Los Angeles Unified School District

November 2004 Edition

All-Hazard Mitigation Plan

Table of Contents

Section 1 - Introduction 4

Executive Summary 4
Introduction and Purpose 4
Scope 4
Plan Overview 5
Document Summary 7
Definition of Hazard Mitigation 8
Purpose of the Plan 8
Mission Statement 9
Plan Adoption 9
Plan Development & Adoption Timeline 10
Legal Authority 11
Federal Laws 11
State Laws 11

Section 2 – Planning Process 12

Hazard Mitigation Planning Participation 12
Hazard Mitigation Planning Task Force Members 12
Adjunct Contributors & Participants 12
Hazard Mitigation Planning Committee By-laws 13
Hazard Mitigation Planning Tasks 14
Hazard Mitigation Planning Goals 15
Goals of the All-Hazard Mitigation Plan 15
Goals of the Hazard Mitigation Planning Task Force 16
Hazard Mitigation Planning Objectives 16
Hazard Mitigation Planning Community Participation 18
Website-based Public Input Program 19
Hazard Mitigation Planning Task Force Meeting Minutes 28

Section 3 – Demographics & Statistics 55

General Data 55
Area 55
Population 55
Number of Schools & Centers 56
Structure of District 58
Governing Board 58
District Central Support System Organization 59
Office of Environmental Health & Safety 62
Departments & Responsibilities 63
Local Districts 91
Employment 104
Financial Data 104
General Facilities 105
Inventory of Assets 107
Inventory of Leased Facilities 135
Critical Assets 144

Strategic Execution Plan for Existing Facilities 146
Seismic Safety 151
Facilities Design Checklist 163
Site Safety Inspection Program 164
KLCS Television Station (Channel 58) 171
Transportation Assets 175
Affiliated Charter Schools and other Organizations 175
Climate 177
Local Meteorology 177
Severe Weather 181

Section 4 – Hazard Vulnerability Analysis 184

Definitions for Hazard Prioritization 184
Prioritization of Hazard Matrix Results 186
Los Angeles County Disasters Since 1950 187
Earthquake 193
Biological & Health Emergencies 254
Wildland Urban Interface Fire 285
Smoke Hazards as a Result of Wildland Fires 293
Terrorism & Weapons of Mass Destruction (WMD) 316
Severe Weather 325
Data/Telecommunications Disruption 333
Flood 340
Economic Disruption 355
Utility Loss 359
Transportation Incidents 363
Drought 369
Transportation Loss 377
Dam Failure 384
Civil Disorder 386
Tsunami 389
Explosion 398
Special Events 401
Volcano 403

Section 5 – Hazard Mitigation Strategies 404

Mitigation Goals and Objectives 404
Identification and Prioritization of Mitigation Actions 404
LAUSD Identified Mitigation Constraints 405
Projects (Current/Past) 406
FEMA-Funded Northridge Earthquake Damage Repair 406
Previous Non-structural Seismic Retrofit Project 1 (Tie Down, Latch & Brace) 422
Previous Non-structural Seismic Retrofit Project 2 (Ceiling & Fixture Retrofit) 447
Deferred Maintenance 470
Measure R 474
Strategy Synopsis 476
Future Strategy Recommendations 477
All Hazards (AH) 477
Earthquake (EQ) 481
Wild Land/Urban Interface Fire (WF) 485
WMD/Terrorism (WT) 486

Utility Loss....487
Transportation Accident/Incident (TA)....488

Section 6 – Future Actions & Goals....489

Preliminary Specific Goals & Actions....489
Development of Specific Goals....489
Prioritization and Implementation of Action Items....490
Long-term Goals, Objectives Actions....491
Capabilities Assessment....498
Existing Institutions, Plans, Policies and Ordinances....498
Reference Materials....501

Section 7 – Plan Maintenance....503

Monitoring, Evaluating & Updating....503
Plan Evaluation....503
Plan Updates....504
Implementing Through Existing Programs....504
Continued Public Involvement....504

Glossary....505

Terms....505
Acronyms....509

Section 1 - Introduction

Executive Summary

Introduction and Purpose

This is the first edition of the Los Angeles Unified School District All-Hazard Mitigation Plan, and through completion of this plan the District continues many years of commitment to the reduction of risks through hazard mitigation planning. Los Angeles Unified School District has long been a nationwide leader in emergency planning and preparedness and highly proactive in planning to reduce potential damage and losses from disasters. The District Board of Education has supported innumerable major bond programs such as: the multi-billion dollar Measure R which was passed in spring 2004. Bond measure such as Measure R have a large number of mitigation projects incorporated that focus on the safety of personnel and students and the protection of property from damage caused be a disaster.

Los Angeles Unified School District is subject to a wide range of destructive disasters, from earthquakes, floods, and wildfires, and human-caused disasters, such as terrorist acts and civil disturbances. In the disaster-rich decade of the 1990s, the District was named in nine federal disaster declarations, including the 1994 Northridge Earthquake, which caused more than $20 billion in damage in Los Angeles County. With the largest student population in the country and vulnerability to a wide range of disasters, the District's long-standing commitment to all-hazard mitigation programs plays a significant role in loss reduction and public safety.

Section 203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC, as amended by Section 102 of the Disaster Mitigation Act of 2000, requires all state and local governments to develop comprehensive mitigation plans as a condition of eligibility for future post-disaster mitigation grants after November 4, 2004. This plan complies with this law, subject to receipt and approval by the California Office of Emergency Services (OES) and the Federal Emergency Management Agency (FEMA). The disasters of the 1990s created eligibility for $600 million in post-disaster hazard mitigation grants for communities within the Los Angeles County Operational Area. The District also can lose eligibility for Federal pre-disaster mitigation grants.

This plan is the first District wide compilation of future mitigation strategies and programs. Information contained in the plan will provide a framework and a rich repository of resource information to support future mitigation grant applications from any District division, department, or office

Scope

FEMA implemented the Disaster Mitigation Act of 2000 and published their requirements for all future hazard mitigation planning in February 2002. The State of California implemented the program in California in the summer and fall of 2003 with guidelines and training sessions. The law requires extensive documentation of the community, the region, its hazards, history and future plans. Some examples include:

- Formation of a Hazard Mitigation Planning Task Force with by-laws, regular meetings, records of the agendas and minutes, subcommittees, and action plans. This group was tasked with prioritizing the hazards, collecting the history and documentation, and formulating future mitigation strategies.

- A complete disaster risk analysis with historic reviews of disasters in the Los Angeles County that affected the District and an analysis of damage projections for future disasters. This risk analysis also prioritized risks that in high, moderate and low risk categories. The mitigation strategies are primarily for high-risk disasters.

- The law included specific requirements for:

  - ✓ Documentation of the process the District has implemented to prioritize and study the hazards and to prepare the plan and conduct the analysis required;

  - ✓ Extensive outreach to the public and to other political jurisdictions served by the District, inviting comment and input into the plan on both the risk prioritization and hazard mitigation strategies;

  - ✓ Setting future goals and tasks to carry out the overall mitigation plan;

  - ✓ Review and incorporation of existing plans, studies, reports and technical information;

  - ✓ Details of ongoing mitigation projects.

This plan is for the Los Angeles Unified School District and covers mitigation responsibilities of District divisions, departments and offices. Because of the complex array of educational facilities, the plan could not reasonably address mitigation planning for each of the 1042 school facilities covered by the law. The plan addresses all major natural and human-caused disasters that may affect the District.

Plan Overview

The plan has been formulated to meet the Federal Law requirements and to serve as a reference document and basis for hazard mitigation projects and grant applications for countywide hazard mitigation programs. This document will assist all divisions, departments and offices in the District in providing the base information and hazard and geographic descriptions required in reference to all related disaster grant and planning programs.

The plan is divided into seven sections:

Section 1 – Introduction

This section contains the formal language outlining the purpose, mission statement, legal authorities and constraints to strategy implementation. The constraints are those circumstances that the District has no control over that would keep the District from implementing mitigation measures for a disaster risk. The constraints most often cited are funding constraints, staffing constraints and lack of legal authority to respond to a risk with mitigation measures.

Section 2 – Hazard Mitigation Planning Process

This section explains the process the Los Angeles Unified School District Hazard Mitigation Planning Task Force used in sharing data, developing strategies, and devising implementation programs. It details the processes used to inform citizens, businesses, and adjacent jurisdictions of the planning project and the methods used to solicit public input. This section lists the Hazard Mitigation Planning Task Force by-laws, goals, objectives and tasks. It also contains copies of the minutes of meetings of the Hazard Mitigation Planning Task Force.

Section 3 – Demographics and Statistics

This section is an in-depth "encyclopedia" of Los Angeles Unified School District which will be used in grant application preparation. It contains detailed lists of assets owned by the District as well as those assets determined to be critical to fulfilling the requirements of the District's mission in times of emergency or disaster. The Planning process requires a description with replacement costs for critical District assets. This information helps in the development of the Hazard Vulnerability Analysis. The Office of Risk Management and Facilities Services Division contributed extensively to this section to assure the data included was complete, current, and reliable.

Section 4 – Hazard Vulnerability Analysis

This section gives a detailed analysis of each of the risks cited by the Hazard Mitigation Planning Task Force in preparation of the plan. Past hazard-specific mitigation projects are discussed as well as specific vulnerabilities and impacts. Projections of damage (dollars, facilities and people) are listed for the high risk priority hazards. FEMA requires that the District demonstrate an in-depth analysis of vulnerability in relationship to population, geographic area, jurisdictional relationships, resources, and disaster mitigation options for future actions.

Los Angeles Unified School District is at risk for a variety of natural and human-caused disasters, and the Hazard Mitigation Planning Task Force established priorities for these risks, taking into account the concerns of the public as expressed in the public input process. The priorities were determined based on the probable effects of each disaster risk, including potential magnitude (including economic impact), frequency, distribution of damage, demographics of areas potentially affected, and the degree of vulnerability. Priorities established for each hazard will guide mitigation planning, with the highest risk hazards receiving the highest level of attention.

The hazards and their relative priority are summarized in the chart below:

High Risk Priority Hazards	**Moderate Risk Priority Hazards**	**Low Risk Priority Hazards**
Earthquake	Economic Disruption	Dam Failure
Biological/Health	Utility Loss	Civil Disorder/Unrest
Wild Land/Urban Interface Fire	Transportation Accident/Incident	Tsunami
WMD/Terrorism	Drought	Explosion
Severe Weather	Transportation Loss	Special Events
Data/Telecommunications Loss		Volcanic Disruption
Flood		

This report also includes a history of disasters in Los Angeles County since 1950, including the costs and number of deaths and injuries caused by each disaster. This information validated the priority ranking of disasters.

In recent years, particularly since the September 11, 2001 terrorist attacks, American society has become much more concerned about human-caused disasters. In recent history, Los Angeles County has experienced two of the most costly and disruptive civil disturbance emergencies in American history – the 1965 Watts Riot and the 1992 Rodney King Riot.

This information will be invaluable in assisting in the preparation of future hazard mitigation projects and in the development of County emergency management plans. The information will also assist in public education campaigns and other public information outreach.

Section 5 – Strategies

This section is a catalog of strategies for mitigation of each of the High Risk and Moderate Risk Priority Hazards detailed in Section 4.

The strategies listed include the general description of the strategy, the organization/department responsible for the strategy, implementation time line, the cost, and the goal and hazard addressed. All of the strategies listed for High Risk Priority Hazards are considered Priority One hazard mitigation strategies; those strategies listed for Moderate Risk Priority Hazards are considered Priority Two hazard mitigation strategies. Typical strategies include: seismic protection projects, flood hazard reduction projects, security projects, technological protection, economic loss protection projects, public information projects, medical and biological preparedness and identification through feasibility studies for other potential projects.

Section 6 – Goals

This section lists Primary Specific Goals and Actions and Long-term Goals, Objectives and Actions regarding this new Hazard Mitigation Planning program. The implementation of these goals and objectives will be based on the District's fiscal and operational capabilities; this part of the plan is a roadmap for the District to follow where feasible, not a commitment to take specific actions.

Section 7 – Plan Maintenance

This section is the detailed guidelines to be employed to keep the plan current, circulated, and to maintain continuity in the public input process. It also lists what needs to be done to prepare the plan for its five-year approval submission to FEMA.

Any disaster plan must be periodically reviewed and kept up-to-date. The Office of Environmental Health and Safety will maintain the plan through annual updates, completed in collaboration with key District divisions, departments and offices. FEMA requires the plan to be submitted every five years for re-approval, which must include a progress report on the implementation of the disaster strategies. This maintenance process will ensure that the plan, when re-submitted every five years, reflects the status of the up-to-the-minute hazard mitigation program for Los Angeles Unified School District. The plan will need to be updated following a major disaster effecting the District in order to include any new mitigation strategies the District may consider implementing with post-disaster grants.

A Note About Earthquakes

Thanks to a multi-billion bond program approved by local voters, all new construction is designed in accordance with stringent code requirements enacted as a result of the Northridge earthquake. Site selection takes into account seismic and environmental factors, as well as comprehensive mitigation efforts, if required.

Document Summary

To summarize, this document contains:

- The Los Angeles Unified School District Hazard Vulnerability Analysis;
- Prioritization of Los Angeles Unified School District Hazards for mitigation activities;
- Hazard Mitigation Strategy Goals and Objectives;

- District-wide Hazard Mitigation efforts and plan input;
- Coordination with local interest groups and citizens;
- Proposed strategies and actions to reduce short and long term vulnerability to the identified hazards; as recommended by the Los Angeles Unified School District All-Hazard Mitigation Task Force, its sub-committees and the general public
- Methods of implementing, monitoring, evaluating, and updating this DMA 2000 Hazard Mitigation Plan;
- Constraints to implementing Hazard Mitigation strategies and recommendations;
- The establishment of the Los Angeles Unified School District All-Hazard Mitigation Planning Task Force to assist in the further development, prioritization and implementation of the recommended Hazard Mitigation strategies.

This document also provides a framework for identification and coordination of Hazard Mitigation strategies developed in Los Angeles Unified School District with other plans; especially those developed by District departments, divisions and offices as well as those plans developed in order to file for Federal disaster assistance, as required by P.L. 106-390 (as amended) of the Disaster Mitigation Act of 2000.

Definition of Hazard Mitigation

Hazard Mitigation is any sustained action taken to eliminate or reduce long term risk to human life, property and the environment posed by a hazard.

Hazard Mitigation Planning is the process of developing a sustained course of action taken to reduce or eliminate long-term risk to people and property from both natural and technological hazards and their effects. The planning process includes establishing goals and recommendations for mitigation strategies.

Hazard Mitigation may occur during any phase of a threat, emergency or disaster. Mitigation can and may take place during the *preparedness* (before), *response* (during), and *recovery* (after) phases.

The process of hazard mitigation involves evaluating a hazard's impact and identifying and implementing actions to minimize or eliminate the impact.

Purpose of the Plan

The purpose of this plan is to integrate Hazard Mitigation strategies into the day-to-day activities and programs of Los Angeles Unified School District.

This plan identifies and evaluates specific strategies to be considered by Los Angeles Unified School District and its agencies. It offers a District-wide support document as well as a planning support tool for those strategies developed by the District's internal organizations.

The strategies presented are deemed appropriate and effective by recommendation of the Los Angeles Unified School District All-Hazard Mitigation Planning Task Force, the Los Angeles Unified

School District Office of Emergency Health and Safety, and the District's administration, agencies and departments.

Upon acceptance by the California Governor's Office of Emergency Services (OES) and the Federal Emergency Management Agency (FEMA), selected strategies will be further developed for funding and implementation by the lead County agencies and departments. This plan describes the potential sources of Hazard Mitigation Strategy funding, and general procedures to obtain that funding.

This plan is based upon the Los Angeles Unified School District Hazard Vulnerability Analysis (HVA) that considers natural, technological, and human-caused risks to which the District and its affiliated organizations are vulnerable. The plan describes strategies that the District and private sector organizations may utilize to develop their capabilities to mitigate those hazards.

It is understood that the mitigation strategies adopted in this plan are recommendations only, and they must be approved by the Superintendent of Los Angeles Unified School District and funded in order to be implemented as official Hazard Mitigation Strategies.

Mission Statement

The mission of the Los Angeles Unified School District Hazard Mitigation Plan is to establish and promote a comprehensive mitigation policy and program to protect students, staff, District property and facilities, the infrastructure and the environment from natural and manmade hazards.

Plan Adoption

Once accepted by the Los Angeles Unified School District Hazard Mitigation Planning Task Force, the plan was presented to the Board of Education in the form of a study session. On (date), 2004, at a regularly scheduled Board of Education meeting held in the Board Room at 333 Beaudry Avenue, Los Angeles California, the Los Angeles Unified School District Board of Education officially adopted the Los Angeles Unified School District ALL HAZARD MITIGATION PLAN. (Letter of adoption below)

Plan Development & Adoption Timeline

Task Statements	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	On going
Hazard Identification, Analysis and Risk Assessment											
1. Task Force Meetings on 3 week schedule											
2. Hazard Identification & Prioritization Process											
3. Hazard Events Profile and Vulnerability Analysis											
4. School District Asset Inventory/Overlay risk and inventory											
5. Risk Assessment and Loss Estimation											
6. Public Input – Gathered as available throughout											
Capability Assessment											
1. Plans, Policies, and Programs documentation review											
2. Assessment of Previous Mitigation Activities											
3. Identification and Evaluations of Resources											
Assessment of Feasible Hazard Mitigation Measures and Needs											
1. Develop Goals and Objectives											
2. Develop, Evaluate and Prioritize Feasible Mitigation Strategies											
Development of Plan and Implementation Strategy											
1. Develop Plan Draft for Review by Task Force											
2. Enter Review Input & Develop Final Plan											
3. Adoption of plan by Planning Task Force											
4. Adoption of plan by School Board											
Ongoing Activities											
1. Plan Evaluations and Maintenance											
2. Coordination with City and County Mitigation Committees											
Plan Updates and Incorporate changes into plan											
1. Required every 5 years, recommended Annually											

Red Lines are Projected Time Lines

Blue Lines are Ongoing Activities

Legal Authority

Federal Laws

Federal legislation has historically provided funding for disaster relief, recovery, and some hazard mitigation planning. The Disaster Mitigation Act of 2000 (DMA 2000) is the latest legislation to improve this planning process (Public Law 106-390). The new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. As such, DMA 2000 establishes a pre-disaster hazard mitigation program and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP).

Section 322 of DMA 2000 specifically addresses mitigation planning at the state and local levels. It identifies new requirements that allow HMGP funds to be used for planning activities, and increases the amount of HMGP funds available to states that have developed a comprehensive, enhanced mitigation plan prior to a disaster. States and communities must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. Local and tribal mitigation plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.

FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002 (44 CFR Parts 201 and 206), which establishes planning and funding criteria for states and local communities.

The Plan has been prepared to meet FEMA and COESS requirements thus making the District eligible for funding and technical assistance from state and federal hazard mitigation programs.

State Laws

California has many laws and programs relating to hazard mitigation, the most effective of which include:

- California Earthquake Hazards Reduction Act of 1986
- California Fire Alliance
- California Earthquake Authority's Seismic Retrofit Program
- NFIP, administered by the DWR
- State planning law and OPR's general plan guidance documents

The following are state laws and executive orders related to hazard mitigation:

- Executive Order W-18-19
- Executive Order W-9-91
- Health & Safety Code §19211
- Health & Safety Code §19181.
- Public Resources Code §2621, et seq. (the Alquist-Priolo Earthquake Fault Zoning Act)

Section 2 – Planning Process

Hazard Mitigation Planning Participation

Hazard Mitigation Planning Task Force Members

Name	Title/Department
Jeff Crawford	LT, LAUSD Police Department
Doug Dunivan	Deputy Director, Maintenance and Operations
Margaret Fairlie	Branch Director, Earthquake Recovery
Jenna Glymph-Williams	Administrative Analyst, Grant Procurement Research & Analysis
Annette Henderson	Facilities Support Services
Steven La Shier (Chair)	Deputy Director, Risk Management
Richard Luke	Director, Design & A/E Technical Support
Dennis Nakafuji	Coordinator, Office of Charter Schools
Bob Spears (Co-Chair)	Director, Emergency Services
Ann Tsao	Administrative Analyst, KLCS Television
Mel Borders	Senior FEMA Claims Analyst – Earthquake Recovery Program

Adjunct Contributors & Participants

Name	Title/Department
Jean Brown	Assistant Superintendent, Instructional Support Services
Jim Delker	Deputy Chief, Facilities Executive – Existing
Duane Johnson	Director, Contracts & Procurement Services
Yi Hwa Kim	Deputy Director, OEHS
Dave Holmquist	Director, Risk Management
Rena Perez	Director, Master Planning Demographics
Angello Bellomo	Director, OEHS
Kristen Montet	Chief of Staff, New Construction
Ana Cortez	Insurance Representative III
Michael Eugene	Business Manager
Vincent Maffei	Deputy Director, Master Plan Coordinator
George Lewis	Facilities Project Manager II, A/E Technical Support
Antonio Rodriquez	Director of Transportation
Chuck Burbridge –	Deputy Chief Fiscal Officer
Kevin Reed	General Counsel
Greg McNair	Office of General Counsel
Rich Rogala	Consultant, Dimensions Unlimited, Inc.
Jan Rogala	Consultant, Dimensions Unlimited, Inc.

Hazard Mitigation Planning Committee By-laws

ARTICLE I – NAME

The name of this organization shall be the LOS ANGELES UNIFIED SCHOOL DISTRICT HAZARD MITIGATION PLAN TASK FORCE, hereafter referred to as the LAUSD HM TASK FORCE.

ARTICLE II - PURPOSE

The purpose of the LAUSD HM TASK FORCE shall be to:

A. Provide direct input to the planning process by those affected by any natural and/or manmade hazards.

B. Solicit the widest range of input into the planning process.

C. Establish direction and guide the five key steps in the planning process (assess the hazard, assess the problems, set goals, review possible mitigation activities, draft an action plan).

D. Educate all participants in hazard mitigation planning.

E. Oversee the development of a Hazard Mitigation Plan that minimizes the effects of all hazards to life and property to the maximum extent practicable.

F. Identify policies that maximize the use of existing programs.

G. Reach a consensus on all issues and facilitate the planning process.

H. Advocate public involvement.

ARTICLE III - POLICY

The policy of the LAUSD HM TASK FORCE shall be to:

A. Observe the key elements of standard District meeting procedures and rules of order in the transacting of meetings.

B. Balance the rights of the majority, the minority, individuals, absentees and all of these together.

C. Determine, through free discussion and review of available materials, the course(s) of action to be taken in developing the Hazard Mitigation Plan.

D. Insure a degree of formality is observed in the transaction of meetings.

E. Select and maintain a Chair and Vice-Chair for all proceedings.

F. Silicate public comments on the proposed Hazard Mitigation Plan and other outreach activities to ensure community interests are fully and adequately represented.

ARTICLE IV - TASK FORCE MEMBERSHIP

The LAUSD TASK FORCE shall be composed of representatives from each District Department responsible for implementing recommendations contained in the Hazard Mitigation Plan and invited Community-based Organization Representatives. All Task Force Members shall have equal voting rights.

The Officers of the LAUSD TASK FORCE shall be:

1. Task Force Chair: Steven A. La Shier

2. Task Force Vice-Chair: Bob Spears

The LAUSD TASK FORCE may employ the services of LAUSD Technical Staff and/or consultants who need not be Task Force Members.

ARTICLE V - VOTING, QUORUM AND CONSENSUS

A simple majority vote of the LAUSD TASK FORCE members present shall be required to pass motions. No formal meetings shall be held, or any business conducted, or a vote taken in the absence of a Quorum. A quorum represents the simple majority of the total LAUSD TASK FORCE membership. A consensus shall mean a general agreement or understanding that the Task Force Members can live with. A consensus does not mean a majority vote.

Hazard Mitigation Planning Tasks

1. Coordinate hazard mitigation planning tasks and activities with the LOS ANGELES UNIFIED SCHOOL DISTRICT staff and departments to develop a all-hazards disaster mitigation plan and support the LOS ANGELES UNIFIED SCHOOL DISTRICT Hazard Mitigation Task Force Chair's oversight of the planning process.

2. Assist in carrying out the goals and objectives of the LOS ANGELES UNIFIED SCHOOL DISTRICT Hazard Mitigation Plan in compliance with FEMA DMA 2000 Hazard Mitigation Act.

3. Prioritize risks for implementing mitigation strategies.

4. Select designated Critical Facilities owned/and/or operated by LOS ANGELES UNIFIED SCHOOL DISTRICT and in proximity to LOS ANGELES UNIFIED SCHOOL DISTRICT facilities, and develops a risk exposure analysis for those facilities.

5. Select highest priority and most-desired mitigation recommendations and develop those recommendations for further action by the LOS ANGELES UNIFIED SCHOOL DISTRICT.

6. Review mitigation planning drafts, recommendations and updates resulting in the prioritization of strategies and an implementation strategy.

7. Develop and implement long- and short-term goals.

8. Coordinate the Hazard Mitigation plan with all phases of LOS ANGELES UNIFIED SCHOOL DISTRICT's Emergency Management and Safety Plans.

9. Provide for the implementation of Task Force decisions.

10. Encourage development of, coordinate and implement a methodology for the implementation of public input.

11. Establish Hazard Mitigation Task Force responsibilities to include but not be limited to the following:

    - Determine implementation ability and constraints for proposed Hazard Mitigation planning steps and development of strategies
    - Bring forward community concerns through private and public input
    - Identify implementation resources and timelines
    - Identify lead divisions/departments for implementation of strategies
    - Provide for the update of the Disaster Mitigation Plan on a regularly scheduled basis
    - Evaluate and carry out mitigation activities
    - Assist in implementation of funding identification and procurement

Hazard Mitigation Planning Goals

Goals of the All-Hazard Mitigation Plan

Protect Life and Property

- Identify natural and manmade hazards that threaten life and property in the Los Angeles Unified School District.
- Implement programs and projects that assist in protecting lives by making schools infrastructure, critical facilities, and other property more resistant to losses from all hazards.
- Protect life and property by adopting state-of-the-art standards, codes and construction procedures.
- Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.
- Improve hazard assessment information to make recommendations for discouraging new development and encouraging preventive measures for existing development in areas vulnerable to natural hazards.

Increase Public Awareness

- Increase public awareness of existing threats and the means to reduce these threats by conducting educational and outreach programs to all the various community groups in the District.
- Provide informational items, partnership opportunities and funding resource information to assist in implementing mitigation activities.

Strengthen Partnerships

- Strengthen communication and coordinate participation among and within public agencies, residents, non profit organizations, business, and industry to gain a vested interest in the implementation of mitigation measures.

- Encourage and support leadership within the private sector, non-profit agencies and community based organizations to promote and implement local hazard mitigation activities.

District Emergency Services

- Establish policy to ensure the importance of mitigation programs and projects for critical facilities, services, and infrastructure.

- Continue providing emergency services with training and equipment to address all identified hazards.

- Continue developing and strengthening inter-jurisdictional coordination and cooperation in the area of emergency services.

Environmental & Historical Preservation

- Balance land use planning with natural and manmade hazard mitigation to protect life, property and the environment.

Goals of the Hazard Mitigation Planning Task Force

- Support the priorities of the LAUSD; its mandate, employees, students, and citizens.

- Support development of facilities consistent with adopted seismic, floodplain and risk management guidance as subscribed to by the LAUSD.

- Provide for an effective public awareness program for natural and technological hazards present in the LAUSD.

- Encourage scientific study and the development of data to support mitigation strategies for those hazards that are a threat to the LAUSD.

- Promote the recognition of the real value of hazard mitigation to public facilities, public safety and welfare of all citizens served by the LAUSD.

- Support the mitigation efforts of local governments, private citizens, non-profit organizations and private businesses throughout the district boundaries.

- Support risk management guidelines as provided by applicable agencies.

Hazard Mitigation Planning Objectives

- Identify mitigation actions to reduce loss of lives and property.

- Implement mitigation actions to reduce loss of lives and property as feasible.

- Identify mitigation strategies that will allow the LAUSD to perform its primary mission and goals.
- Identify mitigation opportunities for short- and long-range planning considerations in the event of a disaster.
- Adopt safe building and zoning codes that support scientific findings of a known risk.
- Identify lead LAUSD Departments that have an interest in mitigation of specific hazards.
- Develop a standard mitigation program utilizing authorities, policies and programs of each LAUSD Department
- Organize, train and maintain an effective ongoing LAUSD Hazard Mitigation Task Force that will facilitate implementation of the LAUSD Mitigation Plan.
- Review and update other LAUSD programs to identify current and future mitigation goals and objectives in compliance with all cities, county, state and Federal requirements.
- Gain support of the LAUSD's Administration and Governing Board for the LAUSD Natural Hazard Mitigation Program implementation.
- Achieve the overall goal of developing a comprehensive mitigation program with Federal, State, LAUSD and appropriate local jurisdictions.
- Support and expand identified hazard mitigation strategies as set forth in LAUSD Safety Element of the LAUSD Master Plan and all other LAUSD plans that contain Hazard Mitigation Strategies.

Hazard Mitigation Planning Community Participation

Integral to the successful development of an assessment, plan, and implementation of projects is the inclusiveness of the District's essential stakeholders in the decision-making process.

Active local citizen participation is important to the District's mitigation planning process and mitigation project implementation; ultimately, this consensus-building approach will serve to engender a new disaster reduction culture. The Los Angeles Unified School District is increasing efforts to develop and strengthen relationships between the District's Board of Education, Local Districts, District managers and staff, schools, cities and communities served, media, and the many diverse sectors of the local citizen populations.

The rich and complex diversity of the area's cultural, racial and socio-economic communities exacerbates the challenge of risk reduction. The task of adequately reflecting the needs of a District and the size and make up of the area is daunting. Additionally, a growing undercurrent of inter-cultural issues related to terrorism involving schools is evolving. New societal paradigms are evolving concerning trust and credibility related to school-sponsored activities.

Of key importance to the District's mitigation planning outreach are the marginalized populations that often populate high risk locations, have limited resources for mitigation actions, are restricted by nature in their ability to respond to life safety issues, and have long term challenges to rebound from the social and economic impacts of an event. These populations include, but are not exclusive of, the non-English speaking and immigrant population, special needs, disabled, poor and single-parent households.

Additionally, since Los Angeles Unified School District serves as a role model for diverse school district organizations throughout America and the Pacific Rim, this unique socio-economic and cultural challenge represents an opportunity to champion the District's leadership role.

Website-based Public Input Program

LAUSD placed information regarding the Hazard Mitigation Planning Process on their OEHS website with a link on their homepage (LAUSD.net). Below is the described link:

LAUSD Website request for input on the Hazard Mitigation Plan

LAUSD News

Bidders' Conference Rescheduled for November 4

The Sun Valley Middle School seeks to build a health clinic on the campus.
...Read on

LAUSDnet's Recommended Educational Website of the Week

LAUSDnet is introducing a new feature. Follow along as this new LAUSDnet feature focuses on educational websites available.
...Read on

Public Comments Sought

he Office of Environmental Health and Safety is seeking feedback on the District's Hazard Mitigation Plan.
...Read on

Workshops Focus on College Preparation

Parents/guardians can get valuable insight into preparing their children for college.
...Read on

When you click on the link, the following appears:

Print Close

Public Comments Sought

In an effort to help identify the community's concerns about natural and human-caused hazards, and to better understand community needs in reducing risk and loss from such hazards, the Office of Environmental Health and Safety would like the public's feedback on the LAUSD's Hazard Mitigation Plan.

For more information and to fill out a public comment form, please click below.

http://www.lausd-oehs.org/emergencyserviceshazardmitigation.asp

Published on 25 October , 2004

The above link takes you to the following page:

Local Hazard Mitigation Plan

Welcome and Thank You for logging on to the

LAUSD's Local Hazard Mitigation Plan!

We want to hear from you. This web site is here to provide information about the District's Hazard Mitigation Plan and get your input.

There have been significant changes to the Robert T. Stafford Disaster and Emergency Assistance Act. These changes have moved mitigation planning from being a post-disaster activity to a pre-disaster activity. Mitigation is no longer the first step in Recovery, but the first step in Preparedness. The Disaster Mitigation Act 2000 says that "Local Governments" (any county, city, town, public authority, School District, or special district) must have an approved Hazard Mitigation Plan on place by November 1, 2004.

Hazard Mitigation is defined as: Sustained action taken to reduce or eliminate the long-term risk to human life, property, and the environment from hazards.

The Federal Emergency Management Agency (FEMA) stresses that all mitigation plans be adopted by the local government and have public involvement.

The adoption of the District's Mitigation Plan by the Board of Education demonstrates the commitment to fulfilling the mitigation goals and objectives outlined in the plan. The adoption of the plan authorizes the District to implement the recommendations in the plan.

What Hazards are covered by the plan?

The plan must look at both natural and human caused hazards. The plan will include:

- Earthquakes
- Wild Fires
- Floods
- Landslides
- Tsunamis
- Droughts
- Severe Weather
- Health Alerts (SARS, Severe Influenza)
- Explosions
- Sinkholes
- Utility Loss- Hazardous Materials Incident
- Structure Fires
- Terrorism/WMD
- Civil Unrest

- Dam Failure
- Critical Infrastructure Interruption
- Radiological Accidents/Incidents
- Special Events (Olympics, Convention, etc.)
- Volcano
- Data/Telecom Loss
- Economic Disruption

How can you contribute?

Please provide your input by downloading and completing our Local Hazard Mitigation Public Comment Form. After you have provided you comments please send them to OEHS at:

Mail to:
Director of Emergency Services
333 S. Beaudry Avenue, 20th Floor
Los Angeles, CA 90017

or e-mail to: HazardMitigation@lausd-oehs.org

Thank you for providing your comments!

Public Input Questionnaire

Community Hazards Mitigation and Preparedness Questionnaire

This questionnaire is designed to help the Local Hazard Mitigation Plan Task Force identify the community's concerns about natural and human-caused hazards, to better understand community needs in reducing risk and loss from such hazards. The questionnaire should be completed by an adult, preferably the homeowner or the head of the household. Please, take a few minutes to complete this questionnaire. All individual responses are strictly confidential, and are for research purposes only.

1. How concerned are you about the following disasters affecting your community? Please give each hazard a priority rating as follows: ***0 = Not concerned; 1 = Somewhat concerned; 2 = Moderately concerned; 3 = Very concerned***

Natural:		Human caused:	
Brush Fire	_____	Civil unrest	_____
Drought	_____	Dam failure	_____
Earthquake	_____	Hazardous materials incident	_____
Flood	_____	Highrise fire	_____
Health Alert/Mass Disease	_____	Radiological incident	_____
Landslides/Mudslides	_____	Special event	_____
Severe Weather	_____	Terrorism	_____
Tsunami	_____	Utilities Interruption	_____

2. Who would you most trust to provide you with information about how to make your household and home safer from natural or human-caused disasters? (***Please check all that apply.***)

- ☐ News media
- ☐ Government agency
- ☐ Insurance agent or company
- ☐ Utility company
- ☐ University or research institution
- ☐ American Red Cross
- ☐ Church/religious organization
- ☐ Other non-profit organization
- ☐ Not sure
- ☐ Other:

3. What is the most effective way for you to receive information about how to make your household and home safer from natural disasters? (***Please check all that apply.***)

Media:

- ☐ Newspaper stories
- ☐ Newspaper ads
- ☐ Television news
- ☐ Television ads
- ☐ Radio news
- ☐ Radio ads
- ☐ Books
- ☐ Mail
- ☐ Fire Department
- ☐ Internet
- ☐ Fact sheet/brochure
- ☐ Church/religious organization
- ☐ Employer
- ☐ Public meetings
- ☐ University or research institution

Other methods:

- ☐ Schools
- ☐ Outdoor advertising (billboards, etc)

Other :

4. In the following list, please check those activities that you ***have done***, ***plan to do*** in the near future, ***have not done***, or are ***unable to do***. (***Please check one answer for each preparedness activity***)

Have you or someone in your household:	Have done	Plan to do	Not done	Unable to do
Attended meetings or received written information on natural disasters or emergency preparedness?	☐	☐	☐	☐
Talked with family members about what to do in case of a disaster or emergency?	☐	☐	☐	☐
Developed a "Household/Family Emergency Plan" in order to decide what everyone would do in the event of a disaster?	☐	☐	☐	☐
Prepared a "Disaster Supply Kit" (extra food, water, medications, batteries, first aid items and other emergency supplies)?	☐	☐	☐	☐
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	☐	☐	☐	☐

5. Building a disaster supply kit, receiving First Aid training and developing a household/family emergency plan are all inexpensive activities that require a personal time commitment. How much time (per year) are you willing to spend on disaster/emergency preparedness? (***Check only one***)

☐ 0-1 hour ☐ 2-3 hours ☐ 4-7 hours ☐8-15 hours ☐16+ hours ☐ Other, please specify

1

6. Did you consider the possible occurrence of a natural hazard when you bought/moved into your current home?
☐ Yes ☐ No

7. Would you be willing to spend more money on a home that has features that make it more disaster resistant?
☐Yes ☐ No ☐ Don't know

8. Would you be willing to make your home more resistant to natural disasters?
☐ Yes ☐ No (***If you answered NO skip to question*** 9)

9. How much are you willing to spend to better protect your home from natural disasters?
(***Check only one***)
☐ Less than $100
☐ $100-$499
☐ $500-$999
☐ $1000-$2499
☐ $2500-$4999
☐ $5000 and above
☐ Nothing
☐ Don't know
☐ Whatever it takes
☐ Other,

10. What nonstructural or structural modifications for earthquakes have you made to your home? (***Please check all that apply***)

10a. Nonstructural
☐ Anchor bookcases, cabinets to wall
☐ Secure water heater to wall
☐ Install latches on drawers/cabinets
☐ Fit gas appliances with flexible connections
☐ Others (please explain)_____
☐ None

10b. Structural
☐ Secure home to foundation
☐ Brace inside of cripple wall with sheathing
☐ Brace unreinforced chimney
☐ Brace unreinforced masonry and concrete walls and foundations
☐ Others (please explain)
☐ None

11. Which of the following incentives, if any, would motivate you to take additional steps to better protect your home from a natural disaster? (***Check all that apply***)

☐ Insurance discount
☐ Low interest rate loan
☐ Lower new home construction cost
☐ Mortgage discount
☐ Tax break or incentive
☐ None
☐ Other (please explain)

12. Natural and human-caused disasters can have a significant impact on a community but planning for these events can help lessen the impact. The following statement will help us determine community priorities for planning for those hazards. Please tell us how important each one is to you.

Statement	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Protecting private property	☐	☐	☐	☐	☐
Protecting critical facilities (hospitals, transportation networks, fire stations)	☐	☐	☐	☐	☐
Preventing development in hazard areas	☐	☐	☐	☐	☐
Protecting natural environment	☐	☐	☐	☐	☐
Protecting historical and cultural landmarks	☐	☐	☐	☐	☐
Promoting cooperation among public agencies, citizens, non-profit organizations and businesses	☐	☐	☐	☐	☐
Protecting and reducing damage to utilities	☐	☐	☐	☐	☐
Strengthening emergency services (police, fire, ambulance)	☐	☐	☐	☐	☐

2

13. Please check the box that best represents your opinion of the following strategies to reduce the risk and loss associated with natural disasters.

Communitywide Strategies	Agree	Neutral	Disagree	Not Sure
I support a regulatory approach to reducing risk.	☐	☐	☐	☐
I support a non-regulatory approach to reducing risk.	☐	☐	☐	☐
I support policies to prohibit development in areas subject to natural hazards.	☐	☐	☐	☐
I support the use of local tax dollars to reduce risks and losses from natural disasters.	☐	☐	☐	☐
I support protecting historical and cultural structures.	☐	☐	☐	☐
I would be willing to make my home more disaster-resistant.	☐	☐	☐	☐
I support steps to safeguard the local economy following a disaster event	☐	☐	☐	☐
I support improving the disaster preparedness of schools.	☐	☐	☐	☐

14. Please feel free to add any additional comments in the space provided:

GENERAL HOUSEHOLD INFORMATION

15. Please indicate your age:_____

16. Gender ☐ Male ☐ Female

17. Please indicate your level of education:
- ☐ Grade school/no schooling
- ☐ Some high school
- ☐ High school graduate/GED
- ☐ Some college/trade school
- ☐ College degree
- ☐ Postgraduate degree
- ☐ Other, please specify

18. Zip code

19. Community name or location

20. How long have you lived in This area?
- ☐ Less than one year
- ☐ 1-5 years
- ☐ 20 Years or more
- ☐ 5-9 years
- ☐ 10-19 years

21. Do you have access to the internet?
☐ Yes ☐ No

22. Do you own or rent your home?
☐ Own ☐ Rent

23. Do you rent/own a:
- ☐ Single-family home
- ☐ Duplex
- ☐ Apartment (3-4 units in structure)
- ☐ Apartment (5 or more units in structure)
- ☐ Condominium/townhouse
- ☐ Manufactured home
- ☐ Other

THANK YOU VERY MUCH FOR PROVIDING THIS INFORMATION

3

Results of Public Input Questionnaire

Los Angeles Unified School District combined with the City of Los Angeles received 438 responses to the citizen questionnaire. The following are the compiled results:

1. The respondents' concern about disasters affecting their community were:

   Very Concerned
   - Earthquake
   - Terrorism
   - Utility Loss
   - Transportation Accident (HAZMAT)
   - Health/Biological
   - Civil Unrest

   Moderately Concerned
   - Wild Land Fire
   - Drought
   - Severe Weather
   - Special Events

   Somewhat or Not Concerned
   - Flood
   - Dam Failure
   - Tsunami
2. The majority of respondents would most trust the American Red Cross to provide them with information about how to make their household and home safer from disasters.
3. The majority of respondents receive information from television news. (fire department second)
4. The majority of respondents responded to participating in disaster preparedness as follows:
   - Attend meetings & receive information – have done
   - Talked with family members – have done
   - Develop a household emergency plan – have done
   - Prepare a disaster supply kit –have done
   - Been trained in emergency care – have done
5. The majority of respondents are willing to spend 4-7 hours per year in disaster preparedness.
6. The majority of respondents did consider the possible occurrence of a natural hazard when they moved into their home.
7. The majority of respondents would be willing to spend more money on a safe home.
8. The majority of respondents would be willing to make their home more resistant to disasters.
9. The majority of respondents would be willing to spend (don't know) to protect their home from natural disasters.
10. The majority of respondents has made non-structural modifications and has not made structural modifications to their homes to make them more disaster resistant.
11. Incentives (by rank) that would motivate respondents to take additional steps to better protect their home from disaster…
    - Insurance discount
    - Tax break or incentive
    - Low interest rate loan
    - Mortgage discount
    - Lower new home construction cost
    - Bland/no answer
    - Other
    - None
12. The majority of respondents prioritize disaster preparedness in the following manner:
    - Protecting Critical Facilities – very important
    - Strengthening Emergency Services – very important
    - Protecting Utilities – very important
    - Protecting Private Property – very important
    - Promoting Cooperation – very important
    - Protecting Environment – very Important
    - Preventing Development in Hazard Areas – very Important

- Protecting Landmarks – very Important

13. The majority of respondents offered the following opinions on strategies to reduce risk:
    - Support Preparedness in Schools – Agree
    - Make Home More Disaster Resistant – Agree
    - Support Safeguarding Economy – Agree
    - Support Use of Tax Dollars – Agree
    - Support a Regulatory Approach - Agree
    - Support Protecting Historical & Cultural Structures– Agree
    - Support Policies to Prohibit Development in Hazard Areas – Agree
    - Support Non-regulatory Approach to Reducing Risk – Agree

14. Comments
15. The majority of respondents were between the ages of 40-49
16. Gender of Respondents
    - 39% Male
    - 55% Female
    - 7% blank

17. The majority of respondents have a college degree.
18. Demographics
19. Demographics
20. The majority of respondents have lived in Los Angeles for 20 or more years.
21. The majority of respondents have access to the internet.
22. The majority of respondents own their homes.
23. The majority of respondents reside in a single-family home

Public Meetings

Representatives from the Hazard Mitigation Planning Task Force attended 3 public-forum Board of Education and Board Committee Meetings where they were given the opportunity to explain the Hazard Mitigation Planning Program and solicit public input.

The first presentation was part of the 10-year anniversary report of Northridge Earthquake recovery.

The second presentation was on June 10, 2004 at the Audit, Business and Technology Committee Meeting held at the District Office at 1:00 PM. The report and solicitation was given by the Task Force Chair and the Director of ORMIS.

The third presentation was on November 18, 2004 at a regularly scheduled Board of Education Meeting. The Task Force Chair presented an overview of the planning process to the Board and afterward, fielded questions and recorded input from the public audience.

Utilization of Public & Community Input

Information and data gathered from the questionnaire, public meetings and off the solicitations on the website, including that from neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties, was analyzed by the Hazard Mitigation Planning Task Force and incorporated into the resulting hazard analysis and strategies. This input was vital in determining the hazards and prioritizing the risks of those hazards.

Charter Schools Stakeholders

In August 2004, a letter was prepared by Bob Spears of OEHS and Greg McNair of the Legal Team on behalf of the Charter Schools Office that explains the District's position involving the Hazard Mitigation Plan and Charter facilities. In general, it explained that if the District owns the property currently occupied by a charter school, it will be included in the HM Plan and thereby included in future FEMA-funded mitigation activities – and that if the property is not owned by the District, it encouraged the charter school to develop a Hazard Mitigation Plan in order to be eligible for future FEMA-funded mitigation activities.

Los Angeles Unified School District
Charter Schools Office
333 South Beaudry Avenue, 25th Floor, Los Angeles, CA 90017
Tel: (213) 241-4625 Fax: (213) 241-6862

Roy Romer
Superintendent of Schools

Ronni Ephraim
Chief Instructional Officer

Jean Brown
Assistant Superintendent

Dr. Roberta Benjamin
Director, Charter Schools Office

August 16, 2004

Joseph Lucente, Director
Fenton Avenue School
11828 Gain Street
Lake View Terrace, CA 91342

Dear Mr. Lucente:

On October 30, 2000, the President signed into law the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act (CRF Parts 201 and 206) by adding a new section, 322 "Mitigation Planning."

Section 322 places new emphasis on local mitigation planning. It requires "local governments" (i.e. any county, city, town, public authority, school district or special district) to develop and submit hazard mitigation plans by November 1, 2004, as a condition of receiving Hazard Mitigation Grant Program (HMGP) and other mitigation project grants. These changes have moved mitigation planning from being post-disaster mitigation to pre-disaster mitigation. Mitigation is no longer the first step in recovery, but rather the first step in preparedness.

The Los Angeles Unified School District has, since 1994, received over $80 million for hazard mitigation projects and intends to apply for future FEMA grants. In order to be eligible for future grant money, LAUSD will be submitting a Hazard Mitigation Plan to FEMA.

If the District owns the property currently occupied by your charter school, please be aware that the property will be included in the Hazardous Mitigation Plan submitted to FEMA by the District. This is being done to make sure that the property is included in any FEMA funded mitigation activity.

If the District does not own the property occupied by your charter school, we would encourage you to consider filing a Mitigation Plan so you would be eligible for future FEMA grants. You can research the Local Hazard Mitigation Plan process by going to the FEMA web site, www.fema.gov.

If there are any questions regarding the Hazard Mitigation Grant Program, please call Robert Spears, Assistant Director, Office of Environmental Health and Safety at (213) 241-3199 or Dennis Nakafuji, Coordinator, Charter Schools Office at (213)241-4625.

Respectfully,

Robert Spears, Assistant Director
Office of Environmental Health & Safety

Dr. Roberta Benjamin, Director
Charter Schools Office

Hazard Mitigation Planning Task Force Meeting Minutes

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Meeting of 3/4/2004

Meeting called to order at 10:00 am.

Member Introduction. Members in attendance:

Angelo Bellomo	angelo.bellomo@lausd.net
Jeff Crawford	jcrawford@laspd.com
Doug Dunivan	ddunivan@laschools.org
Margaret Fairlie	margaret.fairlie@lausd.net
Jenna Glymph-Williams	jwilli04@lausd.k12.ca.us
Annette Henderson	annette.henderson@lausd.net
Steven La Shier, Chair	steven.lashier@lausd.net
Rena Perez	rperez@laschools.org
Janice Rogala	JanRogala@aol.com
Rich Rogala	rich@dimensionsui.com
Bob Spears, Vice Chair	bob.spears@lausd.net
Alberto Tovar	atovar@laschools.org
Ann Tsao	ann.tsao@lausd.net
Ana Cortez	
Richard Luke	rluke@laschools.org
Terri Arnold	terri.arnold@lausd.net

Process Overview by Jan Rogala.

Meeting Schedule

Meetings will be Wednesday's at 1:30 pm –in the Risk Management Conference Room, to be booked by the Chair. Two hours will be set aside. The meeting will follow a prescribed agenda. Next meeting is Wed 3/24 at 1:30 pm.

Introduction to Planning Process

A Risk Hazard Matrix was handed out and the membership was asked to enter their opinions for the next meeting. This matrix is for stake holders and not for the public or other input. Once compiled, the information is used to help prioritize risk by generating public and employee input.

Proposed Task Force Mitigation Planning Activities. Jan explained each of the items. The Chair reiterated that a lot of the materials required for many of the items on the list is already there; it is a matter of locating and compiling it. There are several means to obtain public input, through the website, the PTA, and School Safety Committees. Jan stated that to comply with the planning process, members need to document each and every meeting discussing Hazard Mitigation. The membership motioned, seconded and unanimously adopted the planning activities.

Discussed Task Force Tasks. Bob Spears asked how to decide the criteria for a critical facility. The committee asked for a specific definition of a critical facility. Jan stated that

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

the statute offers no guidance on what the definition is and it is left entirely to the committee. Jan related a definition to that of a cost/benefit analysis. This is not a prioritization, it is a base definition. Also look at un-owned adjacent facilities. Bob related that we could also research the history on facilities and use that information for determination as well as developing mitigation strategies.

The membership agreed to the definition of a Critical Facility is one that has a potential for high loss of life and high financial loss and one that if damaged or lost would cause a disruption of the district's primary mission or its ability to provide vital services in the event of an emergency.

A motion was made and a vote taken to adopt the Task Force Tasks. GIS data associated with school district facilities is available and can be used to illustrate criticalities and risks. Motioned and seconded. Passed by the committee.

Discussed Goals. The membership changed the Goals as follows:

Goals

- Support the priorities of the LAUSD; its mandate, employees, students, and citizens.
- Support development of facilities consistent with adopted seismic, floodplain and risk management guidance as subscribed to by the LAUSD.
- Provide for an effective public awareness program for natural and technological hazards present in the LAUSD.
- Encourage scientific study and the development of data to support mitigation strategies for those hazards that are a threat to the LAUSD.
- Promote the recognition of the real value of hazard mitigation to public facilities, public safety and welfare of all citizens served by the LAUSD.
- Support the mitigation efforts of local governments, private citizens, non-profit organizations and private businesses throughout the district boundaries.
- Support risk management guidelines as provided by applicable agencies.

Motioned, seconded and approved adoption of goals.

Discussed objectives. The membership changed the Objectives as follows:

Objectives

- Identify mitigation actions to reduce loss of lives and property.
- Implement mitigation actions to reduce loss of lives and property as feasible.
- Identify mitigation strategies that will allow the LAUSD to perform its primary mission and goals.
- Identify mitigation opportunities for short- and long-range planning considerations in the event of a disaster.

MEETING OF 3/4/2004 PAGE 2

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

- Adopt safe building and zoning codes that support scientific findings of a known risk.
- Identify lead LAUSD Departments that have an interest in mitigation of specific hazards.
- Develop a standard mitigation program utilizing authorities, policies and programs of each LAUSD Department
- Organize, train and maintain an effective ongoing LAUSD Hazard Mitigation Task Force that will facilitate implementation of the LAUSD Mitigation Plan.
- Review and update other LAUSD programs to identify current and future mitigation goals and objectives in compliance with all cities, county, state and Federal requirements.
- Gain support of the LAUSD's Administration and Governing Board for the LAUSD Natural Hazard Mitigation Program implementation.
- Achieve the overall goal of developing a comprehensive mitigation program with Federal, State, LAUSD and appropriate local jurisdictions.
- Support and expand identified hazard mitigation strategies as set forth in LAUSD Safety Element of the LAUSD Master Plan and all other LAUSD plans that contain Hazard Mitigation Strategies.

Motioned, seconded and approved adoption of objectives.

Other Business

The membership requested a grid or matrix that helps categorize buildings.

A LAUSD Service Area Map will be provided by Rena Perez.

Bob Spears will head a subcommittee to identify pertinent documents and plans needed for completion of the HM Plan.

Asset and value documentation will be provided by Steve.

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Mission Statement

A Mission Statement along with By-Laws was drafted earlier by Bob and Steve. It is as follows:

MISSION and GOALS - DRAFT

MISSION

The mission of the Los Angeles Unified School District Hazard Mitigation Plan is to establish and promote a comprehensive mitigation policy and program to protect students, staff, District property and facilities, the infrastructure and the environment from natural and manmade hazards.

GOALS

Protect Life and Property

- Identify natural and manmade hazards that threaten life and property in the Los Angeles Unified School District.
- Implement programs and projects that assist in protecting lives by making schools infrastructure, critical facilities, and other property more resistant to losses from all hazards.
- Protect life and property by adopting state-of-the-art standards, codes and construction procedures.
- Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.
- Improve hazard assessment information to make recommendations for discouraging new development and encouraging preventive measures for existing development in areas vulnerable to natural hazards.

Increase Public Awareness

- Increase public awareness of existing threats and the means to reduce these threats by conducting educational and outreach programs to all the various community groups in the District.
- Provide informational items, partnership opportunities and funding resource information to assist in implementing mitigation activities.

Strengthen Partnerships

- Strengthen communication and coordinate participation among and within public agencies, residents, non profit organizations, business, and industry to gain a vested interest in the implementation of mitigation measures.
- Encourage and support leadership within the private sector, non-profit agencies and community based organizations to promote and implement local hazard mitigation activities.

District Emergency Services

- Establish policy to ensure the importance of mitigation programs and projects for critical facilities, services, and infrastructure.
- Continue providing emergency services with training and equipment to address all identified hazards.
- Continue developing and strengthening interjurisdictional coordination and cooperation in the area of emergency services.

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Environmental & Historical Preservation

- Balance land use planning with natural and manmade hazard mitigation to protect life, property and the environment.

LOS ANGELES UNIFIED SCHOOL DISTRICT
HAZARD MITIGATION PLAN TASK FORCE - BYLAWS

ARTICLE I – NAME

The name of this organization shall be the LOS ANGELES UNIFIED SCHOOL DISTRICT HAZARD MITIGATION PLAN TASK FORCE, hereafter referred to as the LAUSD HM TASK FORCE.

ARTICLE II - PURPOSE

The purpose of the LAUSD HM TASK FORCE shall be to:

A Provide direct input to the planning process by those affected by any natural and/or manmade hazards.
B. Solicit the widest range of input into the planning process.
C. Establish direction and guide the five key steps in the planning process (assess the hazard, assess the problems, set goals, review possible mitigation activities, draft an action plan).
D. Educate all participants in hazard mitigation planning.
E. Oversee the development of a Hazard Mitigation Plan that minimizes the effects of all hazards to life and property to the maximum extent practicable.
F. Identify policies that maximize the use of existing programs.
G. Reach a consensus on all issues and facilitate the planning process.
H. Advocate public involvement.

ARTICLE III - POLICY

The policy of the LAUSD HM TASK FORCE shall be to:

A. Observe the key elements of standard District meeting procedures and rules of order in the transacting of meetings.
B. Balance the rights of the majority, the minority, individuals, absentees and all of these together.
C. Determine, through free discussion and review of available materials, the course(s) of action to be taken in developing the Hazard Mitigation Plan.
D. Insure a degree of formality is observed in the transaction of meetings.
E. Select and maintain a Chair and Vice-Chair for all proceedings.
F. Silicate public comments on the proposed Hazard Mitigation Plan and other outreach activities to ensure community interests are fully and adequately represented.

ARTICLE IV - TASK FORCE MEMBERSHIP

The LAUSD TASK FORCE shall be composed of representatives from each District Department responsible for implementing recommendations contained in the Hazard Mitigation Plan and invited Community-based Organization Representatives. All Task Force Members shall have equal voting rights.

The Officers of the LAUSD TASK FORCE shall be:

1. Task Force Chair: Steven A. La Shier
2. Task Force Vice-Chair: Bob Spears

The LAUSD TASK FORCE may employ the services of LAUSD Technical Staff and/or consultants who need not be Task Force Members.

The LAUSD TASK FORCE will be dissolved upon the full adoption of the Hazard Mitigation Plan by the Board of Education.

ARTICLE V - VOTING, QUORUM AND CONSENSUS

A simple majority vote of the LAUSD TASK FORCE members present shall be required to pass motions. No formal meetings shall be held, or any business conducted, or a vote

MEETING OF 3/4/2004 PAGE 5

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

taken in the absence of a Quorum. A quorum represents the simple majority of the total LAUSD TASK FORCE membership. A consensus shall mean a general agreement or understanding that the Task Force Members can live with. A consensus does not mean a majority vote.

Meeting adjourned at 3:45 pm.

MEETING OF 3/4/2004 PAGE 6

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Meeting of 3/24/2004

Meeting called to order 1:40 PM

Members in attendance

The membership elected to adopt the minutes from March 4th meeting.

Old Business

A map of service area received by the consultants along with location of facilities

Identification of Hazard Mitigation Documents – ongoing issue. Bob will provide an overview of documentation for the entire district.

Plans – New Construction and Existing Construction Plans. Executive Summary on the website in the facilities.

Received Asset Inventory from Steven Lashier with no valuations yet.

Definition of Critical Facilities as it stands in the last minutes. Consultant asked for a listing of those facilities that would be deemed not to be critical. We will start with all schools and support services and then the membership will work through the list and determine those that may not be critical.

The following are examples of Critical Facilities that are not owned or operated by LAUSD but that are relied upon:

- Fire Stations (City & County)
- Police agencies
- County Office of Ed
- Bus transportation
- Suppliers for essential repair materials
- Public transportation

Simply have to think about these and identify them. Notification of those that are identified is necessary along with asking if they have Hazard Mitigation strategies or plans involving those.

Consultant passed on that LAUSD is a stakeholder in Hazard Mitigation Plans for cities in which they have facilities. Consultant recommended setting up a preset form letter that says that LAUSD is a member of the community, that it is developing a Hazard Mitigation Plan and request any input into the District's process. There is also the issue of refineries and pipelines near school sites. There are aerial photographs available that need to be reviewed and considered. There is a City GIS program the shows aerial topography and then overlays a footprint of the school sites. One can gain access to the site through a password that will be provided to the consultant.

New Business

Overview of LAUSD assent inventory. The LAUSD Real Estate Department has best listing of values.

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Jan sited examples of things already in place that can be listed as mitigation strategies (roll around emergency carts, process gone through with LACOE in building assessments, Field Act compliance, listing of all of the special laws complied with by school districts that deal with risk). California Environmental Quality Act (CEQuA) requirements can also be considered. Web Site under School Facilities will have a list of the laws and information required. Also programmatic maintenance items that have anything to do with reducing risk are strategies. OEHS Inspection Program package that contains risk reduction and mitigation information will be supplied to consultants.

Also LAUSD mitigates potential risk by building strategies into design specifications over and above code. The District identifies mitigation measures in the CEQuA reviews and alignes CEQuA and CDE (California Department of Education) site reviews to eliminate gaps between the two programs. Geotechnical information is available when looking at each school site that can place it in proximity to a fault and then can be overlaid on a map. This will allow a process for ranking risk of damage to the site. Also construction, etc. would be factored into it. This would be good to list as a high priority strategy. Other existing conditions that can be looked at as strategies are flood maps, wild fires potential maps, etc. Bob went through a list of maps he requested from state OES.

The consultant said that we go as far as we can with the data available, publish the plan and then keep it as a living document as we prioritize and analyze it in the future. There was a discussion on the plan being a pre-condition to applying for pre-disaster mitigation funds after November.

A question was brought up asking if we dissolve the committee upon completion of the plan. The consultant recommended, absolutely not. We need to change the goals and objectives to reflect this.

A list of existing and proposed charter schools will be provided. Unless the district owns or maintains a charter facility they are considered fiscally independent. We need to find out if the district is legally responsible for the health and safety of the students at charter facilities and if so, need to clarify. The Chair asked that we convene a subcommittee to find out the relationship between charter schools and responsibility to students and invite any legal experts to the next meeting to help answer the questions. This will be new business on the agenda for the next meeting.

Web site questionnaire will be adapted to the web site overseen by Bob.

Further information on identification of potential growth and capital projects, both current and future, is contained in the Strategic Execution Plan and the Measure R and Measure K Bond specifications.

Topic for next meeting will be to talk about the tabs in the plan document.

Meeting adjourned at 2:45 PM.

MEETING OF 3/24/2004 PAGE 2

Los Angeles Unified School District
HAZARD MITIGATION PLANNING TASK FORCE MEETING
April 14, 2004

MEETING CALLED TO ORDER

Meeting was called to order at 1:30 PM.

INTRODUCTIONS

Those in attendance:

Jeff Crawford	Ann Tsao
Dough Dunivan	Ana Cortez
Margaret Fairlie	Mel Borders
Steven La Shier	Caroline Schad
Dennis Nakafuji	Vincent Maffei
Rich Rogala	George Lewis
Bob Spears	Gregg McNair
	Jan Rogala

MINUTES

The membership elected to accept the minutes from the last meeting.

OLD BUSINESS

Map Access Issue:

Luis Hernandez from FIS (PP&G Bldg, 9th floor) should be contacted about this issue.

Facility design checklist:

Richard Luke, who was absent from this meeting, will bring this information.

Hazard Mitigation Documentation:

Bob Spears said that this information is pulling together. SEMS class has been given to managers because of the recent formation of Local Districts. It is given with a "response level" focus. The goal is to identify which position has what responsibility and to build a cadre' of people to take responsibility for managing the district's response to a disaster.

Jan suggested that something needed to be mentioned in the Plan about this training and organizational responsibility and that it is a SEMS compliance issue. This doesn't tie into the HM Plan as an action item but it would be stated as a means of alignment with SEMS. She said that a strategy in the hazard mitigation plan might be to apply for money to support this training effort.

Jan said that Hazard Mitigation funding for damage from the recent winter hail storm was not an eligible item, because the event was not a federally declared disaster.

Draft Letter for neighboring jurisdictions:

Steve LaShier volunteered to put together a letter to be sent to neighboring jurisdictions soliciting input on strategies for the HM Plan. The consultant will supply a template.

Asset inventory and facilities:

Each member was given copies of owned and leased facilities. The owned facilities will have a column for initial year established which is available on

Los Angeles Unified School District
HAZARD MITIGATION PLANNING TASK FORCE MEETING
April 14, 2004

	the raw data document given to the consultants. There was a discussion regarding the update for the replacement value. Steve LaShier said he might be able to contact Stephen Otto regarding a Special Data Base that might have something that can be used. He also said that there was a recent study commissioned to re-evaluate the property. A suggestion was made to check the GASBI data base. The consultant recommended a formation of a subcommittee that would have the goal of obtaining more current value information on assets. Margaret and Steve volunteered for this subcommittee. This information will have a major impact on estimation of damage for Hazard Mitigation Strategy development. Steve said that the district has a $800 million insurance policy to cover approximately $6.2 billion (or 15%) of assets. The cost of the policy is $2.6 million per year with a $500K deductible. The consultant advised that the committee needs to look at what is most beneficial to the district, but a figure needs to be present on the HM Plan. It's advisable to be conservatively close to the actual value of the assets based on HAZUS and previous loss history. A hazard mitigation strategy might be to prepare a grant application to do a study on the valuation of property in order to keep the plan estimates credible. Margaret recommended that the Public Information department should have representation on this committee regarding publication of the HM Plan. Steve will approach the appropriate person and arrange for representation. Steve mentioned a website indicated in a Seismic Safety article from the LA Times regarding a study done by an architect which reveals tabulated data for 7000+ schools.
Charter Schools	Greg McNair: Said that if the district doesn't own the property, that its not responsible for the maintenance of it, but the district is responsible for oversight of those schools for maintaining a safe environment. This can be interpreted as inspecting the facility and making a report to the appropriate state department. Charter schools most certainly do not have a clue about the Hazard Mitigation Planning obligation and LAUSD doesn't have the obligation to notify them of it. Also, the district is not obligated to go out and make non-owned charter school operated facilities safe. Charter schools are set up as private non-profit schools. The committee decided that it was important to let charter schools know that they need to have a plan to be eligible for HM Grants. There was a discussion over owned property requirement for a plan vs a charter school tenant requirement. The committee recognized that they will be putting the plan together to protect district-owned assets, but they still need to keep charter schools in the loop so they known what they need to do. LAUSD doesn't have the obligation to help write a charter schools plan because the charter school is fiscally independent,

Los Angeles Unified School District
HAZARD MITIGATION PLANNING TASK FORCE MEETING
April 14, 2004

Dennis Nakafuji said that he is sure that Charter School program has no idea about the HM Planning process. He and Greg will go to their director to discuss mechanisms for obtaining usable input for the HM Plan from Charter Schools. The district is responsible for the physical facility if it is owned. Buildings are covered but the organizations (charter schools) are not. The consultant will assist with providing the correct language for program requirements. Structures and buildings housing fiscally independent charter schools will be covered by this plan. Independent charter schools not housed in LAUSD structures and buildings are specifically not included in this plan.

The consultant recommended that the committee find out whether it, as an independent-sanctioned body can make updates to the plan without specific board approval each time. Steve said that each Board Member will receive a briefing on this HM Plan process before it is given to them for study and formal approval.

Non-critical facilities

Consultant recommended the formation of a subcommittee to designate critical versus non-critical facilities. The committee, as a whole, designated all owned facilities as critical. Doug will work through the list of leased assets to designate which of those are critical.

Critical non-owned facilities

Some listed were:

- Transportation
- Food – (Central Cafeteria) there is a 3-day supply of emergency food available at all sites.
- Utilities
- Water
- Fire Stations (Departments)
- Pico Rivera LAUSD Distribution Warehouse (which stores dry and wet products)
- Communication (800 trunk system)
- Fiber-optic Network (a past mitigation strategy was to bury the fiber-optic cables very deep so they have less of a probability of being damaged from ground movement.)
- Sanitation

NEW BUSINESS

Brainstorming Hazard Mitigation Strategies:

Margaret said that she has a log and list of recovery projects that were funded with post-disaster recovery money.

Bob sent the consultant an inspection list that outline daily routines that are, in actuality, ongoing mitigation programs. Jeff and Doug will provide lists of other daily-type routine items that might qualify as Hazard Mitigation Strategies.

Bob indicated that there was a video tape produced a while back entitled "The Safe Classroom" and that he though it might be time to update that and redistribute it to teachers.

He consultant requested a listing of assets owned by the district television station and their replacement values.

Los Angeles Unified School District
HAZARD MITIGATION PLANNING TASK FORCE MEETING
April 14, 2004

MEETING ADJOURNED	The meeting was adjourned at 3:19 PM.

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Meeting of 5/05/04

Meeting called to order at 1:45 PM.

Members in attendance

Doug Dunivan	ddunivan@laschools.org
Steven La Shier,Chair	steven.lashier@lausd.net
Dennis Nakafuji	dennis.nakafuji@lausd.net
Bob Spears	bob.spears@lausd.net
Mel Borders	mel.borders@lausd.net
Caroline Schad	cschad@lausd.net
Ann Tsao	ann.tsao.@lausd.net
Rich Rogala	rich@dimensionsui.com
Theresa Hayes	theresa@dimensionsui.com

The membership elected to adopt the minutes from April 14, 2004 with two changes:

- Page 2, paragraph 2; $800 Million to $750 Million to read "Steve said that the district has a $750 million insurance policy to cover approximately $6.2 billion (or 15%) of assets."
- Page 2, paragraph 8; delete "private" in the first sentence to read "Charter schools are set up as non-profit schools."

Old Business

Letter of Solicitation
Bob Spears has a Letter of Solicitation provided by the consultants to send to appropriate City Managers, county and city entities. Another version with be sent to the Charter Schools. The Charter Schools will need to write their own DMA 2000 Plan.

Map Access
Rich as been unable to reach Luis Hernandez, Task Force GIS contact, for GIS Facility footprints and Ortho-Photos. Doug Dunivan will contact Luis.

Facility Design Checklist
Steve La Shier will follow up on this list.

Public Information Representation
Ellen Morgan will be the Public Information Representative. There was a gas line break which required Ellen's attention. She will be at the next meeting.

Bob Spears reported that there has been no input from the website's questionnaire. He is going to test the questionnaire form with a submittal.

Hazard Mitigation Matrix
The Task Force reviewed the LAUSD Hazard Mitigation Risk Priority Rating List. The discussion generated the below comments:

- Combine Flood and Dam Failure? How many schools are affected by a dam failure? Maps will answer questions concerning floodplains. Move Dam Failure from Moderate Risk to Low Risk.
- Aviation accidents affecting school property… There are schools in flight paths. Schools become shelters in the event of an Aviation accident. The Task Force agreed to move Aviation accidents from Moderate Risk to Low Risk.
- Transportation (road system failure): Move from Low Risk to Moderate Risk

MEETING OF 5/05/04

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Meeting of 5/05/04

- Economic Disruption: Examples of the effects of disasters on people; out of work, strikes, how does that effect students and how does it affect LAUSD? Move from High Risk to Moderate Risk.
- Biological/Health (Disease) effects on schools. Department of Health Services makes the decision on if a school stays open or closes. Quarantine issues from an outbreak are considered. LAUSD is responsible for the students. This issue was tabled until more information can be obtained.
- Data/Telecommunications: How would a failure or disruption to LAUSD's computer mainframe affect their ability to operate on a day-to-day basis? Doug Dunivan will provide the Operational Plan for the computer mainframe. It may contain mitigation strategies.
- Utility Loss: LAUSD is responsibility for student's respirators and school elevators. They do have Honda generators for the respirators. There is a need for generators to operate the school elevators. Power is supplied from private utility companies. There is not a dedicated system at this time. Also, the committee needs to look at back-up power for the Mount Washington transmitter for Channel 58. This represents an opportunity to mitigate Utility Loss risks.
- Civil Disorder/Unrest: Should this topic be added to the Risk Analysis? Riots and their aftermath disrupt school operations. Buses can not return the students to their homes. Schools become shelters. The committee needs to contact Sheriff's Department for school plans. Steve La Shier will contact Lt. Jeff Crawford. This is tabled until the next meeting.

LAUSD Hazard Mitigation Risk Priority Rating

Hazard	Priority
Earthquake	High Risk
Biological/Health (Disease)	
Wildland/Urban Interface Fire	
WMD/Terrorism	
Severe Weather	
Data Telecommunication	
Floods	
Economic Disruption	Moderate Risk
Utility Loss	
Transportation Accident/Incident	
Drought	
Transportation (road system failure)	
Aviation affecting school property	Low Risk
Dam Failure	
Tsunami	
Explosions	
Special Events	
Volcanic Disruption/Ash fallout	
Civil Disorder/Unrest	More information next meeting

MEETING OF 5/05/04

LAUSD Hazard Mitigation Task Force Meeting
MINUTES

Meeting of 5/05/04

Sub-Committee Reports

Charter Schools
Dennis Nakafuji is meeting with the Charter Schools on May 21, 2004. He will discuss how LAUSD will work with the Charter Schools concerning their DMA 2000 Plan.

Current Asset Value
Steve La Shier stated LAUSD does not have updated values on replacement costs. The members discussed ways to obtain the most accurate values; square foot values, PSC default values for new construction ($250.00 per square foot?) difference in structural costs high schools versus elementary schools, standard insurance values, break out of facilities and contents assets. Mel Border will check on standardized formula (cost benefit analysis). Steve will contact Stefan Oto for values. LAUSD may have to use the data already provided. Their critical facilities are highlighted.

New Business

Hazard Mitigation Projects
The Task Force identified mitigation strategies ideas during the Hazard Risk Rating discussion. Apply strategies to the project forms. The Task Force is gathering past FEMA Grant Applications.

Plan Draft
Rich provided three rough drafts of the LAUSD DMA 2000 Plan for the Task Forces to review and comment. The rough draft does not contain all the information required by FEMA. It will give the Task Force an idea of how it will look. Bob Spears and Steve La Shier will review and provide feedback. Also the reviewers were asked to provide information and data sources in the sections that are blank so the consultant can research and add it as necessary.

Other Business
Bob Spears will provide the Guide to Schools and Offices and North Ridge Hazard Mitigation Project Plan.

Adjourned at 3:00PM

MEETING OF 5/05/04

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

Meeting of May 26, 2004

CALLED TO ORDER 1:30 pm

Minutes from the Man 5th Meeting were adopted

Present at the meeting:

Caroline Schad	Cshad@laschools.org
KJ Davis	Kdavis3@LAUSD.k12.ca.us
Jeff Crawford	Jcrawford@laspd.com
Bob Spears	Bob.Spears@Lausd.net
Ellen Morgan	Ellen.Morgan@lausd.net
Margaret Fairley	Margaret.fairlie@lausd.net
SteveNyblom	snyblom@CAO.co.la.ca.us
Ann Tsao	ann.tsao@lausd.net
Ana Cortez	ana.cortez@lausd.net
Rich Rogala	Rich@dimensionsui.com
Jan Rogala	Jan@dimensionsui.com

ASSET VALUATION

Steve Lashier introduced Steve Nyblom from Los Angeles County Administrative Offices to discuss building and asset evaluation. Steve discussed the process the County had used to determine a composite average per square foot building replacement cost for the County's buildings and their content. The County is currently considering $258.00 per square foot for buildings and $70 plus per square foot for content. This is a figure that is based on the County's building inventory and considers the date built, the location, type of construction, use, previous experience with the building and other factors pertaining to the County. Concerns were expressed over the differences in constructing a high school and a grade and middle school. In general the figures were considered usable by the committee in what it would cost to build a school today.

The committee had a lengthy discussion on whether those figures were suitable for the LAUSD and a decision was made to use the figures for a draft evaluation and adjust the figures where necessary.

CHARTER SCHOOLS

Letters have been formulated to go to the Charter Schools. Greg McNair and Bob Spears will pursue getting them sent out to the schools. The letters inform the Charter Schools of their potential responsibility under the DMA 2000 Hazard Mitigation Plan requirements. Some issues with Charter Schools were discussed:

- Statute compliance and safe school program and compliance gaps
- A number of schools have not passed fire safety inspections

The LAUSD has been diligent in apprising those schools utilizing LAUSD facilities of school safety issues and facility requirements. The LAUSD will determine the limits of their responsibility for those schools occupying LAUSD facilities.

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

Meeting of May 26, 2004

CIVIL UNREST

Discussion was held on the County Sheriff's report on Civil Unrest and the need to look at and analysis demographic changes in the community. Ester Wong was identified as having the demographic trends history.

MITIGATION STRATEGIES

On going mitigation strategies were reviewed.

- Facility Design Checklists
- Statute compliance
- Critical Incidents Plans
- Biological Hazard Plan in cooperation with Public Health, it was noted that more input was needed from Public Health on this plan.

WMD RISKS

Discussion was held on special events and Presidential visits to the area and how they might pose a WMD risk to the schools.

COURTESY PLAN REVIEW

Discussion was held on the FEMA Courtesy Review process, the plan may be submitted to State OES for a courtesy review by State OES and FEMA before the board passes the plan. The object would be to get input into the viability of the plan for approval by FEMA before taken formal action on the Plan.

COMMUNITY INPUT

The Website and questionnaire was discussed and it was decided to send a bulletin to principles that the opportunity for input existed and the communications representative will add a teaser to the website directing people to the public questionnaire.

Steve LaShier and Bob Spears have given presentations on the Hazard mitigation planning project at public meetings and will provide the sign in sheets.

MEETING ADJOURNED at 3:20 pm

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

June 16, 2004

Meeting Called to Order 1:40 pm

Introductions

Members in attendance:

Mel Borders	Melville.borders@lausd.net
Doug Dunivan	ddunivan@laschools.org
Richard Luke	Richard.luke@lausd.net
Steven LaShier	steven.lashier@lausd.net
Bob Spears	bob.spears@lausd.net
Dennis Nakafuji	dennis.nakafugi@lausd.net
Ann Tsao	ann.tsao@lausd.net
Rich Rogala	rich@dimensionsui.com
Jan Rogala	JanRogala@aol.com

Minutes From the Last Meeting

The membership voted to accept the minutes from the May 26th meeting.

Old Business

Letters of Solicitation

Sent out 28 letters, with no response

Long Beach USD, Bonita USD and a couple of others were invited to attend meeting of Task Force.

Bob Spears submitted 2 questionnaire replies and an e-mail recommendation from an electrical technician.

Thurs, Jun 10th, Risk Mgmt did a report to a Audit-Business & Technology Committee of the School Board and reported that the HM Plan Project was underway and on track. There was documentation for that meeting and it will be provided on the web site. Doug Dunivan will send the consultant the link.

Hazard Mitigation Strategies

Bob Spears wants to add the Disaster Preparedness non-structural hazard video production to strategies.

Richard Luke reported that there was a list of facilities that have been seismically analyzed sent to him. He recommended that a strategy might be to have a structural engineer look at the list and begin the process of submitting projects. Richard said that there are over 4000 facilities on the list that belong the LAUSD. A study was done about a year ago of concrete structures built pre-1972 code. DSA (Division of the State Architect) said that there is a potential that they may not perform well in a seismic event. Bob Spears asked if these buildings would be the ones looked at first during a post-earthquake inspection. Doug said that would be determined on their proximity to the epicenter of the quake. Consultant recommended that Doug write a benign project to be placed in the plan. Richard will provide a copy of the notice from DSA.

Steve LaShier said that there was also a list of 7756 school structures (wood frame construction) that are at risk.

University High School is located on a potential fault that is being mapped (part of the Santa Monica Fault) and the consequences it may pose. LAUSD is mapping a piece of it with a commissioned geotechnical engineer at a cost of $250K. The preliminary report is that the main

1

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

June 16, 2004

building is far enough away from the fault so it does not pose a risk. The final report should be out in July.

Sub-Committee Reports

Public Input

Web site hits (Bob Spears)
Continuing with publication

Charter Schools

Letters went to schools at LAUSD sites that said we are doing the plan and their facilities are included. The other letter went to those (charter) schools that were not affiliated and that they were invited to do their own plan and that if they want services they are required to pay for them because they are fiscally independent.

New Business

Demographic changes

Richard said that there is a department 'Master-planning Demographics' that goes out every year and the district is well on its way in its new construction program. Measure K is phase two of this plan and has projects identified. Richard recommended to contact Ed VanGinkel (head of project and real estate end of it) who can direct us to where the information is and what kind of information it is. New construction is divided into 3 categories (Valley, Central and South) and are tied to bonds. Mr. VanGinkel can provide the information to help sort this out. There are also projects identified in the Measures K and R language. Kevin Reed has the full copies of these measures. There are many projects that include retrofitting and seismic repairs and the language in the Measures. The first bond BB passed in April 1997 shows projects already in progress.

Strategic Execution Plan has BB projects and has been expanded to include all Measure K projects scheduled and budgeted, by school. All funded deferred maintenance projects are listed here. Jan said that this is a document that is important to be appended to the plan. Doug said that the document should go to the board in July and will be available. The document is updated yearly. Richard said that there are good front-end explanations of the work that is being done. Doug will provide a two year list of deferred maintenance projects for review to see if the data there is appropriate for the plan.

Other new business

A discussion of the term "functional use" in relation to the value of replacement. More research has to be done on the nature of the term to see if it applies to the facilities.

The membership agreed to skip the next meeting to use the time to work on developing the document. The next meeting will be July 28th.

Jan reiterated that plans must be submitted to the state before it is submitted to FEMA.

Meeting Adjourned at 2:40 PM

2

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

July 28, 2004

Meeting Called to Order 1:36 PM

Introductions

Members in attendance:

Richard Luke	Richard.luke@lausd.net
Steven LaShier	Steven.lashier@lausd.net
Margoth Alfaro	
Nida Niravant	
Mel Borders	Melville.borders@lausd.net
Doug Dunivan	
Bob Spears	Bob.spears@lausd.net
Ann Tsao	Ann.tsao@lausd.net
Louis Ventura	lwventura@yahoo.com
Jena Glymph-Williams	
Anette Henderson	Annette.henderson@lausd.net
Dennis Nakafuji	Dennis.nakafuji@lausd.net
Rich Rogala	rich@dimensionsui.com
Jan Rogala	janrogala@aol.com

Minutes From the Last Meeting

The membership voted to accept the minutes from the June 16th meeting with the following changes – DSA letter (Seismic Results) changing the number of 4000 schools to 461 schools.

The # 7756 with regard to wood frame structures are not LAUSD facilities.

Referenced letters to be sent out to Charter Schools have not yet been sent.

Old Business

Bob was concerned to seismic evaluations of buildings after an earthquake. Mel said that past event documentation shows that every building was evaluated and tagged appropriately. ATC20 inspections were done by many other-than school district employees.

Mel provided a copy of FEMA's Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook.

Final Report on University High School is not completed yet, but should be done early next month.

Jan went over the HAZUS report provided by Mark Benthian and explained that the dollar values for schools are very low. She explained that it is a composite of generic earthquake scenarios in the LA County area. She explained that this is a level-1 report and that the county is seeking to apply data to make the report a level-2. For the plan, we will look at the report's loss figures, compare them to what we have for current figures and then submit them to the committee for review and approval.

1

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

July 28, 2004

The other thing that we have asked the University for is an updated fault map. He is producing a map that has faults more likely to have future movement. They are currently working on maps that depict faults in a truer plane other that a perpendicular line on the ground.

Hazard Mitigation Strategies

- Repair & Rehabilitation Strategies from the Strategic Plans
- Seismic Safety Assessments after an Earthquake
- Response to a blackout or power failure that would affect school facilities (maybe more than a 1-stage process for this)
- Soft-seismic Measures (tie down and preparation) & non-structural hazard mitigation projects – planning cost per square foot on new construction
- DSA Project for $460 mil
- $10 mil shortfall in maintenance due to budget cuts
- Child Development Centers need an accessible path foe exits project
- Security for Administrative Buildings
- Security for all district facilities

Jan explained that for strategies that might be construed as future mitigation strategies you can look at every day things we do to reduce risks and want to continue to do, but won't have the funds to do them, and ask for grants (mitigation grants) to continue the program or process already in place.

Richard asked if Mitigation Strategies discussed in past task force meetings were being tracked through this process. These are being kept in the minutes as well as retained by the consultant and will be compiled for a future meeting so that the membership can work on prioritizing them.

Bob asked about resubmitting mitigation grant applications when and if they are denied the first year and they want to resubmit in future years. Jan recommended that you keep the 'meat' of the grant application, update risk analysis figures and resubmit the same grant application.

Disaster Hazard Mitigation litmus test is to ask whether the event would cause the district to go beyond their ability to respond and handle the effects of the event. The event or effects of the event must be mitigated or reduced/eliminated by the project.

Sub-Committee Reports

Public Input Committee – Steve LaShier: No further hits on the survey. Jan said that we have the City of LA's report that compiles the survey information from 422 citizens and since it reflects information within the service area we can use the information in our plan. Steve reported that he has observed much e-mail traffic from Office of Business Managers that essentially saying they were not going to comply because they won't be penalized. Jan explained that they will get the recovery funds. Where the penalties show is when there is mitigation money available, they will NOT be eligible to receive them.

Charter School Committee – Dennis Nakafuji: Most of the new Charter Schools (independent) are unaffiliated with LAUSD and are in non-LAUSD facilities. Conversion schools (dependent) will have their physical property covered in our plan, but their infrastructure and organization are not included in the plan. LA City FD is inspecting Charter Schools and are finding all kinds of violations. These schools are generally not

2

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

July 28, 2004

sponsored by LAUSD, but by the County. They will be addressing that there is a plan being developed which the dependent schools will be included in. The independent schools will be provided the information they need for a plan but not be included in our plan. There are about 50 charter schools, most independent and about 30 set to open in the fall. Most are in buildings that have been retrofitted for safety. LAUSD is charged with oversight with respect to education, but we are still discussing the oversight of safety issues.

New Business

Steve asked the membership to tally staff time related to the task force meetings and process so that he can submit the information along with a request for clarification of the grant.

Richard Luke stated that the facilities reflected in this plan are k-12 facilities and Early Childhood and Adult Education facilities are not covered. These two entities are under the same governing board (LAUSD School Board) so therefore they are covered in this plan and should have representation on this task force. EEC and Adult Ed are funded separately from the k-12 proposition 98 fund. Richard will send e-mails to people affected and get a list of facilities to be included in the plan.

Overhead photos – Luis Hernandez would have all the information (Gary Rainwater is the ultimate boss).

Meeting Adjourned 3:10 PM

Received Documentation

Deferred Maintenance Plan 2004-2008 from Doug Dunivan
Letter from Division of the State Architect re: AB300 Seismic Safety Inventory of California Public Schools Information for School Districts
FEMA Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook
Bond Issue Measure R
November 2002 Local Bond

3

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

August 18, 2004

Meeting Called to Order 1:40 PM

Introductions

Members in attendance:

Richard Luke	Richard.luke@lausd.net
Steven LaShier	Steven.lashier@lausd.net
Rosemarie DeOcampo	Rosemarie.deocampo@alusd.net
Jeff Crawford	jcrawford@laspd.com
Mel Borders	Melville.borders@lausd.net
Peter Misseijer	Peter.misseijer@lausd.net
Bob Spears	Bob.spears@lausd.net
Raouf Beleidy	Raouf.eibeleidy@lausd.net
Margaret Fairlie	Margaret.fairlie@lausd.net
Jena Glymph-Williams	Jena.glymph-williams@lausd.net
Anette Henderson	Annette.henderson@lausd.net
Ferris Trimble	Ferris.trimble@lausd.net
Rich Rogala	rich@dimensionsui.com
Jan Rogala	janrogala@aol.com

Minutes From the Last Meeting

The membership voted to accept the minutes from the July 28th meeting with the following changes –

1. Under Hazard Mitigation Strategies – Change "DSA Project from $460 mil" to "460 buildings surveyed prior to 1978 were found to be structurally unsound…"
2. Under Sub-Committee Reports, second paragraph – Change "(dependent)" to "affiliated and independent…"
3. Same paragraph – change "about 50" to "49…"
4. Same paragraph – change "30" to "20…"

Committee Report

Public Input

Bob Spears submitted Chapter 4 (Draft Hazard Mitigation Strategies from City of LA) to consultants. City of LA is going to publish their plan as a draft for public input. Steve Lashier – KLCS can run a ticker under the screen on the cable TV network that advertises the fact the plan is available and that we are seeking public input. Jan suggested that the Hazard Analysis and Strategies are placed on the web page and say that a full copy of the plan draft is available for review at a given place. Bob suggested that the committee mitigate the "public red flag" by publishing the entire draft as a web page and soliciting input from that.

1

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

August 18, 2004

Hazard Mitigation Strategies

1. Margaret said that we could be looking more toward design and structural issued and no so much at Maintenance & Operations issued. We should research the information and documentation generated after the Northridge Earthquake for example.
2. Bob said that 146 schools were affected by the November 13, 2003 storms (mostly from lost power). Emergency power should be a strategy, not only for school sites, but for the freezers containing food in the main warehouse in Pico Rivera, and for the Central Garage in order for them to maintain the ability to pump fuel into district vehicles during an emergency. Rosemarie said that there are Standard Operating Procedures for Maintenance and Operations. There are also some contracts (2) for generators to be supplied in the event of power emergencies. The generators are assigned regionally. Steve cautioned that in a bad situation, those would probably be gong – used for major response or recovery operations. There was also discussion about emergency generators for schools that have elevators and sub-terrainian parking (to operate pumps if necessary). Rosemarie said she is currently doing a generator survey.
3. The issue of numerous severely handicapped students at facilities that require one on one care was brought up. Also, the fact that some of these students would require a stockpile of medications in the event they need to be kept at the site during an emergency was discussed. Developing a "pharmacy strategy" was considered for the plan. Bob will talk with Donna Lynn-Anton (in charge of Special Education) and run the idea by her.
4. Margaret brought up the issue of liability that when a problem is known or identified, but no action is taken to mitigate or correct it due to lack of funding, what kind of liability does the district assume? Bob said that keeping students safe during an emergency is basically the responsibility of the site administrator as well as transporting students from unsafe conditions if required. Steve said that the liability does not change in this issue. Jan suggested that a strategy be devised to address this issue. Jena said that there is a policy that basically puts the responsibility on the parents for the medication issue.
5. Bob suggested a strategy for non-structural seismic retrofitting of facilities incorporated into design and construction be drafted. Jan suggested that if this need can be substantiated, that it a great opportunity for a grant. Margaret reported that $16,000,000 was spent on non-structural retrofitting in the past, but, because teachers and administrators move things around to suit their needs, many of the measures taken are no longer functioning. Richard will forward project figures and specifications for the DSA Project on 460 structures district-wide.
6. Margaret addressed the issue of fire dangers at schools like those in Topanga Canyon. Jan, having worked with that community, said that there is a cultural mindset in Topanga Canyon not to do mitigation. Bob said he visited Dan Palmer (Transportation) and ask how they would evacuate sites threatened by wild fire. Also he suggested that schools threatened by fire risks take a closer look at themselves and devise a defensive strategy. Jan recommended that LAUSD, affected schools and LACOE enter into a dialogue on addressing the issue of transporting and housing evacuees in the case of wild fires. LAUSD could make a strong case in recommending that LA County enforce brush clearance laws. Also included should be the USDA Forest Service since Clear Creek School is in the Angeles National Forest.
7. Margaret brought up the issue of schools, such as in the Wilmington area, which has nearby underground pipelines, may require some strategies. Richard said that there is a small list of schools that may be threatened by pipeline problems. Some facilities have done a phase 1 study (SQUA) and also that there are vicinity maps identifying easements. He suggested a strategy be written to request a grant to study this issue as

2

LAUSD Hazard Mitigation Planning Task Force Meeting
MINUTES

August 18, 2004

well as identify affected facilities, map and digitize the results for web access by OEHS. Also there are several hundred oil and gas leases (220-250) that should be looked at for strategies.

8. Richard and Rosemarie discussed the issue of underground storage tank removal. Rosemarie said that the district has removed 850 so far and that the project is ongoing; when they are discovered, they are removed.

9. LASPD – Jeff Crawford had the following suggestions for strategies:

   - ✓ Develop a mobilization program for the Police Department (tactical mobilization plan for disasters)
   - ✓ Upgrade Personal Protective Equipment for all police officers
   - ✓ Upgrade Special Response Team (SRT) equipment and training
   - ✓ Acquire a web-based video surveillance system for existing camera systems and procure more systems for vulnerable areas.
   - ✓ Enhance involvement with the LACO Terrorism Early Warning Group

New Business

Information

Steve reported that there will be 763,000+ K-12 students scheduled to start school in September. Also there will be 120,000+ Adult Education students, 11% of which will be Special Education.

Steve said that there is a $10 billion war chest for new construction.

Plan Review Committee

Reviewed the approval process. Steve presents a schedule and a recap of the project to the Board Audit/Business/Technology Committee on October 4th.

Bob wants them to be given the vision that the plan is an ongoing, living document.

The Review Committee will have the following members:

Richard Luke
Bob Spears
Margaret Fairley
Doug Dunivan
Steve LaShier
Ferris Trimble

The next meeting will be September 8th. Please bring more strategies.

Meeting Adjourned 3:10 PM

3

LAUSD, LHMP Meeting Minutes

Wednesday, September 08, 2004

Called to order 1:35 PM

Attendance:

Steven A. La Shier
Ricardo Salas
Ferris Trimble
Mel Borders
Bob Spears
Dennis Nakafuji
Ann Tsao

Richard Luke and Lt. Crawford called in absence.

Minutes of last meeting: 8/18/04
Under new Business, one correction the ABT presentation will be October 28th not the 4th.

No other corrections- minutes approved.

Committee Report:

Public Input – The announcement soliciting public input was approved by the committee and the announcement will direct those interested to our website and instruct them how to access our plan and provide input.

Plan Review Committee – S. La Shier informed the committee that the plan draft is to be delivered to them before the next scheduled meeting of 8/29.

Mitigation Strategies:

Bob Spears questioned if Rosemary had provide power information to Rich since last meeting, S. La Shier will email Rich and Rosemary.

Ricardo Salas will write up a strategy for emergency generators for our vehicle fueling systems – we need to get him the form electronically – email Rich Rogala.

Civil Disturbance Emergency Plan, from Lt. Crawford was emailed to Rich Rogala by S. La Shier. Need cost estimates from Jeff on plan preparation and training costs.

KLCS has no emergency power to keep station active during a black out or other wide spread power outage – Ann Tsao/Bob Spears

New Business:

S. La Shier informed the Task Force that he will be doing a trial run of his ABT Board power point presentation at the next ORMIS staff meeting on 8/15/04 in 28-197 @ 10AM, members of the Task Force are invited to attend.

The next meeting is 9/29/04.

Meeting Adjourned 2:45 PM

Section 3 – Demographics & Statistics

General Data

Area

The total area of the Los Angeles Unified School District is 703.8 square miles. In addition to the City of Los Angeles, the district serves many other cities and several unincorporated areas of Los Angeles County.

Cities Entirely Within LAUSD

Cudahy
Gardena
Huntington Beach
Lomita
Maywood
San Fernando
Vernon
West Hollywood

Cities Partially Within LAUSD

Bell
Bell Gardens
Beverly Hills
Carson
City of Commerce
Downey
El Segundo
Hawthorne
Inglewood
Long Beach
Los Angeles
Lynwood
Montebello
Monterey Park
Rancho Palos Verdes
Santa Monica
South Gate
Torrance

Population

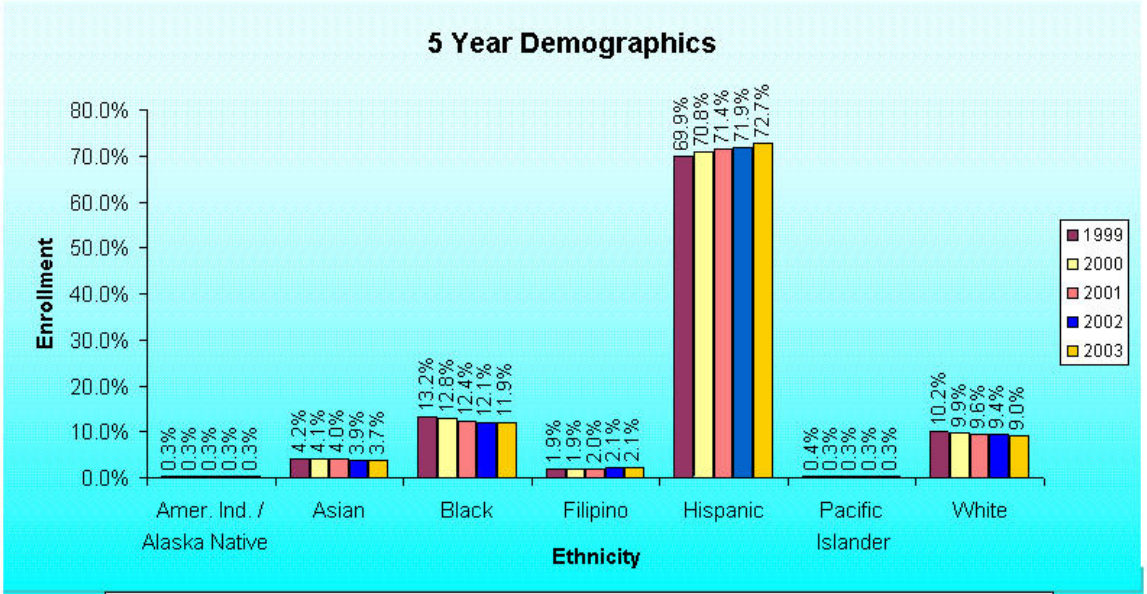
School enrollment for all of Los Angeles County is **1,711,034**. (as of January 1, 2002)

School enrollment for all of Los Angeles Unified School District is **879,826.**

Enrollment Information (Dec 2003)

Type of School	Enrollment
Elementary Schools	316,390
Middle Schools	161,597
Senior High Schools	182,522
Magnet Schools & Centers	52,433
Special Education Schools	4,153
Opportunity & Continuation Schools	4,542
TOTAL K-12 ENROLLMENT	746,610
Community Adult School	112,496
Occupational & Skill Centers	34,856
Children's Centers	10,837

Ethnic Survey Review



	Amer. Ind. / Alaska Native	Asian	Black	Filipino	Hispanic	Pacific Islander	White	Total
1999	2,018	29,770	93,540	13,231	496,571	2,517	72,414	710,061
	0.3%	4.2%	13.2%	1.9%	69.9%	0.4%	10.2%	
2000	2,073	29,270	92,096	13,891	510,367	2,471	71,178	721,346
	0.3%	4.1%	12.8%	1.9%	70.8%	0.3%	9.9%	
2001	2,174	29,070	91,476	14,613	524,904	2,441	70,746	735,424
	0.3%	4.0%	12.4%	2.0%	71.4%	0.3%	9.6%	
2002	2,248	28,920	90,541	15,592	537,136	2,384	70,031	746,852
	0.3%	3.9%	12.1%	2.1%	71.9%	0.3%	9.4%	
2003	2,247	27,575	88,055	15,868	540,487	2,339	66,516	743,087
	0.3%	3.7%	11.9%	2.1%	72.7%	0.3%	9.0%	

Number of Schools & Centers

Schools K-12	Number
Elementary	434
Middle	78
Senior High	56
Multilevel	14
Magnet	21
Magnet Centers	139
Newcomer Centers	1
Continuation Senior High	45
Skills Center	4
Special Education	20
Community Day Schools	9
Opportunity High Schools	6
TOTAL K-12	806

Other Schools & Centers	Number
Community Adult	26
Early Education	110
Infant Centers	4
Primary Centers	13
Regional Occupation Centers	5
Regional Occupational Programs	1
TOTAL CENTERS	159

Independent K-12 Charter Schools & Centers	Number
Elementary	17
SPAN Schools	9
Primary Center	1
Middle School	6
Senior High Schools	9
Senior High Magnet Centers	2
TOTAL CHARTER SCHOOLS	44
TOTAL SCHOOLS & CENTERS	**1042**

Employees

Regular Teachers* 34,215

Other Certificated-Support** 4,994

Other Certificated-Administrators*** 2,709

Classified Personnel (full-time) 33,725

Total Regular Employees 80,325

* Includes K-12, adult and early education teachers

** Includes school psychologists, nurses and counselors

***Includes school-based, local district and central office administrators.

Structure of District

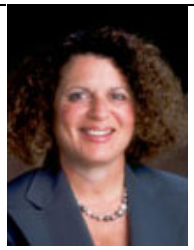
Governing Board

"At each meeting, the Board of Education shall sit and act as the governing board of the Los Angeles Unified School District and the affairs of the District shall be considered at each meeting, and comprehensive records of Board action concerning the same shall be kept." (Rule 13) "The President shall preside at all meetings of the Board of Education, shall sign all records of meetings of the Board and other documents to which his or her signature is required, and shall perform such other duties as are prescribed by law and the rules of the Board." (Rule 51)

Marguerite Poindexter LaMotte

Jose Huizar
BOARD PRESIDENT

Jon Lauritzen



Marlene Canter

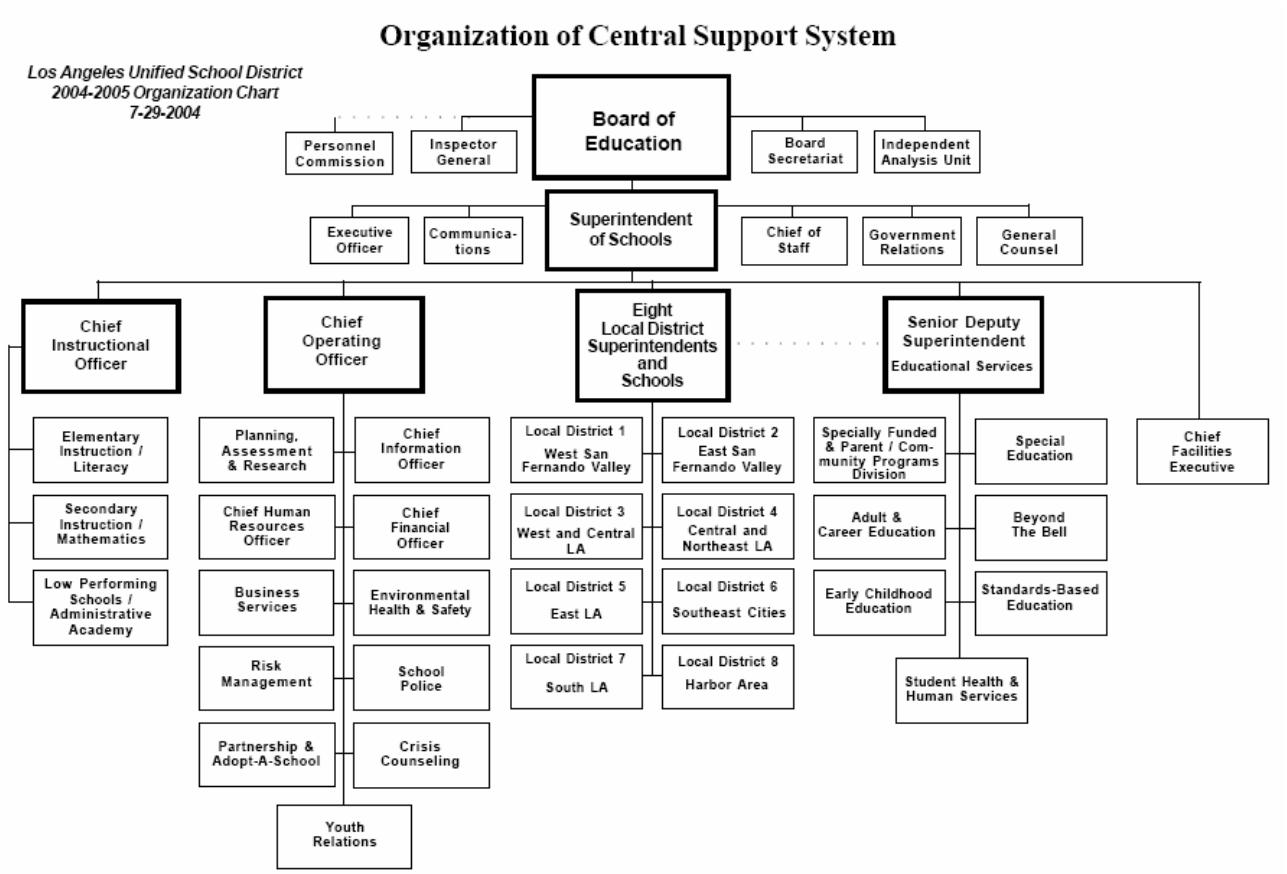
Mike Lansing

Julie Korenstein

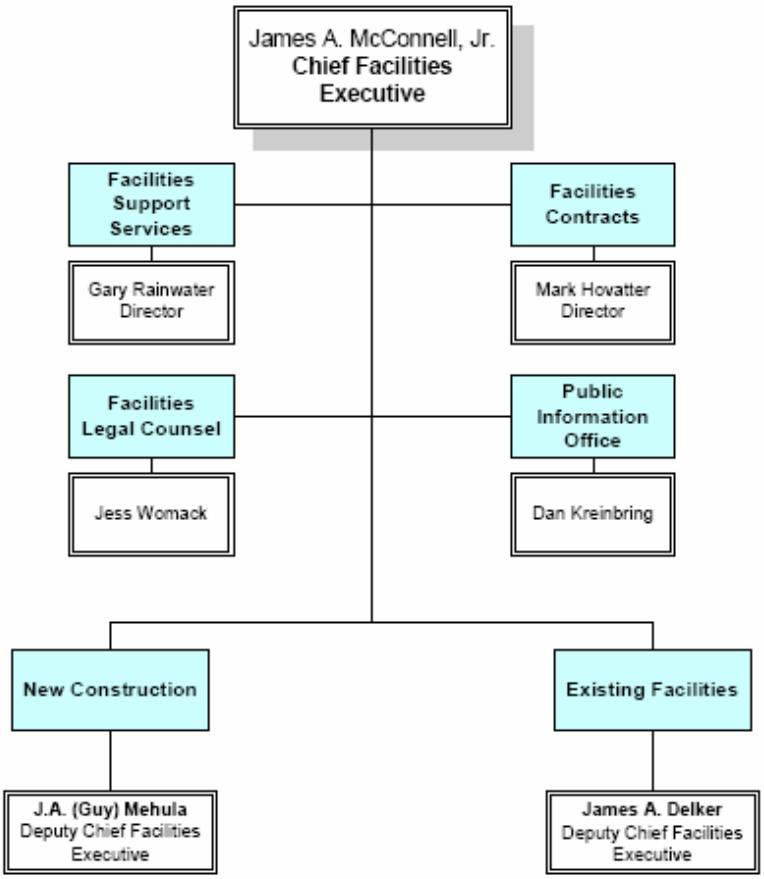
David Tokofsky

The order of business for a regular meeting of the Board of Education and the agenda of a Committee of the Whole meeting shall include a list of items to be presented to the Board at that meeting and shall be posted in the lobby of the Administrative Offices at 333 South Beaudry Avenue at least 72 hours prior to the time of a regular meeting, and at least 24 hours prior to the time of a special meeting (in compliance with Education Code Section 35144 and 35145 and Government Code Section 54954.2.) The business at all regular meetings of the Board shall be transacted in the following order, though the President may deviate from the scheduled order of business with the consent of the Board: A. Adoption of Consent Items B. Student Input C. Public Notice of Initial Negotiation Proposals D. Receipt of Communications for Action at Next Board Meeting E. Special Report F. Adoption of Regular Calendar Items G. Board Member Motion H. Correspondence and Petitions I. Miscellaneous Business J. Public Comment K. Adjournment (Rule 61).

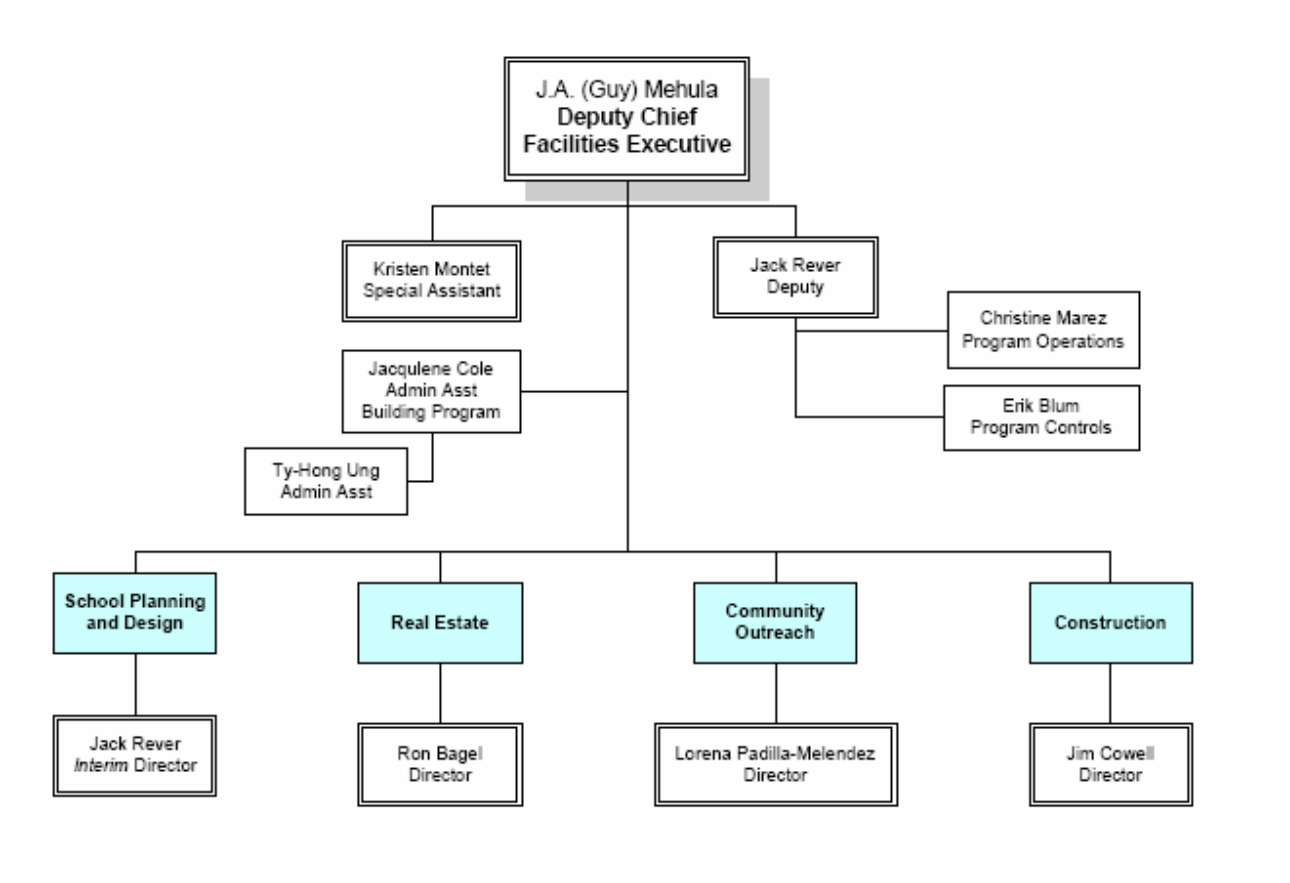
District Central Support System Organization



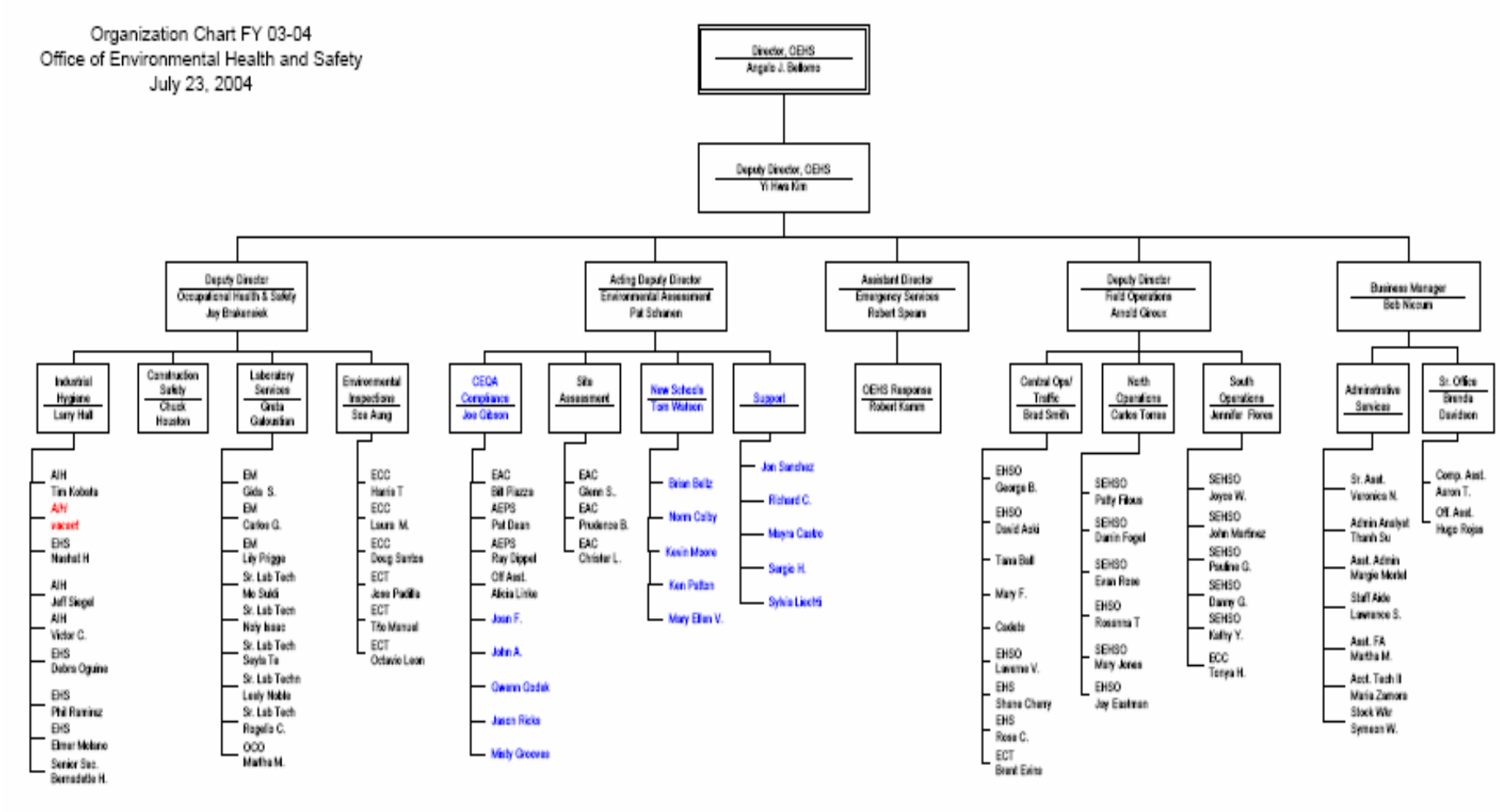
Facilities Services Division



New Construction Division



Office of Environmental Health & Safety



Departments & Responsibilities

Academic English Mastery Program

The Los Angeles Unified School District's Academic English Mastery and Closing the Achievement Gap Branch responds to three district initiatives, The Action Plan for a Culturally Relevant Education that Benefits African American Students and all Other Students (June, 2001); The Children Can No Longer Wait: An Action Plan to End Low Achievement and Establish Educational Excellence (March 1989), and Priorities for Education, A Design for Excellence (December 1986). All three initiatives call for instruction appropriate to the specific language needs of students with limited proficiency in Standard American and Academic English, and for staff development on topics that "come directly from the needs of students [and] teachers, which address both the content (what) and the process (how) of teaching." In response to this charge, the Academic English Mastery and Closing the Achievement Gap Branch provides comprehensive professional development for teachers, coaches, Para-educators, parents, and administrators on culturally relevant and linguistically responsive pedagogy and offers a strategies curriculum designed to enhance academic achievement in Standard English Learners and other underachieving students.

Accounts Payable

A team of dedicated professionals focused on timely payments to our vendors, faculty, staff and students in a courteous and professional manner.

Administrative Academy

The Administrative Academy was created in 1999 to provide support and training for administrators throughout the Los Angeles Unified School District. Using research-based resources, aspiring, new, and experienced administrators gain additional information, ideas, strategies, and skills to assist them with both the management and the instructional elements of the job of school administrator to improve student achievement and close the present achievement gap.

The Academy offers four programs to realize our mission statement:

- The Administrative Academy is committed to providing educational excellence to the students of the Los Angeles Unified School District by providing the highest quality professional development opportunities to those entrusted with the responsibility for leading our schools.

- The Academy is dedicated to the development of current and future leaders who possess the knowledge, skills, and attitudes needed to implement educational reforms resulting in increased performance for every educator and increased achievement for every student.

Adult and Career Education Division

An adult and occupational education system whose mission is to provide the diverse population we serve with quality lifelong educational opportunities that will empower each student to contribute to and benefit from an ever-changing society.

Below, is a list of the programs Adult Education offers:

Adult Education Programs
Adult Academic Instruction

Alternative Education Work Centers
Citizenship Preparation
English as a Second Language
Family Literacy
Literacy/Presecondary Instruction
Parenting and Family Education
Programs for Adults with Disabilities
Programs for Older Adults

Career Education Programs
Apprenticeship
Business Education
California Work Opportunity and Responsibility to Kids
Health Careers
Industrial Education

Adult Student Information Systems

Responsibilities Include:

- Assist with questions relating to Adult-SIS
- Enrollment
- Statistical Report
- Annual School Program Survey
- Adult District Surveys
- Adult-SIS Trouble Shooting
- Attendance Scanning
- Adult-SIS Problems w/hardware/software
- Adult-SIS Printer Problems
- Adult-SIS Training

Arts Education Branch

The Los Angeles Unified School District's Arts Education Plan is action oriented. It has been informed by national studies and reports which identify a set of common factors that contribute to achieving a quality, District-wide arts education program. The District Arts Education Plan ensures that every K-12 student participates in a balanced, articulated, comprehensive, standards-based arts education that includes dance, music, theater and visual arts. The sequential instruction in all the arts is envisioned by introducing dance, music, theater and visual arts in the elementary grades, focusing on multiple strategies for all of these art forms in middle schools, and concentrating on proficient or advanced high school arts coursework for graduation requirements and UC/CSU entrance expectations.

Audiovisual and Educational Software Services

The Audiovisual Media Library provides over 3,000 videocassette, DVD, and CD-ROM titles for teachers and staff to borrow free of charge! These curriculum-oriented titles have been reviewed and recommended by LAUSD teachers.

Resources are evaluated by District committees. Approved materials are listed on a cd sent to all schools and in an online database. The Audiovisual Preview Center is also available for teachers to view materials prior to purchasing Audiovisual Resources that include videocassettes and DVD's are evaluated by District Committees and are published in yearly **Audiovisual Materials Resource Lists** and **Low-cost Video Supplements** to this list, as well as a new online list. Films on KLCS is a cost effective

way for District teachers to build their own school site collections by taping films off the air. Schedules are available only to District staff

Benefits Administration

LAUSD Benefits Administration in partnership with SHPS, Inc. a web portal as an on-going information source for your benefits and plan information, links to the District's providers, plus other timely updates to your benefits. This office manages all aspects of the benefits for the LAUSD employees

Beyond the Bell Branch

Beyond the Bell (BTB) Branch carries that commitment by connecting students and youth to their home, school and community through a variety of programs that are provided and operated by the school district and its partner agencies before and after school and on Saturdays.

Board of Education

The Los Angeles City Board of Education is the governing, policy-making body of the Los Angeles Unified School District. Members of the Board make decisions on matters relating to public education in the City of Los Angeles and several surrounding communities.

All Board meetings are open to the public, except those noticed in advance as Closed Session. Closed Session agenda items are announced in public and then discussed with only Board Members and District staff present. Closed Sessions are permitted by law and held in accordance with the state Open Meeting laws to allow Board Members to discuss confidential legal, personnel and collective bargaining matters as well as certain real estate issues.

Most official business of the Board is conducted during regularly scheduled meetings on the second and fourth Tuesdays of the month. Upcoming public meetings are announced at the end of Board Meetings and are posted outside the lobby at the District Headquarters, 333 South Beaudry in downtown Los Angeles. Meetings begin at 1 p.m. Special meetings are occasionally held for specific purposes and are always announced in advance. Regular meetings take place at the District Headquarters in the Board Room.

Individuals or groups can express their views in writing on any issue before the Board of Education by addressing their letter to an individual Board Member or to All Board Members:

Certified Recruitment and Selection Section

As the nation's second largest school district, the Los Angeles Unified School District (LAUSD) serves more than 730,000 students. Our diverse and culturally rich student population is increasing, and so is our need for qualified, dedicated teachers and school support staff.

The District, which encompasses the city of Los Angeles and several neighboring cities, offers exceptional opportunities for teachers. LAUSD believes teachers are shapers of the future, and we are committed to educational reform and innovative instructional programs that are aligned to state standards. The LAUSD provides a supportive and dynamic environment for making a difference in young lives and enriching the student-teacher experience. This Section oversees the selection and recruitment of staff members. The LAUSD encourages all credentialed / certified teachers, in all subject areas, to begin the application process. This includes students who will complete their teacher credential / certification program prior to August 2004. We also encourage candidates in the subject areas of Special Education, Mathematics and Science to apply now.

Charter Schools

This office oversees the Charter Schools Programs. The Los Angeles Unified School District views charter schools as part of the District's family and as an asset from which we can learn. Therefore, the Los Angeles Unified School District will encourage and nurture the development and continuation of charter schools that are accountable for improved student learning and that can:

Provide possible solutions to urban school challenges through practices that help:

- Ease the shortage of school facilities and seat space
- Narrow the achievement gap among students of various backgrounds
- Increase responsible parent and student involvement in learning
- Improve teacher quality and performance evaluation systems
- Provide data to help identify and evaluate issues that affect quality educational programs and student learning and achievement
- Serve as laboratories to test, demonstrate and disseminate ideas that can promote better educational practices
- Provide an additional educational option for students

The Los Angeles Unified School District is interested in fostering a collaborative relationship among charter and non-charter schools to promote learning through active participation and meaningful articulation of ideas.

Chief Financial Officer

The CFO's Office is comprised of the following Divisions:

Accounting and Disbursements Division which consists of:

- Payroll Services Branch
- Business Accounting Branch
- General Accounting Branch
- Developer Fee Program

Budget Services and Financial Planning Division which consists of:

- Budget Services
- Analysis and forecasting
- School Fiscal Services
- Business Services Division/Procurement Section

Clear Creek Outdoor Education Center

The Clear Creek Outdoor Education Center is the Los Angeles Unified School District 's residential science school located in the Angeles National Forest. Clear Creek stimulates students by providing experiential learning not available in the classroom. Students develop an appreciation of nature and their place in it as they hike in the forest, look through a telescope, or make friends with a snake.

Collective Bargaining Education Project

Our curriculum, "*Workplace Issues and Collective Bargaining in the Classroom,"* assists social studies teachers to incorporate labor relations education into their units of study. All of our lessons are aligned with the California History-Social Science Framework and meet new District Standards. Further, these lessons are specifically designed for Economics and U.S. Government, U.S. History, World History, and Education and Career Planning classes. The Project's work includes:

- *Demonstrating in-depth, student-centered case studies and simulations on*
- *Workplace issues with individual teachers and their students on-site;*
- *Direct support and follow-up for teachers with more resources;*
- *Conducting the annual Collective Bargaining Institute field trip event and salary point workshops.*

All of the events and resources listed are available to individual social studies teachers and interdisciplinary teaching teams on a first-come, first-served basis. We prefer to work with at least two teachers in a school at a time, and lessons can be arranged either as single class periods or within a time block.

Communications Office

The Office of Communication is where you will find information on the eight local districts, answers about enrollment and immunization requirements, when the Board of Education meets. How to locate neighborhood schools and more.

District Reading Program

The Reading First Grant is providing Los Angeles Unified educators an opportunity to deepen our commitment to schools at risk and to improve student achievement through culturally, responsive pedagogy and the implementation of Open Court with integrity. The Reading First Assurances set the standards for high quality and effective teaching in 190 schools in Los Angeles Unified. Reading First Experts and literacy coaches support the teachers in their efforts to improve classroom practice as school site leadership teams analyze data and formulate "next step action plans" for improvement during weekly grade level meetings. The data from curriculum embedded assessments drives instruction and provides teachers with insight regarding how well students learned what they have actually taught in language arts.

As dedicated educators in one of the largest urban districts in the nation, we have created a system of managing and assessing literacy instruction that, once deepened and refined, could be a model for other districts to emulate. We are taking professional development to the school site, providing on-the job training, coaching, and peer assistance. Students of all ethnicities in many of our schools are becoming engaged, empowered, and accountable for their own learning in literacy. Reading First gives new meaning to the belief statement, "All children can learn." Principals are rising above mere site management to don the cloaks of true instructional leadership. They are working, as Michael Fullan states, "to cause greater capacity in the organization to get better results in learning."

What a wonderful time to be in education! In this sea of educational change, we must rely on educational research to be our rudder. We must sail toward excellence sometimes with the wind and sometimes against it…but we must sail and not drift nor lie at anchor. If systemic change is to become a reality through Reading First in Los Angeles Unified, we must stay focused and work together against

the tide of naysayers to ensure that children of every ethnicity, socio-economic level, and creed access the core curriculum with the assistance of a knowledgeable and dedicated teacher. This is the goal of Reading First.

Early Childhood Education Division

The mission of the Early Childhood Education Division is to provide a high quality early education program to maximize school readiness.

Division of Risk Management and Insurance Services

The Office of Risk Management and Insurance Services (ORMIS) is located at 333 S. Beaudry Avenue, 28th Floor, Los Angeles, CA 90017. The Director of ORMIS, David Holmquist, Esq., is LAUSD's (the District's) central authority for all risk management and insurance services relative to:

- Property, Liability, and Auto
- Workers' Compensation
- Act of Violence Leaves
- Unemployment
- Restitution
- Integrated Disability Management
- Reasonable Accommodations
- Disability Retirements
- Family Medical Leave Act (FMLA)/California Family Rights Act (CFRA)
- Risk Analysis
- ERP (Employment Reimbursement Program)
- ERF (Equipment Replacement Fund)
- Computer Insurance
- All related claims handling (except Health Benefits)

Earthquake Recovery

Ongoing program to administer FEMA Disaster Recovery Programs

Educational Equity Compliance

Administers compliance to Title IX, Title VI ADA, Section 405 and other specialized compliance.

Environmental Health and Safety

The Office of Environmental Health and Safety is dedicated to providing a Safe and healthy environment of the 900,000 students and 80,000 employees of the LAUSD. This mission is supported through periodic inspections of existing District facilities, and careful review of all proposed school sites to ensure a school environment that is health-protective and conducive to learning.

Goals

All students will be provided a school environment that is safe, healthy and conducive to learning.

Safe and healthy working conditions will be provided to all District employees.

Proposed school sites will undergo an appropriate level of environmental review, and new school sites will be designed and constructed in a manner that reduces environmental risks, conserves energy, and optimizes the learning environment.

District facilities will operate in strict compliance with environmental regulations, and operating practices will be promoted that reduce environmental liabilities and minimize the unnecessary generation of wastes.

The Office of Environmental Health and Safety (OEHS) has developed and implemented a Chemical Hygiene Plan (CHP) to minimize employee and student exposure to hazardous chemicals in schools with laboratories.

A qualified Chemical Safety Coordinator (CSC) is appointed at each location with a chemical laboratory to implement the CHP. Duties of the CSC include training employees on chemical safety, ensuring that safe laboratory procedures are adhered to, maintaining reference materials including Material Safety Data Sheets, inspecting and maintaining safe chemical storage rooms, completing chemical inventories and providing oversight for packaging and removal of hazardous waste.

To assist science teachers, administrators, and other school staff members understand and avoid situations in which accidents might occur, the State of California has prepared the Science Safety Handbook for California Public Schools. CSCs are encouraged to download and review the handbook.

Only chemicals approved by the State of California and OEHS may be used in school laboratories. Visitors may view all LAUSD Approved Laboratory Chemicals or search for a specific chemical by entering the name below and clicking "View Approved Laboratory.**The Office of Environmental Health and Safety had developed and implemented a Emergency Services Program**

The goal of OEHS Emergency Services is to ensure that the students and staff of the Los Angeles Unified School District are ever prepared for any emergency in a reasonable and responsible manner thus making certain the highest level of safety is achieved in the event of an emergency. This goal is accomplished through educating LAUSD students and staff on emergency preparedness, conducting periodic emergency drills, developing and improving emergency procedures and providing immediate, professional and knowledgeable emergency responders.

The Office of Environmental Health and Safety conducts New School Site Reviews

The Los Angeles Unified School District is currently engaged in the largest building program in its history. Since July 1, 2001 OEHS has performed over 100 site reviews.

Pursuant to state regulations, OEHS conducts an environmental review of all proposed school sites.

This environmental review consists of the following:

1. A comprehensive assessment of site condition under oversight of the state Department of Toxic Substances Control (DTSC).
2. An evaluation of air emission sources in proximity of the proposed school site.
3. An assessment of compliance with the California Environmental Quality Act (CEQA).

Environmental Health and Safety Existing Facility Site Review

The District operates nearly 1000 schools and other facilities. These facilities are often reviewed in order to evaluate concerns related to the safety of students and staff

Environmental Health and Safety School Site Inspections.

The OEHS Facility Inspections Program conducts routine inspections in all District facilities. The inspections are conducted to identify potential health and safety risks and assess compliance with regulatory requirements. OEHS has issued the Safe School Inspection Guidebook in order to assist school administrators in complying with applicable health and safety standards. The school community is invited to review the Guidebook and may search for specific subjects by keyword. Visitors to the OEHS website may also review school inspection results for a particular school.

Environmental Health and Safety Traffic and Pedestrian Safety.

The goal of the OEHS Traffic and Pedestrian Safety Program is to raise the sensitivity and consciousness of children and their parents to the importance of always being aware of traffic safety rules and helping children become safe pedestrians and bike, scooter, and skateboard riders. This goal is accomplished through the implementation of the Los Angeles Unified School District's School Safe Traffic Zone and Citation Diversion Projects which open the door to enhanced school zone safety through the joint efforts of parents, students, schools, communities and law enforcement. The Citation Diversion Youth Traffic Safety Classes address non-vehicular minor traffic refractions and child passenger safety (seat belt and child restraint seat usage).

The School Safe Traffic Zone Project is active in four elements:

- Education
- Engineering
- Enforcement
- Community Enrichment

The leading cause of death of California children under 12 years of age is auto-related collisions involving child passengers, pedestrians or bicyclists.

The School Safe Traffic Zone and Citation Diversion Projects are endorsed by the Los Angeles School Police Department (LASPD), Los Angeles Police Department (LAPD), Los Angeles County Sheriff's Department (LASD), California Highway Patrol (CHP), Los Angeles Department of Transportation (LADOT), Los Angeles County Superior Court Juvenile Traffic Division, Los Angeles City Council, Office of the Los Angeles City Attorney, and various Police Departments in cities where LAUSD schools are located. The collective focus is on safety through education and enforcement.

Injury, Illness and Prevention Program

School facilities are subject to a variety of health and safety requirements intended to ensure the health and safety of students and staff. All District facilities are required to implement an Injury & Illness Prevention Program (IIPP) dealing with workplace safety. The Office of Environmental Health and Safety (OEHS) has issued the IIPP Template to assist Site Administrators in the preparation of this required document. All Site Administrators are encouraged to review and update their existing IIPPs consistent with the OEHS IIPP Template.

Safe School Plan

LAUSD schools are required to comply with California Education Code (CEC), Section 35294, dealing with the preparation of "safe school plans." These plans address violence prevention, emergency preparedness, traffic safety and crisis intervention. The District has developed the Model Safe School Plan (SSP) for use as a template in the preparation of safe school plans for each of the District's 900 schools. The purpose of the template is to standardize safe school plans throughout the District and

minimize the time required for annual updates. The Model Safe School Plan is comprised of two volumes: Volume 1 - Prevention Programs (with Reference Guide); and Volume 2 - Emergency Procedures.

Chemical Product Safety Program

To date OEHS has evaluated more than 4,000 products. Visitors to the OEHS website may search the OEHS Evaluated Chemical Product List & download Material Safety Data Sheets. To request evaluation of a new chemical product by OEHS, complete and submit the OEHS Chemical Evaluation Request Form.

Playground Safety Product Review

OEHS reviews and approves the design, layout and surfacing material for playground equipment before purchase. The 2003 Approved Surfacing Material List indicates those playground surfaces approved for District use.

Facilities Services Division

New Facilities Office

Long Term Goals

The primary goal of New Construction is to provide a two-semester, K-12 neighborhood school seat for every student in LAUSD. Achieving this goal allows us to reduce class sizes to agreed upon limits at all grade levels, provide special education facilities as mandated, provide pre-kindergarten facilities and reduce the reliance on portable classrooms.

Our plan to build new facilities over the next 15 to 20 years requires commitment and dedication that is shown by each and every member of our team in Project Management, Community Outreach, Real Estate, Master Planning & Demographics, Design, and Facilities Information Systems.

Near Term Goals

The Los Angeles Unified School District is currently engaged in the largest building program in our history. Over the next six years we will complete the construction of 159 new construction projects to accommodate explosive growth in our student population. Our road map, the New Facilities Master Plan 2000, identifies the need for 79 new schools, 60 on site building additions and 20 playground expansion projects. The 139 building projects will comprise 3,222 new classrooms and will accommodate a total of 76,871 students on a 2-semester basis. New schools and site expansions will require the acquisition of over 450 acres of land, some of which we have already acquired. The total estimated cost of the Master Plan program is approximately 2.8 billion dollars. Funding has been identified from various sources including State Proposition 1A bonds, local Proposition BB Bonds, and developer fees.

Facilities Grants and Funding Office

Facilities Grants and Funding is responsible for identifying funding for school facilities construction projects.

Once a funding source is identified, the unit gathers the required information and coordinates the submittal of an application for funding.

After funding is received, Facilities Grants and Funding ensures that all the requirements of the funding agency are met including documentation, expenditure and progress reporting, and audit preparation.

Facilities Grants and Funding maintains and analyzes data as it relates to the construction projects and their funding. The unit also prepares the submittal for the AB87 Year-Round grant which provides funds for schools that operate on a multi-track calendar.

School-Based Facilities Funding Sources

Construction:

- California Community Foundation: Revitalize Neighborhoods Program
- Crail-Johnson Foundation
- McCarthy Family Foundation
- New Schools Venture Fund
- The Ambrose Monell Foundation
- W.M. Keck Foundation
- Historical Preservation:
- Preserve L.A. Grants
- Traffic Safety Programs:
- Safe Routes to School Program

Existing Facilities Office

The mission of the Existing Facilities and Modernization division is to provide an effective educational environment for the future development and training of our students.

Our goal is to modernize our school facilities with quality material and workmanship, on schedule and within budget.

Our vision is to establish and maintain a program that is cost-effective, centrally coordinated and locally executed in design and construction management.

- Public Documents
- Existing Facilities Monthly Status Report
- June 2004 Existing Facilities Strategic Execution Plan
- Existing Facilities Applications/Reports Menu
- BB Bond Highlights: Sample Repair Projects
- BB Bond Projects By School: Fact Sheets (30-Sep 2004, Updated Quarterly)

Contract Services

Serves all services relating to contracting for facilities.

LAUSD's First Break Program

The First Break Program is a year-round employment program designed to help link eager and interested high school students in the Los Angeles Unified School District (LAUSD), to the world of work. First Break provides students access to over 20,000 job listings throughout the greater Los Angeles area. First Break is in partnership with private and non-profit organizations to place young people in private sector positions. First Break began in 1973 as a cooperative program of the Los

Angeles Unified School District and the Los Angeles Area Chamber of Commerce to find jobs for high school students. Throughout its history, the program's consistent focus and goal has been to help high school students make a positive first connection with private industry. In return, students experience the rewards of employment and learn the responsibilities of contributing to the workforce.

In November of 1996, the First Break Program started providing LAUSD students with job leads online via the Internet (http://itech.lausd.k12.ca.us/firstbreak). The Los Angeles Unified School District is the first school district in the nation to have a job search and placement database that students and counselors may access anywhere at anytime.

Food Services

The Food Services Branch of Los Angeles Unified School District consists of over 5700 employees dedicated to providing healthy, nutritious and tasty meals to our 690,000 k-12 students, pre-school students, staff, adult students and special after school program participants. Many of our employees work in cafeterias throughout the 711 square mile District. Most of these cafeteria employees are drawn from the local school communities and include parents, friends and neighbors of our students.

Central Kitchen ("Newman Nutrition Center ")

Although most of our schools have on-site kitchens to prepare their meals, a few do not have that capability. Our central kitchen "Newman Nutrition Center" produces 80,000 pre-plated meals per day for 155 schools and 75 Children's Centers.

Test Kitchen

Highly trained nutritionists test and evaluate product quality, develop purchasing specifications and develop new menu items. These specialists also work on specialty menus for students with special dietary needs.

Central Services

Rounding out the staff of the Food Services Branch are the accountants, trainers, equipment specialists and management staff who support our local cafeterias.

General Council

OGC Help Manual Table of Contents

The Office of General Council produces a Manual to guide the district in Legal Matters. The Manual includes:

I. INTRODUCTION
II. REGISTERING STUDENTS
III. PROTECTING STUDENTS
IV. DISCIPLINING STUDENTS
V. INTERACTING WITH VISITORS AND GOVERNMENT AGENCIES
VI. CONSTITUTIONAL RIGHTS OF STUDENTS
VII. ADMINISTERING THE SCHOOL
VIII. SCHOOL SAFETY PROCEDURES
X. MISCELLANEOUS

Ethics Office

Our goal is to help the District improve performance by enhancing trust within the District, and between the District and the community. We are proud to be part of the LAUSD team striving to become the #1 school district in the nation. Our responsibilities include:

- LAUSD Code of Ethics
- Ethics training
- Ethics advise
- Conflict of interest reporting

Law Library Online containing:

- California Education Code
- Brown Act
- FPP Commission
- Public Records Act

Gifted and Talented Program

Welcome to a very large family of parents, students, teachers and administrators whose overall goal is to ensure that students who demonstrate outstanding ability or potential are helped to make the most of their unique talents and capabilities.

--Sheila H. Smith, District Coordinator

Purpose

Gifted/Talented Programs creates high end learning opportunities which allow students to flourish in stimulating academic and social environments. In designing challenging educational opportunities, we strive to raise the floor, remove the walls and eliminate the ceiling on learning.

Ceilings are for rooms not students.

History

Los Angeles Unified School District was one of two districts in California to develop an extensive educational program for gifted in 1951. However, there was no legislation to provide school districts with funds to develop programs for gifted students. The California Department of Education conducted a "State Study of Educational Programs" sponsored by the State Legislature in 1957-1960.

"The study proved conclusively that special provisions made in these programs are beneficial for the gifted…participating pupils made striking gains in achievement with accompanying personal and social benefits."

In 1961, AB362 provided minimal funding for excess cost reimbursement for mentally gifted minors. There were insufficient funds to cover all school districts in California. A new district in California could only apply if a district dropped out of the program. The program was named MGM, or Mentally Gifted Minors. The Intellectual Category was the only category for identification in California.

In 1980, the California Legislature provided legislation (AB1040) to adopt the federal definition of gifted. The program was renamed Gifted and Talented Education (GATE). The Marland Federal Report on gifted education adopted the following:

"Students who are identified as gifted/talented exhibit 'excellence' or the capacity for excellence far beyond that of their chronological peers. They require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their ability to contribute to self and society."

This definition expanded the identification categories of gifted to include intellectual ability, high achievement ability, specific academic ability, leadership, creativity, and visual and performing arts abilities. It provided for 200 minutes a week of differentiated curriculum. The Legislature deemed that each school district determine the categories for identification.

It was the intent of the Legislature in passing AB555 in 1986 to ensure that programs for gifted and talented students are continued and improved. AB555 provided funding for all school districts upon application and approval from the California Department of Education.

Changes Governing Gifted and Talented Education: AB2313

The legislation supports unique opportunities for high-achieving and underachieving students who are identified gifted/talented. Its intent is that special efforts be made to ensure that students from economically disadvantaged and varying cultural backgrounds be provided with full participation in unique learning opportunities. Starting January 1, 2001, the legislation did the following:

1. Differentiated Instruction

The 200-minute per week minimum requirement for differentiated instruction has been eliminated, and replaced with a more rigorous standard that requires instructional programs be planned and organized as an integrated, differentiated learning experience throughout the regular school day, and may be augmented and supplemented with other differentiated activities related to the core curriculum.

2. New Standards

Revises the application requirements to reflect new standards for each of the following categories:

- Program Design
- Identification
- Curriculum and Instruction
- Social and Emotional Development
- Professional Development
- Parent and Community Involvement
- Program Assessment
- Budget

Philosophy

The philosophy of Gifted/Talented Programs is integrally connected to the District mission statement. The District's instructional programs for gifted and talented students are based on the principles that all students are to receive an education appropriate to their individual capabilities, interests, and needs, and that students have learning opportunities that help develop their abilities to the highest level. Because gifted and talented students generally demonstrate high performance or capacity for high performance beyond age/grade expectations, they are atypical learners who require specialized learning experiences beyond the regular curriculum.

With regard to excellence, it is not enough to know, but we must try to have and use it.

--Aristotle

Health Education Programs

The Mission of the Health Education Programs Unit is to assist schools in providing for the health education needs of all the students and ensuring that campuses are violence and drug-free environments where students and other stakeholders can be safe and where all students can achieve their highest academic potential.

HIV/AIDS Prevention Project

In 1985, the Los Angeles Board of Education approved the development of programs to prevent the spread of HIV/AIDS. Since 1987, the U.S. Centers for Disease Control and Prevention has provided funds to develop age-appropriate lessons for students, to train teachers in strategies for preventing the spread of HIV/AIDS and other diseases that may be transmitted sexually (STDs), and for the prevention of teenage pregnancy.

Project Goals

- Improve the quality of HIV/AIDS instruction within comprehensive health education program in the District's secondary schools.
- Collaborate with community organizations on HIVAIDS.
- Develop and implement a parent education program.
- Monitor health education programs and health behaviors that put youth at risk FOR HIV infection.
- Develop and maintain a Web site, which keeps parents and teachers informed of the Unit's efforts.
- Maintain and strengthen the Unit Advisory Panel and ensure that it represents the District's diverse population.

A Team Approach

The Los Angeles Unified School District's HIV/AIDS Prevention Project has quite a diverse Materials Review Panel which meets quarterly to advise staff on project efforts.

Human Resources

Welcome to the LAUSD Human Resources (HR) Division. HR provides service to all LAUSD current and prospective certificated employees. Whether you are seeking teaching opportunities or are already one of our current employees, this is the place to begin. Our goal is that this Office be a resource of first resort providing a wealth of information for you, our valued customer.

The Certificated Credential and Contracting Services Unit is responsible for assisting teachers and support services personnel in the completion of contracting and processing requirements after they have been selected to fill various positions. This unit also ensures that every certificated employee has applied for and maintains the appropriate authorization (permit, certificate, credential, waiver. etc.) needed for his/her current assignment. In addition, this site has information regarding signing a first

contract, renewing a contract and credential, changing contract and credential status and fingerprinting requirements.

Master Plan Verification Unit - provides for the payment of differentials and incentive stipends to qualified employees who are appropriately assigned to programs included in the Master Plan for English Learners. The payments were instituted to enhance the quality of services provided to identified limited-English-proficient (LEP) English Language Learners (ELLs), to help LAUSD recruit and retain qualified teachers for LEP students, and to serve as an incentive for employees to upgrade qualifications and request or accept assignments utilizing special qualifications in Master Plan.

Para educator Career Ladder - A program of support for district Para educators pursuing teaching careers. It also provides support to high school future teachers. The site has information on Career Ladder programs and services as well as information on how to become a member.

Personnel Services and Research - The Personnel Services and Research Branch is one of two Branches within the Personnel Division and includes Personnel Research and Analysis; Employee Services (Employee Relations and Employee Records; Personnel Services for the Disabled; and Salary Allocation.

Placement and Assignments - The Placement and Assignments Office is the primary source of support and contact with teachers, principals, superintendents, and District offices for personnel policies and procedures related to staffing schools. At the Placement and Assignments site, you will find information for Certificated employees regarding leaves, transfers, resignations, and retirements.

Recruitment and Selection - The Recruitment and Selection Office is committed to selecting the most qualified K-12 teachers and support service personnel available and to providing the highest quality services to the children and community of the Los Angeles Unified School District.

Salary Allocation - Salary Allocation Unit staff evaluates and processes required official documents that verify training (transcripts) and experience (employment verification letters) to determine placement and advancement on the Teacher Preparation, Early Education and Development Center Salary Tables. Placement and advancement guidelines are incorporated in the District-UTLA Collective Bargaining Agreement, Education Code and applicable State Laws. We also address appeals related to salary placement and verify eligibility for career increments and promotional opportunities.

Substitute Unit - Functions as the primary source for all certificated substitute teacher assignment activity. This site provides current substitute teachers, regular classroom teachers and school administrators, information related to the requesting and assigning day-to-day substitute teachers. Instruction on how to register with the Sub-Finder System is also available.

Independent Analysis Unit

The Independent Analysis Unit is the Los Angeles City Board of Education's independent research arm. The IAU reports directly to the **Board of Education**.

Information Technology Division

The mission of Information Technology Division is to support our schools, offices and local community by:

- Developing and maintaining computer software/hardware systems to provide the District with timely and efficient delivery of electronic information,

- Providing telecommunication services, and maintaining the District's local area and wide areas networks at all schools and business offices.

- Managing projects to automate existing manual processes, and integrating existing IT assets into a secure interoperable system to enhance productivity at all business and education locations within Los Angeles Unified School District.

- Broadening the information resources available to the schools, to enrich the classroom experience for all students and teachers.

Instructional Services

The mission of Instructional Services is to develop, in collaboration with the Local Districts, comprehensive instructional services that provide standards-based curriculum, rigor, assessment, professional development, and accountability in support of the Superintendent's Strategic Plan.

The Division of Instructional Services accomplishes this mission through the work of the Branches found on this website. The Division develops, coordinates, implements, and monitors instructional programs to improve the academic achievement of all students, with a central focus on embedding culturally relevant and responsive education in all instruction. It ensures that there is equity and access to a high quality, comprehensive, safe and supervised educational and enrichment program for all students.

The major goals are: Implement the District's PreK-12 standards-based literacy and mathematics plans at all schools.

Close the achievement gap by using strategies to address the needs of all students;

- Provide research-based professional development activities on rigorous standards-based teaching and learning that support this goal

- Implement integrated and coordinate efforts to provide tactical support and services for accomplishing the District's educational priorities as specified in the mission statements for the Branches within Instructional Services

Language Acquisition Branch

The Language Acquisition Branch is comprised of a central office and another unit of professionals committed to improving services for the District's English learners. This unit is the Asian Pacific and Other Languages (APOLO) and Dual Language Programs Office.

The Language Acquisition Branch promotes academic excellence, equity, and access for the District's 326,893 English learners. The District has developed a variety of instructional programs to best meet the needs of these students. The programs are designed to close the achievement gap between English learners and native English speaking students. The District's Master Plan for English Learners describes the programs and services that assist English learners to:

- Achieve academic proficiency in all dimensions of the English language

- Attain academic achievement in all content areas

- Develop a positive self-image by acknowledging the linguistic and cultural gifts English learners and their families contribute to the teaching and learning act

- Function effectively and harmoniously in a multicultural society
- To carry out our mission, the Language Acquisition Branch:
- Administers programs that help every child learn English and academic content at high levels
- Provides professional development for the implementation of all Master Plan instructional services: English Language
- Development (ELD), Specially Designed Academic Instruction in English (SDAIE), Primary Language Instruction, and Primary Language Support
- Provides leadership to ensure that federal, state, and district policy related decisions focus on the best interests of English learners
- Collaborates with the Local District English Learner Program staff and other district programs to promote best practices and to strengthen and coordinate services for English learners
- Monitors federal and state funded English learner programs and grants and provides technical assistance to ensure that the programs focus on outcomes and accountability

In addition, the Language Acquisition Branch recognizes the pivotal role of parents as partners in the education of their children and works closely with the District's English Learner Advisory Committee to provide essential information, education, and involvement activities.

Asian Pacific and Other Languages/Dual Language Office

The Asian Pacific and Other Languages/Dual Language Office of the Los Angeles Unified School District is the unit identified to assist schools providing instruction to English Learners participating in various unique and specially funded programs. Each of these areas of assistance is described below.

Dual Language Programs

The office supports implementation of dual language programs district wide at the elementary, middle, and high school levels. The District currently offers students at selected schools the option of participating in a Spanish/English or a Korean/English dual language program. Program design and type vary by school and language.

The office supports implementation of dual language programs by coordinating applications for Federal, State, and Local funding; setting guidelines for implementation of new programs; establishing district policy regarding program implementation; collecting and evaluating performance data; and providing staff development to local district dual language staff and school site administrators charged with implementation and oversight of dual language programs.

The Office of Middle School Programs is responsible for the oversight and assisted implementation of District Initiatives that relate to the middle grade levels. Specific curriculum oversight includes K-12 Social Studies, Physical Education and Foreign Language. The office of Middle School Programs also serves in an advisory capacity for the English/Language Arts, Math, Science, and Social Studies Instructional Guide development; School Management services with new school facility designs; and the District Coordinated School Health Program. Future Instructional Guide development under the auspices of Middle School Programs will include Physical Education and Health with related professional development designs. The office will continue to work on the development of the document, Middle School Redesign, Putting Students First, that identifies the tenets of a

comprehensive middle school plan that focuses on the individual student and improved student achievement.

Secondary literacy Branch

The mission of the Secondary Literacy branch is to fully implement a comprehensive Secondary Literacy Plan as a cornerstone for quality instruction across all disciplines in order to close the achievement gap and increase academic achievement for all secondary students.

The Secondary Literacy Plan, adopted by the Board in January, 2002, outlines an initiative that focuses strategically on:

- Organizing instruction at the secondary level around an instructional disciplinary framework (Institute for Learning) that supports standard-based teaching and learning in each of the core disciplines: English/Language Arts, history/social science, math and science

- Implementing coherent and ongoing professional development designed around core components that will create and support learning conditions that engage teachers in "learning communities" in focused inquiry and improvement of practice to further develop the content-specific knowledge and expertise needed to address more effectively the needs of our diverse learners. In addition, professional development will explicitly address culturally relevant and responsive pedagogy in order to close the achievement gap.

- Structuring an organizational design (secondary literacy coordinators, literacy cadres, literacy coaches and content area experts) that will enhance each school's capacity to address the teaching and learning needs of secondary students. This organizational infrastructure will support the engagement of teachers in on going learning opportunities that focus on research, content specific pedagogy and knowledge.

- Implementing instructional programs to meet the varied needs of students, particularly those who require intensive intervention, accelerated instruction in decoding, reading fluency, phonemic awareness and reading comprehension

- Strengthening curricular and instructional alignment with the content standards through the adoption of standards-based textbooks, content specific instructional guides and periodic assessments for each of the four core academic areas. Together these resources provide teachers with a "road map" for teaching to California content standards at the secondary level.

Los Angeles Unified School District is engaged in an ambitious process of school reform. The Secondary Literacy website provides a snapshot of the commitment and efforts of this branch to support content specific and culturally responsive teaching to ensure that all students meet rigorous state content standards.

Library Services

Providing leadership, expertise, and people power to create quality library media programs that boost student achievement. Library and Information Services provides a variety of specialized services to schools including the following:

- Designing and renovating new or existing Library Media Centers.
- Cataloging and Evaluation of library books.
- Publishing Focus on Books CD-ROM and Print Publication.
- Coordinating the Digital Library.

- Weeding and Automating the school Library Media Center.
- Providing professional development for library staff.
- Integrating learning resources and technology into instruction.
- Developing and implementing reading motivational programs.
- Networking with other organizations who assist school Library Media Centers

Media Services

Audio visual and educational software services provide schools with an interactive website for many forms of classroom media. Searchable data bases of District- approved software and videos are available for teachers to preview and in the case of videos to check out for use in their classrooms.

Office of the Inspector General

The major responsibilities of the OIG are to detect and prevent waste, fraud and abuse as well as promoted efficiency and effectiveness within the nation's second largest school system. The OIG fulfills these responsibilities by conducting supervising independent and objective audits, investigations and reviews of programs and operations within the Los Angeles Unified School District.

The OIG recognizes that the majority of the LAUSD employees and officials are hardworking and honest individuals. However, when evidence of actual or apparent impropriety exists in the school system, it must be effectively dealt with either administratively or through the court system. The OIG will act to ensure that such evidence is brought to light without regard to considerations personal or political. The lasting legacy of the OIG must be to maintain the public's trust in our school system.

Planning, Assessment and Research

The mission of the Planning, Assessment and Research Division is to deliver relevant and timely strategic planning, information, and research in areas of school utilization, student enrollment, student achievement, and program evaluation that impact the learning environment and academic achievement of LAUSD students.

Our office, the Special Education Support Section is part of the Planning, Assessment & Research Division.

We are under the administration of the Student Information Systems Branch. Responsibilities Include:

- SESAC Data
- SPED Assistants/Trainees Data
- SPEDTS Policy & Procedure Support
- SPED Non-Public School Student Data
- SPED Medi-Cal Reimbursement
- Psychological Report of Individual Study (PRIS) Data
- Monthly Log Providers Study
- Special Day Class (SDC) Data
- SDC Student Matriculation Process
- Resource Specialist Program (RSP) Data
- Designated Instruction and Related Services Data
- SPED Extended School Year (ESY) Data
- SPED "Principal's Report

- California Special Education Management Information System (CASEMIS)
- SPED District Applications Support and Training
- Training of SPED PURLS, Class List Program, Matriculation, ESY/Intersession
- SPED Open/Close Class Data
- SPED - District ID Process
- SPED Computer Installations, Repairs and Troubleshooting

Payroll Service

The mission of the payroll services branch is to effectively deliver services to meet the payroll needs of all District employees serving our students.

Personnel Commission

The Personnel Commission is responsible for the administration of an effective and efficient merit system of employment for Classified employees in order to provide students and the community with a quality workforce that furthers the educational program.

Our purpose is to uphold the principles of honesty, fairness, and accountability in advocating a merit-based career system of employment. Together, we are committed to excellence by providing professional, timely, and efficient services.

Police

The Los Angeles School Police Department (LASPD) was established in 1948 to create a safe and tranquil environment for the students, teachers and staff of the Los Angeles Unified School District. The men and women of the LASPD have accepted this duty with an unyielding commitment that has not wavered for fifty-six years. This dedication to public safety is the standard for the fifth largest police department in Los Angeles County and the largest school police department in the nation and the 5th largest Police Department in the State of California.

Twenty four hours a day, the Los Angeles School Police Department is responsible for providing police services to:

- A jurisdiction covering 708 square miles
- Approximately 905,020 students
- Approximately 80,325 teachers, administrators and additional school staff
- Approximately 1030 schools, centers, and administrative offices

The LASPD deploys 335 sworn personnel in a variety of ranks;

- Chief of Police
- Deputy Chief
- Lieutenant
- Sergeant
- Detective
- Senior Police Officer
- Police Officer

The LASPD establishes a diverse deployment of its resources, maximizing the department's ability to provide the most effective and modern police services possible. Amongst these resources is a variety of assignments that officers, upon successful completion of the police academy and probation, are eligible to apply for (some assignments require a minimum two to five years of field duty);

- Campus Police Officer
- Patrol Officer
- Field Training Officer
- Canine Handler (K-9)
- Motors (Traffic Enforcement)
- GANG Detail
- Criminal Investigation Section
- Special Investigation Section
- Benefit Abuse Unit
- Background Investigation
- Special Problems Unit
- Training Unit
- Technology Unit
- Police Activities League (P.A.L.) / Police Explorers
- Special Response Team (S.R.T.)

In addition, the LASPD employs a full time staff of civilian non-sworn personnel in a variety of positions, including, but not limited to;

- School Safety Officer
- Police Dispatcher
- Specialist Reserve Police Officer
- Clerk

Procurement Services Group/Purchasing

Mission Statement: We will acquire those goods and services required by District schools and offices in a timely manner and at the lowest possible cost.

The Procurement Services Group is comprised of four main sections. The Procurement Services Group Administration/Vendor Services Unit provides oversight of District-wide procurement activities and vendor relations. Purchasing Branch is responsible for the purchase, lease or rental of all items and services with the exception of land and buildings. The Materiel Management Branch is responsible for maintaining inventory in the General, Foods, Maintenance, and Salvage Warehouses. Truck Operations Section of the Materiel Management Branch provides distribution of supplies, equipment, furniture, food, and school mail; administers the contract for the collection and disposal of rubbish; and administers the contract for the collection of paper, Styrofoam, and milk cartons for recycling. The Contract Administration Branch assists in the preparation of Request for Proposal and professional services contracts.

High volume for such items as paper, pencils and crayons has made warehouse prices hard to beat. In addition, the warehouse offers a "low price guarantee" on items such as televisions, VCRs, and camcorders. Overnight delivery from the warehouse is also available to customers who are in a hurry for essential items.

Public Schools Accountability Act- SB-1X

Comprehensive School Reform (CSR)

Immediate Intervention/Underperforming Schools Program (II/USP)

High Priority Schools Grant Program (HPSG)

Mission Statement

Welcome to the SB 1X Office, part of Specially Funded & Parent/Community Programs Division of the Los Angeles Unified School District.

The SB 1X Office provides central coordination, monitoring, and evaluation of the Immediate Intervention/Underperforming Schools Program(II/USP), Comprehensive School Reform (CSR), and High Priority Schools Grant (HPSG) programs to improve student academic achievement in underperforming schools.

Whether your perspective is from a local district or school, whether you are an administrator, teacher, staff member, parent, student or community member, welcome to the SB 1X Unit.

Student Health and Human Services

Pupil Services

Is the Child Welfare and Attendance professionals who support learning and promote the well-being of all students. We develop plans and strategies to maximize attendance and reduce school dropout. Collaborating with schools, communities, and families, we empower students and motivate them to stay in school.

School Integration Services

Court-Ordered Voluntary Integration Programs

Continuing Voluntary Program (CVP)

Beginning in the 1995-96 school year, CVP has been combined with the Permits With Transportation Program. Historically, CVP provided the opportunities for students to continue to attend schools with which the resident schools was paired or clustered during the now-concluded mandatory integration program. Receiving schools were allocated additional resources on a per-pupil basis.

Magnet Program

Since 1976, LAUSD has been in the forefront of offering exciting educational choices to its resident students; among these choices is the voluntary integration program known as Magnet. From kindergarten through twelfth grades (K-12), magnet students participate in voluntary integration programs while pursuing academic interests in special environments for learning.

Each magnet offers a subject specialty, for example, science, performing arts, business, or special teaching approaches, for example, alternative and gifted. Students are selected randomly by computer, based on LAUSD and Court-approved guidelines, ethnic balance and available space in each program. Participating students are enrolled in required courses necessary for promotion, graduation, and

meeting all requirements for entrance to the University of California and the California State Universities.

Permits with Transportation (PWT) Program

The PWT Program provides transportation for students voluntarily attending schools other than resident schools. To address the Court-designated harms of segregation, the PWT Program is designed to provide students with integrated experiences by placing Hispanic, Black, Asian and Other Non-Anglo students in integrated settings while providing opportunities for Other White (OW) students to attend PHBAO schools. School assignments for PWT applicants are the responsibility of the District.

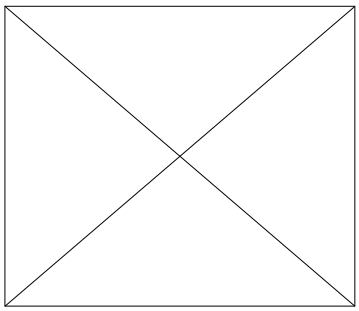
Local District Resources

Local District resources provide adviser time, advisory committee expenses, clerical relief, Parent Community Facilitators, mileage, and supplies. Parent Community Facilitators comprise the Advisory Council which was established under the 1979 Court Order of Judge Paul Egly. The Council, composed of ethnic groups representing LAUSD, provides advice on integration matters. The Parent Community Facilitators provide training and work with Community Representatives of PHBAO schools to open lines of communication in LAUSD and the communities regarding desegregation.

Special Education Division

Special education is a program designed to meet the unique educational needs of children with disabilities who meet eligibility criteria under the law. Special education services can begin at birth and continue until the age of twenty-two. Children may receive special education services under one of the following eligibilities:

- speech or language impairment
- specific learning disabilities
- other health impairment
- emotional disturbance
- mental retardation
- autism or autistic-like behaviors
- orthopedic impairment
- deafness
- deaf-blindness
- hearing impairment
- visual impairment including blindness
- traumatic brain injury
- multiple disabilities



Each student may require a different program or combination of programs, and when appropriate, a student's curriculum can be modified. The goal is to build programs around a student's needs rather than trying to fit the student into the programs. The following is a list of options from the least restrictive to the most restrictive environment:

General education classes:

Whenever appropriate, students with disabilities will be educated in the general education classes. In addition, whenever possible, they will attend the school they would ordinarily attend if they were not in special education.

General education classes with consultation:

In order for students with disabilities to be appropriately educated in general education classes it may be necessary for their teacher to consult with special education personnel to receive guidance and support.

General education classes with designated instruction and services:

Designated instruction and services assist students with disabilities to benefit from their general education program. Some examples of designated instructional services are language and speech services, adapted physical education, counseling and physical and occupational therapy.

General education classes and resource specialist program:

A resource specialist program provides instruction and services to students with disabilities assigned to the general education classroom for the majority of the school day. The goal of the resource specialist program is to enable students with disabilities to succeed in the general education environment. The program provides assistance in a variety of ways depending on the needs of a particular student.

General education and special day class:

Depending on their needs, students with disabilities may be educated in general education classes for part of the school day and special day classes for the other part of the school day.

Special day classes:

Special day classes serve students who, because of their disabilities, cannot participate in general education classes for a majority of the school day. These classes are provided on general education sites. As appropriate, students enrolled in special day classes interact with their general education peers through academic, non-academic and extracurricular activities.

Special schools/centers:

Students are enrolled in special schools/centers when it determined that the nature and severity of their disabilities require more intensive educational instruction. As appropriate, students enrolled in special schools interact with their general education peers through academic, non academic and extracurricular activities.

Non-public schools:

When no appropriate public education program is available, a student with disabilities may be placed in a non-public school under contract with the District.

Home or hospital:

Students with a verified medical or emotional condition that prevents them from attending school may receive services on a temporary basis in the home or a hospital.

State residential schools:

State residential schools provide comprehensive assessment and services for students with visual and/or hearing disabilities.

Specially Funded Programs

Los Angeles Unified School District, Specially Funded and Parent/Community Programs Division, Specially Funded Programs, Compliance and Technical Support Branch

Programs

- School Plans Compliance (SBCP)
- Neglected or Delinquent Programs Uniform Complaint Procedures
- Title I, Private Schools Program Links to Related Sites
- Public School Choice OPCION DE ESCUELA PUBLICA
- Compensatory Education Compliance Evaluation

The Office of Student Integration Services is in charge of the District's court-ordered integration programs such as Magnet and Permits With Transportation Programs and seven Predominantly Hispanic, Black, Asian, And Other Non-Anglo (PHBAO) programs; Medical-Counseling, Organizing and Recruiting (Med-COR), a collaborative with the University of Southern California for students interested in the health care fields.

The Student-To-Student Interaction Program which takes place in the hills of Griffith Park, develops awareness of our diverse cultural society through a student human relations program; Project AHEAD (Accelerating Home Education and Development) is a parent involvement program providing educational parenting skills to parents of children in the Ten Schools Program; Counseling Support Program; High Intensity Language Acquisition Program for teachers to become proficient and speak another language other than English and the Academic English Master Program, also known as Language Development Program for African-American students which facilitates instruction of language acquisition.

Also included are the Capacity Adjustment Program and Satellite Zone Program to assist with relieving overcrowded conditions. The Step-To-College Program enables 11th and 12th grade students to attend classes at one of the California State Universities. The Office of Student Integration Services funds and is responsible for program compliance for School Readiness Language Development Program (SRLDP), a nationally recognized language development pre-kindergarten program, and the Ten Schools Program which was designed to increase academic achievement at ten identified lowest achieving predominantly African-American schools. Currently, the Ten Schools Program serves twelve elementary schools with a researched-based instructional program and organizational program. The Integration Program also provides for some form of class-size reduction in grades 1-10.

Ten Schools Program (TSP)Mission

The mission of the Ten Schools Program is to provide an instructional program and an organizational design that is language intensive and will reverse the pattern of poor academic achievement of African American and other students in Predominantly Hispanic, Black, Asian and Other Non-Anglo (PHBAO) schools. This will be accomplished through on going coordinated relevant staff development supported by a home/school partnership.

History

The Los Angeles Unified School District (LAUSD) implemented the Ten Schools Program (TSP) during the summer of 1987. It is a research-based instructional program designed to restructure and organize ten schools so that all students could achieve to their fullest potential when given optimum learning conditions. The ten (10) lowest achieving elementary schools in LAUSD with a predominantly African-American student population were selected to participate. Currently, the TSP student population is predominantly African American and Hispanic. The original schools selected for the Ten Schools Program were:

Birdielee V. Bright Elementary
Compton Avenue Elementary
Lovelia Flournoy Elementary
McKinley Avenue Elementary
96th Street Elementary

Charles Barrett Elementary
Griffith-Joyner Elementary
Martin L. King Elementary
93rd Street Elementary
112th Street Elementary

There are currently fifteen schools within the Ten Schools Program. In 1998, 116th Street and 118th Street were added. In 2002, Avalon Gardens, Horace Mann and Mt. Vernon were added to the program.

Staffing/Commitment

School administrators, teachers, Para-educators, and all classified staff must be interviewed and selected to participate in the program. They must also sign a Commitment to be a part of the Ten Schools Program. Included in the commitment are instructional and professional standards. All stakeholders develop ownership of and commitment to the program through involvement in the decision-making and evaluation process at each school.**Staff Relations**

This area of the LAUSD website provides access to Union Contracts.

Student Medical Services

Responsibilities of the Office of Student Medical Services

- Plan school-based and school-linked health programs targeted at promoting optimal student health

- Develop policies and procedures that protect and enhance student health, including coordination with other divisions that address student health issues

- Provide school physician services District-wide, concentrating on medically complex cases and students who do not have access to a regular health provider

- Provide staff and oversight to PTA vision clinics, and assist with establishing standards and quality assurance for student vision care activities

- Provide consultation to District Nursing, District staff, and other constituencies relative to student medical issues

- Development and implementation of quality assurance and performance improvement programs for health personnel

- Facilitate staff development and education on important and emerging student health issues

- Establish linkages with public and private community organizations and agencies to improve student access to health care.

Text Book Services

Textbook Services operates a permanent display of all State and District-Adopted textbooks and instructional materials. The office is located at 1545 Wilshire Blvd., Suite 200, Los Angeles, California 90017, and is open from 8:00 a.m. to 4:30 p.m., Monday through Friday.

Translation Unit

The Los Angeles Unified School District has made a commitment to encourage greater parent and community participation. The Translations Unit's role in this commitment is to provide professional translation and interpretation services to the District's schools and offices so that communities can better participate in their children's education.

With an in-house staff of Spanish, Korean, Cantonese, Mandarin, Armenian, Vietnamese, and Russian language specialists and a large network of professionals in other languages, the Translations Unit provides translation and interpretation services in all living languages.

These language specialists are a select team of qualified and dedicated professionals who strive for excellence. In doing so, they have created appropriate terms and translations, where none were available before in other languages.

This experience and professionalism is an invaluable tool in assuring that the services provided to parents and community members are of the utmost quality.

Utilizing these resources allow the Translations Unit to fulfill its purpose of bringing schools and communities closer together.

Transportation Branch

The Transportation Branch provides home-to-school/school-to-school busing services for approximately 76,000 students every school day on over 2,220 routes. In addition, approximately 103,000 other types of bus trips are provided each year, such as class field trips, academic shuttles, parent buses, late activity buses, and athletic team buses. Over 37.6 million miles are driven annually in support of the District's students transportation program. The Transportation Branch is proud to have one of the finest safety records in the country.

Our responsibilities include the following:

- Process requests, schedule buses, and track expenditures for approximately 103,000 curricular and other bus trips.

- Operate five major garage facilities required to service over 3,500 District owned buses, trucks, and autos.

- Provide a continuous program for the training of bus drivers that exceeds the requirements mandated by California law.

- Respond to emergencies, including accidents, resolve problems and complaints from parents, school administrators and the public.

Organization

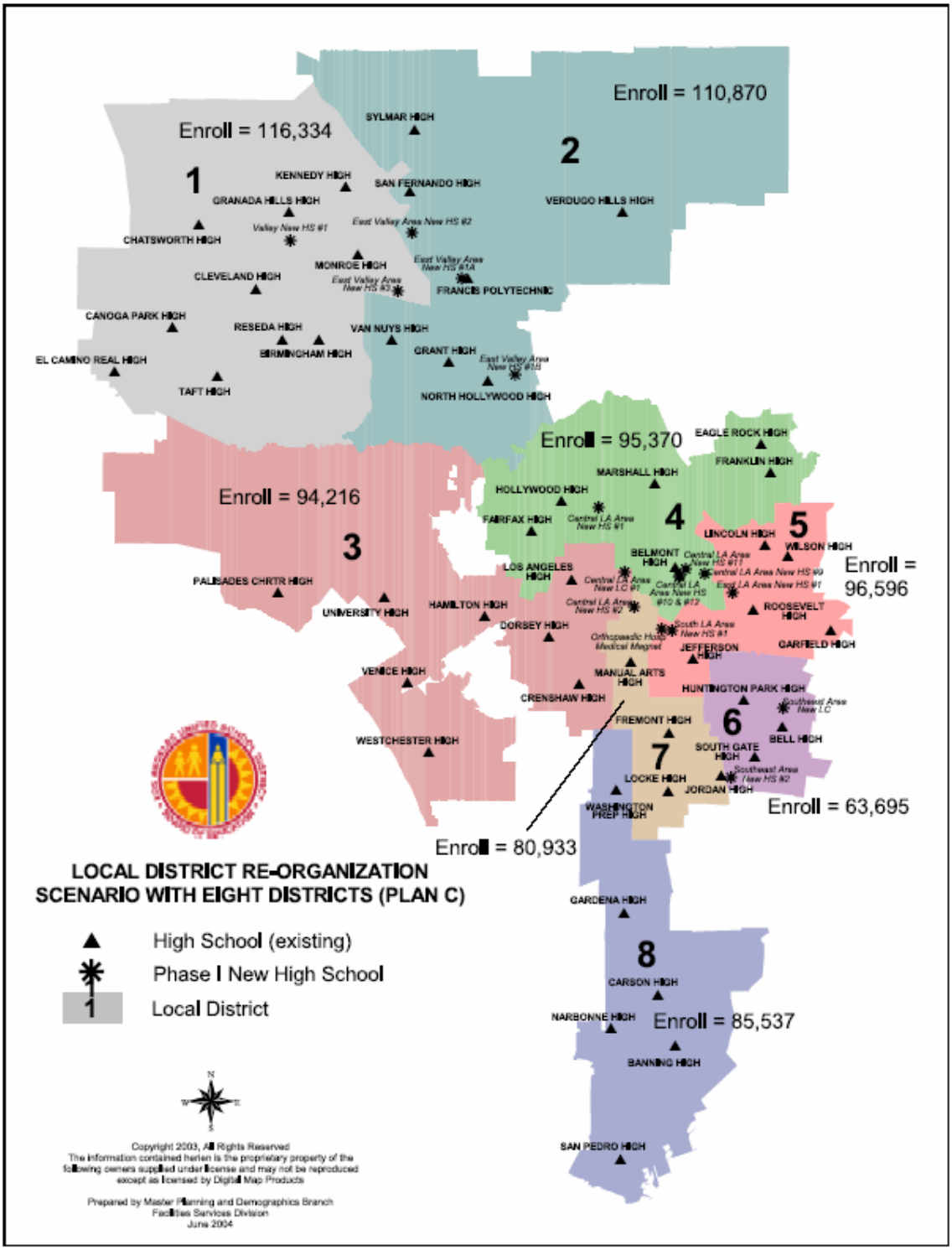
The Transportation Branch consists of 1,542 employees engaged in student transportation, fleet maintenance and central support for drivers, school administrators, parents and the public.

Of the 1,542 employees, 1,092 are bus drivers, most of who work part-time.

Annual Budget

The total budget of the Transportation Branch is $177.9 million. Approximately 91% of all services are funded by the Student Integration ($81.0 million) and Special Education ($80.2 million) programs. The remaining 9.0%, or $16.7 million, is provided for Other Transported Students (OTS), ROC/ROP Programs, Child Development, Continuation Programs, Community Services and maintenance of other vehicles.

Local Districts



Local District Main Offices and Superintendents

Local District 1
Bob Collins, Superintendent
6621 Balboa Blvd,
Lake Balboa, CA 91406
Tel: (818) 654-3600
Fax: (818) 881-6728
(former District C office)

Local District 2
Sue Shannon, Superintendent
5200 Lankershim Blvd.
North Hollywood, CA 91601
Tel: (818) 755-5300
Fax: (818) 755-2810
(former District B office)
*Site of Special Education and Health & Human Services offices serving Districts 1 and 2

Local District 3
Sharon Curry, Superintendent
3000 S. Robertson Blvd.
Los Angeles, CA 90034
Tel: (310) 253-7100
Fax: (310) 842-9491
(former District D office)
*Special Education and Health & Human Services offices serving Districts 3 and 7 will be located at 3710 S. La Brea Ave., Los Angeles, CA 90016 Tel: (323) 421-2800 (former Local District G office)

Local District 4
Richard Alonzo, Superintendent
4201 Wilshire Blvd.
Los Angeles, CA 90010
Tel: (323) 932-2266
Fax: (323) 932-2115
(former District E office)
*Site of Special Education and Health & Human Services offices serving Districts 4 and 5

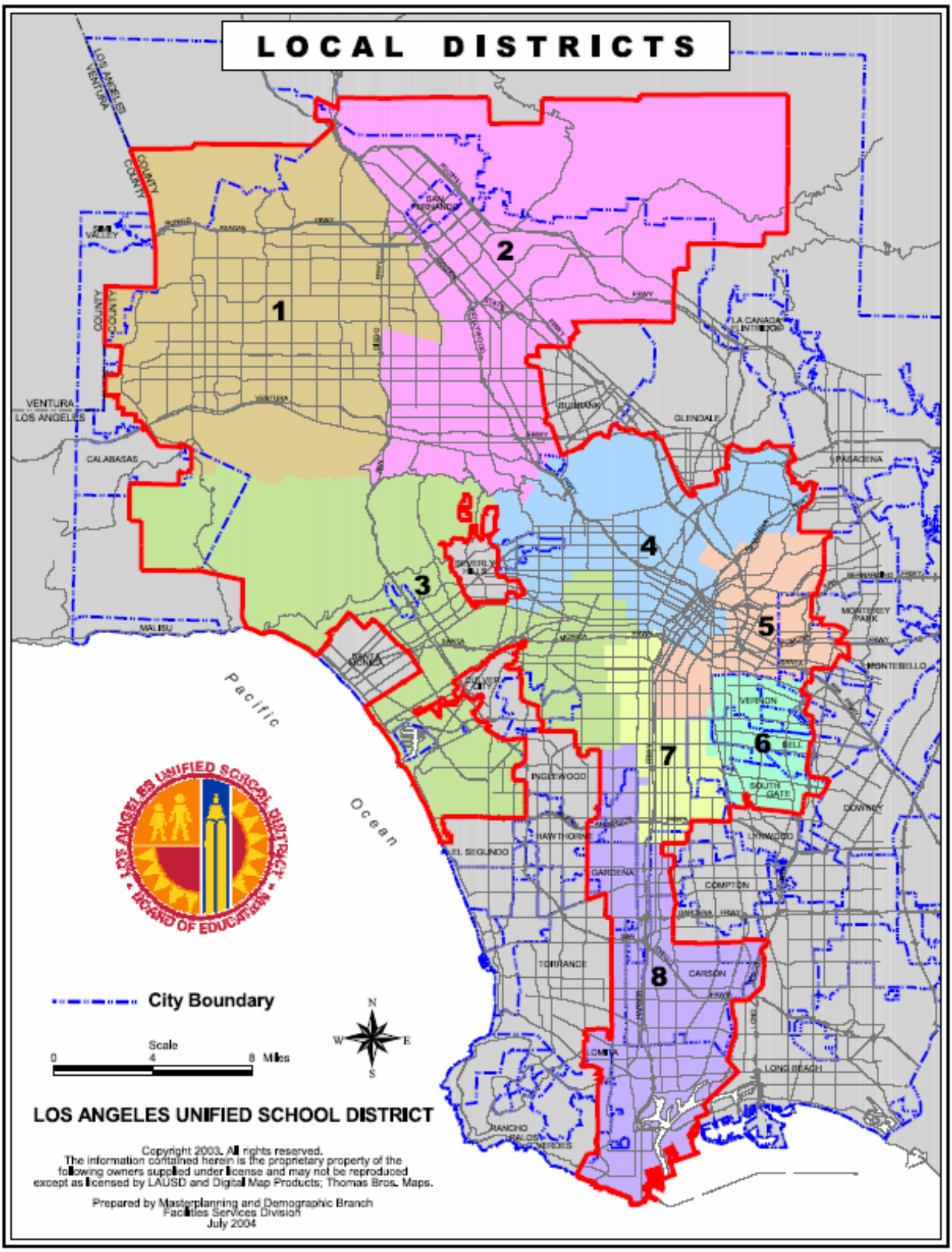
Local District 5
Rowena Lagrosa, Superintendent
2151 North Soto Street
Los Angeles, CA 90032
Tel: (323) 224-3100
Fax: (323) 222-5702
(former District F office)

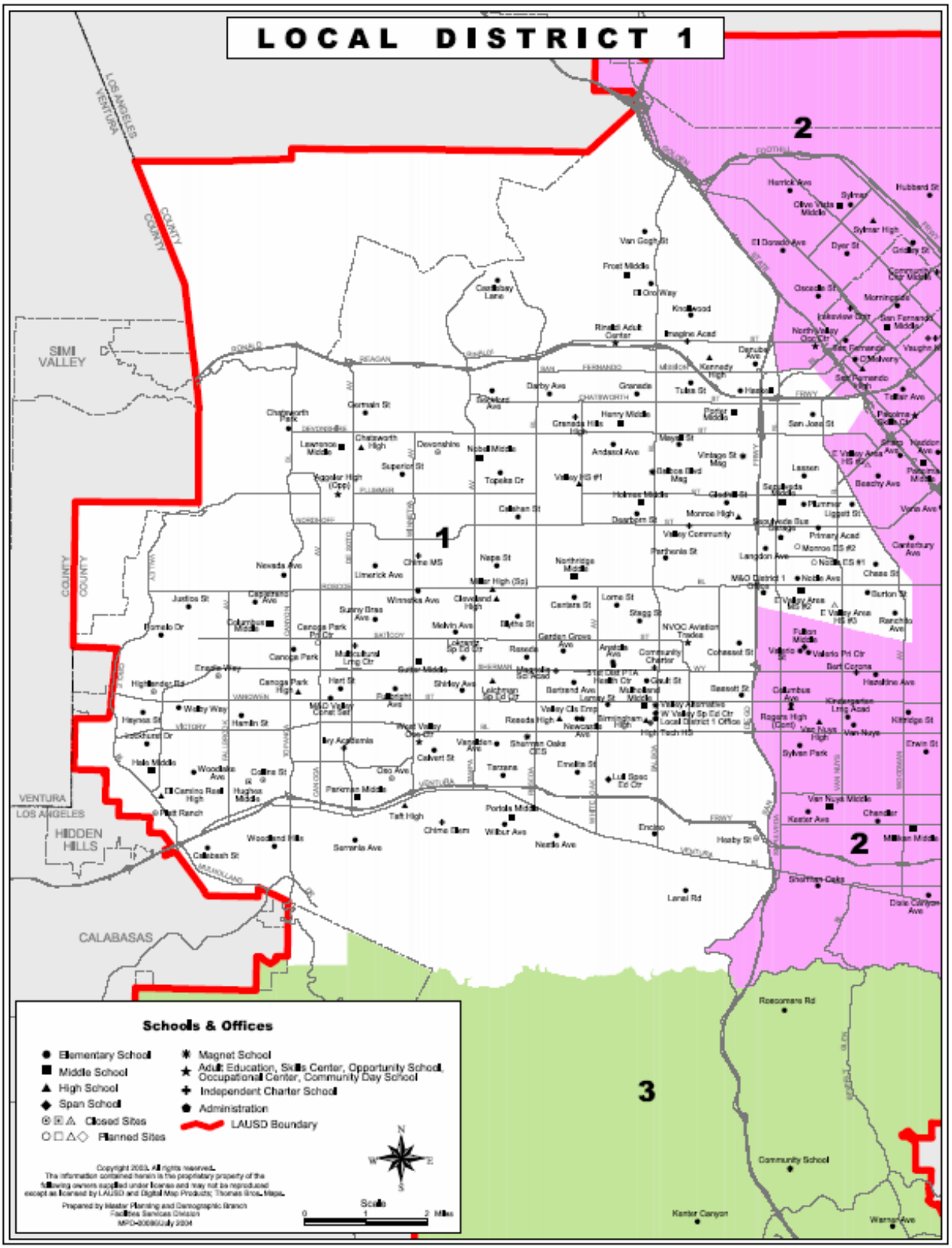
Local District 6
Dale Vigil, Superintendent
5800 S. Eastern Ave.
Commerce, CA 90040
Tel: (323) 278-3900
Fax: (323) 720-9366
(former District J office)
*Site of Special Education and Health & Human Services offices serving Districts 6 and 8

Local District 7
Sylvia Rousseau, Superintendent
10616 S. Western Ave.
Los Angeles, CA 90047
Tel: (323) 242-1300
Fax: (323) 242-1390
*Special Education and Health & Human Services offices serving Districts 3 and 7 will be located at 3710 S. La Brea Ave., Los Angeles, CA 90016 Tel: (323) 421-2800

Local District 8
Myrna Rivera, Superintendent
1208 Magnolia Ave.
Gardena, CA 90247
Tel: (310) 354-3400
Fax: (310) 532-4674
(former District K office)

Local District Maps




LOCAL DISTRICT 1
1
2
2
3
SIMI VALLEY
HIDDEN HILLS
CALABASAS
VENTURA
LOS ANGELES
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary
Scale
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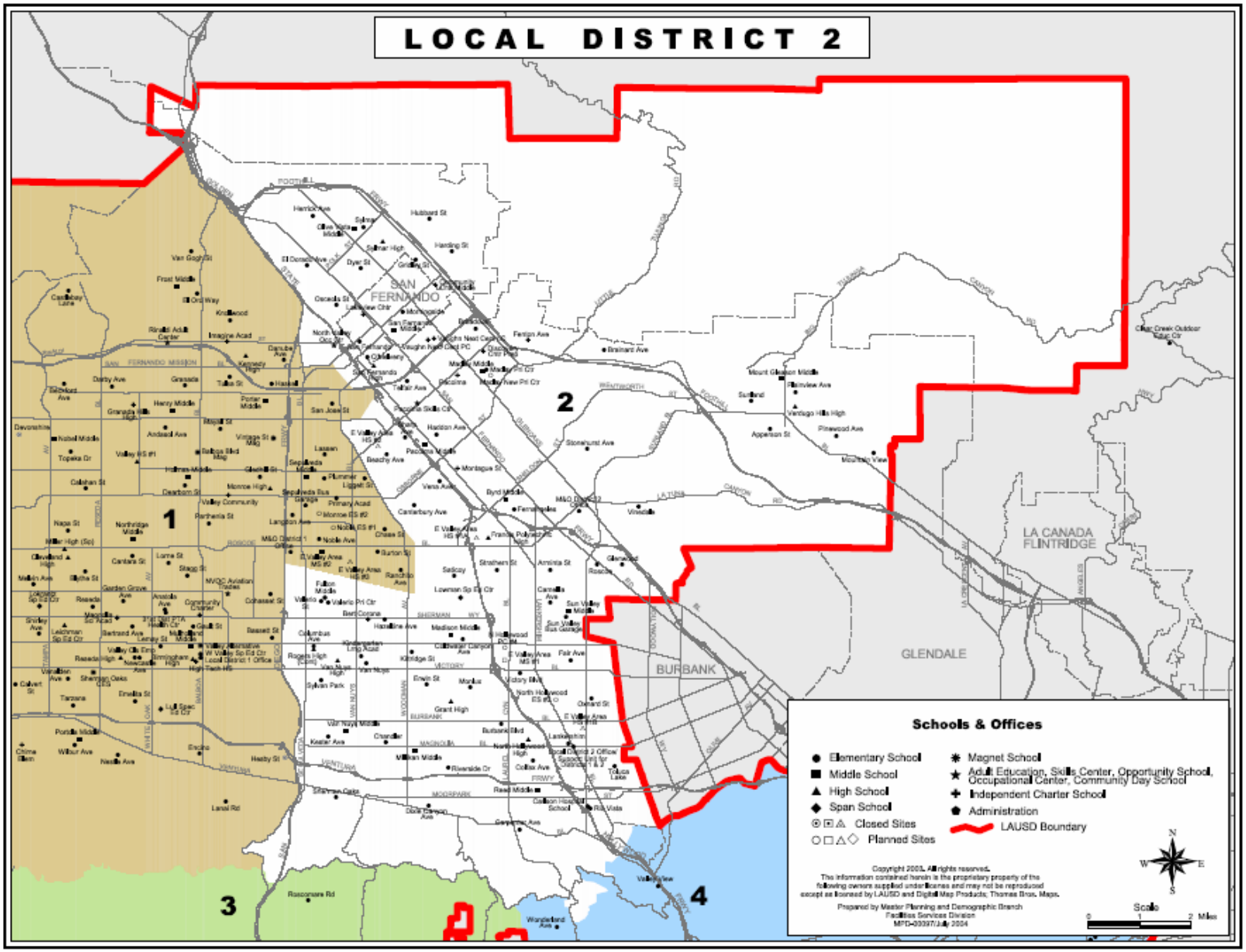
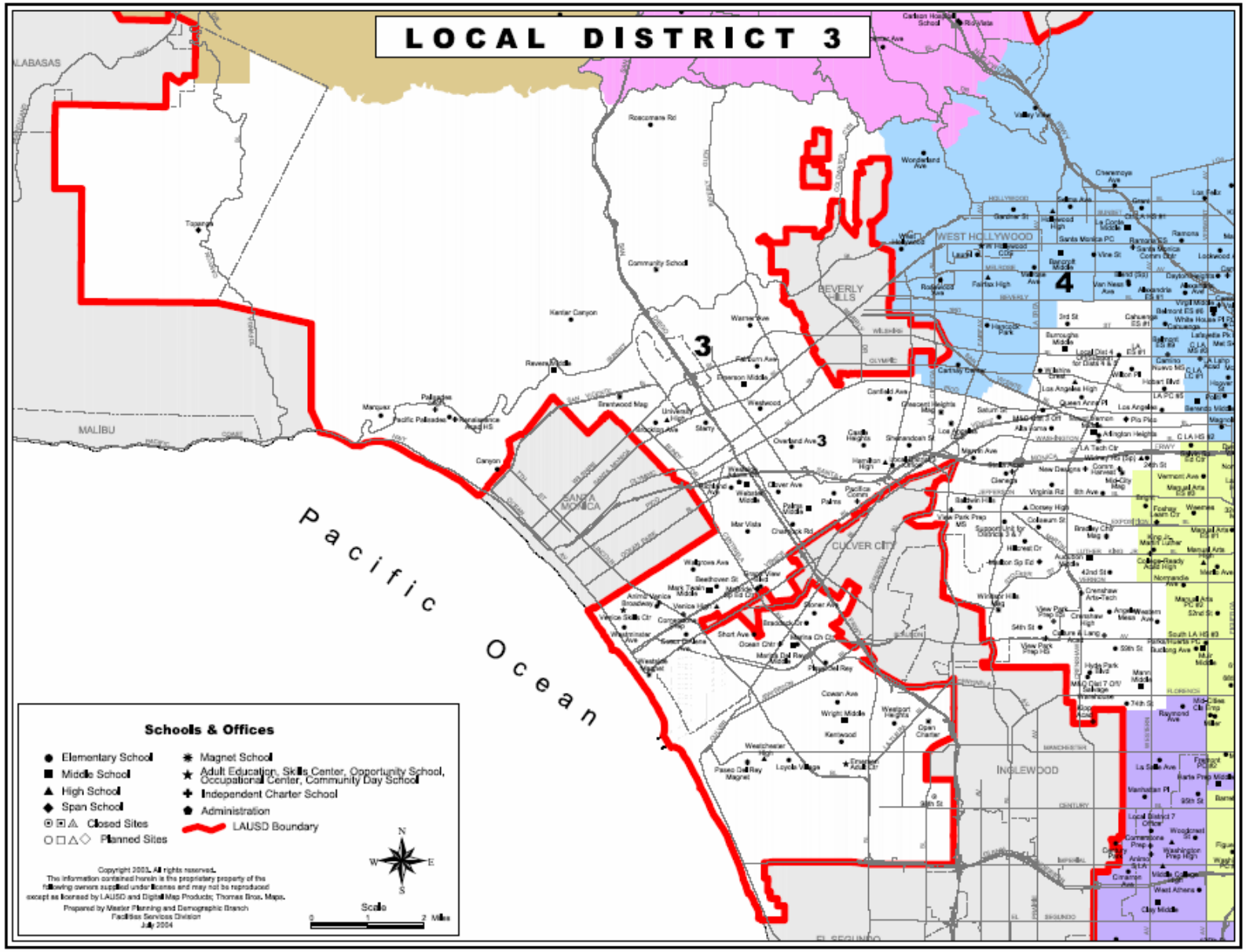
1
2 Miles


LOCAL DISTRICT 2
1
2
3
4
SAN FERNANDO
BURBANK
GLENDALE
LA CANADA FLINTRIDGE
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary
Scale
Miles


LOCAL DISTRICT 3
Pacific Ocean
LABASAS
MALIBU
WEST HOLLYWOOD
BEVERLY HILLS
SANTA MONICA
CULVER CITY
INGLEWOOD
3
4
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary
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Scale
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2 Miles
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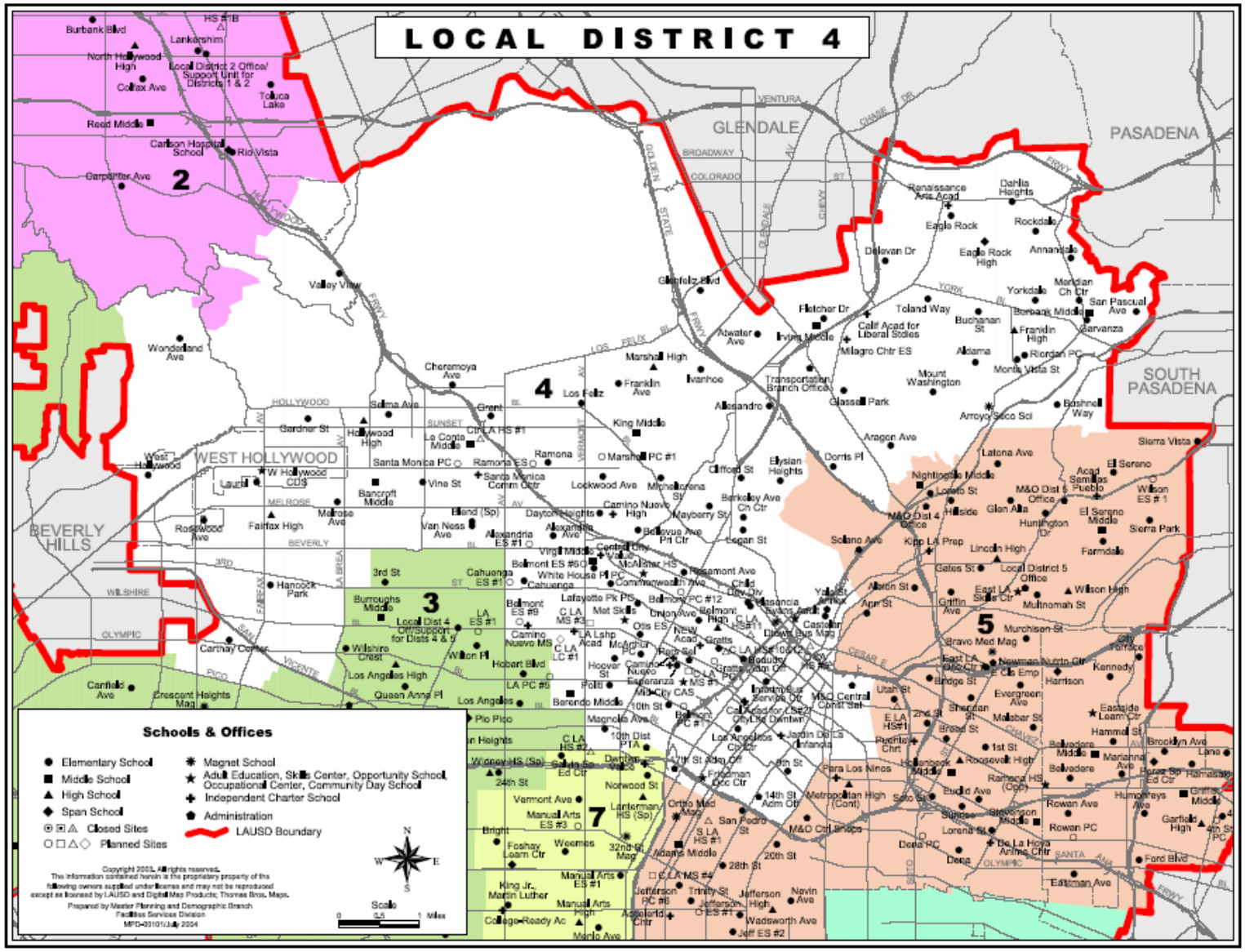
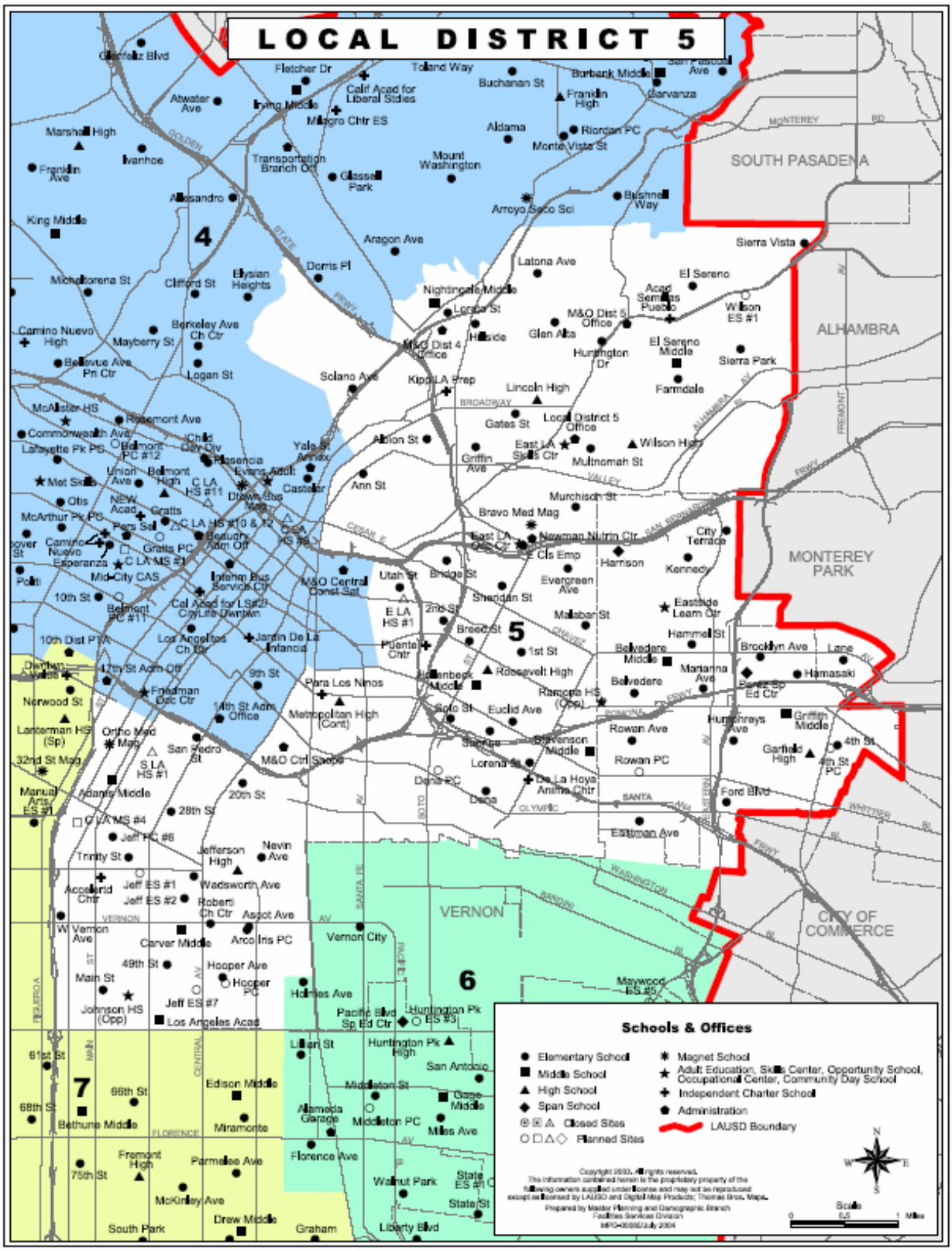
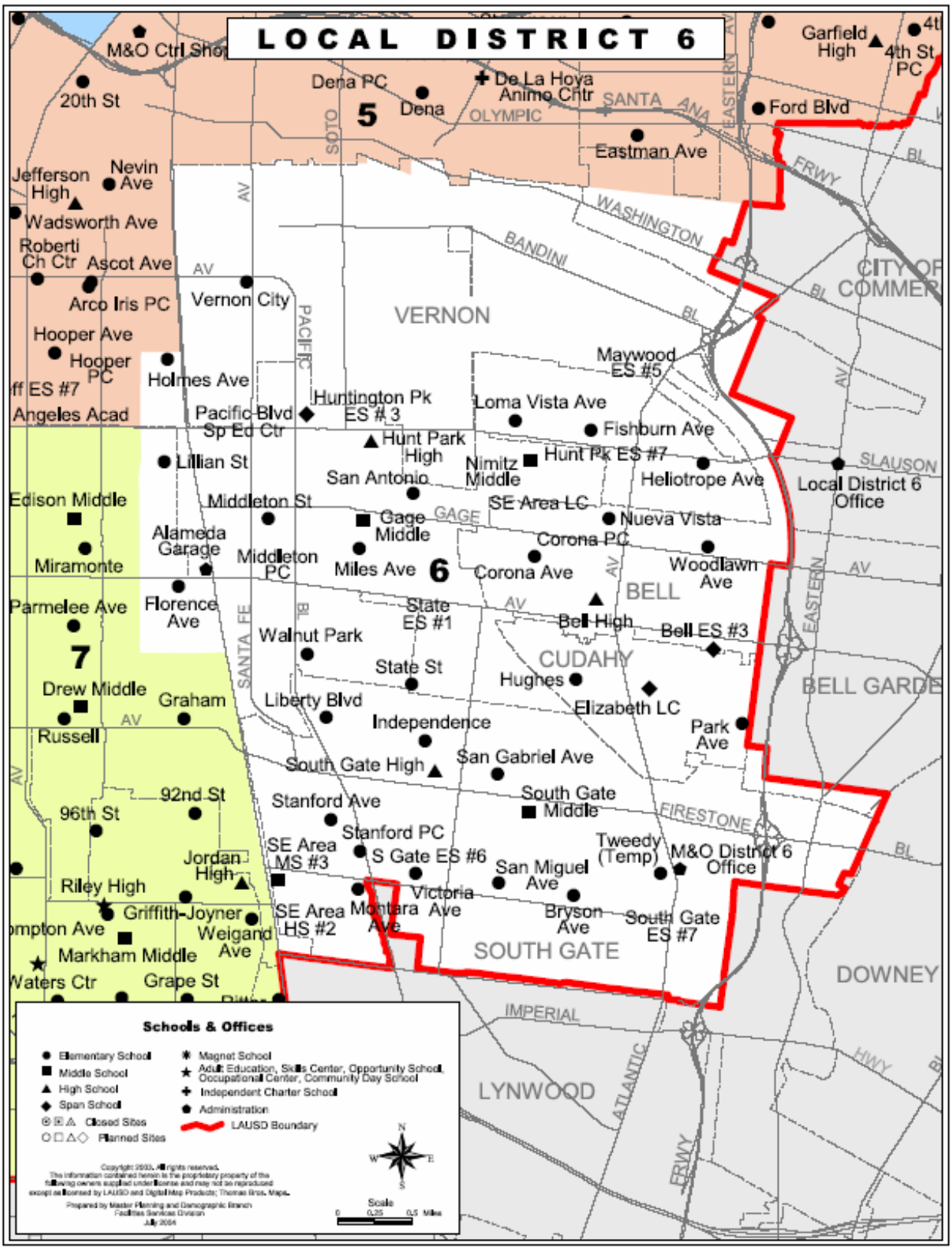
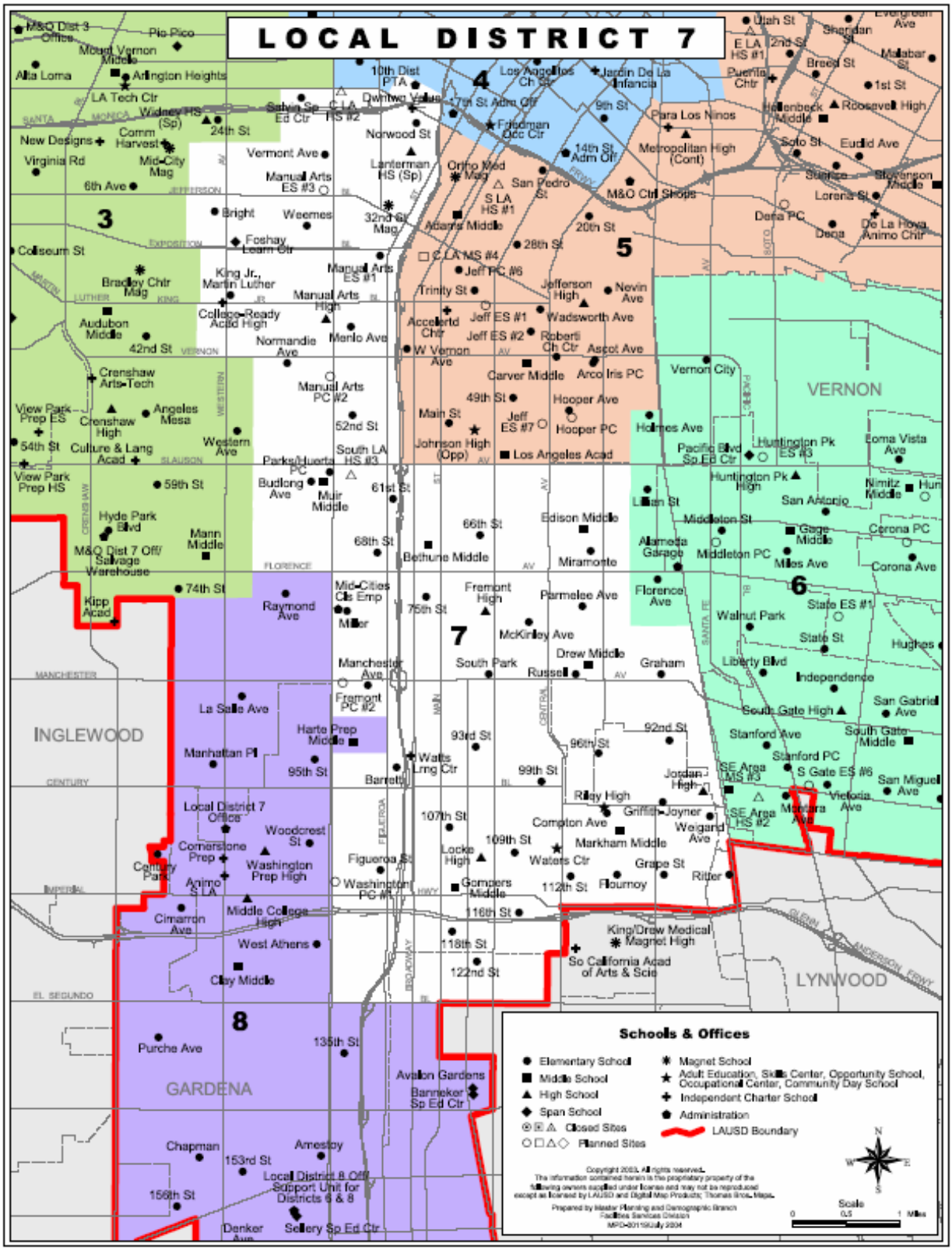
Prepared by Master Planning and Demographic Branch
Facilities Services Division
July 2004


LOCAL DISTRICT 4
GLENDALE
PASADENA
SOUTH PASADENA
WEST HOLLYWOOD
BEVERLY HILLS
2
3
4
5
7
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary
Scale
Miles


LOCAL DISTRICT 5
SOUTH PASADENA
ALHAMBRA
MONTEREY PARK
VERNON
CITY OF COMMERCE
4
5
6
7
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary


LOCAL DISTRICT 6
M&O Ctrl Shop
20th St
Dena PC
Dena
De La Hoya Animo Chtr
SANTA ANA
OLYMPIC
SOTO
5
Eastman Ave
Garfield High
4th St PC
Ford Blvd
EASTERN
FRWY
Jefferson High
Nevin Ave
Wadsworth Ave
Roberti Ch Ctr
Ascot Ave
Arco Iris PC
Vernon City
AV
PACIFIC
VERNON
WASHINGTON
BANDINI
BL
CITY OF COMMERCE
Hooper Ave
Hooper PC
Holmes Ave
Maywood ES #5
Angeles Acad
Pacific Blvd Sp Ed Ctr
Huntington Pk ES # 3
Loma Vista Ave
Fishburn Ave
Hunt Park High
Nimitz Middle
Hunt Pk ES #7
Heliotrope Ave
SLAUSON
Local District 6 Office
Lillian St
San Antonio
Edison Middle
Middleton St
SE Area LC
Gage Middle
GAGE
Nueva Vista
Alameda Garage
Corona PC
Miramonte
Middleton PC
Miles Ave
6
Corona Ave
Woodlawn Ave
BELL
Parmelee Ave
Florence Ave
State ES #1
Bell High
Bell ES #3
Walnut Park
SANTA FE
7
State St
CUDAHY
Hughes
BELL GARDENS
Drew Middle
Graham
Liberty Blvd
Elizabeth LC
Russell
Independence
Park Ave
San Gabriel Ave
South Gate High
92nd St
South Gate Middle
Stanford Ave
96th St
FIRESTONE
Stanford PC
SE Area MS #3
S Gate ES #6
Tweedy (Temp)
M&O District 6 Office
Jordan High
San Miguel Ave
Riley High
Victoria Ave
Griffith-Joyner
SE Area HS #2
Montara Ave
Bryson Ave
South Gate ES #7
Weigand Ave
Markham Middle
SOUTH GATE
Waters Ctr
Grape St
DOWNEY
IMPERIAL
LYNWOOD
ATLANTIC
Schools & Offices
Elementary School
Middle School
High School
Span School
Closed Sites
Planned Sites
Magnet School
Adult Education, Skills Center, Opportunity School, Occupational Center, Community Day School
Independent Charter School
Administration
LAUSD Boundary
Scale


LOCAL DISTRICT 7
3
4
5
6
7
8
INGLEWOOD
VERNON
GARDENA
LYNWOOD
Schools & Offices
Elementary School
Middle School
High School
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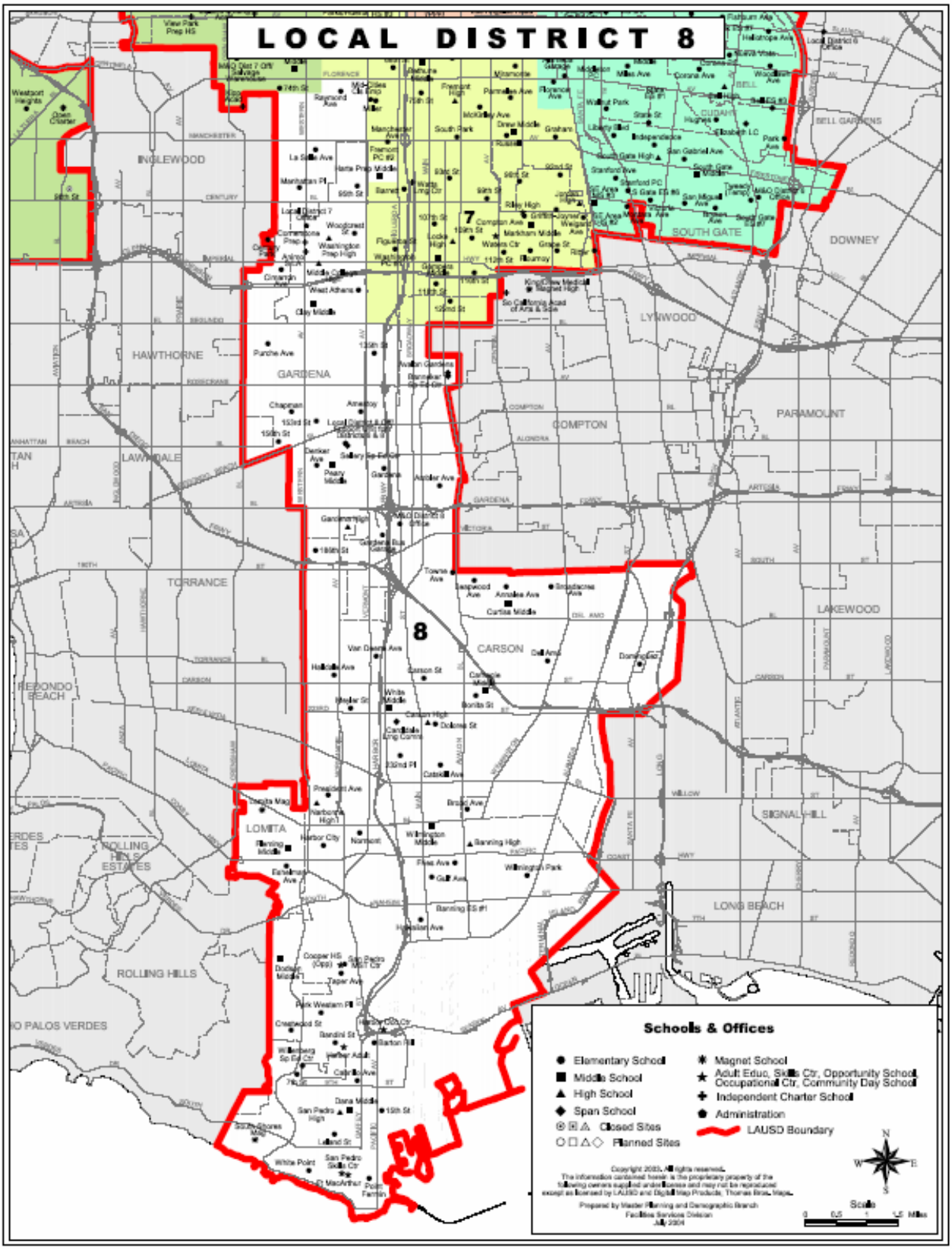
LAUSD Boundary
Scale


LOCAL DISTRICT 8
INGLEWOOD
HAWTHORNE
GARDENA
LAWNDALE
TORRANCE
REDONDO BEACH
LOMITA
ROLLING HILLS ESTATES
ROLLING HILLS
PALOS VERDES
CARSON
COMPTON
LYNWOOD
SOUTH GATE
DOWNEY
PARAMOUNT
LAKEWOOD
SIGNAL HILL
LONG BEACH
BELL GARDENS
7
8
Schools & Offices
Elementary School
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High School
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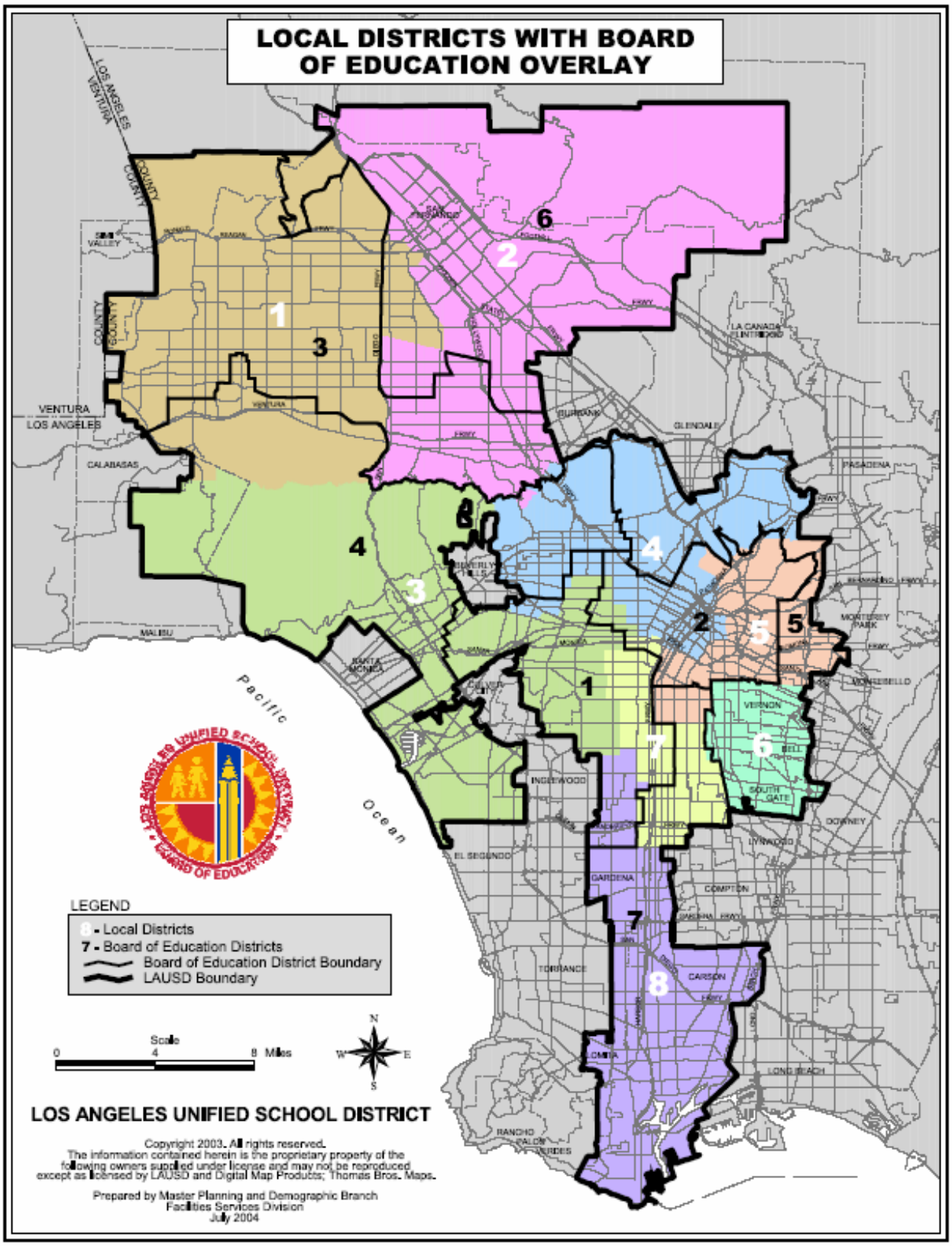
LAUSD Boundary
Scale


LOCAL DISTRICTS WITH BOARD OF EDUCATION OVERLAY
LEGEND
8 - Local Districts
7 - Board of Education Districts
Board of Education District Boundary
LAUSD Boundary
Scale
0
4
8 Miles
N
W
E
S
LOS ANGELES UNIFIED SCHOOL DISTRICT
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Prepared by Master Planning and Demographic Branch
Facilities Services Division
July 2004
Pacific
Ocean
VENTURA
LOS ANGELES
CALABASAS
MALIBU
SANTA MONICA
BURBANK
GLENDALE
PASADENA
LA CANADA FLINTRIDGE
MONTEREY PARK
WONDERBELLO
VERNON
BELL
SOUTH GATE
DOWNEY
LYNWOOD
COMPTON
INGLEWOOD
EL SEGUNDO
GARDENA
TORRANCE
CARSON
LOMITA
LONG BEACH
RANCHO PALOS VERDES

Employment

As of November 2003

Regular Teachers*	34,215
Other Certified Support**	4,994
Other Certified Administrators***	2,709
Classified Personnel (full time)	33,725
Total Regular Employees	80,325

* Includes K-12, adult and early education teachers

** Includes school psychologists, nurses and counselors

*** Includes school-based, local district and central office administrators

Financial Data

Information from the 2003-04 Fiscal Year. General Fund, Regular Program as of September 2003.

Total School District Budget: **$13,351,748,597**.

Total General Fund, Regular Program Budget: **$5,429,969,725**

Source of Income – General Fund	%
Revenue Limit Sources	60.7
Other State Income	26.8
Federal Aid	2.8
Interest & Local Income	1.0
Certificates of Participation	0
Beginning Balance	8.7
Total	100

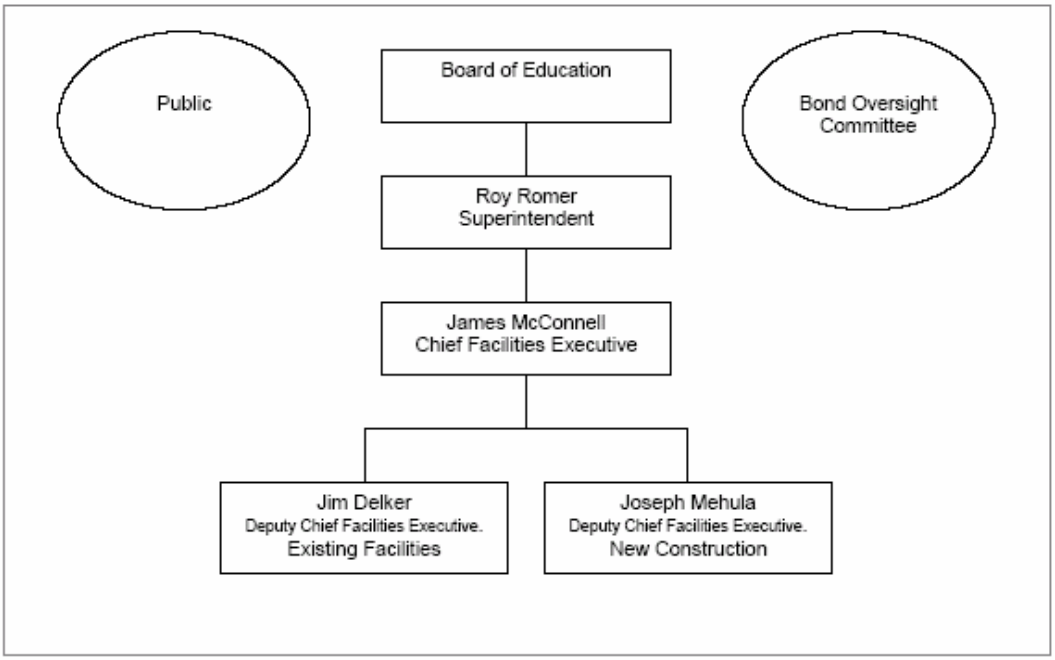
Expenditures	%
Certificated Salaries	45.2
Classified Salaries	15.1
Employee Benefits	18.7
Books & Supplies	5.1
Services & Other Expenses	9.4
All Other	6.5
TOTAL	100

General Facilities

Under the Chief Facilities Executive, there are two operational departments which are charged with accomplishing all facilities related work. Both Deputies are registered professional engineers.

1. Existing Facilities is responsible for the maintenance and operation of all existing schools as well as the completion of all modernization projects designed to upgrade the schools.

2. New Construction is responsible for the construction projects that will build new classroom seats throughout the District.



FACILITIES SERVICES DIVISION.

In the mid 1990's, the Los Angeles Unified School District began the effort to address critical repair and modernization needs at existing school facilities through the Proposition BB Bond. This effort is the largest overall educational construction program developed and undertaken by a school district in the history of the State of California. It will affect thousands of school buildings and offices in the District.

Modernizing the existing facilities with appropriately high standards, the District expects to provide the best possible, cost effective facilities to properly educate and train the children.

Evolution of the program occurred as follows:

April 1997, Passage of Proposition BB. Voters supported modernization of our schools and $1.5 billion was allocated for the repair and modernization of existing school facilities. Work was to include the elimination of longstanding maintenance backlog items, air conditioning projects to support the Year-Round Schools program, and safety and technology projects.

May 2002, BB Bond Modernization Projects Strategic Execution Plan. This report established program budgets and schedules for 6,000 projects.

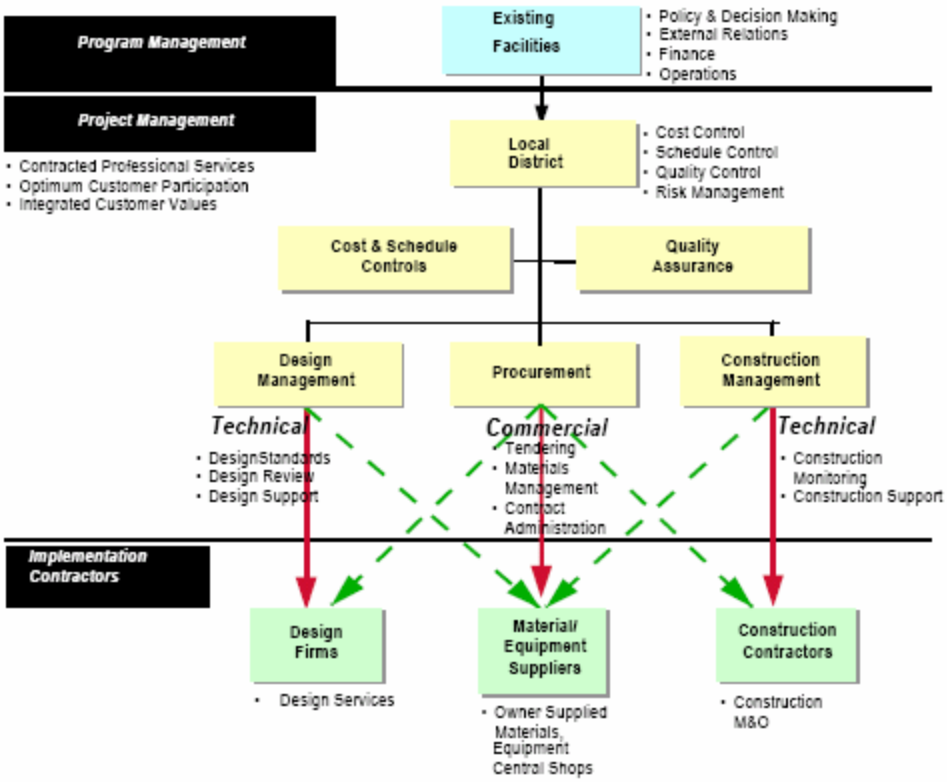
November 2002, passage of Measure K. Voters approve $3.35 billion in local funding for new construction and repair and upgrades of existing facilities.

May 2003, Bond Projects Strategic Execution Plan. This report provides the current status of the on-going Bond BB Repair Program and provides implementation details for the expanded repair program scope for Measure K funding at $526 million.

Future Bonds. It is anticipated that future bonds will be needed to continue to modernize and renovate the existing facilities for our children.

The LAUSD Modernization program is one of the largest of its type in the country, and with its size, certain risks and challenges are inherent. The Existing Facilities team has undertaken efforts to identify and mitigate these threats to program success.

The basic organization concept for program management is illustrated below:



Program and Project Management Organization

Inventory of Assets

Campuses generally have more than one building. This listing shows each named-facility and totals (combined costs and square footages). A detailed listing is available in electronic spreadsheet.

NOTE: The Building $ (cost) figure in the table below represents the cost of construction at the time the facility was built. The following information represents 2004 cost of new construction including change order allowance, demolition and miscellaneous costs and should be used to adjust the dollar figures accordingly: (Soft costs should be adjusted by adding 30% to the base. Environmental and real estate costs are not included.)

Elementary School Facilities:	$266 per square foot
Middle School Facilities:	$245 per square foot
High School Facilities:	$265 per square foot
Administrative Facilities:	$258 per square foot

The methodology used to determine this information is based on an internal study conducted by the County of Los Angeles to determine true-cost and replacement value expressly for recovery from disasters. Basically, the results reveal a conversion to year 2004 dollars based on the per square foot construction costs in today's market.

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
31ST PTA HEALTH OFFICE	17445 CANTLAY ST	VAN NUYS	CA	91406	3,754	274,215	61,520	335,735
ADAMS MS	151 W. 30TH ST.	LOS ANGELES	CA	90007	162,055	11,837,535	2,655,731	14,493,266
ADDAMS CONT SH	16341 DONMETZ ST.	GRANADA HILLS	CA	91344	3,584	261,798	58,734	320,532
ADM OFF - NEWCASTLE	6520 NEWCASTLE AVE.	RESEDA	CA	91335	33,146	2,421,198	543,186	2,964,384
ADMIN OFCS - SOTO ST ANNEX	2011 N. SOTO ST.	LOS ANGELES	CA	90032	146,154	10,676,024	2,395,147	13,071,171
ADMIN OFF - SR SH DIV	644 W 17TH ST.	LOS ANGELES	CA	90015	37,647	2,749,977	616,953	3,366,930
ADMIN REGION C	6519 EIGHTH AVE.	LOS ANGELES	CA	90043	1,824	133,236	29,891	163,127
AGGELER SH	21050 PLUMMER ST.	CHATSWORTH	CA	91311	17,803	1,300,445	291,755	1,592,200
ALBION ST. CC	348 S. AVE. 18	LOS ANGELES	CA	90031	7,110	519,359	116,516	635,875
ALBION ST. ES	322 S. AVE. 18	LOS ANGELES	CA	90031	50,262	3,671,461	823,688	4,495,149
ALDAMA ES	632 N. AVE. 50	LOS ANGELES	CA	90004	43,121	2,700,525	605,856	3,306,381
ALEXANDRIA AVE. CC	4304 ROSEWOOD AVE.	LOS ANGELES	CA	90004	6,050	441,931	99,146	541,077
ALEXANDRIA AVE. ES	4211 OAKWOOD AVE.	LOS ANGELES	CA	90004	75,823	5,295,498	1,188,038	6,483,536
ALISO SH	18741 ELDWOOD ST.	RESEDA	CA	91335	6,312	461,067	103,440	564,507
ALLESANDRO CC	2210 RIVERSIDE DR.	LOS ANGELES	CA	90039	2,736	199,854	44,837	244,691
ALLESANDRO ES	2210 RIVERSIDE DR.	LOS ANGELES	CA	90039	40,368	2,735,957	613,803	3,349,760

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
ALTA LOMA ES	1745 VINEYARD AVE.	LOS ANGELES	CA	90019	56,210	3,975,040	891,794	4,866,834
AMBLER AVE. ES	319 E. SHERMAN DR.	CARSON	CA	90746	58,048	4,029,828	904,090	4,933,918
AMESTOY ES	1048 W. 149TH ST.	GARDENA	CA	90247	51,357	3,119,593	699,878	3,819,471
ANATOLA AVE. ES	7364 ANATOLA AVE.	VAN NUYS	CA	91406	32,567	2,063,339	462,912	2,526,251
ANDASOL AVE. ES	10126 ENCINO AVE.	NORTHRIDGE	CA	91325	43,617	2,660,134	596,792	3,256,926
ANGELES MESA ES	2611 W. 52ND ST.	LOS ANGELES	CA	90043	53,820	3,564,153	799,609	4,363,762
ANGEL'S GATE SH	3202 S ALMA ST.	SAN PEDRO	CA	90731	5,104	372,828	83,643	456,471
ANN ST. ES	126 E. BLOOM ST.	LOS ANGELES	CA	90012	28,366	2,072,033	464,859	2,536,892
ANNALEE AVE ES	19410 S ANNALEE AVE	CARSON	CA	90746	54,378	3,841,218	861,770	4,702,988
ANNANDALE ES	6125 POPPY PEAK DR	LOS ANGELES	CA	90042	26,276	1,919,364	430,607	2,349,971
APPERSON ST ES	10233 WOODWARD AVE	SUNLAND	CA	91040	36,346	2,654,938	595,630	3,250,568
ARAGON AVE ES	1118 ARAGON AVE	LOS ANGELES	CA	90065	50,515	3,519,007	789,483	4,308,490
AREA 4 SCI CTR	1630 WALGROVE AVE	LOS ANGELES	CA	90066	3,456	252,448	56,638	309,086
ARLINGTON HTS ES	1717 SEVENTH AVE	LOS ANGELES	CA	90019	56,122	4,099,508	919,719	5,019,227
ARMINTA ST CC	7911 GOLL AVE	NO HOLLYWOOD	CA	91605	7,108	519,213	116,484	635,697
ARMINTA ST ES	11530 STRATHERN ST	NO HOLLYWOOD	CA		44,799	2,851,660	639,770	3,491,430
ARROYO SECO ALT SCH	4805 SYCAMORE TERR	LOS ANGELES	CA	90042	27,602	1,909,287	428,348	2,337,635
ASBESTOS TECH UNIT	611 JACKSON ST	LOS ANGELES	CA	90012	23,239	1,697,526	380,836	2,078,362
ASCOT AVE ES	1447 E 45TH ST	LOS ANGELES	CA	90011	67,662	4,521,714	1,014,443	5,536,157
ATWATER AVE ES	3271 SILVER LAKE BLVD	LOS ANGELES	CA	90039	37,318	2,725,947	611,561	3,337,508
AUDUBON MS	4120 11TH AVE	LOS ANGELES	CA	90008	220,395	16,099,061	3,611,796	19,710,857
AVALON GARDENS ES	13940 S SAN PEDRO ST	LOS ANGELES	CA	90061	25,652	1,873,787	420,382	2,294,169
AVALON SH	1425 N AVALON BLVD	WILMINGTON	CA	90744	3,816	278,744	62,537	341,281
BALBOA BLVD MAG ES	17020 LABRADOR ST	NORTHRIDGE	CA	91325	37,468	2,526,530	566,822	3,093,352
BALDWIN HILLS ES	5421 RODEO RD	LOS ANGELES	CA	90016	44,444	3,036,107	681,144	3,717,251
BANCROFT MS	929 N LAS PALMAS AVE	LOS ANGELES	CA	90038	183,264	13,267,563	2,976,554	16,244,117
BANDINI BRANCH	425 N BANDINI ST	SAN PEDRO	CA	90731	1,920	0	0	0
BANDINI ST ES	425 N BANDINI ST	SAN PEDRO	CA	90731	40,420	2,952,535	662,396	3,614,931
BANNEKER SPEC ED	14024 S SAN PEDRO ST	LOS ANGELES	CA	90061	70,110	5,121,209	1,148,935	6,270,144
BANNING SH	1527 LAKME AVE	WILMINGTON	CA	90744	406,289	29,677,950	6,658,197	36,336,147
BARRETT ES (97TH ST)	419 W 98TH ST	LOS ANGELES	CA	90003	89,843	6,221,435	1,395,767	7,617,202
BARRETT HEALTH OFC	6519 8TH AVE	LOS ANGELES	CA	90043	3,584	261,798	58,734	320,532
BARTON HILL ES	423 N PACIFIC AVE	SAN PEDRO	CA	90731	62,504	4,565,691	1,024,303	5,589,994

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
BASSETT ST ES	15756 BASSETT ST	VAN NUYS	CA	91406	54,937	2,844,062	638,059	3,482,121
BEACHY AVE ES	9757 BEACHY AVE	PACOIMA	CA	91331	37,473	2,674,148	599,954	3,274,102
BECKFORD AVE ES	19130 TULSA ST	NORTHRIDGE	CA	91326	46,697	2,885,117	647,273	3,532,390
BEETHOVEN ST CC	12939 LUCILLE AVE	LOS ANGELES	CA	90066	5,451	398,176	89,330	487,506
BEETHOVEN ST ES	3711 BEETHOVEN ST	LOS ANGELES	CA	90066	36,444	2,451,730	550,041	3,001,771
BELL FED SVC BUS PARK	4747 EASTERN AVE	BELL	CA	90201	864	63,112	14,159	77,271
BELL SH	4328 BELL AVE	BELL	CA	90201	291,227	21,273,080	4,772,583	26,045,663
BELLAGIO NEWCOMER CTR	11301 BELLAGIO RD	LOS ANGELES	CA	90049	32,896	2,402,929	539,095	2,942,024
BELMONT ES #1	610 N MICHELTORENA	LOS ANGELES	CA	90026	8,520	622,351	139,627	761,978
BELMONT ES #5	309 LUCAS AVE	LOS ANGELES	CA	90017	156,084	5,623,475	1,261,617	6,885,092
BELMONT LEARNING CENTER	TEMPLE/BEVERLY & BEAUDRY	LOS ANGELES			0	116,450,785	0	116,450,785
BELMONT SH	1575 W 2ND ST	LOS ANGELES	CA	90026	539,355	39,397,942	8,838,859	48,236,801
BELVEDERE CC	221 S EASTMAN AVE	LOS ANGELES	CA	90063	4,481	327,321	73,434	400,755
BELVEDERE ES	3724 E FIRST ST	LOS ANGELES	CA	90063	92,091	6,175,269	1,385,412	7,560,681
BELVEDERE MS	312 N RECORD AVE	LOS ANGELES	CA	90063	230,469	16,834,931	3,776,890	20,611,821
BERENDO MS	1157 S BERENDO ST	LOS ANGELES	CA	90006	162,073	11,838,847	2,656,027	14,494,874
BERKELEY AVE CC	1814 BERKELEY AVE	LOS ANGELES	CA	90026	2,606	190,359	42,707	233,066
BERTRAND AVE ES	7021 BERTRAND AVE	RESEDA	CA	91335	35,550	2,140,994	480,319	2,621,313
BETHUNE MS	155 W 69TH ST	LOS ANGELES	CA	90003	228,742	16,577,885	3,719,230	20,297,115
BIRMGHN/CLVLD/RESEDA	6621 BALBOA BLVD	VAN NUYS	CA	91406	2,688	0	0	0
BIRMINGHAM BUS PARK	6651 BALBOA BLVD	VAN NUYS	CA	91405	1,904	139,081	31,203	170,284
BIRMINGHAM SH	17000 HAYNES ST	VAN NUYS	CA	91406	328,246	23,977,182	5,379,233	29,356,415
BLEND ES	5210 CLINTON ST	LOS ANGELES	CA	90004	38,647	2,823,024	633,341	3,456,365
BLYTHE ST ES	18730 BLYTHE ST	RESEDA	CA	91335	32,791	1,974,515	442,980	2,417,495
BONITA ST ES	21929 BONITA ST	CARSON	CA	90745	40,161	2,933,615	658,154	3,591,769
BOYLE HEIGHTS SH	544 S MATHEWS ST	LOS ANGELES	CA	90033	3,552	259,460	58,210	317,670
BRADDOCK DR ES	4711 INGLEWOOD BLVD	CULVER CITY	CA	90230	48,716	2,902,135	651,092	3,553,227
BRADLEY CC	10925 S CENTRAL AVE	LOS ANGELES	CA	90059	2,880	210,372	47,198	257,570
BRAINARD AVE ES	11407 BRAINARD AVE	LAKE VIEW TERRACE	CA	90059	39,951	2,918,277	654,711	3,572,988
BRAVO MED MAG SH	1200 N CORNWELL ST	LOS ANGELES	CA	90033	255,081	18,632,749	4,180,226	22,812,975
BREED ST ES	2226 E THIRD ST	LOS ANGELES	CA	90033	53,953	3,679,275	825,442	4,504,717

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
BRENTWOOD SCIENCE ES	740 GRETNA GREEN WAY	LOS ANGELES	CA	90049	69,211	5,055,606	1,134,220	6,189,826
BRIDGE ST CC	648 ECHANDIA ST	LOS ANGELES	CA	90033	3,900	284,881	63,913	348,794
BRIDGE ST ES	605 N BOYLE AVE	LOS ANGELES	CA	90033	45,028	3,289,134	737,910	4,027,044
BROAD AVE ES	24815 BROAD AVE	WILMINGTON	CA	90744	65,109	4,755,974	1,066,997	5,822,971
BROADACRES AVE ES	19424 S BROADACRES AVE	CARSON	CA	90746	41,789	3,052,534	684,831	3,737,365
BROADOUS CC	11736 BROMONT AVE	PACOIMA	CA	91331	7,236	528,564	118,581	647,145
BROADOUS ES	12561 FILMORE ST	PACOIMA	CA	91331	54,459	3,662,477	821,672	4,484,149
BROADWAY ES	1015 LINCOLN BLVD	VENICE	CA	90291	44,203	3,228,870	724,390	3,953,260
BROCKTON AVE ES	1309 ARMACOST AVE	LOS ANGELES	CA	90025	45,053	3,290,959	738,322	4,029,281
BROOKLYN AVE CC	329 N ARIZONA AVE	LOS ANGELES	CA	90022	7,254	529,878	118,876	648,754
BROOKLYN AVE ES	4620 CESAR CHAVEZ AVE	LOS ANGELES	CA	90022	56,176	3,832,308	859,773	4,692,081
BRYSON AVE ES	4470 MISSOURI AVE	SOUTH GATE	CA	90280	54,718	3,772,626	846,383	4,619,009
BSD-ADMIN REGION A	1208 MAGNOLIA AVE	GARDENA	CA	90247	29,054	2,122,288	476,133	2,598,421
BSD-ADMIN REGION C	6519 EIGHTH AVE	LOS ANGELES	CA	90043	9,253	675,898	151,636	827,534
BSD-ADMIN REGION D	11380 W GRAHAM PL	LOS ANGELES	CA	90064	33,222	1,617,612	362,907	1,980,519
BSD-OPER-ADM OFF	450 N GRAND AVE #S101	LOS ANGELES	CA	90012	489,260	35,738,682	8,017,912	43,756,594
BSD-OPER-YALE	936 YALE ST	LOS ANGELES	CA	90012	2,736	199,854	44,837	244,691
BSD-SALV WHSE	6620 11TH AVE	LOS ANGELES	CA	90043	23,200	1,694,677	380,197	2,074,874
BUCHANAN ST ES	5024 BUCHANAN ST	LOS ANGELES	CA	90042	60,315	3,162,690	709,544	3,872,234
BUDLONG AVE ES	5940 S BUDLONG AVE	LOS ANGELES	CA	90044	90,056	6,355,913	1,425,937	7,781,850
BURBANK BLVD ES	12215 ALBERS ST	NO HOLLYWOOD	CA	91607	35,401	2,165,166	485,752	2,650,918
BURBANK MS	6460 N FIGUEROA ST	LOS ANGELES	CA	90042	185,710	13,565,440	3,043,383	16,608,823
BURROUGHS MS	600 S MCCADDEN PL	LOS ANGELES	CA	90005	167,021	12,200,279	2,737,109	14,937,388
BURTON EL	8111 CALHOUN AVE	PANORAMA CITY	CA	91402	47,097	2,949,407	661,689	3,611,096
BUSHNELL WAY ES	5507 BUSHNELL WAY	LOS ANGELES	CA	90042	50,459	3,178,982	713,199	3,892,181
BUSINESS & INDUSTRY SCHOOL	13151 APPLETON WAY	LOS ANGELES	CA	90066	25,080	1,701,104	381,641	2,082,745
BUSINESS SVC CTR	1315 SAN JULIAN ST	LOS ANGELES	CA	90015	609,381	44,513,088	9,986,433	54,499,521
BYRD MS	9171 TELFAIR AVE	SUN VALLEY	CA	91352	125,893	9,196,035	2,063,113	11,259,148
C O-M&O DISTRICT 7	17729 S FIGUEROA ST	GARDENA	CA	90248	2,256	164,792	36,970	201,762
CABRILLO AVE CC	741 W EIGHTH ST	SAN PEDRO	CA	90731	6,945	507,307	113,813	621,120
CABRILLO AVE ES	732 S CABRILLO AVE	SAN PEDRO	CA	90731	59,875	4,163,277	934,022	5,097,299
CAHUENGA ES	220 S HOBART BLVD	LOS ANGELES	CA	90009	75,437	2,435,805	546,468	2,982,273
CALABASH ST ES	23055 EUGENE ST	WOODLAND HILLS	CA	91364	33,314	1,942,595	435,818	2,378,413

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
CALAHAN ST ES	18722 KNAPP ST	NORTHRIDGE	CA	91324	27,154	1,983,497	444,994	2,428,491
CALVERT ST ES	19850 DELANO ST	WOODLAND HILLS	CA	91367	41,813	2,598,475	582,970	3,181,445
CAMELLIA AVE ES	7451 CAMELLIA AVE	NO HOLLYWOOD	CA	91605	51,534	3,133,244	702,937	3,836,181
CANFIELD AVE ES	9233 AIRDROME ST	LOS ANGELES	CA	90035	38,362	2,591,832	581,473	3,173,305
CANOGA PARK CC	7355 VASSAR AVE	CANOGA PARK	CA	91304	6,808	497,301	111,568	608,869
CANOGA PARK ES	7438 TOPANGA CANYON BLVD	CANOGA PARK	CA	91303	55,399	3,723,614	835,387	4,559,001
CANOGA PARK HS	6850 TOPANGA CYN BLVD	CANOGA PARK	CA	91303	249,437	18,220,471	4,087,738	22,308,209
CANTARA ST ES	17950 CANTARA ST	RESEDA	CA	91335	39,262	2,552,382	572,628	3,125,010
CANTERBURY AVE ES	13670 MONTAGUE ST	PACOIMA	CA	91331	54,643	3,149,981	706,689	3,856,670
CANYON ES	421 ENTRADA DR	SANTA MONICA	CA	90402	20,469	1,495,188	335,443	1,830,631
CAPISTRANO AVE ES	8118 CAPISTRANO AVE	CANOGA PARK	CA	91304	38,090	2,677,157	600,610	3,277,767
CARLSON HSP SCH (K-12)	10952 WHIPPLE ST	NO HOLLYWOOD	CA	91602	3,816	278,745	62,537	341,282
CARNEGIE MS	21820 BONITA ST	CARSON	CA	90745	159,073	11,488,812	2,577,498	14,066,310
CAROLDALE AVE LC	22424 CAROLDALE AVE	CARSON	CA	90745	55,111	3,800,386	852,610	4,652,996
CARPENTER AVE ES	3909 CARPENTER AVE	STUDIO CITY	CA	91604	59,914	3,958,095	887,992	4,846,087
CARSON SH	22328 S MAIN ST	CARSON	CA	90745	260,586	19,034,868	4,270,441	23,305,309
CARSON ST ES	161 E CARSON ST	CARSON	CA	90745	63,748	4,525,662	1,015,323	5,540,985
CARTHAY CENTER ES	6351 W OLYMPIC BLVD	LOS ANGELES	CA	90048	54,003	3,839,537	861,397	4,700,934
CARVER MS	4410 MCKINLEY AVE	LOS ANGELES	CA	90011	200,990	14,681,595	3,293,789	17,975,384
CASTELAR CC	840 YALE ST	LOS ANGELES	CA	90012	10,075	735,942	165,107	901,049
CASTELAR ES	840 YALE ST	LOS ANGELES	CA	90012	100,588	7,347,591	1,648,419	8,996,010
CASTLE HTS ES	9755 CATTARAUGUS AVE	LOS ANGELES	CA	90034	45,681	3,126,458	701,418	3,827,876
CASTLEBAY LN ES	19010 CASTLEBAY LN	NORTHRIDGE	CA	91326	51,296	3,440,125	771,780	4,211,905
CATSKILL AVE ES	23536 CATSKILL AVE	CARSON	CA	90745	56,859	4,153,343	931,797	5,085,140
CENTURY PARK ES	10935 S SPINNING AVE	INGLEWOOD	CA	90303	47,933	3,182,710	714,028	3,896,738
CHAMBERLAIN CC SITE					3,648	266,473	59,783	326,256
CHANDLER ES	14030 WEDDINGTON ST	VAN NUYS	CA	91401	40,146	2,932,517	657,903	3,590,420
CHAPMAN ES	1947 MARINE AVE	GARDENA	CA	90249	39,679	27,921,184	6,264,071	34,185,255
CHARNOCK RD ES	11133 CHARNOCK ROAD	LOS ANGELES	CA	90034	35,357	2,267,145	508,630	2,775,775
CHASE ST ES	14041 CHASE ST	PANORAMA CITY	CA	91402	46,074	2,734,417	613,453	3,347,870
CHATSWORTH PARK ES	22005 DEVONSHIRE ST	CHATSWORTH	CA	91311	32,873	2,401,251	538,719	2,939,970
CHATSWORTH SH	10027 LURLINE AVE	CHATSWORTH	CA	91311	269,520	19,687,467	4,416,859	24,104,326

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
CHEREMOYA AVE ES	6017 FRANKLIN AVE	LOS ANGELES	CA	90028	49,893	3,644,504	817,637	4,462,141
CHEVIOT HILLS SH	9200 CATTARAUGUS AVE	LOS ANGELES	CA	90034	3,360	245,436	55,063	300,499
CHILD DEV DIV BLDG	1360 W TEMPLE ST	LOS ANGELES	CA	90026	25,042	914,614	205,192	1,119,806
CIENEGA ES	2611 S ORANGE DR	LOS ANGELES	CA	90016	64,856	4,737,497	1,062,849	5,800,346
CIMARRON AVE ES	11559 CIMARRON AVE	HAWTHORNE	CA	90250	39,786	2,485,474	557,608	3,043,082
CITY TERRACE ES	4350 CITY TERRACE DR	LOS ANGELES	CA	90063	34,281	2,504,102	561,793	3,065,895
CLARA ST PC	4504 ASCOT AVE	LOS ANGELES	CA	90011	9,952	726,958	163,092	890,050
CLAY MS	12226 S WESTERN AVE	LOS ANGELES	CA	90047	140,487	10,131,173	2,272,905	12,404,078
CLEAR CREEK OUTDOOR ED	STAR ROUTE	LA CANADA	CA	91011	23,143	1,690,511	379,266	2,069,777
CLEVELAND SH	8140 VANALDEN AVE	RESEDA	CA	91335	241,270	17,623,903	3,953,894	21,577,797
CLIFFORD ST ES	2150 DUANE ST	LOS ANGELES	CA	90039	12,728	929,733	208,587	1,138,320
CLOVER AVE ES	11020 CLOVER AVE	LOS ANGELES	CA	90034	33,846	2,261,950	507,463	2,769,413
COEUR D'ALENE AVE ES	810 COEUR D'ALENE AVE	VENICE	CA	90291	23,929	1,747,929	392,147	2,140,076
COHASSET ST ES	15810 SATICOY ST	VAN NUYS	CA	91406	50,269	3,251,227	729,411	3,980,638
COLDWATER CYN AVE ES	6850 COLDWATER CYN AVE ES	NO HOLLYWOOD	CA	91605	53,654	3,464,082	777,160	4,241,242
COLFAX AVE ES	11724 ADDISON ST	NO HOLLYWOOD	CA	91607	40,800	2,769,916	621,435	3,391,351
COLISEUM ST ES					29,032	1,910,313	428,576	2,338,889
COLLIER ES					24,550	3,632,598	814,967	4,447,565
COLLINS ES SITE					25,180	0	0	0
COLUMBUS MS	22250 ELKWOOD ST	CANOGA PARK	CA	91304	132,973	9,713,198	2,179,139	11,892,337
COMMONWEALTH AVE ES	215 S COMMONWEALTH AVE	LOS ANGELES	CA	90004	51,884	3,539,392	794,057	4,333,449
COMMUNITY SCHOOL	5954 AIRDROME ST	LOS ANGELES	CA	90035	18,761	1,370,418	307,451	1,677,869
COMPTON AVE CC	1512 E 104TH ST	LOS ANGELES	CA	90002	3,720	271,731	60,963	332,694
COMPTON AVE ES	1515 E 104TH ST	LOS ANGELES	CA	90002	45,513	3,324,562	745,859	4,070,421
COOPER SH	2210 TAPER AVE	SAN PEDRO	CA	90731	13,709	1,001,392	224,659	1,226,051
CORONA AVE ES	3825 BELL AVE	BELL	CA	90201	90,506	6,611,135	1,483,200	8,094,335
COWAN AVE ES	7615 COWAN AVE	LOS ANGELES	CA	90045	35,395	2,375,103	532,848	2,907,951
CRENSHAW SH	5010 11TH AVE	LOS ANGELES	CA	90043	297,551	21,735,031	4,876,217	26,611,248
CRESCENT HTS BLVD CC	1700 S ALIVIRA ST	LOS ANGELES	CA	90035	7,257	530,097	118,925	649,022
CRESCENT HTS BLVD ES	1661 S CRESCENT HTS BLVD	LOS ANGELES	CA	90035	46,647	3,197,018	717,245	3,914,263
CRESTWOOD ST ES	1946 W CRESTWOOD ST	SAN PEDRO	CA	90732	36,704	2,681,087	601,496	3,282,583
CURTISS MS	1254 E HELMICK ST	CARSON	CA	90746	156,340	11,420,074	2,562,074	13,982,148

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
DACOTAH ST CC	3142 LYDIA DR	LOS ANGELES	CA	90023	10,117	739,010	165,796	904,806
DAHLIA HTS ES	5063 FLORISTAN AVE	LOS ANGELES	CA	90041	28,975	2,011,332	451,239	2,462,571
DANA MS	1501 S CABRILLO AVE	SAN PEDRO	CA	90731	183,859	13,430,233	3,013,053	16,443,286
DANUBE AVE ES	11220 DANUBE AVE	GRANADA HILLS	CA	91344	39,677	2,582,705	579,424	3,162,129
DARBY AVE ES	10818 DARBY AVE	NORTHRIDGE	CA	91326	39,100	2,856,110	640,763	3,496,873
DAYTON HTS CC	3917 CLINTON ST	LOS ANGELES	CA	90004	7,231	528,197	118,499	646,696
DAYTON HTS ES	607 N WESTMORELAND AVE	LOS ANGELES	CA	90004	57,579	3,890,374	872,795	4,763,169
DE PORTOLA MS	18720 LINNET STREET	TARZANA	CA	91356	159,977	11,685,742	2,621,672	14,307,414
DEARBORN ST ES	9240 WISH AVE	NORTHRIDGE	CA	91325	39,850	2,910,894	653,054	3,563,948
DEL AMO ES	21228 WATER ST	CARSON	CA	90745	42,572	3,109,724	697,657	3,807,381
DEL REY SH	8701 PARK HILL DR	LOS ANGELES	CA	90045	3,648	266,472	59,782	326,254
DELEVAN DR ES	4168 W AVE 42	LOS ANGELES	CA	90065	34,186	2,122,436	476,162	2,598,598
DELEVAN SCI CTR	4300 YOSEMITE WAY	LOS ANGELES	CA	90065	5,006	365,668	82,039	447,707
DENA ES (DACOTAH ST)	1314 DACOTAH ST	LOS ANGELES	CA	90023	57,763	4,219,377	946,609	5,165,986
DENKER AVE ES	1620 W 162ND ST	GARDENA	CA	90247	71,392	4,899,373	1,099,163	5,998,536
DEVONSHIRE ES					33,414	2,440,770	547,584	2,988,354
DIXIE CANYON AVE ES	4220 DIXIE CANYON AVE	SHERMAN OAKS	CA	91423	42,212	3,083,433	691,763	3,775,196
DODSON MS	28014 MONTEREINA DR	SAN PEDRO	CA	90732	139,057	10,157,613	2,278,841	12,436,454
DOLORES ST CC	22309 CATSKILL AVE	CARSON	CA	90745	7,120	520,090	116,680	636,770
DOLORES ST ES	22526 DELORES ST.	CARSON	CA	90745	50,237	3,248,880	728,880	3,977,760
DOMINGUEZ ES	21250 SANTA FE AVE	LONG BEACH	CA	90810	50,019	3,338,148	748,906	4,087,054
DORRIS PL ES	2225 DORRIS PL	LOS ANGELES	CA	90031	43,795	2,752,611	617,544	3,370,155
DORSEY SH	3537 FARMIDALE AVE	LOS ANGELES	CA	90016	198,733	14,516,729	3,256,802	17,773,531
DOWNTOWN BUSINESS MAG SH	1081 W TEMPLE ST	LOS ANGELES	CA	90012	107,092	7,822,687	1,755,006	9,577,693
DREW MS	8511 COMPTON AVE	LOS ANGELES	CA	90012	158,342	11,566,313	2,594,882	14,161,195
DUBLIN AVE FUND CTR	3875 DUBLIN AVE	LOS ANGELES	CA	90008	51,573	3,346,480	750,780	4,097,260
DYER ST ES	14500 DYER ST	SYLMAR	CA	91342	48,013	3,507,166	786,827	4,293,993
E L.A. COLLEGE					12,768	932,654	209,238	1,141,892
E L.A. OCC CTR	2100 MARENGO ST	LOS ANGELES	CA	90033	188,839	13,008,042	2,918,318	15,926,360
E L.A. SCI CTR (@ SUNRISE)	961 S EUCLID AVE	LOS ANGELES	CA	90023	5,768	421,331	94,526	515,857
E L.A. SKILLS CTR	3921 SELIG PL	LOS ANGELES	CA	90033	126,346	9,229,120	2,070,537	11,299,657
E L.A. SKILLS CTR CC	3921 SELIG PL	LOS ANGELES	CA	90033	5,800	423,669	95,049	518,718
EAGLE ROCK ES	3921 SELIG PL	LOS ANGELES	CA	90033	84,653	4,519,673	1,013,981	5,533,654

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
EAGLE ROCK SH	1750 YOSEMITE DR	LOS ANGELES	CA	90041	249,900	18,114,043	4,063,862	22,177,905
EAGLE TREE CONTN SH	22628 S MAIN ST	CARSON	CA	90745	3,648	266,472	59,782	326,254
EARHART SH	5355 COLFAX AVE	NO. HOLLYWOOD	CA	91601	3,584	130,899	29,367	160,266
EASTMAN AVE CC	1266 S GAGE AVE	LOS ANGELES	CA	90023	7,093	518,118	116,238	634,356
EASTMAN AVE ES	4112 E OLYMPIC BLVD.	LOS ANGELES	CA	90023	105,629	7,505,443	1,683,832	9,189,275
ED SUPP CTR-REG D/H	15530 HESBY STREET	ENCINO	CA		25,709	1,877,947	421,317	2,299,264
EDISON MS	6500 HOOPER AVE	LOS ANGELES	CA	90001	182,122	13,303,360	2,984,584	16,287,944
EINSTEIN SH (@ MONROE)	15938 TUPPER ST	SEPULVEDA	CA	91343	3,360	245,436	55,064	300,500
EL CAMINO REAL ADLT	5440 VALLEY CIRCLE BLVD	WOODLAND HILLS	CA	91367	2,520	184,077	41,297	225,374
EL CAMINO REAL SH	5440 VALLEY CIRCLE BLVD	WOODLAND HILLS	CA	91367	318,014	22,949,280	5,148,643	28,097,923
EL DORADO AVE ES	12749 EL DORADO AVE	SYLMAR	CA	91342	40,144	2,616,819	587,074	3,203,893
EL ORO WAY ES	12230 EL ORO WAY	GRANADA HILLS	CA	91344	37,813	2,762,100	619,675	3,381,775
EL SERENO CC	3802 PUEBLO AVE	LOS ANGELES	CA	90032	7,102	518,775	116,385	635,160
EL SERENO ES	3838 ROSEMEAD AVE	LOS ANGELES	CA	90032	51,281	3,430,331	769,584	4,199,915
EL SERENO MS	2839 N EASTERN AVE	LOS ANGELES	CA	90032	221,520	15,919,452	3,571,502	19,490,954
ELEMENTRY DISTRICT 3	634 SUNSET BLVD	LOS ANGELES	CA	90012	5,924	432,727	97,082	529,809
ELIZABETH LC SITE	4811 ELIZABETH ST	CUDAHY	CA		144,774	4,318,076	968,752	5,286,828
ELIZABETH ST ES	4811 ELIZABETH ST	CUDAHY	CA		70,473	5,147,799	1,154,899	6,302,698
ELLINGTON SH	1541 W 110TH ST	LOS ANGELES	CA		3,990	291,454	65,386	356,840
ELYSIAN HTS ES	1562 BAXTER ST	LOS ANGELES	CA		35,874	1,759,104	394,652	2,153,756
EMELITA ST ES	17931 HATTERAS ST	ENCINO	CA		34,853	2,230,329	500,368	2,730,697
EMERSON MANOR	8810 EMERSON AVE	LOS ANGELES	CA		27,202	1,987,007	445,781	2,432,788
EMERSON MS	1650 SELBY AVE	LOS ANGELES	CA	90024	139,837	10,214,589	2,291,625	12,506,214
ENADIA WAY ES					25,277	1,846,392	414,237	2,260,629
ENCINO ES	16941 ADDISON ST	ENCINO	CA	91316	38,071	2,780,949	623,902	3,404,851
ERWIN ST ES	13400 ERWIN ST	VAN NUYS	CA	91401	52,334	3,139,108	704,254	3,843,362
ESHELMAN AVE ES	25902 ESHELMAN AVE	LOMITA	CA	90717	54,567	3,859,985	865,978	4,725,963
ESPERANZA ES (BELMONT#3)	680 LITTLE STREET	LOS ANGELES	CA	90017	50,782	3,288,695	737,817	4,026,512
EUCLID AVE ES	806 EUCLID AVE	LOS ANGELES	CA	90023	78,349	5,407,550	1,213,178	6,620,728
EVANS ADULT CTR	717 N FIGUEROA ST	LOS ANGELES	CA	90012	110,542	7,027,508	1,576,607	8,604,115
EVERGREEN AVE CC	1027 N EVERGREEN AVE	LOS ANGELES	CA	90033	7,102	518,775	116,385	635,160
EVERGREEN AVE ES	2730 GANAHL ST	LOS ANGELES	CA	90033	78,286	5,718,508	1,282,939	7,001,447
EVERGREEN SH	13101 DRONFIELD AVE	SYLMAR	CA	91342	3,456	252,448	56,638	309,086

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
FAIR AVE CC	11300 KITTRIDGE ST	NO HOLLYWOOD	CA	91606	7,095	518,263	116,270	634,533
FAIR AVE ES	6501 FAIR AVE	NO HOLLYWOOD	CA	91606	60,273	3,877,155	869,833	4,746,988
FAIRBURN AVE ES	1403 FAIRBURN AVE	LOS ANGELES	CA	90024	35,744	2,400,600	538,571	2,939,171
FAIRFAX SH	7850 MELROSE AVE	LOS ANGELES	CA	90046	354,591	25,901,599	5,810,977	31,712,576
FARMDALE ES	2660 FITHIAN AVE	LOS ANGELES	CA	90032	61,792	4,198,125	941,842	5,139,967
FENTON AVE ES	11828 GAIN ST	LAKE VIEW TERRACE	CA	91342	47,466	3,467,216	777,865	4,245,081
FERNANGELES ES	12001 ART STREET	SUN VALLEY	CA	91352	46,526	3,084,161	691,928	3,776,089
FIFTEENTH ST ES	1527 S MESA ST	SAN PEDRO	CA	90731	56,949	4,159,918	933,271	5,093,189
FIFTY-FOURTH ST ES	5501 S EILEEN AVE	LOS ANGELES	CA	90043	52,672	3,847,498	863,180	4,710,678
FIFTY-NINTH ST ES	5939 SECOND AVE	LOS ANGELES	CA	90043	52,516	3,711,341	832,634	4,543,975
FIFTY-SECOND ST CC	901 W 52ND ST	LOS ANGELES	CA	90037	6,075	443,757	99,555	543,312
FIFTY-SECOND ST ES	816 W 51ST ST	LOS ANGELES	CA	90037	83,397	6,091,851	1,366,698	7,458,549
FIGUEROA ST ES	510 W 111TH STREET	LOS ANGELES	CA	90044	63,452	4,634,938	1,039,840	5,674,778
FIRST ST ES	2820 E FIRST ST	LOS ANGELES	CA	90033	67,789	4,636,175	1,040,122	5,676,297
FISHBURN AVE ES	5701 FISHBURN AVE	MAYWOOD	CA	90270	62,592	4,262,917	956,378	5,219,295
FLEMING MS	25425 WALNUT ST	LOMITA	CA	90717	176,683	12,906,057	2,895,452	15,801,509
FLETCHER DR ES	3350 FLETCHER DR	LOS ANGELES	CA	90065	48,502	3,437,709	771,252	4,208,961
FLORENCE AVE ES	7211 BELL AVE	LOS ANGELES	CA	90001	71,825	5,115,659	1,147,695	6,263,354
FLORENCE DENTAL	1850 E FLORENCE AVE	LOS ANGELES	CA	90001	1,792	130,899	29,367	160,266
FLOURNOY ES	1630 E 111TH ST	LOS ANGELES	CA	90059	78,792	5,755,471	1,291,230	7,046,701
FORD BLVD ES	1112 S FORD BLVD	LOS ANGELES	CA	90022	89,097	6,508,213	1,460,107	7,968,320
FORMER AMBASSADOR HOTEL	3400 WILSHIRE BOULEVARD	LOS ANGELES	CA		0	4,057,200	0	4,057,200
FORT MACARTHUR ANNEX	920 W 36TH ST	SAN PEDRO	CA	90731	33,575	2,452,533	550,221	3,002,754
FORT MACARTHUR BUS GARAGE	3200 ALMA ST	SAN PEDRO	CA	90731	11,807	862,458	193,492	1,055,950
FORT MACARTHUR CTR SITE					39,791	2,906,588	652,088	3,558,676
FORTY-NINTH ST ES	750 E 49TH ST	LOS ANGELES	CA	90011	78,052	5,701,416	1,279,102	6,980,518
FORTY-SECOND ST ES	4231 FOURTH AVE	LOS ANGELES	CA	90008	60,822	3,861,231	866,258	4,727,489
FOSHAY LC	3751 S HARVARD BLVD	LOS ANGELES	CA	90018	211,974	14,696,207	3,297,071	17,993,278
FOURTH ST ES	420 S AMALIA AVE	LOS ANGELES	CA	90022	63,477	4,505,864	1,010,880	5,516,744
FRANCIS POLY SH	12431 ROSCOE BLVD	SUN VALLEY	CA	91352	253,357	17,980,885	4,033,982	22,014,867
FRANKLIN AVE ES	1910 N COMMONWEALTH AVE	LOS ANGELES	CA	90027	37,297	2,514,036	564,023	3,078,059

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
FRANKLIN SH	820 N AVE 54	LOS ANGELES	CA	90042	317,615	22,906,112	5,138,942	28,045,054
FREMONT SH	7676 S SAN PEDRO ST	LOS ANGELES	CA	90003	358,288	25,588,454	5,740,721	31,329,175
FRIEDMAN OCC CTR	1646 S OLIVE ST	LOS ANGELES	CA	90015	245,944	17,965,323	4,030,489	21,995,812
FRIES AVE ES	1301 FRIES AVE	WILMINGTON	CA	90744	65,205	4,428,733	993,578	5,422,311
FROST MS	12314 BRADFORD PL	GRANADA HILLS	CA	91344	152,024	11,104,804	2,491,345	13,596,149
FULLBRIGHT AVE ES	6940 FULLBRIGHT AVE	CANOGA PARK	CA	91306	38,454	2,107,683	472,858	2,580,541
FULTON HORT CTR	7477 KESTER AVE	VAN NUYS	CA	91405	4,948	361,432	81,087	442,519
FULTON MS	7477 KESTER AVE	VAN NUYS	CA	91405	178,997	12,373,853	2,776,055	15,149,908
GAGE MS	2880 E GAGE AVE	HUNTINGTON PARK	CA	90255	176,668	12,381,365	2,777,731	15,159,096
GARDEN GROVE ES	18141 VALERIO ST	RESEDA	CA	91335	20,474	1,495,548	335,522	1,831,070
GARDENA BUS GARAGE	18421 HOOVER ST	GARDENA	CA	90248	30,765	2,247,273	504,171	2,751,444
GARDENA ES	647 W. GARDENA BLVD	GARDENA	CA	90247	44,531	2,832,089	635,369	3,467,458
GARDENA SH	1301 W 182ND ST	GARDENA	CA	90248	282,018	20,764,018	4,658,382	25,422,400
GARDNER ST ES	7450 HAWTHORN AVE	LOS ANGELES	CA	90046	47,525	3,366,344	755,231	4,121,575
GARFIELD ADLT	5101 E SIXTH ST	LOS ANGELES	CA	90022	37,490	2,738,507	614,377	3,352,884
GARFIELD SH	5101 E SIXTH ST	LOS ANGELES	CA	90022	358,908	26,216,928	5,881,723	32,098,651
GARVANZA ES	317 N AVE 62	LOS ANGELES	CA	90042	51,742	3,569,193	800,744	4,369,937
GATES ST CC	2306 THOMAS ST	LOS ANGELES	CA	90031	7,135	521,185	116,927	638,112
GATES ST ES	3333 MANITOU AVE	LOS ANGELES	CA	90031	82,265	5,747,362	1,289,416	7,036,778
GAULT ST ES	17000 GAULT ST	VAN NUYS	CA	91406	32,262	2,080,725	466,808	2,547,533
GERMAIN ST ES	20730 GERMAIN ST	CHATSWORTH	CA	91311	55,939	4,086,139	916,718	5,002,857
GLASSELL PARK ES	2211 W AVE 30	LOS ANGELES	CA	90065	56,571	3,816,745	856,279	4,673,024
GLEDHILL ST CC	16058 GLEDHILL ST	SEPULVEDA	CA	91343	6,606	482,544	108,258	590,802
GLEDHILL ST ES	16030 GLEDHILL ST	SEPULVEDA	CA	91343	47,876	2,971,228	666,588	3,637,816
GLEN ALTA ES	3410 SIERRA ST	LOS ANGELES	CA	90031	38,868	2,839,167	636,962	3,476,129
GLENDALE U.S.D.					952	0	0	0
GLENFELIZ BLVD CC	3745 DOVER PL	LOS ANGELES	CA	90039	6,947	507,453	113,846	621,299
GLENFELIZ BLVD ES	3955 GLENFELIZ BLVD	LOS ANGELES	CA	90039	40,204	2,684,312	602,218	3,286,530
GLENWOOD ES	8001 LEDGE AVE	SUN VALLEY	CA	91352	45,490	3,112,510	698,285	3,810,795
GLUCK CC (MACLAY)	12501 GAIN ST	PACOIMA	CA	91331	3,840	280,496	62,928	343,424
GLUCK CC CTR (N VALLEY)	11387 SHARP AVE	MISSION HILLS	CA	91345	5,776	392,691	88,103	480,794
GOMPERS MS	234 E 112TH ST	LOS ANGELES	CA	90061	185,347	13,538,927	3,037,434	16,576,361
GRAHAM CC	8332 S ELM ST	LOS ANGELES	CA	90001	6,976	509,572	114,321	623,893

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
GRAHAM ES	8407 S FIR AVE	LOS ANGELES	CA	90001	85,211	6,224,357	1,396,424	7,620,781
GRANADA ES	17170 TRIBUNE ST	GRANADA HILLS	CA	91344	37,546	2,742,597	615,295	3,357,892
GRANADA HILLS SH	10535 ZELZAH AVE	GRANADA HILLS	CA	91344	251,381	18,362,477	4,119,585	22,482,062
GRAND VIEW BLVD ES	3951 GRAND VIEW BLVD	LOS ANGELES	CA	90066	48,508	3,017,399	676,953	3,694,352
GRANT CC	1559 N ST ANDREWS PL	LOS ANGELES	CA	90028	7,089	517,825	116,172	633,997
GRANT ES	1530 N WILTON PL	LOS ANGELES	CA	90028	72,831	4,688,928	1,051,952	5,740,880
GRANT SH	13000 OXNARD ST	VAN NUYS	CA	91401	265,428	19,388,553	4,349,792	23,738,345
GRAPE ST ES	1940 E 111TH ST	LOS ANGELES	CA	90059	55,477	4,122,518	924,876	5,047,394
GREY SH (@ RESEDA)	6510 ETIWANDA AVE	RESEDA	CA	91335	3,690	269,541	60,472	330,013
GRIDLEY ST ES	1907 EIGHTH ST	SAN FERNANDO	CA	91340	43,186	3,154,576	707,721	3,862,297
GRIFFIN AVE ES	2025 GRIFFIN AVE	LOS ANGELES	CA	90031	51,676	3,774,744	846,858	4,621,602
GRIFFITH MS	4765 E FOURTH ST	LOS ANGELES	CA	90022	180,627	13,194,148	2,960,085	16,154,233
GUARDIAN ANGEL SCH	10919 NORRIS AVE	PACOIMA	CA	91331	1,044	76,261	17,108	93,369
GULF AVE ES	828 W "L" ST	WILMINGTON	CA	90744	66,701	4,846,335	1,087,270	5,933,605
HADDON AVE CC	10085 HADDON AVE	PACOIMA	CA	91331	6,925	505,845	113,484	619,329
HADDON AVE ES	10115 HADDON AVE	PACOIMA	CA	91331	66,213	4,521,058	1,014,293	5,535,351
HALE MS	23830 CALIFA ST	WOODLAND HILLS	CA	91367	175,346	12,808,391	2,873,538	15,681,929
HALLDALE AVE ES	21514 HALLDALE AVE	TORRANCE	CA	90501	38,770	2,726,824	611,758	3,338,582
HAMASAKI ES (RIGGIN)	4865 E FIRST ST	LOS ANGELES	CA	90022	61,245	4,342,827	974,305	5,317,132
HAMILTON SH	2955 S ROBERTSON BLVD	LOS ANGELES	CA	90034	306,546	22,392,080	5,023,627	27,415,707
HAMLIN ST ES	22627 HAMLIN ST	CANOGA PARK	CA	91307	37,242	1,984,081	445,126	2,429,207
HAMMEL HORT CTR	4216 E HAMMEL ST	LOS ANGELES	CA	90063	11,975	874,731	196,246	1,070,977
HAMMEL ST CC	452 N MARIANNA AVE	LOS ANGELES	CA	90063	7,099	518,556	116,335	634,891
HAMMEL ST ES	438 N BRANNICK AVE	LOS ANGELES	CA	90063	83,877	5,996,013	1,345,193	7,341,206
HANCOCK PARK ES	408 S FAIRFAX AVE	LOS ANGELES	CA	90036	58,298	3,522,147	790,188	4,312,335
HARBOR CITY ES	1508 W 254TH ST	HARBOR CITY	CA	90710	39,612	2,654,429	595,517	3,249,946
HARBOR COMM COLL					4,320	315,560	70,795	386,355
HARBOR OCC CTR	740 N PACIFIC AVE	SAN PEDRO	CA	90731	179,852	13,003,858	2,917,398	15,921,256
HARDING ST ES	13060 HARDING ST	SYLMAR	CA	91342	45,151	3,298,114	739,926	4,038,040
HARRISON ES	3529 CITY TERRACE DR	LOS ANGELES	CA	90063	76,578	5,593,749	1,254,949	6,848,698
HART HEALTH CTR	21006 HART ST	CANOGA PARK	CA	91303	2,043	149,234	33,480	182,714
HART ST ES	21040 HART ST	CANOGA PARK	CA	91303	46,425	2,970,440	666,407	3,636,847
HARTE PREP MS	9301 S HOOVER ST	LOS ANGELES	CA	90044	214,000	15,631,929	3,506,998	19,138,927

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
HASKELL ES	15850 TULSA ST	GRANADA HILLS		91344	41,364	2,460,490	552,009	3,012,499
HAWAIIAN AVE CC	501 HAWAIIAN AVE	WILMINGTON	CA	90744	7,246	529,294	118,746	648,040
HAWAIIAN AVE ES	540 HAWAIIAN AVE	WILIMINGTON	CA	90744	65,712	4,274,099	958,884	5,232,983
HAYNES ES	6624 LOCKHURST DR	WEST HILLS	CA	91307	33,156	0	0	0
HAZELTINE AVE ES	7150 HAZELTINE AVE	VAN NUYS	CA	91405	47,860	3,285,626	737,125	4,022,751
HELIOTROPE AVE ES	5911 WOODLAWN AVE	MAYWOOD	CA	90270	59,929	4,057,071	910,196	4,967,267
HENRY MS	17340 SAN JOSE ST	GRANADA HILLS		91344	158,171	11,553,825	2,592,081	14,145,906
HERRICK AVE ES	13350 HERRICK AVE	SYLMAR	CA	91342	42,423	2,643,038	592,956	3,235,994
HIGHLAND PARK SH	928 N AVE 53	LOS ANGELES	CA	90042	4,232	309,131	69,353	378,484
HIGHLANDER ES	23834 HIGHLANDER RD	WEST HILLS	CA	91307	33,399	2,439,678	547,338	2,987,016
HILLCREST DR ES	4041 HILLCREST DR	LOS ANGELES	CA	90008	56,811	3,834,278	860,220	4,694,498
HILLSIDE ES	120 E AVE 35	LOS ANGELES	CA	90031	47,036	3,199,724	717,853	3,917,577
HOBART AVE ES	980 S HOBART AVE	LOS ANGELES	CA	90006	83,208	4,635,811	1,040,032	5,675,843
HOBART BLVD CC	982 S SERRANO AVE	LOS ANGELES	CA	90006	7,481	546,460	122,598	669,058
HOLLENBECK MS	2510 E SIXTH ST	LOS ANGELES	CA	90023	207,965	14,994,749	3,364,042	18,358,791
HOLLYWOOD SH	1521 N HIGHLAND AVE	LOS ANGELES	CA	90028	325,208	23,755,274	5,329,458	29,084,732
HOLMES AVE CC	1810 E 52ND ST	LOS ANGELES	CA	90058	6,215	453,983	101,850	555,833
HOLMES AVE ES	5108 HOLMES AVE	LOS ANGELES	CA	90058	59,947	4,378,913	982,402	5,361,315
HOLMES MS	9351 PASO ROBLES AVE	NORTHRIDGE	CA	91325	158,061	11,545,782	2,590,273	14,136,055
HOLMES SCIENCE CTR	9351 PASO ROBLES AVE	NORTHRIDGE	CA	91325	3,438	251,135	56,343	307,478
HOLY CROSS MED SCH	104 W 47TH PLACE	LOS ANGELES	CA	90037	930	67,933	15,241	83,174
HOLY NAME ES					980	0	0	0
HOOPER AVE CC	1224 E 52ND ST	LOS ANGELES	CA	90011	6,194	452,449	101,506	553,955
HOOPER AVE ES	1225 E 52ND ST	LOS ANGELES	CA	90011	105,654	7,165,998	1,607,678	8,773,676
HOOVER ST ES	2726 FRANCIS AVE	LOS ANGELES	CA	90005	123,444	8,544,969	1,917,051	10,462,020
HOPE SH	7840 TOWNE AVE	LOS ANGELES	CA	90003	3,808	278,161	62,406	340,567
HUBBARD ST CC	13410 BEAVER ST	SYLMAR	CA	91342	4,064	296,860	66,599	363,459
HUBBARD ST ES	13325 HUBBARD ST	SYLMAR	CA	91342	53,164	3,252,314	729,660	3,981,974
HUGHES ES	4242 CLARA ST	CUDAHY	CA	90201	66,340	4,528,657	1,015,999	5,544,656
HUMPHREYS AVE	500 S HUMPHREYS AVE	LOS ANGELES	CA	90022	80,374	5,239,912	1,175,559	6,415,471
HUNT DR ES	4435 N HUNTINGTON DR	LOS ANGELES	CA	90032	73,739	5,386,367	1,208,425	6,594,792
HUNT PARK ADULT ED	6020 MILES AVE	HUNTINGTON PARK	CA	90255	14,530	1,061,362	238,114	1,299,476
HUNT PARK SH	6020 MILES AVE	HUNTINGTON PARK	CA	90255	300,742	21,651,248	4,857,414	26,508,662

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
HYDE PARK BLVD CC	6428 11TH AVE	LOS ANGELES	CA	90043	7,093	518,118	116,238	634,356
HYDE PARK BLVD ES	3140 HYDE PARK BLVD	LOS ANGELES	CA	90043	67,213	4,804,480	1,077,877	5,882,357
IMMG STD GUID/PLCMNT	6520 NEWCASTLE AVE	RESEDA	CA	91335	4,632	338,353	75,909	414,262
INDEPENDENCE SH (@ BIRM)	6520 NEWCASTLE AVE	RESEDA	CA	91335	8,772	507,525	113,863	621,388
INDIAN SPRINGS SH	1441 S BARRINGTON AVE	LOS ANGELES	CA	90025	4,256	310,885	69,747	380,632
IRVING MS	3010 ESTARA AVE	LOS ANGELES	CA	90065	161,387	9,686,902	2,173,245	11,860,147
IVANHOE ES	2828 HERKIMER ST	LOS ANGELES	CA	90039	26,253	1,707,315	383,032	2,090,347
JEFFERSON ES #2	898 E 42ND ST	LOS ANGELES	CA	90011	88,634	6,330,638	1,420,267	7,750,905
JEFFERSON SH	1319 E 41ST ST	LOS ANGELES	CA	90011	315,153	18,823,252	4,222,964	23,046,216
JEFFERSON SH #1	5300 S SAN PEDRO ST	LOS ANGELES	CA	90011	5,088	185,830	41,690	227,520
JOHNSON SH	333 E 54TH ST	LOS ANGELES	CA	90011	36,649	2,498,264	560,482	3,058,746
JORDAN SH	2265 E 103RD ST	LOS ANGELES	CA	90002	256,805	18,758,675	4,208,484	22,967,159
JORDAN/LOCK CAS-AEWC	325 E 111TH ST	LOS ANGELES	CA	90061	4,056	0	0	0
JORDAN-LOCKE ADLT	325 E 111TH ST	LOS ANGELES	CA	90061	14,336	1,047,190	234,933	1,282,123
JUSTICE ST ES	23350 JUSTICE ST	CANOGA PARK	CA	91304	40,872	2,985,551	669,804	3,655,355
KENNEDY ES	4010 E RAMBOZ DRIVE	LOS ANGELES	CA	90063	54,266	3,963,936	889,301	4,853,237
KENNEDY SH	11254 GOTHIC AVE	GRANADA HILLS	CA	91344	281,500	20,562,535	4,613,162	25,175,697
KENNEDY-SAN FERNANDO ADLT	11254 GOTHIC AVE	GRANADA HILLS	CA	91344	27,291	1,993,509	447,241	2,440,750
KENTER CANYON ES	645 N KENTER AVE	LOS ANGELES	CA	90049	29,821	2,178,311	488,698	2,667,009
KENTWOOD CC	8376 DUNBARTON AVE	LOS ANGELES	CA	90045	4,633	338,424	75,925	414,349
KENTWOOD ES	8401 EMERSON AVE	LOS ANGELES	CA	90045	35,872	2,199,573	493,466	2,693,039
KESTER AVE ES	5353 KESTER AVE	VAN NUYS	CA	91411	44,942	2,967,286	665,709	3,632,995
KING ES	3989 S HOBART BLVD	LOS ANGELES	CA	90062	66,181	4,598,200	1,031,599	5,629,799
KING MS	4201 FOUNTAIN AVE	LOS ANGELES	CA	90029	179,162	12,432,653	2,789,237	15,221,890
KING-DREW MED MAG SH	1601 E 120TH ST	LOS ANGELES	CA	90059	296,002	806,067	180,838	986,905
KITTRIDGE ST ES	13619 KITTRIDGE ST	VAN NUYS	CA	91401	46,055	3,261,299	731,660	3,992,959
KNOLLWOOD ES	11822 GERALD AVE	GRANADA HILLS	CA	91344	45,659	3,335,225	748,251	4,083,476
L.A. CES	5931 W 18TH ST	LOS ANGELES	CA	90035	148,420	10,841,545	2,432,281	13,273,826
L.A. ES #3					52,586	3,128,366	701,841	3,830,207
L.A. NEW MS #1					432,812	6,264,240	1,405,371	7,669,611
L.A. SH	4650 W OLYMPIC BLVD	LOS ANGELES	CA	90019	349,259	24,988,516	5,606,130	30,594,646
LA SALLE AVE ES	8715 LA SALLE AVE	LOS ANGELES	CA	90047	84,089	5,491,698	1,232,052	6,723,750
LANAI RD ES	4241 LANAI RD	ENCINO	CA	91436	38,249	2,793,946	626,815	3,420,761

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
LANE ES	1500 CESAR CHAVEZ AVE	MONTEREY PARK	CA	91754	28,974	2,116,441	474,819	2,591,260
LANGDON AVE ES	8817 LANGDON AVE	SEPULVEDA	CA	91343	54,647	3,571,019	801,153	4,372,172
LANKERSHIM ES	5250 BAKMAN AVE	NO HOLLYWOOD	CA	91601	47,551	3,255,236	730,307	3,985,543
LANTERMAN SH	2328 ST JAMES PL	LOS ANGELES	CA	90007	63,363	4,628,438	1,038,383	5,666,821
LASSEN ES	15017 SUPERIOR ST	SEPULVEDA	CA	91343	46,004	3,360,425	753,904	4,114,329
LATONA AVE ES	4312 BERNICE AVE	LOS ANGELES	CA	90031	26,952	1,627,468	365,121	1,992,589
LAUREL CC	8023 WILLOUGHBY AVE	LOS ANGELES	CA	90046	7,201	526,007	118,008	644,015
LAUREL ES	925 N HAYWORTH AVE	LOS ANGELES	CA	90046	45,563	3,328,215	746,680	4,074,895
LAUSD BEAUDRY BUILDING	333 SOUTH BEAUDRY STREET	LOS ANGELES	CA		980,000	105,843,000	20,326,000	148,469,000
LAUSD PICO ADMINISTRATION BLDG.	1330 W. PICO BLVD.	LOS ANGELES	CA		0	8,709,134	0	9,544,153
LAUSDRENTS	RENTS VARIOUS LOCATIONS				0	0	0	35,933,260
LAWRENCE MS	10100 VARIEL AVE	CHATSWORTH	CA	91311	150,874	11,020,798	2,472,503	13,493,301
LE CONTE MS	1316 N BRONSON AVE	HOLLYWOOD	CA	90028	194,290	11,851,483	2,658,861	14,510,344
LEAPWOOD AVE ES	19302 LEAPWOOD AVE	CARSON	CA	90746	46,169	3,372,479	756,610	4,129,089
LEICHMAN SPEC ED	19034 GAULT ST	RESEDA	CA	91335	45,564	3,328,286	746,697	4,074,983
LELAND ST ES	2120 S LELAND ST	SAN PEDRO	CA	90731	54,642	3,991,398	895,463	4,886,861
LEMAY ST CC	17553 LEMAY ST	VAN NUYS	CA	91406	6,220	454,348	101,932	556,280
LEMAY ST ES	17520 VANOWEN ST	VAN NUYS	CA	91406	32,816	2,291,903	514,186	2,806,089
LEONIS SH	5445 MANTON AVE	WOODLAND HILLS	CA	91367	4,936	360,555	80,889	441,444
LEWIS SH	12508 WICKS ST	SUN VALLEY	CA	91352	4,288	313,222	70,271	383,493
LIBERTY BLVD ES	2728 LIBERTY BLVD	SOUTH GATE	CA	90280	66,953	4,527,712	1,015,787	5,543,499
LIGGETT ST ES	9373 MOONBEAM AVE	PANORAMA CITY	CA	91402	59,885	3,848,459	863,383	4,711,842
LILLIAN ST ES	5909 LILLIAN ST	LOS ANGELES	CA	90001	50,836	3,582,486	803,725	4,386,211
LIMERICK AVE ES	8530 LIMERICK AVE	CANOGA PARK	CA	91306	58,695	3,200,518	718,025	3,918,543
LINCOLN SH	3501 N BROADWAY	LOS ANGELES	CA	90031	261,313	19,087,969	4,282,354	23,370,323
LOCKE SH	325 E 111TH ST	LOS ANGELES	CA	90061	298,645	21,814,944	4,894,147	26,709,091
LOCKHURST DR ES	6170 LOCKHURST DR	WOODLAND HILLS	CA	91367	53,712	3,818,283	856,624	4,674,907
LOCKWOOD AVE ES	4345 LOCKWOOD AVE	LOS ANGELES	CA	90029	76,252	4,833,994	1,084,498	5,918,492
LOGAN ST CC	1712 W MONTANA ST	LOS ANGELES	CA	90026	2,134	155,881	34,971	190,852
LOGAN ST ES	1712 W MONTANA ST	LOS ANGELES	CA	90026	84,522	6,174,029	1,385,132	7,559,161
LOKRANTZ SPEC ED ES	19451 WYANDOTTE ST	RESEDA	CA	91335	67,852	4,956,346	1,111,948	6,068,294

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
LOMA VISTA AVE ES	3629 E 58TH ST	MAYWOOD	CA	90270	73,093	4,954,152	1,111,454	6,065,606
LOMITA FUND CTR	2211 W 247TH ST	LOMITA	CA	90717	64,625	4,611,785	1,034,647	5,646,432
LONDON SH	12924 OXNARD ST	VAN NUYS	CA	91401	3,296	240,761	54,015	294,776
LORENA ST ES	1015 S LORENA ST	LOS ANGELES	CA	90023	66,726	4,453,347	999,106	5,452,453
LORETO ST ES	3408 ARROYO SECO AVE	LOS ANGELES	CA	90065	41,751	2,708,483	607,646	3,316,129
LORNE ST ES	17440 LORNE ST	NORTHRIDGE	CA	91325	44,199	2,807,826	629,940	3,437,766
LOS ANGELES UNIFIED SCHOOL DISTRICT					0	0	500,000,000	589,739,745
LOS ANGELITOS CC	400 W 9TH ST	LOS ANGELES	CA	90015	2,146	0	0	0
LOS FELIZ ES	1740 N NEW HAMPSHIRE AVE	LOS ANGELES	CA	90027	51,074	3,730,771	836,994	4,567,765
LOWMAN SPEC ED	12827 SATICOY ST	NO HOLLYWOOD	CA	91605	58,899	4,302,358	965,222	5,267,580
LOYOLA VILLAGE ES	8821 VILLANOVA AVE	LOS ANGELES	CA	90045	43,217	2,841,289	637,441	3,478,730
LULL SPEC ED	17551 MIRANDA ST	ENCINO	CA	91316	29,357	2,144,424	481,098	2,625,522
M & O CENTRAL SHOPS	1240 S NAOMI AVE	LOS ANGELES	CA	90021	170,320	12,441,261	2,791,174	15,232,435
M & O DIST 1	6620 11TH AVE	LOS ANGELES	CA	90043	41,704	3,046,327	683,436	3,729,763
M & O DIST 2	1406 S HIGHLAND AVE	LOS ANGELES	CA	90019	21,274	1,553,989	348,635	1,902,624
M & O DIST 4	21213 VANOWEN ST	CANOGA PARK	CA	91303	39,515	2,886,430	647,565	3,533,995
M & O DIST 5	4545 HUNTINGTON DR	LOS ANGELES	CA	90032	29,373	2,145,589	481,358	2,626,947
M & O DIST 6	8960 HERRICK AVE	SUN VALLEY	CA	91352	48,705	3,557,722	798,171	4,355,893
M & O DIST 7	17729 S FIGUEROA ST	GARDENA	CA	90248	26,528	1,937,775	434,735	2,372,510
M & O VAL FAC SAT. 11	8210 ORION AVE	VAN NUYS	CA	91406	28,808	2,051,730	460,300	2,512,030
MACLAY MS	12540 PIERCE AVE	PACOIMA	CA	91331	135,395	9,890,120	2,218,834	12,108,954
MACLAY PRIMARY CTR	12513 GAIN ST	PACOIMA	CA	91331	13,416	769,606	172,657	942,263
MADISON MS	13000 HART ST	NO HOLLYWOOD	CA	91605	142,439	10,404,658	2,334,266	12,738,924
MAGNOLIA AVE ES	1626 S ORCHARD AVE	LOS ANGELES	CA	90006	95,016	6,625,019	1,486,299	8,111,318
MAIN ST ES	129 E 53RD ST	LOS ANGELES	CA	90011	74,276	5,193,378	1,165,124	6,358,502
MALABAR ST ES	3200 E MALABAR ST	LOS ANGELES	CA	90063	75,276	5,498,640	1,233,610	6,732,250
MANCHESTER AVE ES	661 W 87TH ST	LOS ANGELES	CA	90044	94,169	6,878,703	1,543,224	8,421,927
MANHATTAN PL ES	1850 W 96TH ST	LOS ANGELES	CA	90047	55,661	4,065,831	912,161	4,977,992
MANN MS	7001 S ST ANDREWS PL	LOS ANGELES	CA	90047	200,365	14,635,943	3,283,548	17,919,491
MANUAL ARTS SH	4131 S VERMONT AVE	LOS ANGELES	CA	90037	284,214	20,760,801	4,657,654	25,418,455
MAR VISTA ES	3330 GRANVILLE AVE	LOS ANGELES	CA	90066	52,138	3,387,742	760,033	4,147,775
MARIANNA AVE ES	4215 E GLEASON ST	LOS ANGELES	CA	90063	36,698	2,575,467	577,803	3,153,270
MARINA CC	4908 WESTLAWN AVE	LOS ANGELES	CA	90066	6,225	454,713	102,014	556,727

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
MARINA DEL REY MS	12500 BRADDOCK DR	LOS ANGELES	CA	90066	130,528	9,534,601	2,139,070	11,673,671
MARINE ANIMAL CTR					9,318	680,647	152,702	833,349
MARINE AVE ADULT BR-BANNING					3,777	0	0	0
MARK TWAIN MS	2224 WALGROVE AVE	LOS ANGELES	CA	90066	157,358	11,494,433	2,578,758	14,073,191
MARKHAM MS	1650 E 104TH ST	LOS ANGELES	CA	90002	153,270	11,195,828	2,511,762	13,707,590
MARLTON SCHOOL	4000 SANTO TOMAS DR	LOS ANGELES	CA	90008	88,073	6,433,415	1,443,325	7,876,740
MARQUEZ ES	16821 MARQUEZ AVE	PACIFIC PALISADES	CA	90272	50,317	3,675,473	824,578	4,500,051
MARSHALL SH	3939 TRACY ST	LOS ANGELES	CA	90027	292,542	20,845,547	4,676,666	25,522,213
MARVIN AVE CC	2341 S CURSON AVE	LOS ANGELES	CA	90016	6,998	511,178	114,682	625,860
MARVIN AVE ES	2411 MARVIN AVE	LOS ANGELES	CA	90016	83,567	6,104,262	1,369,474	7,473,736
MAYALL ST ES	16701 MAYALL ST	SEPULVEDA	CA	91343	40,220	2,937,924	659,118	3,597,042
MAYBERRY ST ES	2414 MAYBERRY ST	LOS ANGELES	CA	90026	42,350	2,675,398	600,223	3,275,621
MCALISTER OPP SH-CYESIS	155 N OCCIDENTAL BLVD	LOS ANGELES	CA	90026	3,136	229,074	51,393	280,467
MCALISTER SH					3,552	259,462	58,211	317,673
MCBRIDE SPEC ED	3960 CENTINELA AVE	LOS ANGELES	CA	90066	50,731	3,705,715	831,369	4,537,084
MCKINLEY AVE ES	7812 MC KINLEY AVE	LOS ANGELES	CA	90001	72,365	3,977,815	892,420	4,870,235
MELROSE AVE ES	731 N DETROIT ST	LOS ANGELES	CA	90046	37,178	2,584,823	579,900	3,164,723
MELVIN AVE ES	7700 MELVIN AVE	RESEDA	CA	91335	46,232	2,781,019	623,910	3,404,929
MENLO AVE ES	4156 MENLO AVE	LOS ANGELES	CA	90037	66,266	4,735,305	1,062,359	5,797,664
MENT HLTH CTR-VAL BR	6651 BALBOA BLVD	VAN NUYS	CA	91406	9,432	688,972	154,571	843,543
MERIDIAN CC	6124 RUBY PL	LOS ANGELES	CA	90042	7,000	511,325	114,714	626,039
METROPOLITAN SH	727 S WILSON ST	LOS ANGELES	CA	90021	55,896	1,558,517	349,652	1,908,169
METROPOLITAN SKILLS CTR	2801 W SIXTH ST	LOS ANGELES	CA		34,560	2,524,484	566,363	3,090,847
MEYLER AVE	1123 W 223RD ST	TORRANCE	CA	90502	54,891	3,732,593	837,402	4,569,995
MICHELTORENA ST ES	1511 MICHELTORENA ST	LOS ANGELES	CA	90026	54,346	3,759,404	843,419	4,602,823
MID-CITY AD-BLMNT CM AD	1510 CAMBRIA ST	LOS ANGELES	CA		15,022	1,097,301	246,179	1,343,480
MID-CITY ALT SCH	3150 W ADAMS BLVD	LOS ANGELES	CA		21,684	1,453,040	325,988	1,779,028
MIDDLETON ST ES	6537 MALABAR ST	HUNTINGTON PARK	CA	90255	89,069	6,113,472	1,371,543	7,485,015
MIKES CC	7720 S VERMONT AVE	LOS ANGELES	CA	90044	7,115	519,724	116,598	636,322
MILES AVE CC	2855 SATURN AVE	HUNTINGTON PARK	CA	90255	7,254	529,878	118,876	648,754
MILES AVE ES	6720 MILES AVE	HUNTINGTON PARK	CA	90255	112,918	7,239,276	1,624,117	8,863,393
MILLER ES	830 W 77TH ST	LOS ANGELES	CA	90044	76,091	5,558,172	1,246,966	6,805,138
MILLER SH	8218 VANALDEN AVE	RESEDA	CA	91335	37,526	2,741,140	614,970	3,356,110

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
MILLIKAN MS	5041 SUNNYSLOPE AVE	SHERMAN OAKS	CA	91423	155,922	11,389,535	2,555,221	13,944,756
MIRAMONTE CC	1341 E 70TH ST	LOS ANGELES	CA	90001	8,815	643,903	144,458	788,361
MIRAMONTE ES	1400 E 68TH ST	LOS ANGELES	CA	90001	106,548	7,652,045	1,716,726	9,368,771
MISSION SH (@ SF SH)	11015 O'MELVENY AVE	SAN FERNANDO	CA	91340	3,716	271,441	60,897	332,338
MONETA SH	1230 W 177TH ST	GARDENA	CA	90248	4,864	366,985	82,332	449,317
MONLUX ES	6051 BELLAIRE AVE	NO HOLLYWOOD	CA	91606	47,478	3,012,289	675,805	3,688,094
MONLUX SCI CTR	6051 BELLAIRE AVE	NO HOLLYWOOD	CA	91606	11,316	826,592	185,446	1,012,038
MONROE SH	9229 HASKELL AVE	SEPULVEDA	CA	91343	254,680	17,894,530	4,014,611	21,909,141
MONTAGUE ST ES	13000 MONTAGUE ST	PACOIMA	CA	91331	53,011	3,741,358	839,372	4,580,730
MONTARA AVE ES	10018 MONTARA AVE	SOUTH GATE	CA	90280	55,966	3,783,001	848,719	4,631,720
MONTE VISTA ST CC	5509 ASH ST	LOS ANGELES	CA	90042	7,260	530,316	118,974	649,290
MONTE VISTA ST ES	5423 MONTE VISTA ST	LOS ANGELES	CA	90042	49,843	3,111,997	698,171	3,810,168
MONTEREY SH	466 S FRASER AVE	LOS ANGELES	CA	90022	4,368	319,066	71,584	390,650
MORNINGSIDE ES	576 N MACLAY AVE	SAN FERNANDO	CA	91340	86,117	3,770,214	845,838	4,616,052
MOTHER/SORROWS SCH	100 WEST 87TH PLACE	LOS ANGELES	CA	90003	930	67,933	15,241	83,174
MOUNT VERNON MS	4066 W 17TH ST	LOS ANGELES	CA	90019	157,540	11,376,827	2,552,374	13,929,201
MOUNTAIN VIEW ES	6410 OLCOTT ST	TUJUNGA	CA	91042	42,718	3,120,397	700,056	3,820,453
MT GLEASON MS	10965 MT GLEASON AVE	SUNLAND	CA	91040	161,234	11,777,563	2,642,274	14,419,837
MT LUKENS SH	7705 SUMMITROSE ST	TUJUNGA	CA	91042	3,360	245,436	55,064	300,500
MT WASHINGTON ES	3981 SAN RAFAEL AVE	LOS ANGELES	CA	90065	25,278	1,636,095	367,055	2,003,150
MUIR MS	5929 S VERMONT AVE	LOS ANGELES	CA	90044	195,641	14,290,869	3,206,133	17,497,002
MULHOLLAND MS	17120 VANOWEN ST	VAN NUYS	CA	91406	154,457	10,861,769	2,436,820	13,298,589
MULTNOMAH ST ES	2101 N INDIANA AVE	LOS ANGELES	CA	90032	36,044	2,632,877	590,680	3,223,557
MURCHISON ST CC	1537 MURCHISON ST	LOS ANGELES	CA	90033	3,377	246,678	55,342	302,020
MURCHISON ST ES	1501 MURCHISON ST	LOS ANGELES	CA	90033	76,292	5,572,855	1,250,260	6,823,115
N HOLLYWOOD ADLT	5231 COLFAX AVE	NO HOLLYWOOD	CA	91601	14,548	1,062,677	238,410	1,301,087
N HOLLYWOOD MAG CTR	5231 COLFAX AVE	NO HOLLYWOOD	CA	91601	11,600	847,337	190,100	1,037,437
N HOLLYWOOD SH	5231 COLFAX AVE	NO HOLLYWOOD	CA	91601	258,342	18,415,142	4,131,407	22,546,549
N VALLEY OCC CTR	11450 SHARP AVE	MISSION HILLS	CA	91345	87,160	6,366,721	1,428,367	7,795,088
NAPA ST ES	19010 NAPA ST	NORTHRIDGE	CA	91324	46,725	3,097,533	694,926	3,792,459
NARBONNE SH	24300 S WESTERN AVE	HARBOR CITY	CA		264,027	19,293,233	4,328,403	23,621,636
NESTLE AVE ES	5060 NESTLE AVE	TARZANA	CA	91356	33,516	2,448,221	549,255	2,997,476
NEVADA AVE ES	22120 CHASE ST	CANOGA PARK	CA	91304	46,596	2,982,922	669,208	3,652,130

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
NEVIN AVE ES	1569 E 32ND ST	LOS ANGELES	CA	90011	53,540	3,580,735	803,331	4,384,066
NEWMAN NUTRITION CTR	2310 CHARLOTTE ST	LOS ANGELES	CA	90033	48,733	3,559,771	798,629	4,358,400
NEWMARK CONT SH	134 WITMER ST	LOS ANGELES	CA	90026	3,360	245,436	55,064	300,500
NIGHTINGALE MS	3311 N FIGUEROA ST	LOS ANGELES	CA	90065	166,490	11,791,224	2,645,338	14,436,562
NIMITZ MS	6021 CARMELITA AVE	HUNTINGTON PARK	CA	90255	189,508	13,711,991	3,076,262	16,788,253
NINETY-EIGHTH ST ES	5431 W 98TH ST	LOS ANGELES	CA	90045	24,665	1,591,313	357,013	1,948,326
NINETY-FIFTH ST CC	1027 W 96TH ST	LOS ANGELES	CA	90044	7,100	518,628	116,351	634,979
NINETY-FIFTH ST ES	1109 W 96TH ST	LOS ANGELES	CA	90044	90,871	6,637,797	1,489,179	8,126,976
NINETY-NINTH ST ES	9900 S WADSWORTH AVE	LOS ANGELES	CA	90002	63,984	4,673,800	1,048,559	5,722,359
NINETY-SECOND ST ES	9211 GRAPE ST	LOS ANGELES	CA	90002	62,203	4,543,703	1,019,373	5,563,076
NINETY-SEVENTH ST CC	430 W COLDEN AVE	LOS ANGELES	CA	90003	7,088	517,752	116,155	633,907
NINETY-SIXTH ST ES	1471 E 96TH ST	LOS ANGELES	CA	90002	60,732	4,071,092	913,344	4,984,436
NINETY-THIRD ST CC	330 E 93RD ST	LOS ANGELES	CA	90003	2,880	210,372	47,198	257,570
NINETY-THIRD ST ES	330 E 93RD ST	LOS ANGELES	CA	90003	84,118	6,039,329	1,354,916	7,394,245
NINTH ST ES	820 TOWNE AVE	LOS ANGELES	CA	90021	24,331	1,637,034	367,267	2,004,301
NOBEL MS	9950 TAMPA AVE	NORTHRIDGE	CA	91324	169,009	12,345,496	2,769,694	15,115,190
NOBLE AVE CC	8315 NOBLE AVE	SEPULVEDA	CA	91343	7,108	519,213	116,484	635,697
NOBLE AVE ES	8315 NOBLE AVE	SEPULVEDA	CA	91343	61,493	3,404,897	763,892	4,168,789
NONAME					33,156	2,421,926	543,355	2,965,281
NONAME 2					980	71,586	16,060	87,646
NONAME 3					174	12,710	2,851	15,561
NORMANDIE AVE CC	4407 RAYMOND AVE	LOS ANGELES	CA	90037	6,242	455,956	102,293	558,249
NORMANDIE AVE ES	4505 S RAYMOND AVE	LOS ANGELES	CA	90037	83,367	5,766,131	1,293,625	7,059,756
NORMONT CC	25028 PERTROLEUM AVE	HARBOR CITY	CA	90710	7,512	548,724	123,104	671,828
NORMONT ES	1001 W 253RD ST	HARBOR CITY	CA	90710	35,735	2,610,311	585,620	3,195,931
NORTH VALLEY AVIATION TRAD					52,576	1,920,244	430,803	2,351,047
NORTHRIDGE MS	17960 CHASE ST	NORTHRIDGE	CA	91325	131,274	9,589,100	2,151,297	11,740,397
NORWOOD ST CC	855 W 21ST ST	LOS ANGELES	CA	90007	4,599	335,941	75,368	411,309
NORWOOD ST ES	2020 OAK ST	LOS ANGELES	CA	90007	59,133	4,057,659	910,324	4,967,983
NUEVA VISTA ES (BELL #2)	4412 RANDOLPH ST	BELL	CA	90201	57,080	4,064,302	911,819	4,976,121
NVOC AVIATION CTR	16550 SATICOY ST	VAN NUYS	CA	91406	26,288	0	0	0
ODYSSEY CONT SH	9321 STATE ST	SOUTH GATE	CA	90280	11,709	855,300	191,886	1,047,186
OLIVE VISTA MS	14600 TYLER ST	SYLMAR	CA	91342	143,838	10,506,850	2,357,194	12,864,044

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
O'MELVENY ES	728 WOODWORTH ST	SAN FERNANDO	CA	91340	55,302	3,698,343	829,707	4,528,050
ONE HUND EIGHTEENTH ST ES	144 E 118TH STREET	LOS ANGELES	CA	90061	68,831	4,686,585	1,051,425	5,738,010
ONE HUND EIGHTY-SIXTH ES	1581 W 186TH ST	GARDENA	CA	90248	51,363	3,120,763	700,132	3,820,895
ONE HUND EIGHTY-SIXTH SCI	1581 W 186TH ST	GARDENA	CA	90248	5,965	435,722	97,751	533,473
ONE HUND FIFTY-SIXTH ST ES	2100 W 156TH ST	GARDENA	CA	90249	29,004	1,800,812	404,011	2,204,823
ONE HUND FIFTY-THIRD ST ES	1605 W 153RD ST	GARDENA	CA	90247	39,135	2,668,015	598,570	3,266,585
ONE HUND NINTH ST ES	10915 S MC KINLEY AVE	LOS ANGELES	CA	90059	41,182	2,898,335	650,239	3,548,574
ONE HUND SECOND ST CC	1925 E 102ND ST	LOS ANGELES	CA	90002	6,222	6,486,082	1,455,140	7,941,222
ONE HUND SECOND ST ES	1963 E 103RD ST	LOS ANGELES	CA	90002	90,234	6,486,082	1,455,142	7,941,224
ONE HUND SEVENTH ST ES	147 E 107TH ST	LOS ANGELES	CA	90003	65,748	4,697,464	1,053,875	5,751,339
ONE HUND SIXTEENTH ST ES	11610 STANFORD AVE	LOS ANGELES	CA	90059	42,188	2,766,125	620,574	3,386,699
ONE HUND THIRTY-FIFTH ST E	801 W 135TH ST	GARDENA	CA	90247	43,767	2,903,380	651,360	3,554,740
ONE HUND TWELFTH ST ES	1265 E 112TH ST	LOS ANGELES	CA	90059	63,580	4,574,167	1,026,208	5,600,375
ONE HUND TWELTH ST CC	1319 E 112TH ST	LOS ANGELES	CA	90059	6,254	456,831	102,490	559,321
ONE HUND TWENTY-SECOND ST	405 E 122ND ST	LOS ANGELES	CA	90061	57,500	4,069,268	912,934	4,982,202
OPEN CHRTR MG (OSAGE)	5540 W 77TH ST	LOS ANGELES	CA	90045	7,909	0	0	0
OPEN SCHOOL CRSNT HTS	6085 AIRDROME ST	LOS ANGELES	CA	90035	15,818	577,724	129,612	707,336
OSCEOLA ST ES					30,219	2,102,202	471,625	2,573,827
OSO ES					21,991	1,606,363	360,385	1,966,748
OUR LADY OF LOURDE SCH					952	0	0	0
OUR LADY OF TALPA	411 S EVERGREEN AVE	LOS ANGELES	CA	90033	1,155	84,369	18,927	103,296
OUR LADY/GUAD-HAZARD	436 N HAZARD AVE	LOS ANGELES	CA	90063	912	66,618	14,946	81,564
OUR LADY/GUAD-ROSEHL	4522 BROWNE AVE	LOS ANGELES	CA	90032	980	71,586	16,060	87,646
OUR LADY/SOLEDAD SCH	4545 DOZIER ST	LOS ANGELES	CA	90002	961	70,198	15,749	85,947
OVERLAND AVE ES	10650 ASHBY AVE	LOS ANGELES	CA	90064	41,015	2,785,624	624,949	3,410,573
OWENSMOUTH SH	6921 JORDAN AVE	CANOGA PARK	CA	91303	3,328	243,098	54,539	297,637
OXNARD ST ES	10912 OXNARD ST	NORTH HOLLYWOOD	CA	91606	52,845	3,531,280	792,239	4,323,519
PACIFIC BLVD SPEC ED	5714 PACIFIC BLVD	HUNTINGTON BEACH	CA	90255	60,133	4,392,494	985,446	5,377,940
PACIFIC PALASADES ES	800 VIA DE LA PAZ	PACIFIC PALASADES	CA	90272	46,142	2,743,913	615,593	3,359,506
PACOIMA CC	11059 HERRICK AVE	PACOIMA	CA	91331	6,234	455,372	102,162	557,534
PACOIMA ES	11016 NORRIS AVE	PACOIMA	CA	91331	78,358	5,723,769	1,284,119	7,007,888

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PACOIMA MS	11016 NORRIS AVE	PACOIMA	CA	91331	160,757	11,742,725	2,634,465	14,377,190
PACOIMA SKILLS CTR	13545 VAN NUYS BLVD	PACOIMA	CA	91331	28,191	6,671,402	1,496,718	8,168,120
PALISADES SH	15777 BOWDOIN ST	PACIFIC PALISADES	CA	90272	217,611	15,895,696	3,566,171	19,461,867
PALMS ES	3520 MOTOR AVE	LOS ANGELES	CA	90034	40,260	2,730,472	612,580	3,343,052
PALMS MS	10860 WOODBINE ST	LOS ANGELES	CA	90034	145,667	10,640,449	2,387,171	13,027,620
PARK AVE ES	8020 PARK AVE	CUDAHY	CA	90201	60,324	4,406,450	988,582	5,395,032
PARK WESTERN PL CC	1220 PARK WESTERN PL	SAN PEDRO	CA	90732	6,782	495,400	111,142	606,542
PARK WESTERN PL ES	1214 PARK WESTERN PL	SAN PEDRO	CA	90732	39,785	2,775,253	622,620	3,397,873
PARKMAN MS	20800 BURBANK BLVD	WOODLAND HILLS	CA	91367	137,223	10,023,651	2,248,790	12,272,441
PARMELEE AVE ES	1338 E 76TH PL	LOS ANGELES	CA	90001	75,445	10,023,646	2,248,790	12,272,436
PARTHENIA ST ES	16825 NAPA ST	SEPULVEDA	CA	91343	33,445	2,443,034	548,089	2,991,123
PASEO DEL REY FUND	7751 PASEO DEL RAY	PLAYA DEL REY	CA	90293	36,997	2,702,497	606,298	3,308,795
PATTON SH	24514 S WESTERN AVE	HARBOR CITY	CA	90710	3,360	245,436	55,063	300,499
PC-INSTR ASST OFFICE	11380 W GRAHAM PL	LOS ANGELES	CA	90064	3,648	133,236	29,891	163,127
PEARY MS	1415 W GARDENA BLVD	GARDENA	CA	90247	208,369	15,220,603	3,414,719	18,635,322
PEREZ SPEC ED	4540 MICHIGAN AVE	LOS ANGELES	CA	90022	111,221	8,124,294	1,822,671	9,946,965
PETTIGREW SCI CTR	4710 CRYSTAL SPRINGS DR	LOS ANGELES	CA	90027	7,589	554,348	124,369	678,717
PHOENIX SH	12971 ZANJA ST	LOS ANGELES	CA	90066	3,584	130,899	29,367	160,266
PINEWOOD AVE ES	10111 SILVERTON AVE	TUJUNGA	CA	91042	59,219	4,325,736	970,467	5,296,203
PINEWOOD AVE SH	7051 VALMONT ST	TUJUNGA	CA	91042	6,230	455,079	102,097	557,176
PIO PICO ES	1512 S ARLINGTON AVE	LOS ANGELES	CA	90019	145,416	4,147,501	930,485	5,077,986
PLACENSIA ES	1321 CORTEZ ST	LOS ANGELES	CA	90026	92,779	6,479,946	1,453,765	7,933,711
PLAINVIEW AVE ES					45,769	3,343,260	750,053	4,093,313
PLATT RANCH ES					32,218	2,173,421	487,603	2,661,024
PLAYA DEL RAY ES	12221 JUNIETTE ST	CLVER CITY	CA	90230	24,105	1,760,780	395,028	2,155,808
PLUMMER ES	9340 NOBLE AVE	SEPULVEDA	CA	91343	60,527	3,790,161	850,320	4,640,481
POINT FERMIN CAMP	3200 ALMA ST	SAN PEDRO	CA	90731	16,937	1,237,187	277,559	1,514,746
POINT FERMIN ES	3333 KERCHKOFF AVE	SAN PEDRO	CA	90731	37,420	2,733,397	613,233	3,346,630
POLITI ES (BELMONT ES #4)	2481 W 11TH ST	LOS ANGELES	CA	90006	55,382	3,624,716	813,196	4,437,912
POMELO DR ES	7633 MARCH AVE	CANOGA PARK	CA	91304	53,852	3,407,766	764,528	4,172,294
PORTER MS					123,956	9,054,542	2,031,375	11,085,917
PRARIE ES					22,285	1,627,839	365,199	1,993,038
PRESIDENT AVE ES	1465 W 243RD ST	HARBOR CITY	CA	90710	55,795	4,075,620	914,360	4,989,980

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
PROF DEV CTR (OSAGE)	4201 WILSHIRE BLVD, SUITE 303	LOS ANGELES	CA	90010	28,043	2,048,434	459,561	2,507,995
PUEBLO DE L.A. SH	2506 ALTA ST	LOS ANGELES	CA	90031	3,392	247,773	55,587	303,360
PURCHE AVE ES	13210 PURCHE AVE	GARDENA	CA	90249	48,258	3,209,510	720,046	3,929,556
QUEEN ANNE PL ES	1212 QUEEN ANNE PL	LOS ANGELES	CA	90019	10,028	732,509	164,338	896,847
RAMONA CC	231 S ALMA AVE	LOS ANGELES	CA	90063	315	23,010	5,162	28,172
RAMONA ES	1133 N MARIPOSA AVE	LOS ANGELES	CA	90029	80,163	5,257,371	1,179,482	6,436,853
RAMONA SH	231 S ALMA AVE	LOS ANGELES	CA	90063	26,654	1,946,978	436,801	2,383,779
RANCHITO AVE ES	7940 RANCHITO AVE	PANORAMA CITY	CA	91402	30,360	2,007,312	450,347	2,457,659
RAYMOND AVE	7511 RAYMOND AVE	LOS ANGELES	CA	90044	73,979	5,403,899	1,212,356	6,616,255
REED MS	4525 IRVINE AVE	NORTH HOLLYWOOD	CA	91602	139,655	10,201,292	2,288,645	12,489,937
RESEDA ES	7265 AMIGO AVE	RESEDA	CA	91335	36,763	2,369,840	531,669	2,901,509
RESEDA SH	18230 KITTRIDGE ST	RESEDA	CA	91335	250,612	18,306,303	4,106,985	22,413,288
REVERE MS	1450 ALLENFORD AVE	LOS ANGELES	CA	90049	147,884	10,802,399	2,423,493	13,225,892
RICHLAND AVE CC	2623 COOLIDGE AVE	LOS ANGELES	CA	90064	2,566	187,438	42,051	229,489
RICHLAND AVE ES					39,431	0	0	0
RILEY SH - COMPTON BR					10,928	798,249	179,086	977,335
RILEY SH - CYESIS	1524 E 103RD ST	LOS ANGELES	CA	90022	14,712	1,074,657	241,099	1,315,756
RIO VISTA ES	4243 SATSUMA AVE	NORTH HOLLYWOOD	CA	91602	37,093	2,709,510	607,874	3,317,384
RITTER CC	11108 WATTS AVE	LOS ANGELES	CA	90059	2,880	210,372	47,198	257,570
RITTER ES	11108 WATTS AVE	LOS ANGELES	CA	90059	41,263	2,803,737	629,014	3,432,751
RIVERSIDE DR ES	13061 RIVERSIDE DR	SHERMAN OAKS	CA	91423	54,677	3,222,586	722,979	3,945,565
ROCKDALE ES	1303 YOSEMITE DR	LOS ANGELES	CA	90041	42,098	1,182,768	265,352	1,448,120
RODIA SH	2315 E 103RD ST	LOS ANGELES	CA	90002	3,376	246,604	55,326	301,930
ROGERS SH	15141 LEMAY ST	VAN NUYS	CA	91405	7,104	259,462	58,209	317,671
ROOSEVELT BILNG AD	456 S MATTHEWS ST	LOS ANGELES	CA	90033	12,031	878,822	197,163	1,075,985
ROOSEVELT SH	456 S MATHEWS ST	LOS ANGELES	CA	90033	368,988	26,953,249	6,046,921	33,000,170
ROSCOE ES	10765 STRATHERN ST	SUN VALLEY	CA	91352	54,315	3,651,954	819,312	4,471,266
ROSCOMARE RD ES	2425 ROSCOMARE RD	LOS ANGELES	CA	90077	33,228	2,216,816	497,340	2,714,156
ROSEMONT AVE CC	430 N ROSEMONT AVE	LOS ANGELES	CA	90026	6,234	5,918,438	1,327,791	7,246,229
ROSEMONT AVE ES	421 N ROSEMONT AVE	LOS ANGELES	CA	90026	85,233	5,918,439	1,327,792	7,246,231
ROSEWOOD AVE CC	510 N ALFRED ST	LOS ANGELES	CA	90048	5,103	372,756	83,626	456,382

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
ROSEWOOD AVE ES	503 N CROFT AVE	LOS ANGELES	CA	90048	54,856	4,007,031	898,972	4,906,003
ROWAN AVE ES	600 S ROWAN AVE	LOS ANGELES	CA	90023	105,921	6,985,571	1,567,203	8,552,774
RUSSELL ES	1263 E FIRESTONE BLVD	LOS ANGELES	CA	90001	67,337	4,918,722	1,103,509	6,022,231
S CENTRAL CLASS EMPL CTR	944 W 77TH ST	LOS ANGELES	CA	90044	240	17,528	3,932	21,460
S EAST AREA MS #1 (ELIZ ST)					5,320	0	0	0
S/C CLS PER/HLTH-NEW	944 W 77TH ST	LOS ANGELES	CA	90044	4,560	333,090	74,728	407,818
SALVIN SP ED CTR	1925 BUDLONG AVE	LOS ANGELES	CA	90007	66,618	4,735,310	1,062,355	5,797,665
SAN ANTONIO CONT SH	2861 RANDOLPH ST	HUNTINGTON PARK	CA	90255	3,296	240,761	54,015	294,776
SAN ANTONIO ES (HUNT PK #2	6222 STATE ST	HUNTINGTON PARK	CA	90255	53,632	3,701,844	830,503	4,532,347
SAN FERNANDO CC	1204 WOODWORTH ST	SAN FERNANDO	CA		7,093	518,118	116,238	634,356
SAN FERNANDO ES	1130 MOTT ST	SAN FERNANDO	CA	91340	82,618	5,693,678	1,277,360	6,971,038
SAN FERNANDO MS	130 N BRAND BLVD	SAN FERNANDO	CA	91340	188,090	13,610,081	3,053,401	16,663,482
SAN FERNANDO SH	11133 O'MELVENY AVE	SAN FERNANDO	CA	91340	326,194	23,560,821	5,285,850	28,846,671
SAN GABRIEL AVE ES	8628 SAN GABRIEL AVE	SOUTH GATE	CA	90280	35,556	2,299,358	515,857	2,815,215
SAN JOSE ST ES	14928 CLYMER ST	MISSION HILLS	CA	91345	50,271	3,251,359	729,445	3,980,804
SAN MIGUEL AVE ES	9801 SAN MIGUEL AVE	SOUTH GATE	CA	90280	62,599	3,813,383	855,527	4,668,910
SAN MIGUEL SCH	2270 EAST 108TH STREET	LOS ANGELES	CA	90059	952	69,540	15,601	85,141
SAN PASCUAL AVE ES	815 SAN PASCUAL AVE	LOS ANGELES	CA	90042	27,558	1,697,454	380,819	2,078,273
SAN PEDRO HEALTH STR	704 W 8TH ST	SAN PEDRO	CA	90731	2,688	196,349	44,050	240,399
SAN PEDRO SCI CTR	2210 BARRYWOOD AVE	SAN PEDRO	CA	90731	6,546	478,162	107,275	585,437
SAN PEDRO SH	1001 W 15TH ST	SAN PEDRO	CA	90731	271,231	19,550,646	4,386,146	23,936,792
SAN PEDRO ST ES	1635 S SAN PEDRO ST	LOS ANGELES	CA	90015	84,727	4,114,778	923,144	5,037,922
SAN PEDRO-NARBONNE CAS-LC	950 W SANTA CRUZ ST	SAN PEDRO	CA	90731	13,987	979,625	219,780	1,199,405
SAN PEDRO-WILMTN SKILLS CT	920 W 36TH ST BLDG 950	SAN PEDRO	CA	90731	78,796	5,615,508	1,259,829	6,875,337
SANTA MONICA BLVD ES	1022 N VAN NESS AVE	LOS ANGELES	CA	90038	55,589	3,631,064	814,625	4,445,689
SANTA TERESITA SCH	2646 ZONAL AVE	LOS ANGELES	CA	90033	980	71,586	16,060	87,646
SATICOY ES	7850 ETHEL AVE	NORTH HOLLYWOOD	CA	91605	44,600	3,021,855	677,950	3,699,805
SATURN ST ES	5360 SATURN ST	LOS ANGELES	CA	90019	58,348	4,262,106	956,195	5,218,301
SECOND ST ES	1942 E SECOND ST	LOS ANGELES	CA	90033	71,818	4,868,978	1,092,352	5,961,330
SECONDARY SCI CTR	6625 BALBOA BLVD	VAN NUYS	CA	91406	19,017	1,389,123	311,646	1,700,769
SELLERY ES	15805 S BUDLONG AVE	GARDENA	CA	90247	46,660	3,408,345	764,657	4,173,002
SELMA AVE ES	6611 SELMA AVE	LOS ANGELES	CA	90028	54,005	3,393,225	761,262	4,154,487

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
SEPULVEDA BUS GARAGE	8920 SEPULVEDA BLVD	NORTH HILLS	CA	91343	10,558	771,515	173,087	944,602
SEPULVEDA MS	15330 PLUMMER ST	SEPULVEDA	CA	91343	160,614	11,588,228	2,599,797	14,188,025
SERRANIA AVE ES	5014 SERRANIA AVE	WOODLAND HILLS	CA	91364	39,562	2,469,118	553,946	3,023,064
SEVENTH ST ES	1570 W SEVENTH ST	SAN PEDRO	CA	90732	44,129	3,223,464	723,180	3,946,644
SEVENTY-FIFTH ST CC	242 W 75TH ST	LOS ANGELES	CA	90003	8,267	603,874	135,478	739,352
SEVENTY-FIFTH ST ES	142 W 75TH ST	LOS ANGELES	CA	90003	102,207	7,334,953	1,645,582	8,980,535
SEVENTY-FOURTH ST ES	2112 W 74TH ST	LOS ANGELES	CA	90047	67,051	4,371,903	980,823	5,352,726
SHARP AVE ES	13800 PIERCE ST	PACOIMA	CA	91331	56,052	4,094,392	918,572	5,012,964
SHENANDOAH AVE CC	8861 BEVERLYWOOD ST	LOS ANGELES	CA	90034	6,222	454,494	101,966	556,460
SHENANDOAH AVE ES	2450 SHENANDOAH ST	LOS ANGELES	CA	90034	60,928	4,345,382	974,882	5,320,264
SHERIDAN ST ES	416 N CORNWELL ST	LOS ANGELES	CA	90033	101,853	6,773,809	1,519,701	8,293,510
SHERMAN OAKS CES	18605 ERWIN ST	RESEDA	CA	91335	136,536	9,973,462	2,237,528	12,210,990
SHERMAN OAKS ES	14755 GREENLEAF ST	SHERMAN OAKS	CA	91403	64,647	4,094,399	918,578	5,012,977
SHIRLEY AVE ES	19452 HART ST	RESEDA	CA	91335	41,292	2,315,643	519,508	2,835,151
SHORT AVE ES	12814 MAXELLA AVE	LOS ANGELES	CA	90066	39,023	2,850,490	639,503	3,489,993
SIERRA PARK ES	3170 BUDAU AVE	LOS ANGELES	CA	90032	70,952	4,841,516	1,086,187	5,927,703
SIERRA VISTA ES	4342 ALPHA ST	LOS ANGELES	CA	90032	19,367	1,414,687	317,384	1,732,071
SIXTH AVE CC	3124 SEVENTH AVE	LOS ANGELES	CA	90018	4,481	327,321	73,434	400,755
SIXTH AVE ES	3109 SEVENTH AVE	LOS ANGELES	CA	90018	65,538	4,612,951	1,034,908	5,647,859
SIXTY-EIGTH ST ES	612 W 68TH ST	LOS ANGELES	CA	90044	64,986	4,746,990	1,064,981	5,811,971
SIXTY-FIRST ST ES	6020 S FIGUEROA ST	LOS ANGELES	CA	90003	63,891	4,667,005	1,047,034	5,714,039
SIXTY-SIXTH ST CC	405 E 67TH ST	LOS ANGELES	CA	90003	7,089	515,346	115,616	630,962
SIXTY-SIXTH ST ES	6600 S SAN PEDRO ST	LOS ANGELES	CA	90003	92,125	6,159,711	1,381,924	7,541,635
SO PARK PRIMARY	1011 W 11TH ST	LOS ANGELES	CA	90015	4,292	156,758	35,169	191,927
SO SHORES/CSUDH MAG	2060 W 35TH ST	SAN PEDRO	CA	90732	25,133	6,627,644	1,486,899	8,114,543
SOLANO AVE ES	615 SOLANO AVE	LOS ANGELES	CA	90012	21,843	1,490,365	334,361	1,824,726
SOTO ST CC	2616 E SEVENTH ST	LOS ANGELES	CA	90023	4,994	1,490,365	334,362	1,824,727
SOTO ST ES	1020 S SOTO ST	LOS ANGELES	CA	90023	36,440	2,451,435	549,974	3,001,409
SOUTH GATE ADLT	3351 FIRESTONE BLVD	SOUTH GATE	CA	90280	2,784	203,362	45,624	248,986
SOUTH GATE ES #4	8435 VICTORIA AVE	SOUTH GATE	CA		85,493	5,543,713	1,243,726	6,787,439
SOUTH GATE MS	4100 FIRESTONE BLVD	SOUTH GATE	CA	90280	183,111	12,982,896	2,912,690	15,895,586
SOUTH GATE SH	3351 FIRESTONE BLVD	SOUTH GATE	CA		266,870	18,668,765	4,188,304	22,857,069
SOUTH PARK ES	8510 TOWNE AVE	LOS ANGELES	CA	90003	80,963	5,808,866	1,303,209	7,112,075

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SPEC ED HORT CTR	7020 VANALDEN AVE	RESEDA	CA	91335	2,366	172,827	38,774	211,601
ST AGNES ES	1428 W ADAMS BLVD	LOS ANGELES	CA	90007	912	66,618	14,946	81,564
ST ANSELM'S SCHOOL	7019 SOUTH VAN NESS AVE	LOS ANGELES	CA	90047	984	139,081	31,203	170,284
ST FRANCIS X CABRINI	1428 W IMPERIAL HIGHWAY	LOS ANGELES	CA	90047	2,816	139,081	31,203	170,284
ST LAWRENCE OF BRINDISI					952	0	0	0
ST MALACHY SCHOOL					952	0	0	0
ST MICHAEL'S SCH	1027 W 87TH STREET	LOS ANGELES	CA	90044	1,015	74,142	16,634	90,776
ST RAPHAEL'S SCHOOL	924 W 70TH STREET	LOS ANGELES	CA	90044	912	66,618	14,946	81,564
ST THOMAS PARISH					1,292	0	0	0
ST TURIBUS SCHOOL	1524 ESSEX STREET	LOS ANGELES	CA	90021	912	66,618	14,946	81,564
ST VINCENT'S SCH	2333 SOUTH FIGUEROA STREET	LOS ANGELES	CA	90007	840	61,359	13,766	75,125
STAGG ST ES	7839 AMESTOY AVE	VAN NUYS	CA	91406	38,042	2,568,457	576,229	3,144,686
STANFORD AVE ES	2833 ILLINOIS AVE	SOUTH GATE	CA	90280	74,940	5,158,531	1,157,302	6,315,833
STATE ST CC	3210 BROADWAY	HUNTINGTON PARK	CA	90255	5,913	431,924	96,902	528,826
STATE ST ES	3211 SANTA ANA ST	SOUTH GATE	CA	90280	65,291	4,208,856	944,249	5,153,105
STERRY CC	1747 SAWTELLE BLVD	LOS ANGELES	CA	90025	4,721	344,852	77,367	422,219
STERRY ES	1730 CORINTH AVE	LOS ANGELES	CA	90025	48,438	3,538,223	793,794	4,332,017
STEVENSON MS	725 S INDIANA ST	LOS ANGELES	CA	90023	193,371	13,912,347	3,121,216	17,033,563
STONEHURST AVE ES	9851 STONEHURST AVE	SUN VALLEY	CA	91352	32,687	2,282,480	512,069	2,794,549
STONER AVE ES	11735 BRADDOCK DR	CULVER CITY	CA	90230	50,287	3,673,275	824,091	4,497,366
STONEY POINT SH	10010 DE SOTO AVE	CHATSWORTH	CA	91311	3,456	252,448	56,638	309,086
STRATHERN ST ES	7939 ST CLAIR AVE	NORTH HOLLYWOOD	CA	91605	48,304	3,318,065	744,393	4,062,458
SUN VALLEY BUS GARAGE	11247 SHERMAN WAY	SUN VALLEY	CA	91352	29,333	2,142,670	480,706	2,623,376
SUN VALLEY MS	7330 BAKMAN AVE	SUN VALLEY	CA	91352	178,124	13,011,313	2,919,064	15,930,377
SUNLAND ES	8350 HILLROSE ST	SUNLAND	CA	91040	50,630	3,698,338	829,718	4,528,056
SUNNY BREA AVE ES	20620 ARMINTA ST	WINNETKA	CA	91306	45,522	2,834,341	635,875	3,470,216
SUNRISE ST ES	2821 E SEVENTH ST	LOS ANGELES	CA	90023	64,271	4,694,760	1,053,258	5,748,018
SUPERIOR ST ES	9756 OSO AVE	CHATSWORTH	CA	91311	31,714	2,316,590	519,722	2,836,312
SUTTER MS	7330 WINNETKA AVE	CANOGA PARK	CA	91306	154,581	10,730,594	2,407,392	13,137,986
SYLMAR ES	13291 PHILLIPPI AVE	SYLMAR	CA	91342	52,816	3,402,210	763,290	4,165,500
SYLMAR SH	13050 BORDEN AVE	SYLMAR	CA	91342	217,851	15,614,038	3,502,985	19,117,023

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
SYLVAN PARK AVE CC	15011 DELANO ST	VAN NUYS	CA	91411	7,230	528,126	118,482	646,608
SYLVAN PARK ES	6238 NOBLE AVE	VAN NUYS	CA	91411	50,876	3,319,223	744,665	4,063,888
TAFT SH	5461 WINNETKA AVE	WOODLAND HILLS	CA	91364	292,441	21,361,764	4,792,477	26,154,241
TAPER AVE ES	1824 TAPER AVE	SAN PEDRO	CA	90731	53,887	3,936,250	883,092	4,819,342
TARZANA	5726 TOPEKA DR	TARZANA	CA	91356	42,372	3,095,116	694,383	3,789,499
TELFAIR AVE ES	10975 TELFAIR AVE	PACOIMA	CA	91331	72,190	4,747,304	1,065,032	5,812,336
TELFAIR AVE HEALTH CTR	10975 TELFAIR AVE	PACOIMA	CA	91331	1,935	141,345	31,711	173,056
TELFAIR CC	10975 TELFAIR AVE	PACOIMA	CA	91331	7,127	520,600	116,795	637,395
TEMESCAL CYN SH	777 TEMESCAL CANYON RD	PACIFIC PALISADES	CA	90272	3,648	266,472	59,782	326,254
TENTH ST ES	1000 GRATTAN ST	LOS ANGELES	CA	90015	80,005	5,713,176	1,281,738	6,994,914
THIRD ST ANNEX	1320 W 3RD ST	LOS ANGELES	CA	90017	91,732	6,700,692	1,503,290	8,203,982
THIRD ST ES	201 S JUNE ST	LOS ANGELES	CA	90004	49,985	2,809,726	630,359	3,440,085
THIRTY-SECOND ST MAG	822 W 32ND ST	LOS ANGELES	CA	90007	47,617	3,478,252	780,342	4,258,594
THIRTY-SEVENTH ST CC	1204 W 36TH PL	LOS ANGELES	CA	90007	7,120	520,090	116,680	636,770
THIRTY-SIXTH ST CC	3556 S ST ANDREWS PL	LOS ANGELES	CA	90018	6,200	452,887	101,605	554,492
THIRTY-SIXTH ST ES	1771 W 36TH ST	LOS ANGELES	CA	90018	62,679	4,496,004	1,008,665	5,504,669
THOREAU SH	5429 QUAKERTOWN AVE	WOODLAND HILLS	CA	91364	5,376	259,460	58,210	317,670
TOLAND WAY CC	4505 TOLAND WAY	LOS ANGELES	CA	90041	4,708	343,902	77,154	421,056
TOLAND WAY ES	4505 TOLAND WAY	LOS ANGELES	CA	90041	50,094	2,501,910	561,302	3,063,212
TOLUCA LAKE CC	4915 STROHM AVE	NORTH HOLLYWOOD	CA	91601	6,100	445,583	99,966	545,549
TOLUCA LAKE ES	4840 CAHUENGA BLVD	NORTH HOLLYWOOD	CA	91601	41,408	3,024,704	678,587	3,703,291
TOPANGA ES	141 N TOPANGA BLVD	TOPANGA	CA	90290	23,108	1,687,955	378,689	2,066,644
TOPEKA DR ES	9815 TOPEKA DR	NORTHRIDGE	CA	91324	47,342	3,072,477	689,304	3,761,781
TOWNE AVE ES	18924 TOWNE AVE	CARSON	CA	90746	33,441	2,442,743	548,027	2,990,770
TRINITY ST CC	3816 TRINITY ST	LOS ANGELES	CA	90011	6,254	4,408,496	989,039	5,397,535
TRINITY ST ES	3736 TRINITY ST	LOS ANGELES	CA	90011	72,224	4,408,492	989,047	5,397,539
TRUTH SH (@LOCKE)	11015 S AVALON BLVD	LOS ANGELES	CA	90061	3,296	240,761	54,015	294,776
TULSA ST ES	10900 HAYVENHURST AVE	GRANADA HILLS	CA	91344	36,528	2,668,237	598,615	3,266,852
TWEEDY ES	9515 PINEHURST AVE	SOUTH GATE		90280	43,025	1,775,398	398,297	2,173,695
TWENTIETH ST ES	1353 E 20TH ST	LOS ANGELES	CA	90011	28,589	2,088,325	468,512	2,556,837
TWENTY-EIGHTH ST CC	747 E 28TH ST	LOS ANGELES	CA	90011	7,226	527,833	118,417	646,250

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
TWENTY-EIGHTH ST ES	2807 STANFORD AVE	LOS ANGELES	CA	90011	81,004	5,706,674	1,280,289	6,986,963
TWENTY-FOURTH ST CC	2101 W 24TH ST	LOS ANGELES	CA	90018	6,050	441,931	99,146	541,077
TWENTY-FOURTH ST ES	2055 W 24TH ST	LOS ANGELES	CA	90018	93,405	6,561,100	1,471,970	8,033,070
TWO HUND THIRTY-SECOND ES	23240 ARCHIBALD AVE	CARSON	CA	90745	39,624	2,894,388	649,350	3,543,738
UNION AVE ES	150 S BURLINGTON AVE	LOS ANGELES	CA	90057	89,400	6,268,550	1,406,337	7,674,887
UNIVERSITY SH	11800 TEXAS AVE	LOS ANGELES	CA	90025	262,143	19,148,601	4,295,968	23,444,569
UTAH ST CC	1367 VIA LAS VEGAS	LOS ANGELES	CA	90033	4,728	345,364	77,482	422,846
UTAH ST ES	255 N CLARENCE ST	LOS ANGELES	CA	90033	70,910	5,048,818	1,132,693	6,181,511
VALERIO ST ES	15035 VALERIO ST	VAN NUYS	CA	91405	46,488	3,395,779	761,838	4,157,617
VALLEY ALT SCH	6701 BALBOA BLVD	VAN NUYS	CA	91406	32,864	2,400,593	538,577	2,939,170
VALLEY ED SUPP CTR	6505 ZELZAH AVE	RESEDA	CA	91335	11,566	844,853	189,542	1,034,395
VALLEY VIEW ES	6921 WOODROW WILSON DR	LOS ANGELES	CA	90068	22,258	1,520,682	341,162	1,861,844
VAN DEENE AVE ES	826 W JAVELIN ST	TORRANCE	CA	90502	39,736	2,902,571	651,187	3,553,758
VAN GOGH ST ES	17160 VAN GOGH ST	GRANADA HILLS	CA	91344	53,198	3,970,351	890,757	4,861,108
VAN NESS AVE ES	501 N VAN NESS AVE	LOS ANGELES	CA	90004	32,158	2,349,026	527,002	2,876,028
VAN NUYS ADLT	6535 CEDROS AVE	VAN NUYS	CA	91411	1,830	0	0	0
VAN NUYS ES	6464 SYLMAR AVE	VAN NUYS	CA	91401	54,951	3,570,726	801,090	4,371,816
VAN NUYS MS	5435 VESPER AVE	VAN NUYS	CA	91411	124,135	9,067,615	2,034,300	11,101,915
VAN NUYS SH	6535 CEDROS AVE	VAN NUYS	CA	91411	278,990	19,032,833	4,269,989	23,302,822
VANALDEN AVE CC	6212 VANALDEN AVE	RESEDA	CA	91335	7,234	528,416	118,548	646,964
VANALDEN AVE ES					36,490	2,244,716	503,598	2,748,314
VANOWEN ANNEX-VN SH					18,297	0	0	0
VAUGHN ST CC	11480 HERRICK AVE	PACOIMA	CA	91331	7,093	518,118	116,238	634,356
VAUGHN ST ES	13330 VAUGHN ST	SAN FERNANDO	CA	91340	51,013	3,726,308	835,992	4,562,300
VENA AVE ES	9377 VENA AVE	PACOIMA	CA	91331	46,441	2,620,980	588,014	3,208,994
VENICE HEALTH CENTER	239 WESTMINSTER AVE	VENICE	CA	90291	2,736	199,855	44,838	244,693
VENICE SH	13000 VENICE BLVD	LOS ANGELES	CA	90066	291,311	21,279,221	4,773,959	26,053,180
VENICE SKILLS CTR	611 FIFTH AVE	VENICE	CA	90291	23,523	1,718,270	385,490	2,103,760
VERDUGO HILLS SH	10625 PLAINVIEW AVE	TUJUNGA	CA	91042	218,381	15,951,939	3,578,798	19,530,737
VERMONT AVE ES	1435 W 27TH ST	LOS ANGELES	CA	90007	93,148	6,530,639	1,465,141	7,995,780
VERNON CITY CC	2350 E VERNON AVE	LOS ANGELES	CA	90058	1,728	126,224	28,319	154,543
VERNON CITY ES	2360 E VERNON AVE	LOS ANGELES	CA	90058	23,728	1,733,244	388,851	2,122,095
VICTORIA AVE ES	3320 MISSOURI AVE	SOUTH GATE	CA	90280	74,161	4,891,264	1,097,352	5,988,616

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VICTORY BLVD ES	6315 RADFORD AVE	NORTH HOLLYWOOD	CA	91606	60,042	3,859,919	865,963	4,725,882
VIEW PARK CONTN SH DORSEY	4701 RODEO RD	LOS ANGELES	CA	90016	3,958	289,117	64,862	353,979
VINE ST CC	6312 ELEANOR AVE	LOS ANGELES	CA	90038	8,972	655,371	147,030	802,401
VINE ST ES	955 N VINE ST	LOS ANGELES	CA	90038	72,140	3,350,274	751,629	4,101,903
VINEDALE ES	10150 LA TUNA CANYON RD	SUN VALLEY	CA	91352	32,774	1,938,209	434,836	2,373,045
VINTAGE ST MAG ES	15848 STARE ST	SEPULVEDA	CA	91343	40,839	2,772,774	622,070	3,394,844
VIRGIL MS	152 N VERMONT AVE	LOS ANGELES	CA	90004	159,979	11,162,293	2,504,237	13,666,530
VIRGINIA RD ES	2925 VIRGINIA RD	LOS ANGELES	CA		52,353	3,613,824	810,760	4,424,584
W ATHENS ES	1110 W 119TH ST	LOS ANGELES	CA	90044	72,390	4,788,191	1,074,220	5,862,411
W GRANADA SH	10500 LINDLEY AVE	NORTHRIDGE	CA	91326	3,296	240,761	54,015	294,776
W HOLLYWOOD ES	970 N HAMMOND ST	WEST HOLLYWOOD	CA	90069	50,586	3,695,124	828,993	4,524,117
W HOLLYWOOD OPP CTR	1049 N FAIRFAX AVE	LOS ANGELES	CA	90046	12,576	918,636	206,095	1,124,731
W VALLEY OCC CTR	6200 WINNETKA AVE	WOODLAND HILLS	CA	91367	193,858	14,160,617	3,176,933	17,337,550
W VALLEY SPEC ED	6649 BALBOA BLVD	VAN NUYS	CA	91406	44,118	3,222,663	722,998	3,945,661
W VERNON AVE ES	4312 S GRAND AVE	LOS ANGELES	CA	90037	67,260	4,440,931	996,312	5,437,243
WADSWORTH AVE CC	1047 E 41ST ST	LOS ANGELES	CA	90011	6,075	5,596,596	1,255,587	6,852,183
WADSWORTH AVE ES	981 E 41ST ST	LOS ANGELES	CA	90011	81,377	5,596,594	1,255,588	6,852,182
WALGROVE AVE ES	1630 WALGROVE AVE	LOS ANGELES	CA	90066	42,235	3,085,110	692,142	3,777,252
WALNUT PARK ES (HP #1)	2642 OLICE ST	HUNTINGTON BEACH	CA	90255	58,361	3,964,009	889,319	4,853,328
WARNER AVE ES	615 HOLMBY AVE	LOS ANGELES	CA	90024	40,958	2,991,832	671,215	3,663,047
WASHINGTON PREP SCHOOL	10860 S DENKER AVE	LOS ANGELES	CA	90047	322,664	23,569,437	5,287,766	28,857,203
WATERS EMPL PREP ADM	10925 S CENTRAL AVE	LOS ANGELES	CA	90059	91,013	6,648,173	1,491,506	8,139,679
WATERS EMPL PREP CLS	10925 S CENTRAL AVE	LOS ANGELES	CA	90059	16,502	1,205,400	270,432	1,475,832
WEBSTER MS	11330 W GRAHAM PL	LOS ANGELES	CA	90064	124,816	9,117,362	2,045,465	11,162,827
WEBSTER TRK BUS PARK	742 N MISSION	LOS ANGELES	CA	90033	2,646	193,280	43,362	236,642
WEEMES ES	1260 W 36TH PL	LOS ANGELES	CA	90007	98,406	7,188,203	1,612,661	8,800,864
WEIGAND AVE ES	10401 WEIGAND AVE	LOS ANGELES	CA	90002	36,512	2,667,069	598,355	3,265,424
WELBY WAY ES	23456 WELBY WAY	CANOGA PARK	CA	91307	47,783	2,859,249	641,473	3,500,722
WEST PORT SCHOOL	920 W 36TH ST BLDG 950	SAN PEDRO	CA	90731	40,462	2,534,866	568,695	3,103,561
WESTCHESTER SH	7400 W MANCHESTER AVE	LOS ANGELES	CA	90045	238,038	17,261,586	3,872,621	21,134,207
WESTERN AVE ES	1724 W 53RD ST	LOS ANGELES	CA	90062	78,647	5,346,628	1,199,510	6,546,138

Facility Name	Address	City	State	ZIP Code	Total Sq. Footage	Building $	Contents $	Total $
WESTMINSTER AVE CC	1010 MAIN ST	VENICE	CA		6,215	453,983	101,850	555,833
WESTMINSTER AVE ES	1010 ABBOT KINNEY BLVD	VENICE	CA	90291	69,128	5,049,547	1,132,856	6,182,403
WESTSIDE ALT SCH	104 ANCHORAGE ST	MARINA DEL REY	CA	90292	27,763	2,027,985	454,978	2,482,963
WESTWOOD ES	2050 SELBY AVE	LOS ANGELES	CA	90025	54,784	3,581,022	803,399	4,384,421
WHITE MS	22102 S FIGUEROA ST	CARSON	CA	90745	145,545	10,631,540	2,385,166	13,016,706
WHITE POINT ES	1410 SILVIUS AVE	SAN PEDRO	CA	90731	35,739	2,756,701	618,461	3,375,162
WHITEHOUSE PLACE PC	108 S BIMINI PL	LOS ANGELES	CA	90004	10,764	786,271	176,398	962,669
WHITMAN SH	7795 ROSEWOOD AVE	LOS ANGELES	CA	90036	4,852	354,421	79,513	433,934
WIDNEY SPEC ED SH	2302 S GRAMERCY PL	LOS ANGELES	CA	90018	114,748	8,381,929	1,880,471	10,262,400
WILBUR AVE ES	5213 CREBS AVE	TARZANA	CA	91356	48,385	3,534,346	792,922	4,327,268
WILLENBERG SPEC ED CTR	308 WEYMOUTH AVE	SAN PEDRO	CA	90732	87,678	6,404,561	1,436,852	7,841,413
WILMINGTON MS	1700 GULF AVE	WILMINGTON	CA	90744	171,130	12,369,528	2,775,083	15,144,611
WILMINGTON PARK CC	1419 YOUNG ST	WILMINGTON	CA	90744	7,115	519,724	116,598	636,322
WILMINGTON PARK ES	1140 MAHAR AVE	WILMINGTON	CA	90744	87,761	6,095,065	1,367,418	7,462,483
WILSHIRE CREST ES	5241 W OLYMPIC BLVD	LOS ANGELES	CA	90036	58,059	4,135,813	927,855	5,063,668
WILSON SH	4500 MULTINOMAH ST	LOS ANGELES	CA	90032	313,072	22,868,776	5,130,574	27,999,350
WILTON PLACE CC	4030 W LEEWARD AVE	LOS ANGELES	CA	90005	6,812	497,591	111,632	609,223
WILTON PLACE ES	745 S WILTON PL	LOS ANGELES	CA	90005	98,729	3,210,243	720,211	3,930,454
WINDSOR M SC-AERO MAG	5215 OVERDALE DR	LOS ANGELES	CA	90043	43,935	2,893,736	649,203	3,542,939
WINNETKA AVE ES	8240 WINNETKA AVE	CANOGA PARK	CA	91306	44,333	2,642,313	592,793	3,235,106
WONDERLAND AVE ES	8510 WONDERLAND AVE	LOS ANGELES	CA	90046	24,554	1,793,582	402,389	2,195,971
WOODCREST ES	1151 W 109TH ST	LOS ANGELES	CA	90044	77,198	5,377,241	1,206,378	6,583,619
WOODLAKE AVE ES	23231 HATTERAS ST	WOODLAND HILLS	CA	91367	30,146	2,195,475	492,548	2,688,023
WOODLAND HILLS ES	22201 SAN MIGUEL ST	WOODLAND HILLS	CA	91364	39,175	2,335,664	523,997	2,859,661
WOODLAWN AVE ES	6314 WOODLAWN AVE	BELL	CA	90201	58,940	3,989,795	895,100	4,884,895
WRIGHT MS	6550 W 80TH ST	LOS ANGELES	CA	90045	157,360	11,284,210	2,531,587	13,815,797
YORKDALE ES	5657 MERIDIAN ST	LOS ANGELES	CA	90042	60,407	2,711,701	608,359	3,320,060
YOUNG ST	3051 W 52ND ST	LOS ANGELES	CA	90043	3,376	246,604	55,326	301,930
YOUTH SV FLD OF SOUTH	2060 W 156TH ST	GARDENA	CA	90249	6,192	452,302	101,473	553,775
YOUTH SV FLD OF V WEST	5607 CAPISTRANO AVE	WOODLAND HILLS	CA	91367	129,639	3,749,694	841,233	4,590,927
YTH SV FLD OF-WEST	2635 COLBY AVE	LOS ANGELES	CA	90064	7,088	0	0	0
GRAND TOTAL					**59,343,183**	**4,319,583,496**	**1,436,681,944**	**5,905,073,464**

Inventory of Leased Facilities

Temp File #	Lessor/Lessee	School	ADDRESS
1	1130 K Street - Northwest Mutual Life Insurance Company	Administrative Offices	1130 K Street; Suite No. 205, Sacramento, CA
3	Maguire/Thomas Partners	Administrative Offices	355 S. Grand Avenue, Los Angeles, CA 90071
3	Maguire/Thomas Partners	Administrative Offices	333 S. Grand Avenue, Los Angeles, CA 90071
6	Bakewell Hawthorne (formerly Crenshaw Business Center)	Administrative Offices - Genethia Hayes	4401 S. Crenshaw Blvd., Los Angeles, CA
7	Adams Shatto Building (Replacement for Copeland Beverage)	Administrative Offices	1543 Shatto Street, Los Angeles, CA 90017
8	1330 Pico Associates-School Police Department	Administrative Offices	1330 W. Pico Blvd, Los Angeles, CA
8	1330 Pico Associates-School Police Department	Administrative Offices	1330 W. Pico Blvd, Los Angeles, CA
10	Northridge Business Center, LLC	Local District A	8550 Balboa Blvd., Northridge, CA
10	Northridge Business Center, LLC	Local District A	8550 Balboa Blvd. Suite 220, Northridge, CA
10	Northridge Business Center, LLC	Local District A	8550 Balboa Blvd. Suite 140, Northridge, CA
11	AG/Touchstone Daley, Inc. (Prentiss Properties Natomas, LLC)	Local District B	5200 Lankershim Blvd., North Hollywood, CA 91601
12	Ampco Parking	Local District B	5200 Lankershim Blvd., North Hollywood, CA 91601
13	Quality Parking	Human Resources / Certificated Personel	5230 Lankershim Blvd., North Hollywood, CA 91601
13	Quality Parking	Local District B	5230 Lankershim Blvd., North Hollywood, CA 91601
15	Atrium Properties, LLC / eRealty Mgmt	Local District D	3000 S. Robertson Blvd. Los Angeles, CA
16	Ampco Parking	Local District D	3000 S. Robertson Blvd. Los Angeles, CA
17	4201 Wilshire, LLC	Local District E	4201 Wilshire Blvd., Los Angeles, CA 90010
17	4201 Wilshire, LLC	Special Education	4201 Wilshire Blvd., Los Angeles, CA 90010
18	Meagher & Maleki Receivership	Local District G	3710 South La Brea Avenue , Los Angeles, CA 90003
19	Baldwin Hills Investors	Local District G	3741 S. La Brea Avenue,Los Angeles, CA
20	Ampco Parking	Local District I	611 W. 6th Street, G-1, Los Angeles, CA 90017
21	Verizon (formerly GTE Directories Corporation)	Local District H	1115 South Boyle Avenue, Los Angeles, CA
24	611 W. Sixth Street (AT&T building)	Local District I	611 W. 6th Street, Los Angeles, CA 90017
26	602 N. Grand Avenue, LLP (701 Cesar Chavez)	Maintenance Branch (Bid Processing Unit)	701 Cesar Chavez Avenue Suite # 207, Los Angeles, CA 90012
28	Forest Service USDA	Clear Creek Educational Center	
30	602 N. Grand Avenue, LLP (701 Cesar Chavez)	Parent Community Services Branch	701 Cesar Chavez Avenue Suite # 102 & 103, Los Angeles, CA 90012
32	State of California (16th and Trinity) (7-FLA-10-34)	Trucking Operations	16th & Trinity, Los Angeles, CA
36	SpectraSite (formerly Advanced Electronics) San Pedro Hill	Office of Administrative Services	Rancho Palos Verdes
37	Mobile Relay Associates -- Mt. Lukens	Office of Administrative Services	Mt. Lukens
38	City of Los Angeles -- Mt. Lee	Office of Administrative Services	3800 Mount Lee Dr., Los Angeles, CA
39	American Tower Systems (Oat Mt.)	Office of Administrative Services	Oat Mountain Chatsworth, CA

40	American Tower Systems (Loop Canyon)	Office of Administrative Services	Loop Canyon, Sylmar, CA
43	State of California DOT (7FLA-10-28 & &FLA-10-29)	Transportation Branch	1640 S. San Pedro / 940 E. 16th Str.,Los Angeles, CA
44	RBE Roscoe-Woodley Phase II, LLC	Transportation Branch	16200 Roscoe Blvd. Van Nuys, CA
45	State of California DOT (Hooper Ave.(7FLA-10-21)	ADMINISTRATIVE OFFICES -- INTEGRATION	1621 S. Hooper Street
47	Pride Properties, LLC (Alameda Garage)	ADMINISTRATIVE OFFICES -- INTEGRATION	6901 S. Alameda Street, Huntington Park, CA 90255
51	Japanese Language School Kyodo System	Belmont CAS	1216 Menlo Avenue, Los Angeles, CA 90008
52	Mijoo Peace Church	Belmont CAS	170 Bimini Place, CA 90004
53	YMCA - Crenshaw Family YMCA	Crenshaw/Dorsey CAS	3820 Santa Rosalia Dr., los Angeles, CA 90005
55	Stocker Plaza /James Jones	Crenshaw/Dorsey CAS	3741 Stocker Street # 110, Los Angeles, CA 90005
56	Faith Lutheran Church (155744)	El Camino CAS	7769 Topanga Canyon Blvd.,Canoga Park, CA 91304
57	Our Lady of the Valley	El Camino CAS	22021 Gault Street, Canoga Park, CA 91304
59	Water and Power Credit Union (Parking)	Evans CAS	1053 Sunset Blvd.Los Angeles, CA 90012
63	Chinese Zion Baptist Church	Franklin CAS	3271 Verdugo Road, Los Angeles, CA 90065
65	Estelle Van Meter Center	Fremont CAS	606 East 76th Street, Los Angeles, CA 90003
67	Leroy Shepard (fka Son-Shine Baptist Church)	Fremont CAS	1425 Nadeau Street, Los Angeles, CA 90001
72	First Presbyterian Church	Gardena CAS	1957 Redondo Beach Blvd.Gardena, CA 90247
74	Harbor Gateway Ctr / First United Methodist Church	Gardena CAS	812 W. 165th Street, Gardena, CA 90247
75	Japanese Cultural Institute (Gardena Valley)	Gardena CAS	16215 S. Gramercy Place, Gardena, CA 90247
76	Iglesia Bautista Biblica	Gardena CAS	1049 W. 149th St., Gardena, CAA 90247
77	Dormar Properties (14626 Crenshaw LLC)	Gardena CAS	14626 S. Crenshaw Blvd.,Gardena, CA 90247
78	South Bay Ko-Am Senior Center	Gardena CAS	1047 W. 164th Street, Room # 3,Gardena, CA 90247
79	DeYoung and Hyon Kim	Garfield CAS	Eastside Learning Center, 831 N. Bonnie Beach Place, Los Angeles, CA
90	Greater Bethany Educational Center	Jordan/Locke CAS	8409 S. Hoover Street, Los Angeles, CA
92	Royal Group	Los Angeles CAS	3407 W. 6th Street, Los Angeles
93	Catholic Charities / El Santo Nino	Manual Arts/Jefferson CAS	601 E. 23rd St., Los Angeles, CA
95	Jamison Properties (formerly George Guylas)	Metropolitan Skills Center	2801 W. 6th St.,Los Angeles, CA 90049
101	1919 Building Management	Refugee Employment Training Project	1919 W. Redondo Beach Blvd, Suite # 107, Gardena, CA
102	Krikor Shenian	Refugee Employment Training Project	825 E. Colorado, Suite B Glendale, CA 91205
103	William & Gertrude Tom Family Trust	Refugee Employment Training Project	9251 Garvey Ave. Unit H, I, P, S. El monte, CA
106	U.C.C. Plaza - Gary Fultheim	Refugee Employment Training Project	2338 E. Anaheim St. Suite # 201B & 201C, ong Beach, CA
108	First United Methodist Church	Reseda CAS	18120 Saticoy Street, Reseda, CA 91335
109	Pacoima Investment LLC (fka Plaza del Sol / Litwin Family Trust)	Pacoima Skills Center	13545 Van Nuys Blvd., Los Angeles, CA 90015
110	Rafu Chuo Gakuen	Roosevelt Bilingual CAS	202 North Saratoga, Los Angeles, CA
115	Los Angeles Baptist City Mission Society	South Gate CAS	First Baptist Church of South Gate; 8691 California Avenue, South Gate, CA 90280

Temp File #	Lessor/Lessee	School	ADDRESS
116	American Red Cross (LSE0111)	South Gate CAS	9200 State Street, South Gate, CA 90280
118	Unite LA Chamber of Commerce	South Gate CAS	350 S. Bixel St. # 160 Los Angeles, CA
119	Regis House	Fairfax Hamilton University Palisades CAS	11346 Iowa Ave. Room#1, Los Angeles, CA 90025
121	Presbytery of San Fernando	Van Nuys CAS	14701 Friar Street, Van Nuys, CA
123	Valerio Property	Van Nuys CAS	7405 Van Nuys Blvd. # 201, Van Nuys, CA 91405
127	Vista Del Rey Church	Venice Univeristy CAS	12118 Pacific Avenue, Los Angeles, CA 90066
129	Mar Vista Family Center	Venice/Hamilton CAS	5075 Slauson Avenue, Culver City, Ca 90230
131	Lesserman and Epstein	Watts Skills Center	840 East 111th Place, Los Angeles, Ca 90059
133	Yat Corporation	Wilson/Lincoln CAS	2310 Pasadena Ave.,Los Angeles, CA 90031
135	Puente South	Westchester/Washington CAS	10000 S. Western Ave., Los Angeles, CA 90047
137	Crescent Properties / G--Bar--K	Purchasing Branch	2458-62 E. 28th Street, Vernon, CA
139	Community Television of California	Channel 58 Antenna Station (KLCS)	Top of Mt. Wilson
140	Los Angeles Community College (at Harbor College)	South Gate HS	1111 Figueroa Plaza, Wilmington, CA 90744
141	Los Angeles Trade Technical College	Jefferson High School	400 W. Washington Blvd. Los Angeles, CA 90744
142	Calote, George and Pamela	Area 3 Opportunity Unit #1 (Jesse Owens Oppornty Schl)	2400 W. 54th Street, Los Angeles, CA
143	St. Anne's Maternity Hospital	McAlister High School	2808 Glassell Street, Los Angeles, CA 90010
145	State of California, Department of Transportation (FLA-07-10-42)	Friedman Occupational Center	17th Street & Grand Ave.
146	City of Los Angeles (Department of Airports)	North Valley Occupational Center	16550 Saticoy Street, Van Nuys, CA 91640
147	City of Los Angeles - Pool	Banning High School	
148	City of Los Angeles -- Swimming Pool	Belmont High School	
149	Athena Parking (construction trailers)	Belmont Learning Complex	1st and Mignonette
151	City of Carson (See PERMITS)	Carson Street School	22328 S. Main Street,Carson,CA 91335
152	City of Carson (See PERMITS)	Catskill Ave. & Carson St. Schools	
152	City of Carson	LAUSD	
153	City of Los Angeles - Swimming pool	Cleveland High School	8140 Vanalden Ave. Reseda, CA 91335
154	Gerald Saiz	Dana MS - Healthy Start	793 W. 15th Street,San Pedro, CA 90731
154	ADT (Securities)	Dana MS - Healthy Start	793 W. 15th Street.San Pedro, CA 90731
155	City of Los Angeles (See PERMITS)	Dorsey High School	
156	City of Los Angeles (Dept of Parks and Rec)	Downtown Business Magnet (Eagle Rock HS)	1840 Yosemite Drive, Los Angeles, CA 90041
157	City of Los Angeles - Yosemite Swimming Pool	Eagle Rock High School	
158	City of Los Angeles -Pool	Fremont High School	Lots A and B Tract No 8558 Los Angeles, CA
160	Hurley, Joseph G.	Lankershim School	5255 Bakman Avenue Parking Lot, North Hollywood, CA 91601
162	Los Angeles Community College	Middle College High School	1600 Imperial Hwy, Los Angeles
163	Metropolitan Transit Authority (parking)	Overland School	271 Easterly Overland Ave. 45 Southerly Northvale Rd. Los Angeles,CA
163	Metropolitan Transit Authority (parking)	Overland School	45 Southerly Northvale Road, Los Angeles, CA
164	City of Los Angeles -Pool	Roosevelt High School	Lot 1 Tract 17880 Los Angeles, CA

165	Union Pacific Railroad	South Gate High School	Ardmore St. (South Gate HS)
167	Metropolitan Water District	South Gate Middle School	Ref: RL618; 0.36 Acre adjacent site South Gate, CA (Northerly of Southern Ave. bwten San Miguel and Otis Sts.) Middle Cross Feeder
168	City of South Gate (ground lease)	Tweedy School	9515 Pinehurst Ave. South Gate, CA
169	City of Los Angeles -Pool	Venice High School	Walgrove Ave. & Venice Blvd.,Los Angeles, CA
170	Thomas A. Ybarra	Vernon City School	2326 E. Vernon Ave.Vernon, CA 90058
171	Emergency School Housing	Vernon City School	
172	Girls and Coed. Interscholastic Swim Prgm.	Vernon City School	
174	The Park Hills Community Church	Windsor Hills School	5254 Overdale Drive,Los Angeles, CA 90043
175	East-West Japanese Language School	Emergency Immigrant Education Program	16110 La Salle Ave. Gardena, CA 90247
177	OSULA Education Center	Emergency Immigrant Education Program	3921 Laurel Canyon Blvd. Studio City, CA 91604
178	San Fernando Valley Japanese--American	Emergency Immigrant Education Program	12953 Branford Street,Pacoima, CA 91331
180	Temple Isaiah	Emergency Immigrant Education Program	10345 W. Pico Blvd.,Los Angeles, CA 90064
183	Parking Concepts, Inc.	Transportation Branch	611-623 S. Carondelet 450 Parking Stalls,Los Angeles, CA
186	Archdiocese of Los Angeles	Title 1 Non-Public Schools	Non-public School Program 66 Various Addreses See Exhibit A of Lease, los Angeles, CA
187	City of Los Angeles	Administrative Offices, ES,MS and SHS	
188	City of Los Angeles	Adult Schools	
189	City of Los Angeles	Occupational Centers	
190	City of Los Angeles	Children's Centers	
191	City of South Gate	City of South Gate	
192	Meridian Street	Electrolier Lighting Systems--Children Centers	
193	Sewer Facilities Charges	Electrolier Lighting Systems--Children Centers	
194	Marshaleeta Parish (The Ancient Church of the East)	City of Angels High School	2064 5th Ave. San Fernando, CA 91340
195	Barrio Action Group	City of Angels High School	4927 Huntington Drive Reception Room & Office No. 2 Los Angeles, CA 90032
197	Charlotte Guilder	City of Angels High School	1733 W. Florence West Suite,Los Angeles, Ca
199	County of LA., Patriotic Hall	City of Angels High School	1816 S. Figueroa Street,Roosvelt Room, 6th Floor,Los Angeles, CA 90015
200	First Southern Baptist Church	City of Angels High School	1025 Marine Ave.Gardena, CA 90247
201	Grace Presbyterian Church	City of Angels High School	1500 North Avenue# 53 Los Angeles, CA 90042
203	Hollywood Beverly Christian Church	City of Angels High School	1717 N. Gramercy Place, Los Angeles, CA 90028
204	Immanuel Presbyterian Church	City of Angels High School	3300 Wilshire Blvd. Los Angeles, CA 90010
208	St. Mark's Presbyterian Church	City of Angels High School	24027 Pennsylvania Avenue, LA CA 90717
209	Community Presbyterian Church of South Gate	City of Angels High School	3300 Liberty Blvd. South Gate, CA 90280
210	Toberman Settlement House	City of Angels High School	131 N. Grand Ave., San Pedro, CA
211	YMCA of Verdugo Hills	City of Angels High School	6840 Foothill Blvd.,Tujunga, CA 91042

Temp File #	Lessor/Lessee	School	ADDRESS
212	Temple Beth Zion	City of Angels High School	5555 W. Olympic Blvd. Room 1-5, Los Angeles, CA 90036
213	Watts Labor Community Action Committee	City of Angels High School	1230 E. 109th Street,Los Angeles, CA
214	Tungs Investment Group c/o Charles Dunn Real Estate (Grace Plaza)	City of Angels High School	441 E. Carson Street "L", Carson, CA
215	Community United Presbyterian Church	City of Angels High School	7501 S. Normandie Ave.Los Angeles, CA 90044
216	Congregational Church of Northridge	City of Angels High School	9659 Balboa Blvd. Northridge, CA 91325
217	Wayside United Methodist Church	City of Angels High School	25904 Cayuga Ave.Lomita, CA 90717
219	North Valley Professional Plaza	City of Angels High School	8949 Reseda Blvd. Office#106 Northridge, CA 91324
220	Los Angeles Christian Presbyterian Church	City of Angels High School	2241 North Eastern Ave. Los Angeles, CA 90032
223	Ujima Community Development Corporation	Central High School	860 East 126th Street,Los Angeles,CA 90059
224	County of Los Angeles, Patriotic Hall	Central High School	1816 S. Figueroa Street 6th Floor,Los Angeles, CA 90015
226	Centers Business Mgmt.- 319 Carson Street	Central High School	319 East Carson Street,Carson, CA
227	SAAY All Peoples Christian Center	Central High School	822 East 20th Street, Los Angeles, CA
228	Schaub and Gelb	Central High School	14546 Hamlin Street, Suite # 120
230	Williams Scotsman	ECIA Normandie Christian School	6306 S. Normandie, Los Angeles, CA 90044
231	Williams Scotsman	El Camino Real CAS	22250 Elkwood Street, Canoga Park , Ca 91304
234	GE Capital	LA Center for Enriched Studies	5931 West 8th Street, Los Angeles, CA 90035
235	Williams Scotsman	Maintance Branch	528 E. 15th St., Los Angeles, CA 90015
236	Williams Scotsman	Maintenance Branch	528 E. 15th St., Los Angeles, CA 90015
237	Williams Scotsman	Maintenance Branch - BSC	528 E. 15th St., Los Angeles, CA 90015
238	Williams Scotsman	Manual Arts HS	4131 S. Vermont, Los Angeles, CA 90037
239	Williams Scotsman	Ninth Street ES	820 Towne Ave, Los Angeles, CA 90015
240	Williams Scotsman	North Hollywood/Poly CAS	12431 Roscoe Blvd., Sun Valley, CA 91352
244	Mobile Modular	South Gate HS	3351 Firstone Blvd., South Gate, CA 90280
245	Williams Scotsman	St. Patrick's School	6535 Cedros Avenue
246	Mobile Modular	Stevenson MS	725 S. Indiana Street, Los Angeles, 90023
247	Mobile Modular	Stevenson MS2	725 S. Indiana Street, Los Angeles, 90023
248	GE Capital	Transportation Branch	2955 Robertson Blvd., Los Angeles, 90034
249	GE Capital	Transportation Branch	1640 S. San Pedro, Los Angeles, CA 90015
250	GE Capital	Transportation Branch	929 N. Las Palmas Ave., Hollywood, CA
251	GE Capital	Transportation Branch	13670 Montague Street, Pacoima CA 91311
252	GE Capital	Transportation Branch	3537 Farmdale Ave, Los Angeles, CA 90016
253	GE Capital	Transportation Branch	820 N. Avenue 54, Los Angeles, CA 90042
254	GE Capital	Transportation Branch	9351 Paso Robles Ave., Northridge, CA 91330

255	GE Capital	Transportation Branch	1010 Variel Ave., Chatsworth, CA 91311
256	GE Capital	Transportation Branch	3330 Granville Ave., Los Angeles, CA 90066
257	GE Capital	Transportation Branch	4066 W. 17th Street, Los Angeles, 90019
258	GE Capital	Transportation Branch	15777 Bowdoin Street, Pacific Palisades, CA
259	Williams Scotsman	Van Nuys CAS	6535 Cedros Avenue, Van Nuys, CA 90015
260	Williams Scotsman	Verbum Dei HS	1110 S. Central Ve., Los Angeles, CA 90051
266	Centers Business Mgmt. - 319-1/2 Carson Street	City of Angels High School	319 1/2 East Carson Street, Carson CA
273	First Chinese Baptist Church	Infant and Preschool Programs	936 Yale Street, Los Angeles CA 90012
275	Grace Evangelical Lutheran Church	Central High School	6714 Pine Avenue, Bell CA
276	Housing Authority, City of LA	El Camino Real CAS	6300 Owensmouth Ave., Reseda, CA
276	Housing Authority, City of LA	El Camino Real CAS	18450 Ingomar St. Reseda, CA
279	Banning/Carson CAS	Banning/Carson CAS	
286	Schaub Gelb Sherman Way Professional Bldg.	City of Angels High School	22048 Sherman Way #205, Canoga Park
287	Volunteers of America - El Jardin de Ninos	Infant and Preschool Programs	
288	Volunteers of America - El Pueblo de los Ninos	Infant and Preschool Programs	
292	Beltmann Group	Instructional Technology Branch	500 Hacienda, Industry CA
305	City of Los Angeles	Baldwin Hills School	
306	City of Los Angeles	Banning High School	
307	City of Bell	Bell Area New Elementary School No. 2	
308	City of Bell	Bell High School	
309	City of Los Angeles	Belmont Learning Complex	
310	City of Los Angeles	Birmingham High School	
311	City of Los Angeles	Cleveland High School	
312	City of Los Angeles	El Camino Real High School	
313	City of Los Angeles	Glen Alta School-Happy Valley Glen Alta Community Center	
314	City of Huntington Park	Huntington Park High School	
315	City of Los Angeles	Irving Middle School	
316	City of Los Angeles	King Middle School	
317	City of Los Angeles	Locke H.S. Multi-Service & Child Development Center (Noble Nolcox, Director)	320 East 11th Street (Los Angeles)
319	City of Huntington Park	Newell Street School	
320	City of Los Angeles	Reseda High School	
321	California Science Center	Science Museum School Project	Exposition Park, Calif. Science Center
322	City of Los Angeles	Sylmar High School	
323	City of Los Angeles	Birmingham High School	
324	City of Los Angeles	Brentwood Science Magnet School	
325	City of Los Angeles	Lincoln High School	
326	City of Los Angeles	Olive Vista Middle School	
327	City of Los Angeles	Pomelo Drive School	
328	City of Los Angeles	Reseda High School	
329	City of Los Angeles	Rhodia High School	
330	City of Los Angeles	Sylvan Park Children Center	
334	City of Long Beach, Dept. of Parks, Recreation and Marine	Interscholastic Athletics (Barbara Fiege, Director)	
341	City of Los Angeles	Bravo Medical Magnet (Lincoln Medical H.S.) Rosa Hernandez, Principal; Pat Kleiner, VP	Hazard Park-Comille Didier 485-4831, Dr. Mell Ross #7624, Alonzo A. Carmichael 485-2451
343	Foundation Center (Marilyn Prosser) (916-447-2087), Capital Thrift & Loan Assoc. (Dick George 1-800-952-5343)	Child Development Division (Sheila Derrig) Contact person: Craig Lancaster 625-6803	Roberti Child Care Center 1143 East Vernon Avenue, Los Angeles, CA
347	County of Los Angeles	Garfield High School	
348	City of Los Angeles	Los Angelitos Children's Center	Formerly Optimum House, 1011 West 11th Street, Los Angeles

Temp File #	Lessor/Lessee	School	ADDRESS
349	Hollywood Lutheran Church	Los Feliz School-1740 N. New Hampshire Ave. (Elizabeth H. Castaneda, Prin.)	1733 N. New Hampshire Avenue
350	Orthopedic Children's Hospital, Elouise Helwig	Medical Magnet	2400 S. Flower St., Los Angeles
351	City of Los Angeles	North Hollywood High School (John T. Hyland, Principal)	5300 Zoo Drive, Los Angeles
352	East Valley Congregational Church, Maxine Hall	Oxnard Elementary School	10919 Oxnard Street, North Hollywood
355	LA County Flood Control District	Seventh Street School	Seventh Street School
356	City of Los Angeles	Sheridan Street School	Sheridan Street School
357	City of Los Angeles	Soto Street Children's Center	Soto Street Children's Center
358	Regents University of California, Judy Howard	Special Education Division (Infant/Preschool)	1000 Veterans Avenue, Los Angeles CA
380	Hoiby Enterprises	Student Health and Human Services	11240 Magnolia Blvd., N. Hollywood
381	Port of Los Angeles	Wilmington Skills Center	NW corner B St. & Island Ave.
383	Central City Action Committee	Division of Instruction - Student Intervention Programs	534 Edgewater Rd, LA
433	City of Los Angeles	Fairfax High School	
434	City of Lomita	Fleming Junior High School	
435	City of Los Angeles (see lease 542)	Franklin High School	
436	City of Los Angeles	Fremont High School	
437	City of Los Angeles	Gompers Middle School	
438	City of Los Angeles	Henry Middle School	
439	City of Los Angeles	Hollenbeck Middle School	
440	County of Los Angeles	Huntington Park ES No. 1	
441	City of Los Angeles	Los Angeles Center for Enriched Studies	
442	City of Los Angeles	Los Angeles Center for Enriched Studies	
443	City of Los Angeles	Maclay & Broadus	
444	City of Los Angeles	Markham Middle School	
445	City of Los Angeles	Monroe High School	
446	City of Los Angeles	Mount Washington School/Athletic Field Improvements	
447	City of Los Angeles	Mount Washington School/Mixed-Use Building	
451	Catalina Ltd. Partnership (formerly Norm Pomeranz)	Bellevue Primary Center	re: parking lot at 430 and 436 South Virgil Ave
456	United Methodist Church (Huntington Park)	City of Angels High School	6420 Rita Ave.Huntington Park, CA 90255
457	Schaub & Gelb (Hamlin Street/Peachtree)	City of Angels High School	14546 Hamlin St. # 110 Van Nuys, Ca 91401
458	University Religious Conference at UCLA	CDS - Educational Options	900 Hilgard Avenue, Los Angeles, CA 90024
459	Metropolitan Community Church	CDS - Educational Options	5730 Cahuenga Blvd.N.Hollywood, CA
462	Crescent Heights UMC	Central High School	1296 N. Fairfax Ave.W.Hollywood, CA 90046
468	Weingart Center Assoc. (Leavy Adult Learning Ctr)	Belmont CAS	512 S. San Pedro St. Los Angeles, CA 90013
469	Laurence S. Aubrey	City of Angels High School	22949 Ventura Blvd. Suite # A,oodland Hills, CA 91364
470	Esperanza Community Housing (Mercado La Paloma)	Jefferson CAS	3655 S. Grand Avenue, Los Angeles

472	St. Paul's Presbyterian Church	Crenshaw CAS	5100 Coliseum Street, Los Angeles
473	520 Lafayette Place, LLC	Metropolitan Skills Center	520 LaFayette Place, Los Angeles
473	520 Lafayette Place, LLC	Metropolitan Skills Center	520 LaFayette Place, Los Angeles
475	Central Lutheran Church	Van Nuys CAS	6425 Tyrone Avenue, Van Nuys CA
476	UTLA (United Teachers Los Angeles)	Peer Assistance Review	3303 Wilshire Blvd., #400, Los Angeles
477	HC Makabi	Refugee Employment Training Project	18210 Sherman Way, Reseda CA
478	St. Michael Center	Fremont CAS	1039 W. 87th Street
480	City of Los Angeles	Verdugo Hills High School	
481	City of Los Angeles	San Pedro High School	
483	333 S. Beaudry Ave.(Bank of America)	LAUSD Headquarters - Harbor Building	333 S. Beaudry, Los Angeles, CA
485	RMG Properties	Kindergarten Learning Academy	14402 Haynes Street
486	Mahar House	Harbor CAS	1115 Mahar Ave. Wilmington
487	YMCA (New Castle ES)	Reseda CAS	6520 New Castle Avenue, Reseda CA
489	Kenneth Young c/o Joy Gibson	City of Angels High School	5317 North Figueroa Street, Los Angeles CA
490	Housing Authority of the City of Los Angeles	Central High School	4873 Marionwood Dr., Culver City, CA
495	CEI Property Management	Hollywood AEWC	1253 North Vine Street #23
496	CEI Property Management	Hollywood CAS	1253 North Vine Street #24
498	Los Angeles Media Tech Center	Transportation Branch	2710 Media Center Drive
499	Second Baptist Church	Jefferson CAS	2419 S. Griffith Avenue, Los Angeles
500	Rakestraw Community Center	Jefferson CAS	5139 S. Main Street, Los Angeles
501	AP Commerce LLC (The Abbey Company)	Local District J	5800 South Eastern Avenue
501	Newcrow	Local District J	5900 South Eastern Avenue, Suite 130
502	Harbor City Boys & Girls Club	Harbor CAS	1220 W. 256th St.
503	Guadalupe Center/Catholic Charities	El Camino Real CAS	21600 Hart Street, Canoga Park
504	JCI Gardens	Gardena CAS	2000 W. 162nd Street, Torrance
505	Pacific Boys Lodge	Serrania ES	4900 Serrania Avenue, Woodland Hills
506	Vermont Square UMC (Never signed)	Central High School - Tri C	4410 S. Budlong, Los Angeles, CA 90037
507	Housing Authority of Los Angeles	Central High School - Tri C	26601 S. Western Ave. #346, Lomita CA 90717
509	Girls Club of LA / Faith Children's Center	Special Education Division (Infant/Preschool Support Services)	2057 W. Century Blvd., Los Angeles, Ca 90047
510	R&L Business Interiors, Inc.	South Gate CAS	13327 E. Garvey Ave., North, Baldwin Park, CA 91706
512	City of Los Angeles - Community Redev. Agency	Pico Union Housing/Early Childhood Dev.	Pico Union
513	A.M.E. Church / Colour Me Freedom	Crenshaw HS	Crenshaw HS
514	Concerned Citizens of So. Central LA	Johnson Opp. School	333 E. 54th Street, Los Angeles, CA 90011
515	Citibank (Cal Fed Bank)	Central High School	2450 Glendale Blvd. Suite A, Los Angeles
516	Safari Enterprises / Royal Plaza Retail Center	Harbor CAS	1001 W. Carson, Units J&K, Torrance
517	Craig B. & Carol P Pursuit	City of Angels High School	8731 La Tijera Blvd., Los Angeles, CA 90045
518	Asian American Drug Abuse Program	CDS - Educational Options	5825 W. Olympic Blvd., Los Angeles, CA 90036
519	Century Quality Management/Sam Menlo Trust	City of Angels High School	15335 Morrison Street, Sherman Oaks, CA 91403
521	Nasser & Zahra Fathi Trust	City of Angels High School	505 West Pacific Coast Hwy, Wilmington, CA
522	CFB Properties	Venice Skills Ctr.	316-318 S. Lincoln Blvd., Venice, CA
523	Flight Facilities, Inc.	Science Materials Center	16518 Arminta Street, Van Nuys
525	Los Angeles Area Chamber of Commerce	Instructional Support Services	350 S. Bixel Street, Los Angeles
526	1241 Soto Plaza Partners (Jamus Enterprises, Inc. and Alphen Corporation)	Roosevelt Bilingual CAS	1241 South Soto Street, Ste 203, Los Angeles

Temp File #	Lessor/Lessee	School	ADDRESS
527	City of Huntington Park	Huntington Park High School	Lighting of Tennis Courts
528	Victory Outreach	Central High School/Tri -C	13580 Osborne Street, Arleta, CA 91331
529	City of Los Angeles	Marquez Charter School	
530	Centinela Youth Services, Inc. (fka Centinela Valley Juvenile Diversion Project)	George Washington Prep HS	
531	City of Los Angeles	Central High School/Tri -C	133 N. Sunol Drive, Los Angeles, CA 90063
532	Campus 1000 Fremont LLC	Local District F	1000 S. Fremont Ave., Alhambra CA
533	Riboli Family Trust	Lincoln High School	2700-2704 North Main Street, LA, CA
534	Korean American Education Foundation	Belmont CAS	680 Wilshire Place, Los Angeles, CA
535	Wilshire Christian Church	Los Angeles CAS	634 S. Normandie Ave., Los Angeles, CA
536	DHS Investment Co. (VIN 170198)	10th Street School	900 Union Ave; 918 Beacon Ave
537	Grace Presbyterian Church	Franklin CAS	1500 North Avenue# 53 Los Angeles, CA 90042
538	Tungs Investment Group c/o Charles Dunn Real Estate (Grace Plaza)	CDS - Educational Options	441 E. Carson Street "K", Carson, CA
539	Odette Peters/ Tri-City Surgery, Inc. Medical Group	Refugee Employment Training Project	828 E. Colorado Street, Glendale, CA
540	Williams Scotsman	Van Nuys CAS	5115 Southern Ave., So. Gate, CA
541	Williams Scotsman	Van Nuys CAS	5115 Southern Ave., So. Gate, CA
542	City of Los Angeles (see lease 435)	Franklin High School	
543	Palmer Third Street Properties	Administrative Offices (333 Beaudry)	1221 West 3rd St , Los Angeles, CA
544	Archdiocese of Los Angeles	Aragon ES (Prj 55.98040)	1230 San Fernando Road, Los Angeles
545	1545 Wilshire, L.P.	Facilities Contract Administration	1545 Wilshrie Blvd. Suite 200 L.A. CA
546	Congregational Church of the Messiah	CDS - Educational Options	7300 West 126th Street,Los Angeles, Ca
547	Unger Fabrik, LLC	M&O Local District E	3225 Lacy Street, LA CA
549	Gardena Academy of Culture	Gardena CAS	15435 S. Western Ave., Gardena, CA
550	M&M Platering Inc.	CDS - Educational Options	5726 Cahuenga, No. Hollywood, CA
551	4201 Wilshire, LLC (Formerly 17F)	District E Modernization	4201 Wilshire Blvd., Los Angeles, CA 90010
551	4201 Wilshire, LLC	Various Groups	4201 Wilshire Blvd., Los Angeles, CA 90010
552	State of California (Pico & 14th) (7-FLA-10-72)	School Police and various	Pico & 14th Street (next to School Police)
553	Geronimo Real Estate Corp., (dba Grand Olympic Auditorium)	Norwood ES (Prj 47.06114)	1801 S. Grand Avenue., Los Angeles, CA
554	Central Parking System	Local District F	1000 S. Fremont Ave., Alhambra CA
555	Shatto (file 7)		
556	I.C.F.G. dba West Adams Foursquare Church	Cienega ES (Prj. 47.02302)	2600 S. La Brea Avenue., Los Angeles, CA 90016
557	Alfonso and Amelia Rodarte as Trustees of Rodarte Trust Dated 3/12/1987	Florence ES (Prj 47.003315)	between Walnut and Whitsett; south of Florence (west of Florence ES)
558	City of Carson	San Miguel ES	City of Carson
559	Metropolitan Transit Authority (parking) (RADL015014) (formerly File 17)	Specially Funded Programs	4201 Wilshire Blvd., Los Angeles, CA 90010
561	L.A. Gay and Lesbian Center	Central High School	1125 McCadden Place, Los Angeles,
562	City of Los Angeles Recreation & Parks	Hughes MS	
563	Jeffrey Foundation	Los Angeles CAS	5443 W. Washingon Blvd., LA CA 90016
564	St. Mary's Church	Los Angeles CAS	916 S. Mariposa Ave., LA CA
565	Parking Concepts, Inc.	Hamilton HS (Prj 55.98016)	3000 S. Robertson, LA CA
566	Door of Hope	Central High School	1414 S. Atlantic Blvd. LA, CA 90022
566	Children's Collective, Inc., The	Hillcrest Drive School	4041Hillcrest Drive, LA, CA
567	Bureau of Sanitation	Loca District G	6000 W. Jefferson Blvd., LA, CA
568	(in progress)	Local District I	Western Avenue
569	Tresierras Property Investments	Pacoima ES (Prj 47.06315)	12911 Van Nuys Blvd., Pacoima CA 91331
571	West Side Jewish Community Center	Emergency Immigrant Education Program	5870 West Olympic Blvd., Los Angeles, CA 90005
572	California Credit Union	Rosemont Ave. School	northwest corner of Rosenell Terrace and Temple Streets
574	Holy Nativity Church	Central High School	6700 W. 83rd St., Los Angeles, CA 90033
575	Sojourner Truth Club	Central High School	1803 Crenshaw Blvd., LA, CA 90019
576	Child Care Resource Center Head Start	Infant and Preschool Programs	Woodman Head Start; 5944 Woodman Ave.; Van Nuys, CA 91401
577	Kedren Community Health Center	Infant and Preschool Programs	Cypress I Head Start, 1145 Cypress Ave., Los Angeles, CA 90065
578	St. Columbkille School	Fremont CAS	145 W. 64th Street, Los Angeles, CA 90003
579	Community Redevelopment Agency (CRA)	CDS - Educational Options	947 W. 85th Street, Los Angeles, CA
580	California Credit Union	Rosemont Ave. School (Prj 47.06813)	northwest corner of Rosenell Terrace and Temple Streets
581	Highland Park Church of the Nazarene	Franklin CAS	6544 N. Figueroa Street, LA CA 90042
582	Hollypark United Methodist Church	Gardena Carson CAS	13000 Van Ness Ave., Gardena CA
583	Nueva Maravilla	Central High School	
584	Annette Bravos	M Lamotte	5351 West Adams Blvd. L.A. CA
585	1545 Wilshire, L.P.	City of Angels High School	1545 Wilshrie Blvd. Suite 511 L.A. CA
586	Heart of the Valley Community Church	Reseda CAS	18644 Sherman Way, Reseda, CA
587	William Webster	Abram Friedman ROC/RETP	2490 N. Lake Ave., Altadena, CA 91001

Critical Assets

The LAUSD Hazard Mitigation Planning Task Force agreed to the definition of a Critical Facility as one that has a potential for high loss of life and high financial loss and one that, if damaged or lost, would cause a disruption of the district's primary mission or its ability to provide vital services in the event of an emergency.

The Los Angeles Chapter of the American Red Cross and Los Angeles Unified School District have entered into an official agreement where the District agrees that, after meeting its responsibilities to its students and staff, it will permit, to the extent of its ability and upon request by the Red Cross, the use of its physical facilities by the Red Cross as mass care shelters for disaster victims. In view of this agreement, and based on the above definition, ***all District-owned assets have been designated as critical***.

STATEMENT OF AGREEMENT

This agreement is made and entered into between the governing board of the Los Angeles Unified School District of the state of California, hereafter called the "district" and the Los Angeles Chapter of the American Red Cross, hereafter called the "Red Cross".

RECITALS

Pursuant to the terms of federal statutes, the Red Cross provides emergency services in behalf of individuals and families who are victims of disaster. J. Michael DeLuca, Deputy Director of Real Estate and Asset Management is authorized to permit the Red Cross to use the buildings, grounds, and equipment of the District for mass care shelters which may be required in the conduct of Red Cross Disaster Services activities, and wishes to cooperate with the Red Cross for such purposes.

The parties hereto mutually desire to reach an understanding that will result in making the aforesaid facilities of the District available to the Red Cross for the aforesaid use. Now, therefore, it is mutually agreed between the parties as follows:

1. The District agrees that, after meeting its responsibilities to its students and staff, it will permit, to the extent of its ability and upon request by the Red Cross, the use of its physical facilities by the Red Cross as mass care shelters for disaster victims.

2. The Red Cross agrees that it shall exercise reasonable care in the conduct of its activities in such facilities and further agrees to replace or reimburse the District for any supplies or services that may be offered to and used by the Red Cross in the conduct of its relief activities in said mass care shelters.

3. Not withstanding any other agreements, the Los Angeles Chapter of the American National Red Cross agrees to defend, hold harmless, and indemnify the District against any legal liability in respect to bodily injury, death, and property damage, arising from the negligence of the said chapter during its use of the property belonging to the said District.

In witness thereof, the governing board of the District has caused this agreement to be executed by the Deputy Director of Real Estate and Asset Management, and the Red Cross has caused this agreement to be executed by the Chapter Financial Officer of the Los Angeles Chapter, said agreement to become effective and operative upon the fixing of the last signature hereto.

SIGNATURES TO THE AGREEMENT

Nancy Kindelan	7/17/96	J. Michael DeLuca	7/21/96
Date		Date	
Chapter Financial Officer Los Angeles Chapter American Red Cross		Deputy Director of Real Estate and Asset Management Los Angeles Unified School District	

Assets Not Owned but Considered Critical

The following leased facilities have been designated as Critical:

Item	Lessor / Lessee	School	Address
3	Maguire/Thomas Partners	Admin Offices	355 S. Grand Ave – Los Angeles
7	Adams Shatto Building	Admin Offices	1543 Shatto St – Los Angeles
8	1330 Pico Associates	School Police Dept	1330 W Pico Blvd – Los Angeles
10	Northridge Business Cntr LLC	Local District A	8550 Balboa Blvd – Northridge
11	AG/Touchstone Daley, Inc.	Local District B	5200 Lankershim Blvd – Hollywood
12	Ampco Parking	Local District B	5200 Lankershim Blvd – Hollywood
13	Quality Parking	Human Resources	5230 Lankershim Blvs – Hollywood
15	Atrium Porperties	Local District D	3000 S Robertson – Los Angeles
17	4201 Wilshore, LLC	Local District E, Special Ed	4201 Wilshire Blvs – Los Angeles
18	Meagher & Maleki Receivership	Local District G	3710 S LaBrea Ave – Los Angeles
19	Baldwin Hills Investors	Local District G	3741 S LaBrea Ave – Los Angeles
20	Ampco Parking	Local District I	611 W 6th St G-1 – Los Angeles
21	Verizon	Local District H	1115 S Boyle Ave – Los Angeles
43	State of Calif DOT	Transportation Branch	1640 S San Pedro – Los Angeles
44	RBE Roscoe-Woodley	Transportation Branch	16200 Roscoe Blvd – Van Nuys
45	State of Calif DOT	Admin Offices-Integration	1621 S Hooper St
46	Pride Properties	Admin Offices-Integration	6901 S Alameda St – Huntington Park
139	Community Television of Calif	Channel 58 Antenna Station	Top of Mt Wilson
140	LA Community College	South Gate High School	1111 Figueroa Plaza – Wilmington
146	City of LA Dept of Airports	N Valley Occupational Cntr	16550 Saticoy St – Van Nuys
162	LA Community College	Middle College High School	1600 Imperial Hwy – Los Angeles
483	333 S Beaudry (B of A)	LAUSD Headquarters	333 S Beaudry – Los Angeles
498	LA Media Tech Center	Transportation Branch	2710 Media Center Dr
501	AP Commerce LLC	Local District J	5800 S. Eastern Ave – Los Angeles
532	Campus 1000 Fremont LLC	Local District F	1000 S Fremont Ave – Alhambra
545	1545 Wilshire LP	Facilities Contract Admin	1545 Wilshire Blvd – Los Angeles
547	Unger Fabrik, LLC	M&O Local District E	3225 Lacy St – Los Angeles
551	4201 Wilshire	Dist E & Various Groups	4201 Wilshire Blvd – Los Angeles
552	State of California	School Police & various	Pico & 14th St – Los Angeles
554	Central Parking System	Local District F	1000 S Fremont Ave - Alhambra

Strategic Execution Plan for Existing Facilities

This Existing Facilities program is an aggressive, multi-project, multibillion dollar program to modernize existing school facilities, with the aim of providing the best possible environments for critical student learning and development needs throughout the District. These repair and upgrade projects address the changing instruction needs in K-12 as well as the deteriorated classroom conditions that resulted from postponed maintenance. This program requires the District to prioritize the target areas of need, design and develop plans, and contract for the required work at the LAUSD schools as quickly as possible.

In addition, Ballot Measure K was approved by the voters on November 5, 2002 providing a continuation of the upgrade process as well as addressing specific needs in the areas of Early Childhood Development, Special Education, Information Technology Repairs, and Lead and Asbestos Abatement.

While this represents significant progress toward providing modern learning environments throughout each of the eleven local districts, it is anticipated that additional such repair and upgrade bond measures will be required to address all of the current requirements.

Intent

This Bond Projects Strategic Execution Plan is intended to provide the reader with a simple and clear plan for the repair and modernization of existing facilities to achieve the best possible environment for student growth. This Strategic Execution Plan update is conceived and written as a useful tool for many different audiences:

…for the Public and our Students; to show you the modernization projects planned for the schools in your neighborhood, the sources of the funds that will be used to build these projects, and the ways you can participate in the various stages of the program;

…for the Board and Bond Oversight Committee; to identify, in detail, a developed plan and strategy for repair and modernize projects to existing schools;

…for the Construction Community; to show you the opportunities which lie ahead and the steps we have taken to demonstrate our commitment as a good business partner;

…for the Local School Districts and Teachers; to identify when and where building enhancements will effect schools and classrooms so that cooperative planning can commence at the earliest date possible;

…for Existing Facilities Staff; to update our plan for the modernization and repair projects at various locations and to establish the metrics by which we will manage the program.

It is our hope that this document provides a common understanding of the existing facilities modernization program, and our roles and responsibilities as program participants. Success of a program this size will be greatly enhanced by a common vision which will focus each of our individual contributions towards a common goal.

Executive Summary

Statement of Intent

This Bond Projects Strategic Execution Plan outlines the Design and Construction Management effort that will be used to coordinate the upgrade of existing facilities in eleven Local School Districts.

This plan describes the scope, schedule and costs at the Program and Project levels. It also outlines the management structure and coordination requirements necessary to carry out this plan with the Local School Districts as well as the accountability measures and procedures that are used to administer the program and ensure success.

Mission

Our mission is to modernize and/or repair LAUSD school facilities with quality materials and workmanship, on schedule and within budget, so that LAUSD schools can provide an effective educational environment for the development and training of our students.

Vision

Our vision is to build and maintain schools that promote the full development of the child, are educationally and environmentally sound, enhance their neighborhoods through design and programming as centers of community, and reflect the wise and efficient use of limited land and public resources.

Guiding Principles

Maximize the capabilities of our existing facilities through ***centrally coordinated*** and ***locally executed*** design and construction management efforts in full complement to our new facilities planning program.

Utilize the best practices in engineering design, project management, and the unique Local School District capabilities to establish a first-class Facility Management Program.

Fundamental concepts for the foundation of the Bond Projects Strategic Execution Plan:

- Accountability at the Program and Project levels includes periodic Local District program reviews
- Comprehensive and Coordinated Management Plan
- Timely, accurate dissemination of program information supports and enhances coordinated management minimizes disruptions in the school environment
- Maintain or Develop Good Relationships with contractors, suppliers, other city and state agencies and community stake holders (administrators, teachers and students)
- Provide Comprehensive Program Reports for the Board of Education and Bond Oversight Committee for their guidance and oversight
- Program guided by Defined and Measurable Results
- An integrated Quality Assurance and Quality Control Program supporting the scheduled completion dates at all critical levels

- Continuous Improvement by learning from our experiences in cost efficiencies and expeditious project execution

Design Principles

Sustainable Design, Greening, and Joint Use objectives will be incorporated to the extent possible, within the identified scopes and budgets:

- Design for the long term and consider life cycle costs
- Minimize maintenance and focus on energy efficiencies
- Maximize use of natural ventilation
- Use laminated glass on windows and glass doors that face noisy streets
- Specify affordable, durable, sustainable materials and equipment
- Use reflective or light colored roofing materials
- Use reduced water consumption fixtures
- Incorporate designs that make schools accessible on evenings and weekends and promote lifelong learning as a community value
- Design in such a way that the private areas of the school can be secured while the library, multipurpose room, playgrounds and sports fields are open to the community in the evenings and on weekends
- The design aesthetic shall respect the neighborhood context and will be done through partnership with local governments, business and community groups
- Find shared use opportunities. Utilize adjacent sites with libraries, auditoriums, playfields, etc.
- Design with special needs students in mind. Diminish potential hazards with obstacles to children with disabilities
- Maintain a balance between hardscape and useable green space for outdoor play areas and teaching areas
- Creatively design the playground surface. Incorporate different shapes, colors, and designs to add visual interest
- Specify hardy grass to withstand constant use
- Maximize use of daylight and provide an even level of illumination throughout the classroom
- Provide sound-insulating windows when appropriate
- Optimize natural ventilation along with effective energy efficient HVAC systems that consider noise levels conducive to student learning
- Specify greater sound insulation inside common walls with back-to-back whiteboards

- Utilize the whole classroom environment to maximize display space, tackable surfaces, and storage
- Provide storage for backpacks, books, coats, etc.
- Maximize multi-use equipment opportunities. Whiteboards can double as projection screens

Organizational Structure

The Los Angeles Unified School District Board of Education is ultimately responsible to the public for the Existing Facilities Modernization Program. This seven-member panel of elected individuals establishes District policy and gives approval of various aspects of the administration of the Modernization Program.

The Board has established a Bond Oversight Committee (BOC) who provides an independent review of the use of Proposition BB and Measure K Funds. The Bond Oversight Committee is entitled to access all information concerning the projects not subject to legal privilege, and has the responsibility to report on any expenditures of the funds in a manner illegal, imprudent or in a manner not consistent with the adopted Strategic Execution Plan. The Bond Oversight Committee also has the opportunity to review and recommend for or against projects prior to action on the project by the Board of Education.

The Board has selected Superintendent of Schools, Roy Romer, to lead the day-to-day operations of the District. Superintendent Romer has the immediate responsibility of executing Board policy and directing all District operations.

Facilities Division

Reporting to Superintendent Romer is the head of the Facilities Division, Chief Facilities Executive, James McConnell. Mr. McConnell is a registered professional engineer charged with leading the 2000 person Facilities Division. Under his leadership, the Division has undergone a major transformation in the last year preparing to execute the large construction and modernization program. Key to this transformation has been hiring experienced facilities professionals.

Under the Chief Facilities Executive, there are two operational departments which are charged with accomplishing all facilities related work. Both Deputies, Jim Delker and Joseph Mehula, are registered professional engineers.

1. Existing Facilities is responsible for the maintenance and operation of all existing schools as well as the completion of all modernization projects designed to upgrade the schools.
2. New Construction is responsible for the construction projects that will build new classroom seats throughout the District.

A separate Strategic Execution plan is developed and updated annually by both of these groups. The remainder of this plan will deal with the Existing Facilities program.

Challenges for Existing Facilities

The LAUSD Modernization program is one of the largest of its type in the country, and with its size, certain risks and challenges are inherent. The Existing Facilities team has undertaken efforts to identify and mitigate these threats to program success. At this time, we are carefully monitoring the following areas:

Construction Labor Pool. The District's aggressive modernization schedule may challenge the capacity of the regional construction community. We have started an outreach program to attract additional contractors. We are closely tracking the number and quality of bids received to detect any indication of a saturation of the market. Use of alternative contracting methods such as design-build may be used to attract more contractors.

Other Local Construction. There have been a number of recent bonds and construction programs in the Los Angeles region, which may impact the District's ability to meet project schedules and budgets. Other local entities that vie for the same scarce resources include:

- City of Los Angeles: estimated at $2 billion construction program
- University of California: estimated at $1.5 billion development program
- Metropolitan Transportation Authority: estimated at $1.6 billion new transportation projects
- Orange County transit: estimated at $2.5 billion capital development program

Asbestos Abatement Program

Measure K provided funding for asbestos and lead abatement. Funds will be utilized to abate asbestos-containing pipe insulation and contamination of attics and crawl spaces found in buildings throughout the District. Many Existing Facilities construction projects are impacted by asbestos in attics and crawl spaces. Where a construction project requires the disturbance of asbestos containing materials, the project construction budget will fund a prorated amount of the abatement and the Measure K funds will provide funding to complete the abatement of the entire attic and/or crawl space to make available a safe location for the contractors to enter to perform work and greatly reduce the risk for potential exposure of students and faculty to asbestos.

An Asbestos Abatement Program has been prepared to address the abatement needs and the estimated costs for each building involved. The Local District Facilities Directors (LDFD) provided input to establish a priority listing of buildings that require abatement. Several options were reviewed in determining how funds would be apportioned for abatement of buildings in each Local District. It was determined the most equitable approach was to apportion funding according to a percentage based on student population.

The scope of work represented by the abatement cost estimate includes the decontamination of the attic and/or crawl space, and the encapsulation of all surfaces within the work space or the repair of the asbestos containing materials (ACM) including cleaning minor debris that has resulted from damage to the ACM as required. When ACM damage is 3 percent or less and construction work does not directly impact the ACM repair, clean up may be performed by means that will significantly lower costs to allow the contractor safe access to these areas.

When ACM damage exceeds 3 percent or is distributed throughout an attic or crawl space or the ACM will be directly impacted by construction it is more cost effective to completely remove the material and decontaminate the attic or crawl space. Repairs using this criteria will significantly reduce the cost of abatement and allow for more projects to be performed within the limits of the available Measure K funding.

The Asbestos Technical Unit (ATU) will be responsible for approving abatement of buildings and verifying these are on the local district's priority list and ensuring funding is available for each abatement project. Before each project is initiated, the ATU will verify with the LDFD that the abatement is still a priority as previously identified. If not, the LDFD will re-prioritize the projects requiring abatement. This will ensure Measure K funding is being utilized to the greatest benefit in support of the construction program for each local district.

Seismic Safety

A great portion of the work being done on District School Facilities is as a result of the following report and its findings. A very large school district like Los Angeles Unified will be attempting to meet Seismic Safety Standards for a long period of time. Funding constraints and staffing limitations are a source of delay, as well as constantly-changing combination of research results and standards.

Seismic Safety Inventory of California Schools (A Report to the Governor of California and the California State Legislature) (11-15-2002) - EXCERPTS

Executive Summary

Public school buildings in California are the safest in the nation. They exceed the seismic standards required for most other buildings and have proven to provide a level of protection that assures the safety of California's public school children. Since the passage of the Field Act in 1933, no school has collapsed due to a seismic event, and there has been no loss of life. Nonetheless, the need to constantly examine conditions, in light of a better understanding of building performance, is necessary to maintain the high standard that is historic in California.

This report conforms to the requirements of Assembly Bill (AB) 300 (Corbett, Chapter 622, Statutes of 1999) which requires the California Department of General Services (DGS) to conduct an inventory of public school buildings (Kindergarten through grade 12, inclusive) that are of concrete tilt-up construction and those with non-wood frame walls that do not meet the minimum requirements of the 1976 *Uniform Building Code* (UBC). Substantial improvements in the seismic design of buildings were incorporated into the 1976 UBC and were adopted for the design and construction of public schools on July 1, 1978.

The DGS, through the Division of the State Architect (DSA), developed a seismic-safety inventory methodology to evaluate the buildings in a meaningful way without conducting costly field investigations. The screening process adopted by DSA eliminated all but approximately 16,000 school building construction projects that were then evaluated using a construction documents review process to identify the lateral-force-resisting systems of these buildings.

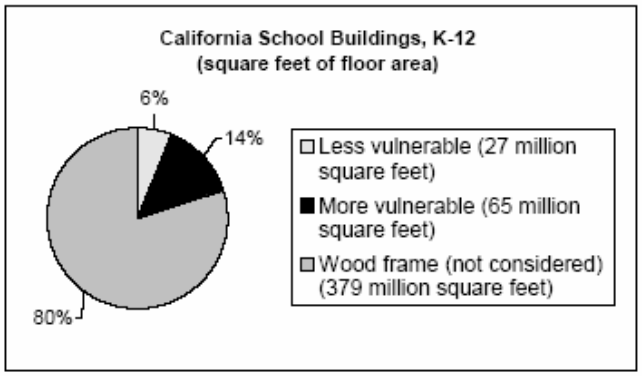
Throughout the development of this report, DSA consulted with the Seismic Safety Commission (SSC). In addition to coordinating the results and recommendations in this report, the SSC provided information on other inventory reports, the history of seismic safety legislation and regulations in California.

The resulting inventory of non-wood frame California public schools designed and built before July 1, 1978, contained 9,659 buildings (92 million square feet), which were then classified in one of the following seismic vulnerability categories:

Category 1: those building types that are likely to perform well, and are expected (but not guaranteed) to achieve life-safety performance in future earthquakes (2,122 buildings, 27 million square feet); and

Category 2: those building types that are not expected to perform as well in future earthquakes as Category 1 building types and that require detailed seismic evaluation to determine if they can be expected to achieve life-safety performance (7,537 buildings, 65 million square feet).

Category 2 buildings represent 14 percent of the current total square footage of California public schools, including wood frame buildings (see diagram below).



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The report presents the results of the inventory of non-wood frame public school buildings by number, structural system vulnerability, structure type, square footage, distance from a fault, seismic forces on the building, and estimated costs for rehabilitation. The most vulnerable of Category 2 buildings represent a total cost of $800 million for seismic upgrade. This inventory demonstrates that the cost for seismic rehabilitation of all Category 2 buildings should not exceed an estimated $4.7 billion for work directly associated with the structural strengthening alone. Costs for improvements to the architectural, mechanical, electrical, plumbing or other systems of the building; damage repair costs; hazardous material costs; disabled access improvements; and fire and life safety upgrading and relocation of students may double or triple the costs for implementation of a seismic rehabilitation program.

It must be emphasized that costs at this stage are very preliminary. They are not based on site visits or detailed analysis of individual buildings and also do not take into consideration any recent alterations made through bond measures. Chapter 4 of this report provides a more thorough description of the algorithm used to assess costs at this early stage and its benefit in quantifying the extent of the problem faced.

Typical rehabilitation programs rank buildings according to the level of life-safety risk to the occupants. Buildings that pose the greatest risk are scheduled for rehabilitation first. Table A provides the number of buildings relative to distance from an active fault and the approximate cost to rehabilitate. Each building will require further evaluation to determine its specific seismic strength and extent of rehabilitation to meet the desired performance objective. Table A provides estimated costs for rehabilitation to a "Damage Control" performance objective, which is equivalent to the performance objective for new public school construction.

A program that provides for evaluation, ranking and rehabilitation of those buildings most vulnerable and nearest to active faults is recommended. The costs for a comprehensive rehabilitation program can, therefore, be distributed over several years. Bond financing of public school construction has in part contributed to seismic upgrade of California's public schools. The passage on November 5, 2002, of Proposition 47, a 13 billion dollar measure for school construction, will provide much needed funds for continuing to make California schools the safest in the nation.

A number of school districts throughout California have independently undertaken reviews of the seismic condition of their facilities built prior 1978 and of these some have implemented seismic retrofit programs. Among these are Fremont, San Mateo, Santa Clara, Beverly Hills, Charter Oaks, Glendale and Newport Mesa. Some of the buildings identified in this inventory may be included in current work underway or recently completed. The State Architect and the Department of General Services have always and will continue to work in partnership with local school districts to assure the protection of California's children.

Table A Number of School Buildings and Total Estimated Costs for Seismic Evaluation and Rehabilitation for Category 2* Buildings for "Damage Control" Performance Objective. (Seismic Safety Inventory of California Public Schools)**

Seismic Vulnerability Category 2	*Less than 2 km from Active Fault*	*Between 2 and 5 km from Active Fault*	*Between 5 and 10 km from Active Fault*	*More than 10 km from Active Fault*	*Total All Buildings*
Number of Buildings	1,229	1,602	1,896	2,810	7,537
Cost in Millions	$808	$1,051	$1,204	$1,636	$4,699

*Category 2: Cost includes evaluations, structural rehabilitation, removal and replacement of finishes, project design and administrative costs, and contingencies.
**Non-wood-frame schools designed before July 1, 1978.

STRUCTURAL SYSTEMS
S1 Steel Moment Frame With Rigid Diaphragm
S1A Steel Moment Frame With Flexible Diaphragm
S2 Steel Braced Frame With Rigid Diaphragm
S2A Steel Braced Frame With Flexible Diaphragm
S3 Steel Light Frame Metal siding and/or Rod Bracing
S4 Steel Frames with Concrete Shear walls and diaphragms
S5 Steel Frames w/ Infill Masonry Shear Wall/Conc Diaphragms
S5A Steel Frame w/ Infill Masonry Shear Wall/Wood Diaphragms
C1 Concrete Moment Frame
C2 Concrete Shear Wall Rigid Diaphragm
C2A Concrete Shear Wall Flexible Diaphragm
C3 Conc. Frame w/ Infill Masonry Shear Walls/Conc. Diaphragm
C3A Conc. Frame w/ Infill Masonry Shear Walls/Flex. Diaphragm
PC1 Precast/Tilt-up Concrete Shear Wall with Conc. Diaphragm
PC1A Precast/Tilt-up Conc. Shear Wall with Flex. Diaphragm
PC2 Precast Conc. Frame Conc. Shear Walls/Rigid Diaphragm
PC2A Precast Conc Frame No Conc. Shear Walls - RigidDiaphragm
RM1 Reinforced Masonry Bearing Wall - Flexible Diaphragms
RM2 Reinf Masonry Bearing Wall - Stiff Diaphragms
URM Unreinforced Masonry Wood Diaphragms
URMA Unreinforced Masonry Rigid Diaphragms
M Mixed –indicate systems here

Remarks:

FILE NUMBER	
APPL. NUMBER	
Firm	Initials

Wood Frame Buildings Questions:
Does this appl. have only wood buildings? **Yes**___ **No**___
Number of Wood Bldgs. on this **Application** ____
No. of Stories ____
If any building is 2 stories or more, provide rough approximate of the sq. ft. per floor in remarks section.
This box must be completed even if there are no wood buildings.

Does this application appear to be for an entire campus?
Yes___ **No**___
This box must be completed for all projects

ZONE 3	ZONE 4	AP ZONE	10Km	5Km	2Km
These	**boxes**	**will be**	**filled**	**by**	**CDMG**

Fill in the box below only for non-wood frame buildings

Bldg. No. →	1	2	3	4	5	6
Struct. Sys. →						
No. of Stories						
Classroom						
Multipurpose						
Library						
Auditor/theater						
Administration						
Shop						
Science						
Gym						
Cafeteria						
Greenhouse						
Equip./storage						
Lunch Shelter						
Canopies						
Other						
Sq. Ft. → Combine the Sq. Ft. for all floors and enter. In remarks describe setbacks if any.						

Figure 1. Data Collection Form used in California public school seismic-safety inventory.

Table 1. Building Classification System for Seismic-Safety Inventory of California Public Schools

Alpha-Numeric Reference Code	Brief Description
C1	Concrete moment frames
C1B	Reinforced concrete cantilever columns with wood roofs
C2	Concrete shear wall with rigid floor and roof diaphragms
C2A	Concrete shear wall with flexible floor and roof diaphragms
C3	Concrete frame with infill masonry shear walls and concrete floor and roof diaphragms
C3A	Concrete frame with infill masonry shear walls and flexible floor and roof diaphragms
M	Mixed construction containing a combination of two or more of the other structure types defined in this table
PC1	Precast tilt-up concrete shear wall with concrete floor and roof diaphragms
PC1A	Precast tilt-up concrete shear wall with flexible floor and roof diaphragms
PC2	Precast concrete frame with concrete shear walls and rigid floor and roof diaphragms
PC2A	Precast concrete frame without concrete shear walls and with rigid floor and roof diaphragms
RM1	Reinforced masonry bearing wall with flexible floor and roof diaphragms
RM2	Reinforced masonry bearing wall with stiff floor and roof diaphragms
S1	Steel moment frame with rigid floor and roof diaphragms
S1A	Steel moment frame with flexible floor and roof diaphragms
S1B	Steel cantilever columns with wood roofs
S2	Steel braced frame with rigid floor and roof diaphragms
S2A	Steel braced frame with flexible floor and roof diaphragms
S3	Steel light frame with metal siding and/or rod bracing
S4	Steel frames with concrete shear walls
S5	Steel frames with infill masonry shear walls and concrete floor and roof diaphragms
S5A	Steel frame with infill masonry shear walls and wood floor and roof diaphragms
URM	Unreinforced masonry bearing wall with flexible floor and roof diaphragms
URMA	Unreinforced masonry bearing wall with rigid floor and roof diaphragms

Chapter 3. INVENTORY RESULTS

3.1 Building Seismic Vulnerability Categories

As the initial step in analyzing and interpreting the results from the seismic-safety inventory of California public schools, the Project Advisory Panel reviewed the list of building types included in the inventory (Table 1) and divided them into two seismic vulnerability categories:

Category 1: those building types that are likely to perform well[2], based on their performance in prior earthquakes, and are expected to achieve life-safety performance in future earthquakes; and

Category 2: those building types that are not expected to perform as well as Category 1 building types in future earthquakes and that require detailed seismic evaluation to determine if they can be expected to achieve life-safety performance when subjected to earthquake ground motions equivalent to those specified for new design in the 1997 UBC.

If, after detailed seismic evaluation, it is determined that a Category 2 building will not achieve life-safety performance when subjected to the specified ground motions, several risk reduction options are available, including (1) seismically rehabilitating the building to meet DSA's life-safety requirements, (2) a change in use, or (3) demolition.

Table 2 contains a listing of the building types in each seismic vulnerability category.

Table 2. Building Types by Seismic Vulnerability Category*
(Seismic-Safety Inventory of California Public Schools)**

Category 1: Building Types Expected to Perform Well in Future Earthquakes	Category 2: Building Types Requiring Detailed Seismic Evaluation
	C1, C1B, C2A, C3A,
C2, C3	M
S1, S1A, S2, S2A, S4, S5, S5A	S1B, S3
RM2	PC1, PC1A, PC2, PC2A
	RM1, URM, URMA

*Excludes consideration of the seismic performance of nonstructural components.
**Non-wood-frame schools designed before July 1, 1978.

3.2 Summary and Interpretation of Inventory Data

Because the seismic-safety inventory data are archived in a relational database, it is possible to summarize the data in a wide variety of ways. Table 3 provides a summary of the number of school buildings by building type, vulnerability category, and square footage. Based on this table, 78 percent of the buildings, and 71 percent of the square footage, are building types in

[2] Performance in future earthquakes is estimated, not guaranteed, and not to be construed to be a warrant.

Category 2, which require detailed seismic evaluation to determine if they can achieve life-safety performance when subjected to the specified ground motions.

Table 3. Distribution of Building Types by Seismic Vulnerability Category*, Number of Buildings, and Square Footage (School Seismic-Safety Inventory of California Public Schools)**

Building Type	Number of Buildings	Total Square Footage
Category 1: Building Types Expected Perform Well in Future Earthquakes		
C2	452	8,851,000
C3	20	236,000
S1	57	1,179,000
S1A	685	5,332,000
S2	34	1,180,000
S2A	294	2,347,000
S4	2	65,000
S5	3	25,000
S5A	15	114,000
RM2	560	7,154,000
Total Category 1:	2,122	26,483,000
Category 2: Building Types Requiring Detailed Seismic Evaluation		
C1	189	3,304,000
C1B	216	1,486,000
C2A	760	8,695,000
C3A	11	61,000
M	361	3,941,000
S1B	450	2,436,000
S3	181	932,000
PC1	234	3,442,000
PC1A	1,077	10,766,000
PC2	60	583,000
PC2A	18	115,000
RM1	3,980	28,716,000
Total Category 2:	7,537	64,477,000
Total Inventory	9,659	90,960,000

*Excludes consideration of the seismic performance of nonstructural components.
**Non-wood-frame schools designed before July 1, 1978.

Twenty-two percent of the buildings, and 29 percent of the square footage, are building types in Category 1, which are expected to perform well in future earthquakes. Fifty-three percent of Category 2 buildings are of the RM1 type, reinforced masonry bearing wall buildings with flexible floor and roof diaphragms. For buildings constructed between 1933 and 1978, diaphragms were generally wood and therefore flexible. Other prevalent types in Category 2 include PC1A, precast tilt-up concrete shear wall buildings with flexible floor and roof diaphragms (14 percent), and C2A, concrete shear wall buildings with flexible floor and roof diaphragms (10 percent).

Figure 2. Map of California showing Title 24 Seismic zones.

A summary of California public schools in Seismic Zone 3 and Zone 4 (Figure 2), as specified by the 1997 UBC, is provided in Table 4. Zone 4 specifies the region of highest expected ground shaking. Zone 3 ground motions are expected to be less severe than Zone 4, and the equivalent static force level for design is 3/4 of that for Zone 4. Within Zone 4, which contains 79 percent of the school buildings in the seismic-safety inventory, there are 1,596 public school buildings in seismic vulnerability Category 1 and 6,061 public school buildings in seismic vulnerability Category 2. In Zone 3, which contains 21 percent of the school buildings in the seismic-safety inventory, there are 526 public school buildings in seismic vulnerability Category 1 and 1,476 public school buildings in seismic vulnerability Category 2.

Of the 9,659 public school buildings in the seismic-safety inventory, 1,569 school buildings are located within two km of an active fault, 2,004 school buildings are located between two km and five km of an active fault, 2,417 school buildings are located between five km and 10 km of an active fault, and 3,669 buildings are located more than 10 km from an active fault (Table 5). The distribution of school buildings within areas having various ranges of expected seismic shaking (with a 10 percent chance of being exceeded in 50 years) is shown in Table 6.

Table 4. Number of Buildings, and Square Footage by Seismic Vulnerability Category* and Seismic Zone (Seismic-Safety Inventory of California Public Schools)**

Seismic Vulnerability Category	Seismic Zone 3	Seismic Zone 4
Number of Buildings		
Category 1	526	1596
Category 2	1476	6061
Total Buildings	2002	7657
Total Square Footage		
Category 1	4,177,000	22,306,000
Category 2	11,523,000	52,954,000
Total Square Footage	15,700,000	75,260,000

*Category 1: Buildings Expected to Perform Well in Future Earthquakes
Category 2: Buildings Requiring Detailed Seismic Evaluation
Excludes consideration of the seismic performance of nonstructural components.
**Non-wood-frame schools designed before July 1, 1978.

Table 5. Number of Schools Within 2, 5, 10 and More Than 10 Km of an Active Fault, by Seismic Vulnerability Category*
(Seismic-Safety Inventory of California Public Schools)**

Seismic Vulnerability Category**	Within 2 km of Active Fault	2 km to 5 km from an Active Fault	5 km to 10 km from an Active Fault	More than 10 km from an Active Fault
Number of Buildings				
Category 1	340	402	521	859
Category 2	1,229	1,602	1,896	2,810
Total Buildings	1,569	2,004	2,417	3,669

*Category 1: Buildings Expected to Perform Well in Future Earthquakes
Category 2: Buildings Requiring Detailed Seismic Evaluation
Excludes consideration of the seismic performance of nonstructural components.
**Non-wood-frame schools designed before July 1, 1978.

Table 6. Number of Schools in Areas With Specified Levels of Expected Ground Shaking, by Seismic Vulnerability Category*
(Seismic-Safety Inventory of California Public Schools)**

Seismic Vulnerability Category**	Horizontal Acceleration Response of Buildings with Short Periods of Vibration (With 10% Chance of Being Exceeded in 50 Years)			
	Less Than 0.6 *g*	0.6 *g* to less than 1.0 *g*	1.0 *g* to less than 1.4 *g*	1.4 *g* or more
Number of Buildings				
Category 1	557	182	793	590
Category 2	1,645	917	2,993	1,982
Total Buildings	2,202	1,099	3,786	2,572

*Category 1: Buildings Expected to Perform Well in Future Earthquakes
Category 2: Buildings Requiring Detailed Seismic Evaluation
Excludes consideration of the seismic performance of nonstructural components.
**Non-wood-frame schools designed before July 1, 1978.

Chapter 4. MITIGATION STRATEGIES

School buildings in seismic vulnerability Category 1 are likely to perform well, based upon their performance in prior earthquakes, and are expected to achieve life-safety performance in future earthquakes. Category 1 buildings, however, need to be evaluated to determine if their nonstructural components will achieve life-safety performance in future earthquakes.

School buildings in seismic vulnerability Category 2, as defined in Chapter 3, require detailed seismic evaluation to determine if they can be expected to achieve life-safety performance when subjected to earthquake ground motions equivalent to those specified for new design in the 1997 UBC. If after detailed seismic evaluation it is determined that a Category 2 building, including its nonstructural components, will not achieve life-safety performance when subjected to the specified ground motions, the building should be seismically rehabilitated to meet life-safety requirements for the specified ground motions. Other options include a change in use to one where life-safety is not an issue, change in ownership to another party, or demolition.

Typical Seismic Deficiencies. Seismic deficiencies can be related to the overall configuration of the building or to the specific type of construction. An example of a deficiency related to configuration would be an "open front" condition in which a large percentage of windows or doors create a weak line along one or more walls of the building. It is termed "open front" because it usually occurs along the front elevation of a building, where doors and windows are most desirable. The side and rear elevations of most buildings are often essentially solid by comparison. An open front condition causes a weakness in one portion of the building that can concentrate damage along the weak line. It also causes the building to respond to the earthquake with a significant twisting motion (torsion) that can cause damage elsewhere in the building.

Deficiencies related to the type of construction are specific to the material and structural system used in the building. They are the result of past practices used in the construction of certain classes of structures that have proven to be vulnerable to damage in earthquakes. A prominent example of a deficiency related to construction occurs in older concrete buildings that have too few reinforcing steel bars in their concrete columns and beams. As a result, brittle concrete easily cracks and can become unstable and collapse during earthquakes.

Rehabilitation Strategies. Correction of deficiencies varies with the nature of the deficiency. Rehabilitation strategies can consist of adding overall strength and stiffness to a structure, localized addition of strength and stiffness to a specific weak location in a structure, or correction of construction-related deficiencies to prevent premature failure of connections.

Deficiencies related to configuration can be corrected by installing new lateral force resisting elements to supplement the weakness or softness in a structure. In an open front condition, for example, the installation of a new shear wall or braced frame along the weak line would prevent damage along that line, and prevent the twisting response of the building that can cause damage elsewhere.

Material or construction related deficiencies can be corrected in a variety of ways, either by locally strengthening weak connections, or by globally strengthening the structure to reduce the demands on the connections. For example, new steel "jackets" can be added to older concrete columns to keep them from collapsing.

Table 10. Total Seismic Rehabilitation Estimated Costs for Category* 2 Buildings in Seismic Zone 4 (Seismic Safety Inventory of California Public Schools)**

Structural System	Total Structural Costs: Life Safety	Total Structural Costs: Damage Control	Total Non-Structural Costs	Total Structural Plus Non-Structural Costs: Life Safety	Total Structural Plus Non-Structural Costs: Damage Control
C1	$113,351,000	$137,366,000	$64,734,000	$178,084,000	$202,099,000
C1B	$49,599,000	$60,108,000	$27,346,000	$76,946,000	$87,454,000
C2A	$157,541,000	$190,919,000	$124,555,000	$282,096,000	$315,474,000
C3A	$1,296,000	$1,571,000	$996,000	$2,292,000	$2,567,000
M	$82,590,000	$100,088,000	$66,156,000	$148,746,000	$166,244,000
PC1	$87,073,000	$105,521,000	$70,626,000	$157,699,000	$176,147,000
PC1A	$244,373,000	$296,147,000	$191,332,000	$435,706,000	$487,480,000
PC2	$20,593,000	$24,956,000	$12,982,000	$33,576,000	$37,939,000
PC2A	$4,107,000	$4,977,000	$2,570,000	$6,677,000	$7,548,000
RM1	$730,933,000	$885,791,000	$566,493,000	$1,297,426,000	$1,452,284,000
S1B	$55,238,000	$66,942,000	$30,827,000	$86,066,000	$97,769,000
S3	$10,702,000	$12,970,000	$15,186,000	$25,889,000	$28,156,000
Total	$1,557,396,000	$1,887,356,000	$1,173,803,000	$2,731,203,000	$3,061,161,000

* Category 2: Buildings Requiring Detailed Seismic Evaluation.
**Non-wood-frame schools designed before July 1, 1978.

Table 11. Total Estimated Seismic Rehabilitation Costs for Category* 2 Buildings (Seismic Safety Inventory of California Public Schools)**

Seismic Zone	Total Structural Costs: Life Safety	Total Structural Costs: Damage Control	Total Non-Structural Costs	Total Structural Plus Non-Structural Costs: Life Safety	Total Structural Plus Non-Structural Costs: Damage Control
Zone 3	256,168,000	313,735,000	255,410,000	511,099,000	569,144,000
Zone 4	1,557,396,000	1,887,356,000	1,173,803,000	2,731,203,000	3,061,161,000
Total	1,813,564,000	2,201,091,000	1,429,213,000	3,242,302,000	3,630,305,000

* Category 2: Buildings Requiring Detailed Seismic Evaluation.
**Non-wood-frame schools designed before July 1, 1978.

Table 14. Estimated Costs for Rehabilitation of Category 2* Buildings within 2, 5, 10 and More Than 10 km of an active Fault for Life-Safety and Damage-Control Performance Objectives (Seismic-Safety Inventory of California Public Schools)**

Performance Objective	Distance from an Active Fault	Number of Buildings	Cost of Evaluations	Cost of Rehabilitation	Total Cost
Life Safety	0 - 2 km	1,229	$20,411,000	$718,869,000	$739,280,000
	2 - 5 km	1,602	$26,606,000	$935,409,000	$962,015,000
	5 – 10 km	1,896	$31,489,000	$979,841,000	$1,011,330,000
	10+ km	2,810	$46,668,000	$1,451,780,000	$1,498,448,000
	Total all Buildings	**7,537**	**$125,174,000**	**$4,085899,000**	**$4,211,073,000**
Damage Control	0 - 2 km	1,229	$20,411,000	$787,185,000	$807,596,000
	2 - 5 km	1,602	$26,606,000	$1,024,303,000	$1,050,909,000
	5 - 10 km	1,896	$31,489,000	$1,172,949,000	$1,204,438,000
	10+ km	2,810	$46,668,000	$1,589,748,000	$1,636,416,000
	Total all Buildings	**7,537**	**$125,174,000**	**$4,574,185,000**	**$4,699,359,000**

*Category 2: Buildings Requiring Detailed Seismic Evaluation
**Non-wood-frame schools designed before July 1, 1978.

1/28/04

Check up for. 460 - Building P

State of California • Department of General Services • Gray Davis, Governor
DIVISION OF THE STATE ARCHITECT
Headquarters • 1130 K Street, Suite 101 • Sacramento, CA 95814 • (916) 445-8100

January 8, 2003

Roy Romer
Superintendent of Schools
Los Angeles Unified
450 N. Grand Ave., A-223
Los Angeles, CA 90012

Subject: AB 300 Seismic Safety Inventory of California Public Schools
Information for School Districts

Dear Roy Romer:

In 1999, the California Legislature passed AB 300 (Corbett, Chapter 622), which required the Department of General Services (DGS) to conduct an inventory of Kindergarten – 12th grade public school buildings that featured concrete tilt-up construction and non-wood frame walls that do not meet the minimum requirements of the 1976 Uniform Building Code. AB 300 also required DGS to submit a report to the Legislature and the Governor summarizing the seismic risk and make recommendations to address seismic safety of public school buildings. A copy of the report is available on the DGS website under Publications - 2002 Legislative Reports at www.legi.dgs.ca.gov.

The report found that of the 60,000 public school buildings in use in California today, 7,537 school buildings -- 14% of K-12 school buildings -- do not meet certain structural criteria and should undergo additional evaluation. This evaluation should be completed by structural engineers familiar with seismic retrofits to determine if the structures should be seismically retrofitted.

The inventory identified an additional 2,122 buildings -- 6% of all K-12 school buildings -- which the report indicated were likely to perform well and were expected to achieve life-safety performance in future earthquakes.

Inclusion of a school building in the inventory is NOT, by itself, a determination of the safety of the building. The life-safety performance of any individual building depends on a number of factors, including the location relative to an earthquake fault, previous history of the earthquake performance of a building type, the duration and severity of an earthquake, safety factors that are built into the design that exceed code requirements, and other factors. **School districts should be advised that only a detailed evaluation by structural engineers can determine whether a building is expected to be safe during an earthquake or if a retrofit is needed.**

DGS is committed to assisting your district in identifying buildings and evaluating them. While the report does not list specific buildings, collected information is available from the survey database. Upon your request, the Division of the State Architect (DSA) will provide a list of all buildings surveyed within your district that fall into either of the above categories.

Roy Romer - 2 - January 8, 2003

This list will identify the building by DSA application number, year of submittal, and type of building. Plans and records of specific projects will be available upon request. These plans and records will be very useful during the structural engineers' evaluations. However, fees will be charged to recover costs associated with retrieval and duplication of the documents. Requests should be made to the regional manager of the office in your area.

Every effort has been made to ensure that the information contained in the inventory is as accurate as possible. However, the accuracy of the data contained in the inventory is limited by the following:

1. The inventory may contain a number of buildings that may have been demolished, retrofitted, or sold; and
2. The inventory may have omitted a number of non-wood frame buildings that were constructed between 1933 and 1978.

The report constitutes a first step to recognizing the need for strengthening buildings that were constructed to standards that, over time, have become obsolete due to knowledge learned from past earthquakes. DSA looks forward to partnering with your district to strengthen these buildings to achieve the life-safety and damage control objectives of the Field Act.

If you have any questions regarding the findings of this report, please call the Regional Manager of your local DSA office.

Sincerely,

Stephan Castellanos FAIA, State Architect
Division of the State Architect

The above letter was a result of a seismic safety study. The report listed 461 facilities operated by LAUSD that where the structure's seismic safety was in question. (See Task Force minutes for June 16 and July 28, 2004.)

New Facilities Design

The following documents comprise a checklist that is used to determine the type and amount of environmental analysis the District engages in for new school and modernization projects:

- ✓ School Site Selection & Approval Guide
- ✓ SFPD 4.01 – School Site Approval Procedures
- ✓ Plan Review Checklist – Growth Projects
- ✓ Plan Review Checklist – Modernization Projects
- ✓ Title 5, California Code of Regulations, Division 1, Chapter 13, Subchapter 1, School Facilities Construction

Each of these tools is designed to ensure application of state-of-the-art safety standards of construction and operation to all **new construction**. In terms of vulnerability of future buildings, infrastructure, and critical facilities to damage or destruction by catastrophic natural events, and depending upon the nature of the event, the impact to the school district is estimated to be substantially less.

The current New School Construction Program will provide for the construction of approximately 119,000 2-semester classroom seats at a total of over $ 5.9 billion dollars. The program will complete 78,000 seats by 2008, with the balance by 2010. It includes over $100 million for the expansion of Charter Schools, early childhood development centers, and funding for joint use opportunities with other local agencies.

OEHS Site Safety Inspection Program

In 2001, routine health and safety inspections were initiated in all District schools to assess compliance with Federal, State and District requirements. In 2003, a compliance checklist and scorecard were implemented to simplify the assessment process. The program is carried out by the Office of Environmental Health and Safety.

The inspections and scorecard ratings are based on an assessment of compliance with 14 health and safety standards:

- Accident Prevention
- Asbestos Management
- Fire/Life Safety
- Campus Security
- Chemical Safety
- Pest Management
- Lead Management
- Restroom Facilities
- Indoor Environment
- Maintenance & Repairs
- Emergency Preparedness
- Traffic & Pedestrian Safety
- Science Lab Safety
- Safe School Planning

Specific requirements for each of the standards are presented in a “Safe School Inspection Guidebook, 04-15-02” which may be viewed at http://www.laschools.org/oehs.

Inspection Process

The Site Administrator is notified in writing of the planned inspection and asked to have relevant documentation available on the day of inspection. Two weeks prior to the inspection, the inspector reviews the complaint, claim and incident history of the school, as well as previous inspection findings and outstanding deficiencies.

The inspection begins with a meeting between the inspector and the Site Administrator, and is followed by a detailed inspection to assess compliance with the regulatory standards referenced in the “Guidebook” and “Compliance Checklist”. Following the inspection, an exit interview is conducted with the Site Administrator to review the findings and identify any items requiring immediate attention. During the inspection, the inspector records unsafe conditions and areas of noncompliance and assigns an appropriate score. The inspector also documents necessary corrective actions and issues a prioritized “Corrective Action Notice”. The Site Administrator is asked to return a copy of the notice within 30 days indicating those items which have been corrected Once received, OEHS updates their database.

Safety Compliance Checklist and Scorecard

OEHS
Office of Environmental Health and Safety
Facility Inspection Program
333 South Beaudry Avenue
Los Angeles CA, 90017
Phone: (213) 241-3199

SCHOOL SAFETY COMPLIANCE CHECKLIST

Los Angeles Unified School District

Date: _____
School: _____

Local District: _____
OEHS Inspector: _____
Inspection ID: _____

STANDARD	EVALUATION CRITERIA	Yes	No
1. Accident Prevention	**Threshold Questions**		
	Is there a written IIPP, which is current, complete, and readily available?	☐	☐
	Is the IIPP summary page posted in a conspicuous area?	☐	☐
	Is employee training provided on a regular basis and documented? *[Confer with school administration and review the available documentation.]*	☐	☐
	Is there a designated School Safety Committee that meets quarterly? *[Confer with school administration and review the available documentation.]*	☐	☐
	Does the Safety Committee perform and document semi-annual safety inspections?	☐	☐
	Is there evidence of follow up action to deficiencies noted during inspections? *[Review trouble call log.]*	☐	☐
	Does the school's Claims Rate compare favorably with the District wide average? *[Less than 120% of LAUSD average.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Accident Investigations ☐ Hazard Reporting ☐ New Employee Orientation ☐ Safety Inspections ☐ Enforcement / Discipline ☐ Personal Protective Equipment ☐ Safety Incentives ☐ OSHA Postings ☐ Accident Reporting ☐ Others	**Notes:**	
2. Asbestos Management	**Threshold Questions**		
	Is the Asbestos Management Plan kept in a designated location, readily available, and updated with the current 6-month and 3-year inspection results? *[Check that the update is consistent with AHERA regulations.]*	☐	☐
	Is there a procedure in place to a review the Asbestos Management Plan prior to disturbing potential asbestos containing materials? *[Determine if Plant Manager has received 2-hour asbestos awareness training and if staff have been informed on the need to review the Asbestos Management Plan prior to disturbing any building material.]*	☐	☐
	Is all work on asbestos-containing materials performed by properly trained personnel? *[Evaluation should be based on staff interviews, field observations, and review of Contact Log.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ VAT floors maintained ☐ Reporting of damaged ACBM ☐ Damage to ACBM ☐ Others	**Notes:**	

Form SIP2a
Revised 12/9/03

Page 1 of 5
OEHS FILE 2.5.6

STANDARD	EVALUATION CRITERIA	Yes	No
3. Fire/Life Safety	**Threshold Questions**		
	Are fire extinguishers checked monthly and serviced annually, clearly marked, and easily accessible?	☐	☐
	Are all exits and exit corridors free of obstructions?	☐	☐
	Are exits properly marked?	☐	☐
	Does each classroom equipped with security grilles have at least one with a releasable latch in compliance with District policy? *[Per Board of Education Report #15.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Exit signs illuminated ☐ Exits unlocked & openable in single action ☐ Marked fire lane ☐ Occupant signs posted in assembly areas ☐ Fire extinguisher training ☐ Fire alarms tested weekly ☐ Posted emergency routes ☐ Flammable liquid storage ☐ Emergency lighting ☐ Others	**Notes:**	
4. Campus Security	**Threshold Questions**		
	Is the school perimeter secured with fencing in good condition & gates locked?	☐	☐
	Is there a visitor check in procedure in compliance with the Locked Campus Policy? *[Per Bulletin 33.]*	☐	☐
	Is there a written procedure for communicating classroom or play yard emergencies to the main office? *[Review written procedure and assess overall staff awareness of procedure.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Graffiti removed daily ☐ Discipline code ☐ Identification badges ☐ Secured food supply ☐ Crime reporting ☐ Exterior lighting ☐ Security signs ☐ Others	**Notes:**	
5. Chemical Safety	**Threshold Questions**		
	Is Hazard Communication training provided at time of initial assignment and when new hazards are introduced into the work place? *[Confer with school administration and review the available documentation.]*	☐	☐
	Is a chemical inventory kept in a designated location and readily available?	☐	☐
	Are MSDSs readily accessible for all chemicals listed on the inventory? *[MSDSs should be kept in a centralized location known to all staff members]*	☐	☐
	Are all cleaners and other non-laboratory chemical products used at the school District-approved? *[Remove any unapproved chemical products.]*	☐	☐
	Are cleaners and other non-laboratory chemical products properly stored, secured, and disposed of?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Personal Protective Equipment ☐ Gas cylinders secured ☐ Proper labeling & signs ☐ Emergency eyewash ☐ Grounding / Bonding ☐ Others ☐ Spill response kits	**Notes:**	

Form SIP2a
Revised 12/9/03

Page 2 of 5
OEHS FILE 2.5.6

STANDARD	EVALUATION CRITERIA	Yes	No
6. Pest Management	**Threshold Questions**		
	Is there evidence of a continuing pest infestation?	☐	☐
	Is a copy of the District's IPM Handbook kept in a designated location and readily available?	☐	☐
	Are the necessary annual and 72-hour notifications of pesticide use provided? *[Review available documentation.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Recordkeeping ☐ Approved pesticides ☐ Fly fans or screen doors ☐ Refuse bins ☐ Staff trained ☐ Others ☐ Posted approved pesticide list **Notes:**		
7. Lead Management	**Threshold Questions**		
	Is there evidence of peeling or chalking paint on or within buildings constructed prior to 1993?	☐	☐
	Has a trouble call been placed for areas of peeling or chalking paint?	☐	☐
	Are drinking fountains flushed daily and is a log maintained? *[Per Bulletin 55.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Staff awareness ☐ Others **Notes:**		
8. Restroom Facilities	**Threshold Questions**		
	Are all restrooms available for use; adequately stocked with toilet paper, soap, and paper towels; and maintained in sanitary condition? *[Evaluation should be based on visual inspection and review of Contact Log.]*	☐	☐
	Are restroom inspections conducted regularly? *[At least twice daily]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Adequate supervision ☐ Fixtures operating properly ☐ Restroom designation ☐ Adequate number of toilets / urinals ☐ Restroom ventilation ☐ Others **Notes:**		
9. Indoor Environment	**Threshold Questions**		
	Is there evidence of potentially toxic or odorous emissions affecting the indoor environment? *[Evaluation should be based on staff interviews, field observations, and review of Contact Log.]*	☐	☐
	Are classrooms and offices adequately lighted?	☐	☐
	Are ventilation systems adequate & properly maintained? *[Evaluation should be based on visual observations and interview of Plant Manager.]*	☐	☐
	Are classrooms free of excessive noise? *[Evaluation should be based on staff interviews, field observations, and review of Contact Log.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Evidence of mold ☐ Continuing or multiple IAQ complaints ☐ Housekeeping ☐ Objectionable odor ☐ Thermal comfort ☐ Others ☐ Excessive dust **Notes:**		

Form SIP2a
Revised 12/9/03

Page 3 of 5
OEHS FILE 2.5.6

STANDARD	EVALUATION CRITERIA	Yes	No
10. Maintenance & Repairs	**Threshold Questions**		
	Are facilities and equipment maintained in good repair?	☐	☐
	Have trouble calls been placed for necessary repairs?	☐	☐
	Are proper housekeeping practices followed in classrooms and on campus?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Furniture ☐ Approved TV mounts ☐ Landscaping ☐ Hopper rooms ☐ Unapproved vegetation ☐ Salvage disposal ☐ Broken windows ☐ Fall / Trip hazard ☐ Seismic bracing ☐ Secured electrical equipment ☐ Machine guarding ☐ Others ☐ Carpet condition **Notes:**		
11. Safe School Plan	**Threshold Questions**		
	Is the "Safe School Plan" current and readily available?	☐	☐
	Are staff familiar with the SSP and their responsibilities?	☐	☐
	Does the "Safe School Plan" include procedures for: Violence Prevention, Emergency Preparedness, Crisis Intervention and Traffic & Pedestrian Safety? *[Consider use of Model Plan]*	☐	☐
	Does the Safe School Plan comply with CEC Section 212?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Contact Information ☐ Prevention Programs ☐ School Safety Planning Committee ☐ Crisis Intervention Training ☐ School Site Crisis Team ☐ Enforcement Programs ☐ Annual Safety Assessment ☐ Intervention Programs ☐ Crisis Intervention Handbook (1994) ☐ Others **Notes:**		
12. Emergency Preparedness	**Threshold Questions**		
	Are emergency procedures current and readily available, and are staff familiar with their designated responsibilities?	☐	☐
	Is there an Emergency Response Plan that complies with regulatory requirements? *[Review "emergency preparedness" section of the Safe School Plan and compare "emergency response procedures" to the Model Emergency Response Plan for Schools.]*	☐	☐
	Are emergency supplies and equipment adequately stocked, properly maintained, and stored in designated locations? *[Review supplies and equipment in earthquake bin and designation locations. Refer to supply inventory listed in Bulletin N-58]*	☐	☐
	Is dedicated storage provided for emergency supplies?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Adequate water supply ☐ Emergency drills ☐ Emergency training ☐ Annual emergency hazard assessment ☐ First aid kits ☐ Designated command post ☐ Office to room communication ☐ Others ☐ SEMS **Notes:**		

Form SIP2a
Revised 12/9/03

Page 4 of 5
OEHS FILE 2.5.6

STANDARD	EVALUATION CRITERIA	Yes	No
13. Traffic & Pedestrian Safety	**Threshold Questions**		
	Have "Safe Routes" to school been designated? *[Safe Routes should be posted and distributed to parents.]*	☐	☐
	Are drop-off and pick-up points designated and supervised? *[Drop-off and pick-up points should be posted and distributed to parents.]*	☐	☐
	Are there recurring complaints, observed hazards, or a history of student injuries? *[Evaluation should be based on staff interviews, field observations, and review of Contact Log and School Police accident records.]*	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Annual meeting with traffic safety ☐ Bi-annual meeting with LAPD & School Police ☐ Accident reporting ☐ Adequate crossing guards ☐ Crosswalks adequately marked ☐ Traffic enforcement ☐ Others	**Notes:**	
14. Science Lab Safety	**Threshold Questions**		
	Is the Chemical Hygiene Plan kept in a designated location, readily available and are staff aware of their responsibilities?	☐	☐
	Has a Chemical Safety Coordinator been assigned by the Principal?	☐	☐
	Is a laboratory chemical inventory kept in a designated location and readily available?	☐	☐
	Are MSDSs readily accessible for all chemicals listed on the inventory? *[MSDSs should be kept in a centralized location known to all science staff.]*	☐	☐
	Is safety equipment adequate, available, and maintained in good condition?	☐	☐
	Are laboratory chemicals properly stored, secured and disposed of?	☐	☐
	Are all laboratory chemicals used at the school District-approved?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Incompatible storage ☐ CSC training ☐ Eyewash / showers ☐ Personal Protective Equipment ☐ Fire extinguishers ☐ Fume hoods ☐ Outdated chemicals ☐ Over-accumulation of reagents ☐ Others	**Notes:**	
15. Off-Site Issues	**Threshold Questions**		
	Are off-site air emission sources affecting the school?	☐	☐
	Are off-site noise polution sources affecting the school?	☐	☐
	Are there leaking transformers immediately adjacent to the school?	☐	☐
	Is there adequate lighting for after school activities?	☐	☐
	Other Factors: *[mark factors requiring attention]* ☐ Abandoned Vehicles ☐ Sidewalk Hazards (holes, cracking, etc.) ☐ Truck/Bus Idling ☐ Rubbish ☐ Rodent Infestation ☐ Dead Animals ☐ Traffic / Pedestrian Hazards ☐ Bus Drop-Off / Pick-Up Area ☐ Fire Hazards ☐ Hazardous Materials ☐ Others	**Notes:**	

Form SIP2a
Revised 12/9/03

Page 5 of 5
OEHS FILE 2.5.6

Office of Environmental Health and Safety
Facility Inspection Program
333 South Beaudry Avenue
Los Angeles CA, 90017
Phone: (213) 241-3199

Health & Safety Compliance Scorecard

Inspection Date: October 11, 2002
Facility Type: Elementary School
District: A
OEHS Inspector: Patty Filous

Site Administrator: Jacqueline Howard
Facility: Andasol Avenue Elementary School
Address: 10126 Encino Avenue
City: Northridge **State:** CA **Zip:** 91325

	Compliance Score (%)		
Standard	Facility	Local District A	LAUSD
Accident Prevention	60	59	52
Asbestos Management	80	78	70
Fire/Life Safety	60	59	50
Campus Security	80	78	74
Chemical Safety	30	52	51
Pest Management	70	77	68
Lead Management	70	63	63
Restroom Facilities	70	68	65
Indoor Environment	70	67	65
Maintenance and Repairs	70	69	67
Safe School Plan	N/R	N/R	N/R
Emergency Preparedness	80	70	65
Traffic and Pedestrian Safety	70	66	67
Science Lab Safety	N/R	54	49
SR	1.92	1.75	1.52
Overall Compliance Rating	FAIR	FAIR	FAIR

Scoring Method: A compliance score of 1 to 10 is assigned to each of the 14 standards in the Compliance Checklist. If all threshold criteria are met for a standard, a minimum score of 7 is given. If all threshold criteria are not met for a standard, the maximum allowable score is 6. Each score is then converted to a percentage. The 14 scores are then averaged and the resulting percentage is assigned a value of 0 - 4 based on the following scale: 0% to 59% = 0; 60% to 69% = 1; 70% to 79% = 2; 80 to 89% = 3; 90% to 100% = 4. The "Scorecard Rating" (SR) is the average of the 14 values. An overall compliance rating of "Good", "Fair" or "Poor" is assigned to each facility based on the following SR values: 0.00 - 1.49 = Poor; 1.50 - 2.49 = Fair; 2.50 - 4.00 = Good.

N/R= Not Rated

Form 1f - Health & Safety Compliance Scorecard Summary - Andasol Avenue Elementary School

KLCS Television Station (Channel 58)

Our Station

KLCS-TV/DT -- The Education Station -- is a noncommercial educational television station licensed to the Los Angeles Unified School District and is a member of the Public Broadcasting Service. A multiple Emmy® Award winner, KLCS broadcasts on analog channel 58 and digital channel 41 to over sixteen million viewers throughout Southern California. KLCS is also carried on DirecTV, Dish Network, and most cable systems.

Our Mission

KLCS-TV is a multimedia education channel that inspires learners of all ages to higher levels of achievement and personal and professional growth through the use of programs and services that educate, inform, and enlighten.

Our Identity

KLCS-TV/DT: The Education Station for all Generations

Our Coverage Area

Broadcasting from Mt. Wilson, the KLCS coverage area extends from Santa Barbara to San Diego, reaching a potential viewing audience of over five million households in Los Angeles, Orange, San Bernardino, Riverside, Ventura, and San Diego Counties. The Los Angeles DMA is the second largest in the United States and is comprised of over 16,000,000 people; 6% of the U.S. population. The daily school audience potentially includes 900,000 LAUSD students ins schools and centers, and a staff of over 100,000 dedicated full and part-time employees. KLCS classroom instructional television (CITV) programming reaches over 150 school districts throughout Southern California.

Our History

The Los Angeles Unified School District (LAUSD) began to produce instructional television programming for in-school viewing in October 1957. In 1963, LAUSD received the channel designation of UHF-58 and began the process of acquiring its own broadcast license from the Federal Communications Commission (FCC). By the 1966-67 school year, the LAUSD was producing over 700 television programs per year for various broadcast outlets, and leasing airtime to televise 40 hours of instructional programming week, Monday through Friday.

The objective to achieve quality tailored programming and to provide in-school programs continued to grow. Teachers and administrators who were impressed with the television medium's effectiveness in enhancing the classroom experience particularly expressed their support

On July 1, 1967, the District submitted an application to the State Department of Education and the U.S. Office of Education under Title III of the Elementary and Secondary Education Act of 1965 to build and equip a broadcast facility for the LAUSD. This Act provided grants for the demonstration of innovative programs in schools.

In the summer of 1967, advocates testified before the FCC in Washington, D.C. on behalf of the District's application for the Channel 58 franchise. Speakers attested to the benefits that would accrue

to the students as well as to staff, parents, and the community at large. The District was granted its broadcast license for Channel 58 on March 3, 1972, and began broadcasting on November 5, 1973.

The District's success in obtaining the license for Channel 58 opened up a myriad of opportunities to improve instruction, in-service training, and cultural programming in particular, and to provide the community at large with an opportunity to acquire meaningful information about the Board of Education via the broadcast of its meetings.

Our Programming

A multiple winner of Los Angeles Area Emmy® Awards, KLCS broadcasts 12 hours of instructional programming each school day. Evening and weekend programming is targeted to the lifelong learner, featuring a wide variety of documentaries, performing arts, history, news, sports, travel, community meetings, how-tos, and professional development series.

Our Local Productions

KLCS continues to produce over 700 original television programs each year; more local programming than any other station in Los Angeles. Among the standouts in our local line-up is the perennial favorite, Homework Hotline, the Emmy® Award-winning, interactive tutorial program for students. Other local productions include Mosaic, a magazine format series purposed to present engaging, compelling, informational and educational feature segments of interest to the communities of Los Angeles and Southern California; Between the Lines, a weekly interview series featuring noted authors; and three other weekly programs, In Their Own Words, A Conversation with Roy Romer, and Teachers' Lounge, which provide needed information for staff, students, and parents. KLCS also produces News Briefs, which highlights newsworthy events occurring throughout LAUSD. Additionally, special events such as the Academic Decathlon SuperQuiz and Banquet, Superstars Conference, Interscholastic Championships, Superintendent's Address to Administrators, and LAUSD Career Telefair are produced by KLCS.

LAUSD Staff Development Series produced by KLCS include Teachers & Their Coaches, a series of six 30-minute programs designed to provide practical information and inspiration for teachers; and Hollywood Homeroom, a series of four 15-minute programs that instruct teachers on how to create and use video technology as an effective teaching tool.

Our Statistics

- KLCS is one of only eight television stations in the nation licensed to a K-12 school district.
- KLCS broadcasts 24 hours a day, achieving approximate annual totals listed in the following categories:
- 3,000 hours of Classroom Instructional Television (KLCS' Classroom Instructional Television (CITV) provides schools with direct access to more than 140 curriculum-matched series and over 1600 individual program titles).
- Over 500 hours of professional development for LAUSD teachers, administrators and staff.
- 1,560 hours of LAUSD Board of Education and County Board of Supervisors meetings.
- 2,330 hours of informational programming, continuing education, college credit, how-to, self-improvement, personal development, entertainment, documentaries, and specials.
- 230 hours of live college telecourses from the California State University system.

- KLCS broadcasts more Spanish-language programming than any non-Spanish language television station in the Los Angeles DMA.

- KLCS productions are distributed to 15 other states, including Hawaii, New York, Illinois, Oregon, Georgia, and Tennessee.

- KLCS Magazine, a monthly schedule of evening and weekend programming, and Teacher's TV Digest, a quarterly CITV schedule, is distributed to all schools and offices and is available by subscription to Friends of KLCS members. A yearly Catalog of CITV Programs, also published and sent to all schools and offices, details curricular/standards-matched series and contains strategies for integrating CITV into a technology-rich curriculum.

- KLCS provides an extensive outreach program that includes hands-on workshops and the award-winning Video in the Classroom (VIC) Awards program.

- KLCS provides Secondary Audio Program (SAP) capability which enables Board meetings and other programs to be simulcast in Spanish.

Our Future

KLCS continues to seek the advice and expertise of the District's learning community in helping to shape its role in the future. Focus groups provide input in determining the most effective programs, schedules, and services.

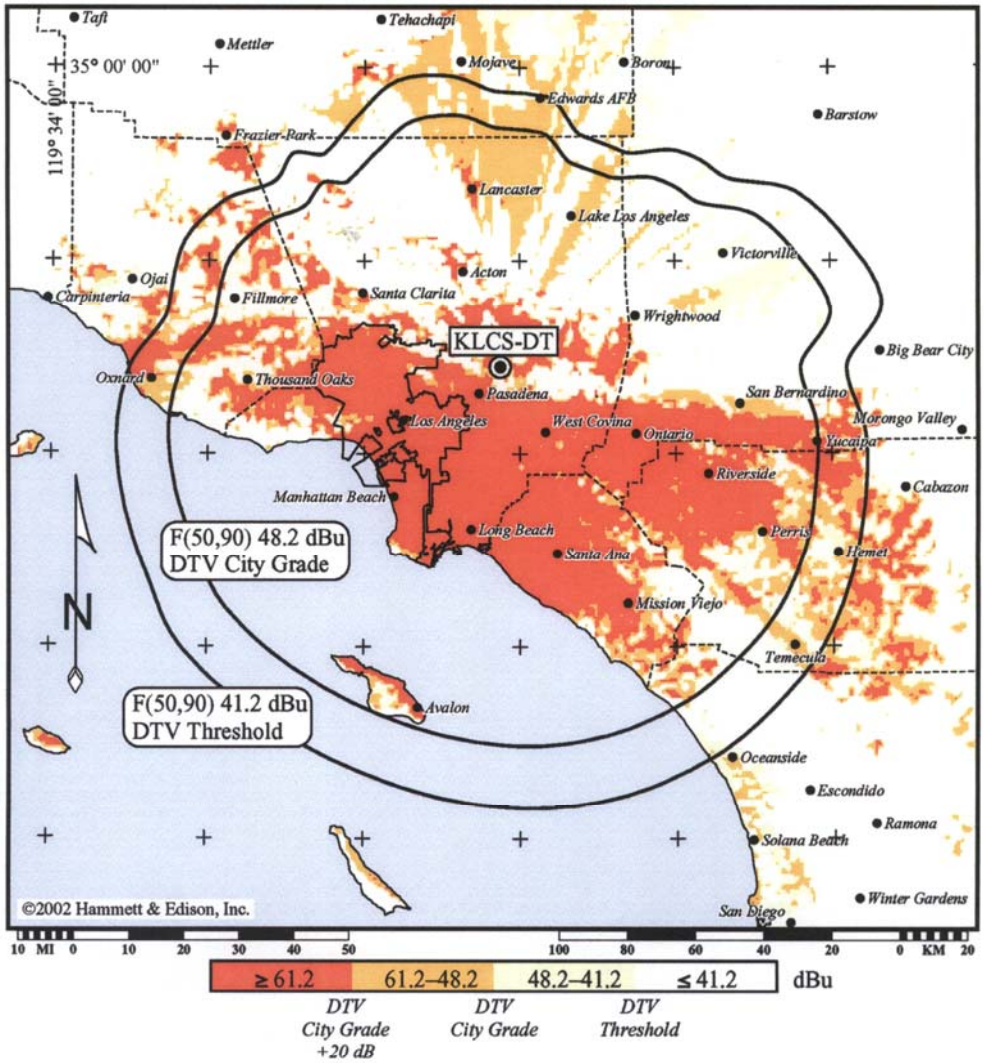
KLCS will continue to: upgrade, reconfigure, and augment its technology to improve the design and production of its original series; increase the production of original, tailored programming to blend State standards and the instructional and professional development needs of the District; produce promotional videos and interstitial material highlighting KLCS programs and services; and certainly not least, prepare for the multi-channel digital environment.

KLCS will implement a comprehensive digital content distribution model to LAUSD campuses, which will enable teachers and students to access rich instructional media content directly from their classroom or library computers via video/data streaming so that individualized, tailored learning can occur. Specific plans are also underway to subdivide KLCS' digital bandwidth into concurrent sub-channels that appeal to specific audiences. Realization of KLCS' multicasting and datacasting plans will enable us to simultaneously enhance the educational experiences of our students; increase the resources available to our teachers; and provide even greater programming choices and interactive capabilities for general audiences in the greater Los Angeles community.

KLCS welcomes opportunities to partner with other television production and distribution facilities, multimedia designers, telecommunications providers, and other public and private agencies to meet expanding broadcast demands. These partnerships will assist KLCS in the areas of program augmentation; revenue generating strategies including corporate sponsorships, donations, and grants; increased local and national viewership; and shared technological resources.

Station KLCS-DT • DTV Channel 41 • Los Angeles, California

FCC Contours Plus Terrain-Limited Coverage
162 kW ERP (DA) at 1,774.8 m AMSL / 900.8 m HAAT
TCI Model 888 Antenna at 170°T
1.6° ebt Plus 0.6° mbt at 225°T



Based on proprietary implementation of the JSC Terrain Integrated Rough Earth Model propagation algorithm using 3-second USGS digitized terrain data. City limits and county lines shown taken from 2000 U.S. Census Bureau TIGER data. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. Scale: 1:1,632,997.4.

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

September 18, 2002
Figure 1A

Transportation Assets

The District Fleet is diverse and rather large. "Home-to-School" transportation is provided by some 1,309 busses traversing 938 LAUSD managed routes and 1,227 contracted routes. The following table shows a breakdown of the transportation assets operated by LAUSD:

DEPARTMENT	TYPE OF VEHICLE	# OF VEHICLES	# OF ROUTES		COMBINED # OF MILES/YR		# OF STUDENTS TRANSPORTED	# OF ACCIDENTS
			DISTRICT	CONTRACT	DISTRICT	CONTRACT		
Transportation	Bus	1,309	938	1,227	16,393,233	21,502,191	77,669	
Food Services					339,000			13
	van	2						
	Refrigerated cargo truck	27						
Truck Operations					1,113,904			33
	Tractors	62						
	Dry Freight Trailers	84						
	Refrigerated Trailers	28						
	Roll-off Truck	1						
	Bobtail Trucks	13						
	Stake Bed Trucks	3						
	Small Cargo Vans	22						
	Passenger Vans	4						
	Small Pick up Trucks	3						
	Forklifts with trailers	3						
M & O	Facilities Maintenance	1,486			11,145,000			
Police		170			1,275,000			
District cars	Pool Cars, Exec. Cars	211			1,582,500			

Courtesy of Office of Risk Management, November 2004

Affiliated Charter Schools and other Organizations

Currently in the State of California there is no outreach to charter schools to assist or inform them of the need to develop a DMA 2000 Hazard Mitigation Plan other then the information efforts of the Los Angeles Unified School District. (LAUSD) The LAUSD has taken on the difficult tasks of asking the question on how this law applies to school owned facilities occupied by charter schools and charter school operating in private facilities. Since all charter schools in the eyes of the State of California are public schools it seem apparent that all aspects of the Stafford Act, and Disaster Mitigation portions of that Act apply to these schools.

There are numerous Charter Schools through out the State of California. The center for education reform reports that the State of California passed a law authorizing Charter Schools in 1992 and that currently there are approximately 500 charter schools operating in California as of winter 2004. These schools serve 170,000 students.

The Charter Schools have their own boards of education and operate independently of of local school districts. Local school districts and county boards of education, however, have an oversight responsibility over charter schools and review the progress of charter schools. Local school districts, county boards of education and the state can revoke charters.

A charter school is generally exempt from some laws governing school districts, except where specifically noted.

All charter schools are public schools. The charter law prohibits the conversion of a private school to a charter school. Charter schools must be nonsectarian in their programs, admission policies, employment practices and all other operations

Under the State Law there are 16 required elements of a charter school petition:

1. A description of the educational program of the school, as specified
2. The measurable pupil outcomes identified by the school
3. The method by which pupil progress in meeting those pupil outcomes is to be measured.
4. The schools governance structure, including parental involvement.
5. The qualifications to be met by individuals employed by the school.
6. Procedures to ensure health and safety of pupils and staff.
7. The means by which the school will achieve racial and ethnic balance among its pupils, reflective of the general population residing in the district.
8. Admissions requirements, if applicable
9. The manner in which annual financial audits will be conducted, and the manner in which audit exceptions and deficiencies will be resolved.
10. The procedures by which pupils may be suspended or expelled.
11. Provisions for employee coverage under the State Teacher's Retirement System, the Public Employees' Retirement System or federal social security.
12. A description of the rights of any employee of the school district upon leaving the employment of the school district to work in a charter school, and of any rights of return to the school district after employment at a charter school.
13. A public school alternative for pupils residing within the district who choose not to attend charter schools.
14. A dispute resolution process
15. A declaration of whether or not the charter school will be the exclusive public school employer of the charter school employees.
16. The process to be used if the charter school closes.

The LAUSD Hazard Mitigation Task Force recommends the State of California accept the responsibility and support charter schools in interpreting the DMA 2000 Hazard Mitigation Plan requirements and implementing those requirements by charter schools.

Climate

Local Meteorology

Monthly Average Maximum & Minimum Temperatures

Measured in Degrees Fahrenheit

Station	Avg. Temp.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Avalon [1]	**Max**	**61.9**	**62.9**	**63.3**	**65.3**	**66.9**	**69.2**	**72.1**	**73.5**	**73.0**	**70.7**	**67.1**	**63.2**	**67.4**
	Min	46.6	47.6	48.4	51.2	53.8	56.9	60.3	61.4	59.9	56.4	51.0	47.4	53.4
Burbank [2]	**Max**	**66.9**	**68.8**	**70.3**	**74.0**	**76.6**	**81.7**	**88.7**	**89.3**	**87.2**	**81.1**	**73.4**	**67.9**	**77.2**
	Min	41.6	43.6	45.6	49.0	53.4	57.1	60.9	61.3	59.2	53.3	45.9	41.7	51.0
Canoga Park [3]	**Max**	**67.6**	**70.1**	**72.1**	**77.0**	**80.7**	**87.3**	**94.8**	**95.3**	**91.5**	**84.1**	**74.8**	**68.9**	**80.4**
	Min	39.2	40.7	41.7	44.7	48.9	52.9	56.9	57.4	54.6	48.8	42.4	38.8	47.3
Culver City [4]	**Max**	**66.5**	**67.3**	**67.9**	**70.4**	**71.5**	**74.2**	**78.1**	**79.2**	**78.9**	**76.2**	**71.9**	**68.0**	**72.5**
	Min	45.0	46.5	48.0	51.2	54.3	57.8	61.1	61.8	60.5	56.0	49.9	45.9	53.2
Lancaster [5]	**Max**	**57.3**	**60.4**	**64.8**	**71.5**	**79.2**	**88.9**	**95.3**	**94.7**	**88.6**	**78.2**	**65.5**	**57.4**	**75.1**
	Min	31.4	35.1	39.7	45.0	53.1	60.6	66.1	64.2	57.4	46.4	35.2	28.9	46.9
LAX [7]	**Max**	**65.0**	**65.4**	**65.3**	**67.7**	**69.1**	**72.0**	**75.3**	**76.5**	**76.2**	**73.9**	**70.3**	**66.2**	**70.2**
	Min	47.2	48.9	50.2	53.0	56.2	59.5	62.8	63.8	62.6	58.5	52.1	47.8	55.2
Long Beach Airport [6]	**Max**	**66.9**	**67.5**	**68.3**	**72.0**	**73.6**	**77.3**	**82.6**	**84.3**	**82.5**	**78.4**	**72.2**	**67.4**	**74.4**
	Min	45.5	47.4	49.6	52.3	56.7	60.1	63.6	65.0	62.9	57.9	50.3	45.2	54.7
Los Angeles Civic Center [8]	**Max**	**66.3**	**67.4**	**68.8**	**71.1**	**73.0**	**77.1**	**82.4**	**83.2**	**81.8**	**77.6**	**73.0**	**67.7**	**74.1**
	Min	48.4	49.7	51.1	53.5	56.5	59.7	63.1	64.0	62.7	58.8	53.4	49.4	55.9
Montebello [9]	**Max**	**69.4**	**71.1**	**72.6**	**77.8**	**79.0**	**83.6**	**88.6**	**89.8**	**87.9**	**82.6**	**75.4**	**70.9**	**79.1**
	Min	47.9	49.0	50.5	53.5	57.1	60.6	64.3	65.2	63.6	58.3	51.4	47.2	55.7
Mt Wilson [10]	**Max**	**51.5**	**52.5**	**53.9**	**59.3**	**66.0**	**75.1**	**81.3**	**80.8**	**76.9**	**68.5**	**58.9**	**53.0**	**64.8**
	Min	36.2	36.5	36.7	40.8	47.1	55.8	63.2	62.4	58.4	50.8	42.7	37.7	47.4
Palmdale [11]	**Max**	**58.2**	**62.1**	**66.9**	**73.9**	**81.5**	**90.0**	**97.5**	**96.8**	**91.2**	**80.2**	**67.2**	**58.8**	**77.0**
	Min	32.2	35.5	38.7	43.6	50.4	57.5	64.8	63.6	57.2	47.8	37.8	32.5	46.8

Station	Avg. Temp.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Pasadena [12]	**Max**	**66.7**	**68.4**	**70.2**	**74.0**	**76.6**	**81.5**	**88.6**	**89.5**	**87.5**	**81.2**	**74.0**	**67.9**	**77.2**
	Min	42.7	44.5	46.0	49.1	52.6	56.0	60.2	61.0	59.2	54.0	47.3	43.4	51.3
Pomona [13]	**Max**	**65.7**	**67.9**	**69.8**	**74.1**	**77.4**	**83.1**	**90.7**	**90.6**	**88.3**	**81.1**	**73.4**	**66.9**	**77.4**
	Min	38.1	40.3	42.2	45.6	49.7	53.1	57.5	58.0	55.7	50.2	42.5	38.5	47.6
San Gabriel [14]	**Max**	**68.9**	**70.4**	**71.6**	**75.3**	**77.8**	**82.6**	**88.9**	**89.8**	**88.2**	**82.4**	**75.3**	**70.0**	**78.4**
	Min	41.4	43.4	45.6	48.9	53.1	56.9	60.7	61.2	59.1	53.5	45.8	41.6	50.9
Sandberg [15]	**Max**	**47.5**	**50.2**	**52.6**	**58.9**	**66.3**	**76.7**	**84.9**	**84.3**	**79.0**	**68.4**	**56.1**	**48.1**	**64.4**
	Min	35.0	36.6	36.9	40.9	46.4	54.9	62.9	62.4	58.7	50.8	41.7	35.7	46.9
Santa Monica Pier [16]	**Max**	**64.0**	**63.7**	**63.1**	**64.1**	**64.9**	**67.4**	**70.5**	**71.6**	**71.7**	**70.3**	**67.9**	**64.9**	**67.0**
	Min	49.6	50.3	51.0	53.1	55.7	58.6	61.4	62.5	61.7	58.5	53.8	50.0	55.5
Torrance [17]	**Max**	**66.1**	**67.2**	**67.6**	**70.2**	**71.8**	**74.5**	**78.2**	**79.4**	**78.7**	**76.4**	**71.6**	**67.3**	**72.4**
	Min	44.8	46.3	47.4	50.1	53.9	57.0	60.5	61.5	60.1	56.0	49.6	45.3	52.7
Westwood [18]	**Max**	**65.5**	**66.5**	**66.4**	**68.5**	**69.2**	**72.2**	**76.7**	**77.9**	**77.8**	**75.1**	**71.0**	**66.7**	**71.1**
	Min	49.7	50.4	50.2	52.6	55.0	57.8	60.9	61.9	61.3	58.5	54.4	50.6	55.3

Temperature Averages & Records - Monthly & Annual
Los Angeles Civic Center Weather Station, 1878-2002

Measurements are in Degrees Fahrenheit

Month	Average Daily High	Average Daily Low	Record High	Record Low
January	65.8°	47.4°	95 (1971)	28 (1949)
February	66.9°	48.5°	95 (1995)	34 (1989)
March	68.2°	50.0°	98 (1988)	35 (1976)
April	70.7°	52.4°	106 (1989)	39 (1975)
May	72.7°	55.4°	102 (1967)	46 (1964)
June	77.1°	58.6°	112 (1990)	50 (1953)
July	82.2°	61.8°	107 (1985)	54 (1952)
August	83.1°	62.8°	105 (1983)	53 (1943)
September	81.7°	61.2°	110 (1988)	51 (1948)
October	77.3°	57.3°	108 (1987)	41 (1971)
November	72.7°	52.1°	100 (1966)	38 (1978)
December	67.4°	48.4°	91 (1979)	30 (1978)
Annual	**73.8°**	**54.7°**	**112 (June 1990)**	**28 (Jan 1949)**

Source: National Weather Service

Monthly Average Total Precipitation (Rainfall)

Measured in inches

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Avalon Pleasure Pier [1]	2.65	2.37	1.90	0.97	0.18	0.02	0.00	0.07	0.29	0.18	1.35	1.90	11.90
Burbank [2]	3.37	3.72	3.00	1.20	0.27	0.08	0.01	0.12	0.20	0.47	1.60	2.25	16.30
Canoga Park [3]	3.79	3.66	2.87	1.13	0.26	0.05	0.01	0.11	0.17	0.43	1.87	2.23	16.58
Culver City [4]	2.97	2.87	2.31	0.86	0.17	0.03	0.01	0.06	0.13	0.34	1.38	2.20	13.32
Lancaster [5]	1.69	1.75	1.48	0.35	0.12	0.06	0.11	0.17	0.21	0.31	0.48	1.09	7.81
LAX [7]	2.76	2.60	2.00	0.80	0.16	0.06	0.02	0.08	0.17	0.30	1.51	1.69	12.15
Long Beach Airport [6]	2.74	2.83	2.07	0.75	0.17	0.07	0.02	0.08	0.22	0.30	1.35	1.65	12.24
Los Angeles Civic Center [8]	3.19	3.31	2.48	1.07	0.26	0.06	0.01	0.06	0.29	0.40	1.32	2.34	14.79
Montebello [9]	4.14	4.18	3.23	1.02	0.28	0.09	0.02	0.03	0.23	0.36	1.14	1.98	16.69
Mt Wilson [10]	7.60	7.74	6.31	2.74	0.82	0.19	0.07	0.18	0.74	1.12	3.85	4.46	35.81
Palmdale [11]	1.55	1.55	1.31	0.47	0.13	0.04	0.05	0.19	0.21	0.29	0.69	1.36	7.83
Pasadena [12]	4.24	4.44	3.49	1.49	0.38	0.15	0.03	0.12	0.36	0.60	1.86	3.01	20.17
Pomona FairPlex [13]	3.74	3.55	3.06	1.27	0.26	0.07	0.01	0.09	0.29	0.61	1.58	2.73	17.27
San Gabriel [14]	3.80	3.84	3.17	1.30	0.27	0.10	0.02	0.08	0.36	0.49	1.74	2.39	17.55
Sandberg [15]	2.25	2.66	1.61	0.84	0.30	0.06	0.03	0.07	0.27	0.27	1.50	2.00	11.86
Santa Monica Pier [16]	2.97	2.79	1.99	0.82	0.19	0.03	0.02	0.10	0.14	0.28	1.47	1.81	12.61
Torrance [17]	3.41	2.82	2.18	0.87	0.19	0.06	0.02	0.08	0.18	0.31	1.51	1.87	13.51
Westwood [18]	4.00	4.09	2.80	1.14	0.27	0.08	0.02	0.12	0.23	0.42	1.85	2.31	17.32

Monthly Average Snowfall & Snow Depth

Measured in inches

Location	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Lancaster [5]	**Snowfall**	**1.8**	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**3.4**
	Snow Depth	0	0	0	0	0	0	0	0	0	0	0	0	0
Mt Wilson [10]	**Snowfall**	**4.5**	**2.9**	**3.7**	**1.7**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.7**	**2.0**	**15.8**
	Snow Depth	2	2	2	1	0	0	0	0	0	0	0	0	1
Palmdale [11]	**Snowfall**	**0.9**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.2**	**1.5**
	Snow Depth	0	0	0	0	0	0	0	0	0	0	0	0	0
Pasadena [12]	**Snowfall**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**
	Snow Depth	0	0	0	0	0	0	0	0	0	0	0	0	0
Sandberg [15]	**Snowfall**	**6.8**	**2.3**	**4.1**	**2.8**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.7**	**3.5**	**20.7**
	Snow Depth	1	0	0	0	0	0	0	0	0	0	0	0	0

Period of Record:

1 - (Pleasure Pier) 7/ 1/1948 to 12/31/2001
2 - (Valley Pump Place) 12/1/1939 to 12/31/2001
3 - (Pierce College) 7/ 1/1949 to 12/31/2001
4 - 1/ 1/1935 to 12/31/2001
5 - 5/ 1/1974 to 12/31/2001
6 - 4/ 1/1958 to 12/31/2001
7 - 8/ 1/1944 to 12/31/2001
8 – (Civic Center) 1/ 1/1914 to 12/31/2001
9 - 1/ 1/1979 to 12/31/2001
10 - 7/ 1/1948 to 12/31/2001
11 - 4/ 1/1931 to 12/31/2001
12 - 12/1/1927 to 12/31/2001
13 – (FairPlex) 12/1/1927 to 12/31/2001
14 - (Fire Dept) 5/ 1/1939 to 12/31/2001
15 - 7/ 1/1948 to 12/31/2001
16 – 7/ 1/1948 to 12/31/2001
17 - 1/ 1/1949 to 12/31/2001
18 – (UCLA) 7/ 1/1948 to 12/31/2001

Source: National Climate Data Center

The Warming of Los Angeles

By the 1990s, average temperatures in Los Angeles had risen to be 5 degrees Fahrenheit warmer than in 1940. This was due to the dramatic loss of Los Angeles County orchards and farmland in favor of buildings and roads. The increased concrete and asphalt served to absorb solar heat and heat up the surrounding atmosphere, causing a massive "urban heat island." Studies suggest that a massive planting of trees in the San Fernando Valley alone could lower average temperatures as much as 9 degrees Fahrenheit.

Severe Weather

Santa Ana Winds

The *Santana Winds* or *Santa Ana Winds*, most common in the late summer and early fall, begin with dry air moving in from the interior of the U.S. towards Southern California. As this air flows down into the Los Angeles Basin through the low gaps in the mountains (notably **Cajon Pass** on the east end of the San Gabriel Mountains and **Soledad Pass** south of Palmdale), it compresses and warms about five degrees Fahrenheit for every 1,000 feet that it descends. Though these winds are much cooler high in the mountains, they can become hot and dry and assume gale force when descending into the Los Angeles Basin. They are often the source of air turbulence for aircraft approaching Los Angeles International Airport.

The original spelling of the of name of the winds is unclear, not to mention the origin. Although the winds have been commonly called *Santa Ana Winds* or *Santa Anas*, many argue that the original name is *Santana Winds* or *Santanas*. Both versions of the name have been used. The name *Santana Winds* is said to be traced to Spanish California when the winds were called *Devil Winds* due to their heat. The reference book *Los Angeles A to Z* (by Leonard & Dale Pitt), credits the Santa Ana Canyon in Orange County as the origin of the name *Santa Ana Winds*, thereby arguing for the term *Santa Anas*. This might be supported by early accounts which attributed the Santa Ana riverbed running through the canyon as the source of the winds. Another account placed the origin of *Santa Ana Winds* with an Associated Press correspondent stationed in Santa Ana who mistakenly began using *Santa Ana Winds* instead of *Santana Winds* in a 1901 dispatch.

*Special credit for the research assistance of **Librarian Nancy Smith** of the Metropolitan Cooperative Library System Reference Center, Los Angeles Public Library.*

Rainfall Record

California's **Record Rainfall** for a 24-hour period was 26.12 inches occurring January 22-23, 1943, at Hoegees Camp in **Los Angeles County** (18 miles north of Los Angeles City Hall in the San Gabriel Mountains).

Seasonal Extremes

Wettest Seasons/Days/Calendar Years & Driest Seasons
Los Angeles Civic Center Weather Station

Wettest Seasons (Period: July 1 to June 30 of following year)

Total Inches of Rainfall	Season
38.18	1883-1884
34.84	1889-1890
33.44	1977-1978
32.76	1940-1941
31.25	1982-1983
31.01	1997-1998
27.47	1968-1969
27.36	1992-1993
26.98	1979-1980
26.28	1892-1893
26.21	1951-1952
24.35	1994-1995
23.65	1913-1914
23.43	1937-1938
22.41	1936-1937
22.41	1966-1967
22.31	1885-1886
21.66	1934-1935
21.26	1877-1878
21.26	1972-1973

Wettest Days

Total Inches of Rainfall	Date
5.88	Mar 2, 1938
5.71	Jan 26, 1956
4.86	Dec 31, 1933
3.96	Sep 25, 1939
3.85	Nov 7, 1966
3.84	Dec 29, 1965
3.69	Jan 22, 1967
3.61	Nov 19, 1967
3.60	Feb 20, 1944
3.52	Jan 7, 1974
3.51	Nov 22, 1965
3.43	Jan 25, 1969
3.43	Jan 22, 1943
3.42	Mar 1, 1983
3.30	Jan 10, 1995
3.30	Jan 20, 1969
3.24	Jan 4, 1995
3.12	Mar 3, 1943
3.12	Jan 1, 1934
3.03	Feb 16, 1980

Wettest Calendar Years (Period: January-December)

Total Inches of Rainfall	Calendar Year
40.29	1884
34.04	1983
33.26	1889
31.28	1941
30.57	1978
27.85	1998
27.16	1938
26.81	1965
26.33	1980
26.32	1969
24.95	1952
24.07	1967
23.92	1909
23.65	1995
23.50	1993
23.29	1916
23.21	1914
22.65	1992
22.57	1943
21.96	1893

Five Driest Seasons:

Season	Total Inches of Rainfall
1960-1961	4.85
1958-1959	5.58
1898-1899	5.59
1923-1924	6.67
1893-1894	6.73

Source: National Weather Service

During a 24-hour period from December 31, 1933 through January 1, 1934, 7.36 inches of rain fell on the **Los Angeles Civic Center**, a record for a 24-hour period at that location.

Section 4 – Hazard Vulnerability Analysis

A hazard can be defined as a condition that has the potential to result in equipment or system failure that can result in human injury or death or damage to the environment. Hazards are divided into two categories: natural or technological. Natural hazards include earthquakes, wild fires, and floods; while technological hazards include transportation accidents, illegal disposal, and equipment failures during manufacturing, storage, transportation, and use of hazardous materials.

A risk assessment is the process of evaluating the degree of harm a hazard presents. Risk assessments are utilized in developing emergency response plans and procedures, designing and modifying safety systems, identifying needed resources, conducting training and exercises, and minimizing damage and liability.

Definitions for Hazard Prioritization

Magnitude

Physical and Economic Greatness of the event

Factors to consider

- Size of Event
- Threat to life
- Threat to Property
    1. Individual
    2. Public Sector
    3. Business and Manufacturing
    4. Tourism

Duration

The length of time the disaster and the effects of the disaster last

Factors to consider

- Length physical duration during emergency phase
- Length of threat to life and property
- Length of physical duration during recovery phase
- Length of effects on individual citizen and community recovery
- Length of effects on economic recovery, tax base, business and manufacturing recovery, tourism, threat to tax base and threat to employment

Distribution

The depth of the effects among all sectors of the community and State

Factors to consider:

- How wide spread across the state is the effects of the disaster
- Are all sectors of the community affected equally or disproportionately

Area Affected

How large an area is physically threatened and potentially impaired or by a disaster risk

Factors to Consider:

- Geographic Area affected by primary event
- Geographic, physical, economic areas affected by primary risk and the potential secondary effects.

Frequency

The historic and predicted rate of recurrence of a risk caused event (generally expressed in years such as the 100 year flood)

Factors to consider:

- Historic events and recurrences of events in a measured time frame
- Scientifically based predictions of an occurrence of an event in a given period of time.

Degree of Vulnerability

How susceptible is the population, community infrastructure and state resources to the effects of the risk.

Factors to Consider:

- History of the impact of similar events
- Mitigation steps taken to lessen impact
- Community and State preparedness to respond to and recover from the event

Community Priorities

The importance placed on a particular risk by the citizens and their elected officials

- Willingness to prepare for and respond to a particular risk
- More widespread concerns over a particular risk then other risks
- Cultural significance of the threat associated a risk.

Hazard Ratings

Hazard Rating Definitions

Instructions for Hazard Mitigation Rating Form

Give each hazard priority risk category listed as a rating from 0 to 3; 0 = no risk, 3 meaning a high risk.

0 = No hazard risk in accordance with the definitions for hazard prioritization on page 4 through 6 of this form.

1 = Low Risk in accordance with the hazard prioritization definitions on pages 4 through 6 of this form.

2 = Moderate Risk in accordance with the hazard definitions on pages 4 through 6 of this form.

3 = High Risk in accordance with the hazard risk definitions on pages 4 though 6 of this form.

Total the numbers horizontally for each hazard category. The highest possible score for a hazard is 24 the lowest potential score is 0.

Examples:

a score of	15 - 24	could be considered HIGH priority risk
	9 - 14	could be considered MODERATE priority risk
	0 - 8	could be considered LOW priority risk

Prioritization of Hazard Matrix Results

LAUSD Hazard Mitigation Planning Task Force came to consensus on the following Hazard Priorities:

Hazard	Priority
Earthquake	High Risk
Biological/Health (Disease)	
Wildland/Urban Interface Fire	
WMD/Terrorism	
Severe Weather	
Data/Telecommunications Loss	
Flood	
Economic Disruption	Moderate Risk
Utility Loss	
Transportation Accident/Incident	
Drought	
Transportation Loss (road system failure)	
Dam Failure	Low Risk
Civil Disorder/Unrest	
Tsunami	
Explosions	
Special Events	
Volcanic Disruption/Ash fallout	

Los Angeles County Disasters Since 1950

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Flood	Floods	OCD 50-01	1950	Statewide	11/21/50	Not declared	9		$32,183,000
Flood	Fire, Flood, and Erosion	DR-28	1954	Los Angeles, San Bernardino	2/5/54	2/5/54			Not Avail
Flood	Floods	DR-47	1955	Statewide	12/22/55	12/23/55	74		$200,000,000
Fire	Fires	DR-65	1956	Los Angeles (Malibu area), Ventura		12/29/56	1	Several hundred	$70,000,000
Fire	Fires	CDO 58-01	1958	Los Angeles	1/3/58	Not declared	1	23	Not available
Flood	Storm & Flood Damage	N/A	1958	Statewide	4/2/58	82	13		$24,000,000
Flood, Landslide	Potential Flood Damage and Landsides as a Result of Fires	CDO 59-01	1959	Los Angeles	1/8/59	Not declared			Not applicable
Fire	Major and Widespread Fires	N/A	1960	Los Angeles, San Bernardino	7/21-22/60	Not declared		12	$10,000,000
Fire	Bel Air Fires	DR-119	1961	Los Angeles		11/16/61		103	Between $50,000,000 - $100,000,000
Flood	Flood and Rainstorm	DR-122	1962	Los Angeles, Ventura	2/16/62 & 2/23/62	3/6/62			Not available
Flood	Baldwin Hills Dam Failure	DR-161	1963	Los Angeles	12/16/63	12/21/63			$5,233,203
Severe Storm, Flood	Abnormally Heavy and Continuous Rainfall	N/A	1963	Northern California (boundaries of San Luis Obispo, Ventura, Los Angeles, and San Bernardino counties to the Oregon State Line	2/14/64	Not declared			Not Available
Fire	Major Widespread Fires (Weldon Fire)	N/A	1964	Los Angeles	3/16/64	Not declared			$2,000,000
Flood	Storms	N/A	1964	Los Angeles	4/3/64	Not declared			1,610,300
Civil Unrest	Riots	N/A	1965	Los Angeles	8/14/65	Not declared	32	874	$44,991,000
Flood, Landslide	Flooding and Hill Slides Caused by Heavy Rains	N/A	1965	City of Burbank, Los Angeles	1/5/65	Not declared			Not Available
Landslide	Slide Damage	N/A	1965	City of Los Angeles	6/21/65	Not declared			$6,488,600
Fire	Major and Widespread Fires	N/A	1967	Los Angeles, Orange, San Diego, Ventura	1/7/67	Not declared			$11,345,000
HazMat	Major Oil Spill	N/A	1969	Coastal Areas of Southern California		Not declared			Not available

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Flood	1969 Storms	Unknown	1969	Los Angeles, San Luis Obispo, Fresno, Inyo, Riverside, San Bernardino, Santa Barbara, Tulare, Ventura, Amador, El Dorado, Kern, Kings, Madera, Modoc, Mono, Monterey, Orange, Placer, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Tuolumne, Mariposa, Merced, Calaveras, San Benito, Sierra, Contra Costa, Humboldt, Mendocino, Sonoma, Plumas, Tehama, Yuba, Butte, Marin, Yolo	1/23/69, 1/25,69, 1/28/69, 1/29/69, 2/8/69, 2/10/69, 2/16/69, 3/12/69	1/26/69	47	161	$300,000,000
Landslide	Slide Damage Caused by Heavy Rains and Storms	N/A	1970	City of Los Angeles	3/10/70	Not declared			$8,500,000
Fire	Statewide Fires		1970	City of Oakland, Los Angeles, Ventura, San Diego, Kern, San Bernardino, Monterey, Riverside	9/24/70, 9/28/70, 10/1/70, 10/2/70, 10/20/70, 11/14/70	9/29/70	19		$223,611,000
Earthquake	San Fernando Earthquake	DR-299	1971	Los Angeles	2/9/71	2/9/71	58	2,000	$483,957,000
Agricultural	Exotic Newcastle Disease Epidemic	N/A	1972	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura, Santa Barbara	4/10/72, 5/22/72	Not declared			$10,000,000
Fire	Fires	N/A	1973	Los Angeles	7/16/73	Not declared			$1,300,000
Economic	Gasoline Purchasing Problems	N/A	1974	Alameda, Contra Costa, Los Angeles, Orange, Riverside, San Mateo, Solano, Santa Clara, Ventura	2/28/74, 3/4/74, 3/10/74	Not declared			
Fire	Fires	N/A	1975	Los Angeles	11/24/75	Not declared			$19,486,960
Drought	Drought	N/A	1976	Alpine, Calaveras, Colusa, Fresno, Glenn, Madera, Merced, San Diego, San Joaquin, Solano, Stanislaus, Sutter, Tuolumne, Alameda, Butte, Contra Costa, Kings, Los Angeles, Riverside, San Luis Obispo, Tulare, Yolo, Amador, Monterey, Napa, Nevada, San Benito, San Bernardino, Tehama, San Mateo, Marin	2/9/76, 2/13,76, 2/24/76, 3/26/76, 7/6/76	Not declared			$2,664,000,000
Fire	1978 Los Angeles Fire	EM-3067	1978	Los Angeles	10/24/78	10/29/78	1		$61,279,374

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Severe Storm	Storms	Unknown	1978	Inyo, Mono, San Diego, San Luis Obispo, Kings, Monterey, Kern, Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Tulare, Ventura	3/9/78, 2/27,78, 2/13/78	2/15/78	14	21	$117,802,785
Economic	Gasoline Shortage Emergency	N/A	1979	Alameda, Contra Costa, Los Angeles, Marin, Monterey, Orange, Riverside, San Francisco, San Diego, Santa Clara, Santa Cruz, San Mateo, Ventura, San Bernardino, Sonoma, Contra Costa, Los Angeles, Orange, Santa Clara	5/8/79 - 11/13/79	Not declared			
Fire	Fires	N/A	1979	Santa Barbara, Ventura, Los Angeles, El Dorado	9/28/79, 9/21/79, 9/20/79	Not declared			$9,970,119
Flood	1980 Winter Storms	DR-615	1980	Santa Barbara, Los Angeles, Orange, Riverside, Ventura, San Bernardino, San Diego	2/21/80, 2/7/80	2/21/80			
Fire	Southern California Fires	DR-635	1980	San Bernardino, Los Angeles, Orange, Riverside	11/18/80	11/18/80			$64,795,200
Economic	Mediterranean Fruit Fly Infestation	N/A	1981	Contra Costa, Los Angeles, San Benito, Stanislaus, Santa Cruz, San Mateo	8/8/81 - 9/25/81	Not declared			$22,000,000
Flood, Severe Storm	1982-83 Winter Storms	DR-677	1982	Contra Costa, San Joaquin, Sacramento, Marin, San Mateo, Los Angeles, San Diego, Alameda, Orange, San Benito, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Sonoma, Ventura, Trinity, Colusa, Lake, Mendocino, Monterey, San Luis Obispo, Solano, Yolo, Butte, Glenn, Kern, Kings, San Bernardino, Sutter, Tehama, Merced, Del Norte, Fresno, Madera, Napa, Placer, Riverside, Stanislaus, Tulare, Humboldt, Mariposa, Nevada, Yuba	1982, 1983	2/9/83	0	0	$523,617,032
Fire	Dayton Hills Fire	N/A	1982	Los Angeles, Orange, Ventura	10/10/82	Not declared	0		$19,277,102

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Flood	Winter Storms	Unknown	1982	Contra Costa, San Joaquin, Sacramento, Marin, San Mateo, Los Angeles, San Diego, Alameda, orange, San Benito, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Sonoma, Ventura, Trinity, Colusa, Lake Mendocino, Monterey, San Luis Obispo, Solano, Yolo, Butte, Glenn, Kern, Kings, San Bernardino, Sutter, Tehama, Merced, Del Norte, Fresno, Madera, Napa, Placer, Riverside, Stanislaus, Tulare, Humboldt, Mariposa, Nevada, Yuba	12/8/82-3/21/83	2/9/83			$523,617,032
Economic	Mexican Fruit Fly	N/A	1983	Los Angeles	11/4/83	Not declared			
Fire	Statewide Fires	DR-739	1985	San Diego, City of Los Angeles, San Luis Obispo, Monterey, Santa Clara, Santa Cruz, Ventura	7/1/85 - 7/11/85	4/25/84	3	470	$64,845,864
Earthquake	Whittier Earthquake	DR-799	1987	Monterey park, City of Whittier, Los Angeles, Orange	10/2/87 - 10/5/87	10/7/87	9	200	$358,052,144
Economic	Mediterranean Fruit Fly	N/A	1987	Los Angeles	8/25/87	Not declared			
Severe Storm	Coastal Storms	DR-812	1988	Los Angeles, Orange, San Diego	1/21/88	2/5/88	0		
Economic	Mediterranean Fruit Fly	N/A	1988	Los Angeles	7/21/88	Not declared			
Fire, Windstorm	Fires/ High Winds	N/A	1988	Los Angeles	12/9/88	Not declared	0	2	$12,400,000
Economic	Mediterranean Fruit Fly	N/A	1989	Los Angeles	8/9/89	Not declared			
Fire	Santa Barbara Fires	DR-872	1990	Los Angeles, Santa Barbara, Riverside, San Bernardino	6/28/90, 6/29/90	6/30/90	3	89	$300,000,000
Freeze	Freeze	DR-894	1990	Santa Cruz, Fresno, Glenn, imperial, Kern, Mendocino, Monterey, Riverside, San Benito, San Bernardino, San Diego, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, Tulare, Ventura, Alameda, Butte, Colusa, Los Angeles, Madera, Marin, Merced, Napa, San Joaquin, San Luis Obispo, Sutter, Yolo, Yuba, Stanislaus, Tehama	12/19/90-1/18/91	2/11/91			$856,329,675
Earthquake	Upland Earthquake	N/A	1990	Los Angeles, San Bernardino	3/9/90, 3/13/90	Not declared	0	38	$12,034,150
Economic	Mexican Fruit Fly	N/A	1990	Los Angeles, San Diego	5/14/90	Not declared			
Severe Storm	1992 Winter Storms	DR-935	1992	Los Angeles, Ventura, City of Los Angeles, kern, orange, San Bernardino	2/12/92, 2/19/92	2/25/92	5		$123,240,531
Civil Unrest	Los Angeles Civil Disorder	DR-942	1992	Los Angeles	4/29/92	5/22/92	53	2,383	$800,000,000

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Flood	1992 Late Winter Storms	DR-979	1992	Alpine, Los Angeles, Humboldt, Napa, Santa Barbara, Culver City, City of Los Angeles, Contra Costa, Mendocino, Sonoma, Fresno, imperial, Madera, Monterey, San Bernardino, Sierra, Tehama, Trinity, Tulare, Modoc, Orange, Riverside, Lassen, Siskiyou, Plumas, San Diego	1/7/93 - 2/19/93	1/15/93	20	10	$600,000,000
Fire	Southern California Firestorms	DR-1005	1993	Los Angeles, Ventura, San Diego, Orange, Riverside, San Bernardino	10/27/93, 10/28/93	10/28/93	4	162	$1,000,000,000
Earthquake	Northridge Earthquake	DR-1008	1994	Los Angeles, Ventura, Orange	1/17/94, 1/24/94	1/17/94	57	11,846	$40,000,000,000
Severe Storm	Severe Winter Storms	DR-1044	1995	Los Angeles, Orange, Humboldt, Lake , Sonoma, Butte, Colusa, Contra Costa, Del Norte, Glenn, Kern, Lassen, Mendocino, Modoc, Monterey, Napa, placer, Plumas, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Tehama, Ventura, Yolo, Yuba, Alpine, Amador, Nevada, Riverside, Sacramento, San Bernardino, San Mateo, Shasta, Sutter, Trinity, San Diego, Alameda, Marin, Fresno, Kings, El Dorado, Madera, Solano, Siskiyou	1/6/95 - 3/14/95	1/13/95	11		$741,400,000
Storm, Flood	Late Winter Storms	DR-1046	1995	All counties except Del Norte		1/10/95	17		$1,100,000,000
Fire	Southern California Firestorms	EM-3120	1996	Los Angeles, Orange, San Diego	10/1/96			5	$40,000,000
Flood	El Nino		1998	Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, Fresno, Glenn Humboldt, Kern, Kings, Lake, Los Angeles, Marin, Mendocino, Merced, Monterey, Napa, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Ventura, Yolo, Yuba			17		$550,000,000

Hazard Type	Disaster Name	Disaster #	Year	Counties and Cities Declared	State Declaration	Federal Declaration	# of Deaths	# of Injuries	Cost of Damage
Fire	Fire		1999	Various Counties	8/26/99				
Fire	California Wildfires	DR-1498	2003	Ventura, Los Angeles, San Bernardino, Riverside, San Diego		DR1498			
Earthquake	Sierra Madre Earthquake	N/A	2003	Los Angeles	7/5/91	Not declared	1	30	$33,500,000
Fire	Southern California Wildfires	DR-1498	2003	Ventura, Los Angeles, San Bernardino, Riverside, San Diego	10/24-26/03	10/27/03			

]State of California Governor's Office of Emergency Services

HIGH RISK Priority Hazards

Earthquake

Earthquake was rated a HIGH PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

The most recent significant earthquake event affecting Southern California was the January 17th 1994 Northridge Earthquake. At 4:31 A.M. on Monday, January 17, a moderate but very damaging earthquake with a magnitude of 6.7 struck the San Fernando Valley. In the following days and weeks, thousands of aftershocks occurred, causing additional damage to affected structures.

57 people were killed and more than 1,500 people seriously injured. For days afterward, thousands of homes and businesses were without electricity; tens of thousands had no gas; and nearly 50,000 had little or no water. Approximately 15,000 structures were moderately to severely damaged, which left thousands of people temporarily homeless. 66,500 buildings were inspected. Nearly 4,000 were severely damaged and over 11,000 were moderately damaged. Several collapsed bridges and overpasses created commuter havoc on the freeway system. Extensive damage was caused by ground shaking, but earthquake triggered liquefaction and dozens of fires also caused additional severe damage. This extremely strong ground motion in large portions of Los Angeles County resulted in record economic losses.

However, the earthquake occurred early in the morning on a holiday. This circumstance considerably reduced the potential effects. Many collapsed buildings were unoccupied, and most businesses were not yet open. The direct and indirect economic losses ran into the 10's of billions of dollars.

To better understand the earthquake hazard, the scientific community has looked at historical records and accelerated research on those faults that are the sources of the earthquakes occurring in the Southern California region. Historical earthquake records can generally be divided into records of the pre-instrumental period and the instrumental period. In the absence of instrumentation, the detection of earthquakes is based on observations and felt reports, and are dependent upon population density and distribution. Since California was sparsely populated in the 1800s, the detection of pre-instrumental earthquakes is relatively difficult. However, two very large earthquakes, the Fort Tejon in 1857 (7.9) and the Owens Valley in 1872 (7.6) are evidence of the tremendously damaging potential of earthquakes in Southern California. In more recent times two 7.3 earthquakes struck Southern California, in Kern County (1952) and Landers (1992). The damage from these four large earthquakes was limited because the occurred in areas which were sparsely populated at the time they happened. The seismic risk is much more severe today than in the past because the population at risk is in the millions, rather than a few hundred or a few thousand persons.

Historic Earthquakes

Since seismologists started recording and measuring earthquakes, there have been tens of thousands of recorded earthquakes in Southern California, most with a magnitude below three. No community in Southern California is beyond the reach of a damaging earthquake. The table below describes the historical earthquake events that have affected Southern California.

About 30 earthquakes occur every day in Southern California. Most have a magnitude of less than 2.0. No evidence exists that earthquakes are more likely to occur in certain kinds of weather.

The best place to see any part of the monstrous, 800-mile San Andreas Fault is in Palmdale in a road cut along the Antelope Valley Freeway (Route 14) just north of Avenue S. The last time this part of the fault was active was in 1857

Year	Date	Location	Time	Richter	Mercalli	Deaths & Property Damage
1769	Jul 28	L.A. Area	---	6.0	VIII	No information
1812	Dec 8	L.A. Area	3:00pm	7.0	VII	40 deaths, Mission San Juan Capistrano severely to moderately damaged. Mission San Gabriel moderately damaged.
1827	Sep 24	L.A. Area	4:00am	5.5	---	**No information**
1855	Jul 11	L.A. Area	4:15am	6.0	VIII	Bells of Mission San Gabriel torn down. 26 buildings damaged in L.A.
1857	Jan 9	Fort Tejon	4:24pm	7.9	IX	2 deaths; Heavy property damage and loss
1916	Oct 23	Tejon Pass Region	**2:44pm**	**5.3**	**---**	**No information**
1933	Mar 10	Long Beach	5:54pm	6.4	IX	120 deaths; $50 million
1941	Oct 21	Torrance-Gardena	10:57pm	4.8	VII	No deaths; $100,000
1941	Nov 14	Torrance-Gardena	12:42am	4.8	VIII	No deaths; $1 million
1951	Dec 25	San Clemente Island	4:46pm	5.9	---	**No deaths; No appreciable damage**
1971	Feb 9	San Fernando	6:01am	6.6	---	65 deaths; $505 million
1979	Jan 1	Malibu	3:15pm	5.2	---	No deaths; minor damage
1987	Oct 1	Whittier-Narrows	7:42am	5.9	---	8 deaths; $358 million
1988	Dec 3	Pasadena	11:38pm	5.0	---	No deaths; No appreciable damage
1989	Jan 19	Malibu	10:38pm	5.0	---	No deaths; slight damage
1989	Jun 12	Montebello	9:57am	4.6	---	No deaths; No appreciable damage
1991	Jun 28	Sierra Madre	7:44am	5.8	---	2 deaths; $40 million
1994	Jan 17	Northridge	4:31am	6.7	---	61 deaths Est. $20 billion
2001	Sep 9	SE of West Hollywood	4:59pm	4.2	---	No deaths; moderate damage

The Los Angeles-Whittier Narrows Earthquake of October 1, 1987 (FEMA-799-DR-CA).

Introduction

On October 7, 1987, the President declared California a major disaster area as a result of an earthquake which struck the eastern Los Angeles Metropolitan area. Los Angeles County was declared eligible for the Individual and Public Assistance Programs. What follows is a summary of the Hazard Mitigation Survey Team's recommendations to the Federal Emergency Management Agency (FEMA) Regional Director, the Governor's Authorized Representative, and interested Federal, State, and local agencies.

Description of the Disaster

Overview

The relatively moderate earthquake that struck the eastern Los Angeles area at 7:42 a.m. on October 1 produced widespread damage in southern California. The earthquake caused relatively few deaths and injuries but produced significant financial impacts, both from damage and loss of revenues.

Damage due to earthquake shaking was reported as far north as Ventura County and extended south to mid-Orange County, west to Long Beach, and east to Ontario. At least 55 cities as well as unincorporated areas in Los Angeles, Orange, and Ventura counties reported some degree of damage, and total losses exceeded $350 million (see Tables 1 and 2 for detailed estimates of losses). The primary concentration of major damage was to the redeveloped historic central business district of Whittier. Numerous buildings occupied primarily by small businesses suffered severe damages.

Fatalities caused by the earthquake included a student at California State University, Los Angeles, killed by a concrete slab falling from a parking structure, a utility worker trapped while excavating for a power line in the Angeles National Forest area, and a Maywood man who fell to his death from a second story apartment window. Approximately 200 injuries (mostly minor) and several fatal heart attacks were also attributed to the earthquake.

FEMA and the State of California opened ten disaster application centers. By November 13, 1987, 22,622 individuals and businesses had registered at these centers. The temporary housing program received 15,579 applications for assistance, while the Individual Family Grant Program received 4,609 applications. The Small Business Administration issued 13,877 home and personal property loan applications and 4,200 business loan applications.

Public schools generally experienced few casualties or major damage. The Los Angeles Unified School District reported that 56 schools sustained minor damage and two schools sustained major damage, with an estimated loss of $5 million. The most significant problem appeared to be emergency coordination and implementation of school disaster plans.

The earthquake damaged more than 30 hospitals, nursing homes, medical care and outpatient facilities as far away as 30 miles from the epicenter. Businesses experienced significant financial disruption. Several large corporations reported structural and nonstructural damage, resulting in significant losses. Numerous small businesses in Whittier experienced major losses and interruptions of business that in some cases were difficult to recover from.

LOSSES (in $millions)			
	Los Angeles Co.	**Orange Co.**	**Total**
Private Sector	$244,080	$8,648	$252,728
Public Sector	104,909	413	105,322
TOTAL	***$348,989***	***$9,061***	***$358,050***

PUBLIC SECTOR LOSSES BY CATEGORY (in $millions)	
Counties/Cities/Special Districts	$52,170
Community Colleges	1,747
State Facilities	23,625
Schools (K-12)	16,000
Private Non-Profit	11,780
TOTAL	***$105,322***

Geophysical Discussion

The Los Angeles-Whittier Narrows earthquake, measuring 5.9 on the Richter scale, occurred in the east Los Angeles metropolitan area at 7:42 a.m. on October 1, 1987. The earthquake's epicenter was approximately six miles south-southeast of Pasadena. The main shock occurred along a previously unidentified Transverse Range thrust fault. It was followed by approximately thirty-five aftershocks including one magnitude 5.3 event at 3:59 a.m. on October 4. Aftershocks continued through the end of the month.

The geophysical setting of this earthquake is described by the interaction between crustal plates that are in constant motion (5-10 cm/yr.) relative to one another. The San Andreas fault system forms the boundary between the Pacific and the North American plates. This boundary intersects several of California's major metropolitan centers, making it one of the most extensively urbanized tectonic plate boundaries.

The Los Angeles metropolitan area is susceptible to earthquake damage resulting from the ongoing tectonic process that characterizes coastal California. This process is dominated by the intersection of the San Andreas and the Transverse Range fault systems ; the effects of this intersection are evident in the regular occurrence of moderate size earthquakes.

The Los Angles metropolitan area, inhabited by more than 11 million people, is one of the key industrial, commercial, and cultural centers of the United States. As the area's population and development continue to expand, so does its vulnerability to damaging earthquakes. The 1971 San Fernando and the Whittier Narrows earthquakes, both moderate-sized events, demonstrate how vulnerable a complex modern urban society is to the damaging effects of earthquakes. Earthquakes of similar moderate magnitude can be expected to recur in the region on a regular basis. According to the

U.S. Geological Survey, there is a strong possibility that the potential for moderate magnitude earthquakes within the Los Angeles Basin has been underestimated by seismologists and emergency planners.

Even though the losses from these and other moderate earthquakes are significant, they do not reflect the overall risk to the region, since none has been as strong as the largest credible earthquake, an 8.0+ magnitude event on the San Andreas Fault. The probability that such a large earthquake will occur sometime in the next 25 years near the Los Angeles metropolitan area is estimated to be 50 percent or greater. Projected losses would exceed those of any previous natural disaster in the United Stated.

Damage Assessment

Approximately 10,000 buildings in the region were damaged as a result of the October 1 earthquake, with additional damage occurring after the major October 4 aftershock. Structural damage impacted primarily unreinforced masonry commercial buildings, wood frame homes, apartments, and mobile homes, and concrete frame structures. Other areas of concern included nonstructural damage, transportation and lifelines.

Unreinforced Masonry Structures

The most heavily damaged structures were older commercial buildings constructed of unreinforced masonry. The business district of Whittier experienced heavy damage to these types of structures. Following the earthquake, the entire business district was closed, and a number of the damaged buildings were demolished. Typical damaged consisted of failure of one or more load-bearing walls, with occasional collapse of floor or roof diaphragm elements.

The Unreinforced Masonry Building Act (SB 547), the state law passed in 1986 to require local jurisdictions to develop hazard mitigation programs for unreinforced masonry buildings, had not yet been fully implemented at the local level. The cities of Los Angeles and Monterey Park had enacted hazardous building ordinances, but had not yet fully implemented them. Other communities in the impacted area were considering enacting this type of ordinance.

Residential Structures

A second serious type of structural damage involved single family homes, apartment buildings, and mobile homes. In some cases, homes experienced damage to unreinforced masonry walls, especially hollow clay tile walls, a construction material popular in older southern California buildings. In most cases, however, residential damage was to wood frame structures. Typically the failure of the supporting “cripple wall” between the concrete foundation and the floor diaphragm caused the building to slide off the foundation, destroying exterior structural components and breaking utilities connections. Many homes sustained minor damage such as chimney collapse.

Un-reinforced masonry apartment buildings experienced significant damage, although none actually collapsed. Wood frames/stucco apartment buildings were less heavily impacted, but some sustained major cracking of exterior walls that in effect made the structure uninhabitable. Some damage occurred also to the more modern apartment and condominium structures, including wall cracks, fallen ceilings, and collapse of balconies. Damage was also reported to mobile homes. Typically, this damage involved loss of support from foundation piers due to earthquake shaking.

Modern Concrete Frame Structures

Some modern concrete frame buildings experienced significant problems, while steel frame buildings performed well. Concrete frame parking structures experienced damage, in one case resulting in a

fatality. Several concrete frame buildings on the campus of California State University, Los Angeles, sustained significant damage. Pre-cast concrete buildings proved particularly vulnerable to earthquake shaking, and would probably have experienced severe damage if the duration of the earthquake shaking had been slightly longer. A 1976 pre-cast concrete frame structure in Rosemead experienced serious structural damage which forced the corporate occupant to relocate its work force in temporary outdoor units.

Nonstructural Damage

Widespread nonstructural damage was reported following the earthquake. Many broken glass storefront windows could have resulted in severe injuries had the earthquake occurred one hour later when pedestrian traffic was present. Other nonstructural damage of serious concern included the widespread failure of elevators, the partial collapse of many ceilings and light fixtures, and the toppling of building contents.

Transportation & Lifelines

Damage to the transportation system was minimal. One exception was the Interstate 605 overpass at the intersection with Interstate 5, where damaged columns resulted in a one-day closure of both freeways at that location. Local roads and highways experienced little damage. Airports suffered enough damage to require temporary closure, but were generally back in operation within a day.

The municipally owned water system in Whittier experienced major damage. Numerous water mains in the old system were cracked or broken. The October 4 aftershock exacerbated the damage in some of the same locations.

Emergency Response

The California Office of Emergency Services (OES) activated its Region I Emergency Operations Center (EOC) in Los Angeles and attempted to determine the level and location of earthquake damage. Region I staff, supplemented by staff from the State Department of Transportation, the State Department of Health Services, and the Southern California Earthquake Preparedness Project (SCEPP), also processed requests for volunteer assistance from the California Conservation Corp (CC) and the OES engineers program. At approximately 3:45 p.m. on October 1, the California Earthquake Prediction Evaluation Council (CEPEC) convened via a conference call from the EOC to ascertain, to the extent possible, the probability that the initial earthquake would be followed within the next several days by a shock of equal or greater magnitude. The consensus of the Council was that the likelihood of such an event was less than 5%.

Two of the cities most affected by the earthquake had exercised their emergency response plan during 1987. One of these, Monterey Park, had exercised its plan just two days prior to the earthquake. Whittier, the city most seriously damaged by the earthquake, had previous initiated a comprehensive community training program and reported that citizens and city employees knew what to do.

Evacuations

Numerous evacuations from high-rise and other types of buildings occurred after the earthquake. In most cases, these evacuations were spontaneous and unplanned, resulting in some inappropriate actions. For example, in some high-rise buildings, occupants congregated on sidewalks outside the building, risking injury from falling glass in the event of an aftershock.

In other cases, residents of apartment buildings self-evacuated to nearby parks, sometimes against the advice of emergency responders. Red Cross staff reported dealing with two kinds of problems following

the earthquake: residents fearful of leaving shelters and returning to their homes, and landlords locking tenants out in order to obtain new tenants at higher rents.

Mutual Aid

Once the area and extent of damage became generally known, jurisdictions in need of mutual aid were called by jurisdictions willing to provide it. Among the resources made available were:

- The City of Los Angeles provided numerous building inspectors to Whittier;
- Huntington Park provided public works assistance to Bell;
- Los Angeles County provided building inspectors, aerial lift trucks, and haulage to Alhambra and building inspectors to Whittier;
- Orange County provided fire units to Monterey Park;
- Ventura and Orange counties dispatched fire equipment to Los Angeles County through regular fire mutual aid channels;
- The (CCC) provided crews to Alhambra and Whittier to assist in demolishing chimneys destroyed by the earthquake;
- State OES provided hand-held radios to Whittier.

Communications

The telephone communications system, as expected, experienced severe overload and consequent outage. Land-line communications were disrupted by the earthquake. In some cases, phones did work, but most jurisdictions hit hardest reported one-way communications, with calls coming in, but none going out. Although service was restored relatively quickly, the outage restricted the ability of local government to respond quickly to the emergency.

Jurisdictions with organized amateur radio groups reported success in using these individuals to determine the initial extent of their damage. One city used cellular car phones for two-way communications; they functioned well although they are ultimately tied into the existing land line network.

In spite of the relatively minor incidence of injury produced by this earthquake, medical communications systems experienced an overload of the 911 system. Extra telephone dispatchers were called in to handle the greatly increased number of calls which, at one point, tied up virtually every 911 line.

It is clear from this response that a higher magnitude earthquake, with greater consequences, could completely overburden the emergency communications system.

Fires and Hazardous Materials

Fire departments around the area reported a number of calls concerning fires and hazardous materials incidents immediately following the earthquake. The Los Angeles City Fire Department reported five earthquake caused fires, three of which were linked to natural gas leaks.

A significant hazardous materials incident occurred in the City of Santa Fe Springs, when an earthquake-ruptured tank leaked 240 gallons of chlorine into the air, causing a plume cloud formation that drifted through the industrial section of the City toward Whittier, resulting in the evacuation of some areas. Spilled chemicals resulted in a fire at a laboratory facility of California State University, Los Angeles. Pockets of encapsulated asbestos were dislodged by the earthquake shaking, releasing airborne asbestos fibers into ventilation systems or some public schools.

The Southern California Gas Company received over 20,000 service calls following the earthquake. They found 4,065 gas leaks, of which only 1,411 proved to be directly caused by the earthquake. A

total of 16,507 customers reported turned off their gas although there was no gas leak; 81 automatic gas shutoff valves had to be reset.

Mass Care

The American Red Cross sheltered 10,359 people in 21 shelters following the earthquake and fed disaster victims 186,635 meals. By November 18, 1987, the Red Cross had provided 20,930 "bed units" (one person per day per bed equals one bed unit). In addition, some 625 families had been placed in rental units and more than 593 individuals checked into motels. Some difficulties were reported in terms of developing coordination between volunteer organizations and local government in providing this service.

Initial Recovery

After the main shock, city and county authorities started to quickly clean up and open the damaged area to people who wanted to remove their business inventories, clean up debris, or get back to work. Vehicle traffic was kept out of the most seriously damaged areas, but allowed access to the immediately surrounding area. This initial recovery effort failed to account for potentially damaging aftershocks. Although the Whittier Narrows aftershock sequence was characterized by an unusually small number of aftershocks during its first 48 hours of activity, a very large aftershock, measuring 5.3 on the Richter scale, occurred on October 4. The Whittier May Company parking garage, which was damaged but stills standing after the earthquake, collapsed during the aftershock.

The Northridge Earthquake

The magnitude 6.7 Northridge earthquake occurred at 4:31 on the morning of January 17, 1994, a national holiday, when most Californians were at home asleep. Fifty-seven people lost their lives, nearly 9,000 were injured, and damage was in excess of $20 billion.

Responding to the losses from the Northridge earthquake, Governor Pete Wilson issued Executive Order W-78-94 instructing the Seismic Safety Commission to review the effects of the earthquake and to coordinate a study of the specific policy implications arising from the Northridge earthquake, with particular attention to seismic structural safety and land-use planning.

In carrying out the Governor's mandate, the Commission used over three dozen background reports (published separately in the *Compendium of Background Reports on the Northridge Earthquake*, SSC 94-08) that describe the relevant laws, codes, regulations, and current practices in the fields of land use planning, structure and lifeline design, construction, and earth sciences. These reports were prepared by experts who reviewed the legal, social, and physical environment in which they took place. The reports were also reviewed by over 60 stakeholders, from state agencies and professional organizations to private citizens. In addition, a number of detailed case studies were conducted on over two dozen buildings following the earthquake and published as *Northridge Buildings Case Studies*, SSC 94-06.

Effects of the Northridge Earthquake

At 4:31 a.m. on January 17, 1994, eight miles below the surface of the northwestern end of the San Fernando Valley, the magnitude 6.7 earthquake generated intense shaking that caused widespread damage and enormous economic loss. The communities of Northridge, San Fernando, West Hollywood, Santa Clarita, Fillmore, Simi Valley, and Sherman Oaks were the hardest hit, but strong shaking and vulnerable buildings caused extensive damage as far away as central Los Angeles, Santa Monica, and Whittier.

This report is an overview of the effect of the Northridge earthquake on people, buildings, lifelines, and the local economy. It is these effects the Commission seeks to reduce in future earthquakes through improved public policy.

People

Although the number of lives lost in the Northridge earthquake was remarkably low considering the intensity of the earthquake and its location, 57 people died, nearly 9,000 were injured, and the earthquake affected the lives of more people than any previous natural disaster in the United States.

The earthquake hit California hardest at home. Over 25,000 dwelling units were permanently lost or severely damaged, and over 1,600 homes and apartment buildings were declared uninhabitable. By mid-September, the Governor's Office of Emergency Services and the Federal Emergency Management Agency (FEMA) had received over 630,000 phone calls regarding disaster assistance from victims of the earthquake, more than twice the number received after the previous record holder, Hurricane Andrew. FEMA had also received over 265,000 applications for individual and family grants. The Small Business Administration had conducted over 535,000 interviews with earthquake victims and had approved over 100,000 loans totaling nearly $3.4 billion.

Low-cost housing proved the most difficult to replace. Despite extraordinary city, state, and federal government efforts, repairs were begun on less than half of the 5,607 buildings that provided 11,000 apartments in the now infamous "ghost towns". The owners of the remaining buildings didn't know whether they could rebuild or decided to forfeit their equity and allow lenders to foreclose.

Local mental health agencies and community-based groups reported over 1,150,000 crisis counseling interventions, costing over $35 million. Although most victims have adjusted and returned to an appearance of normalcy, for many the traumas continues.

Buildings

With losses estimated at $20 billion, the Northridge earthquake was the most expensive earthquake in the history of this country. The greatest portion of those losses was a direct result of the damage to buildings. Over 112,000 structures were damaged in the earthquake. In the City of Los Angeles, over 934,000 buildings were damaged badly enough to require inspection, and nearly 2,000 (including 1,500 residential buildings) of those were red-tagged, forbidding entry; another 1,000 buildings were red-tagged in other affected communities. Over 8,800 buildings were yellow-tagged as safe only for limited use in Los Angeles; 5,000 more were yellow-tagged in other communities.

Most modern buildings (those built to post-1976 codes) performed significantly better than structures built to prior codes, however, three types of structures built to modern codes had a higher-than-expected frequency of damage:

1. Tilt-up concrete buildings

2. Steel moment-frame buildings

3. Aboveground reinforced concrete parking structures

The most severe damage generally occurred to buildings designed to codes used before 1976, with damages divided into three categories:

1. Buildings constructed with suspect materials and techniques, such as tilt-ups, non-ductile concrete frames, and un-retrofitted unreinforced masonry.

2. Buildings designed or constructed with irregular configurations – for example, multistory buildings with inadequately braced first stories (like most of the apartment houses that collapsed) and hillside homes.

3. Buildings with poor design, construction, or maintenance.

In spite of the good performance of most buildings, the economic losses were high. The damage to nonstructural elements – heating and air conditioning systems, lighting fixtures, suspended ceilings, partitions, and equipment – was costly. Nonstructural damage is a significant matter as the value of these elements generally ranges from slightly over half of a single-family dwelling's cost to as much as 80 percent of the total cost of many large buildings. Nonstructural items make possible a building's function and damage can disable buildings that are otherwise safe to occupy. Some hospitals had to close even though they had suffered only minor structural damage, because of damage to sprinkler systems, power systems, and other vital equipment.

Fires

The earthquake caused relatively few fires, although the most spectacular, the fire at a break in a natural-gas transmission line on Balboa Boulevard, was shown so often on television that it gave the perception of a more pervasive problem. Good fortune played a critical role in keeping fires from spreading; there was no wind, and the area was not experiencing a dry spell. Another major factor, which was not a matter of luck, was the high level of planning and training in local fire departments and utilities, and the earthquake risk-mitigation programs of many businesses and governments.

Nonetheless, there were several problem areas:

- A number of fires in mobile home parks were caused when mobile homes fell from their supports and severed natural-gas connections. In all, 172 mobile homes were destroyed by fire. These mobile home fires were all too predictable; they remain a constant threat throughout the state.

- Communications failures hampered the response of emergency responders.

- Damage to water delivery systems seriously limited the efforts of firefighters.

Lifelines

Lifelines – transportation systems, communications, and water, gas, and electric utilities – suffered extensive damage. The effect of individual lifeline failures and combined failures is both direct (gas fires) and indirect (interference with emergency response). The combined loss of water pressure, electrical power, emergency power, and communications, coupled with significant gas-related fires, present a clear and unacceptable hazard with far-reaching implications for emergency response and disaster recovery. Only good fortune prevented an even greater disaster.

Transportation Systems

Despite the retrofits and improvements in design that were made between the 1971 San Fernando earthquake and this 1994 event, some freeway overpasses collapsed and other portions of the highway system failed. Most of the bridges that were severely damaged were designed prior to the changes instituted as a result of the San Fernando (1971) and Loma Prieta (1989) earthquakes. Bridges designed and built after the late 1970s performed relatively well. The direct cost to repair damaged freeway structures was over $350 million.

Communications

Communications failures during this disaster resulted in breakdowns in service, misunderstandings, lack of information for making decisions, and, in some cases, loss of lives and property. Emergency and normal communications systems were disrupted by damage, loss of electrical power, increased call volume, and call convergence into and out of the affected area. The disruption ranged from delayed dial tones to nonfunctional radio systems. Cellular phones worked well, but experienced overload. Radio communication among various police and fire agencies was hampered by too few mutual-aid channels, incompatibility of dissimilar radio systems, and the use of exclusive frequency bands.

Many hospital radios and phones did not work, requiring the Los Angeles Fire Department to send runners and fire units to determine the status of hospitals; paramedic and emergency medical services in the San Fernando Valley had communication problems; the Los Angeles County Medic Alert Center broke down; the Hospital Emergency Administrative Radio system was inoperable in the area of greatest earthquake impact; Reddi-Net, a computerized system owned by the Hospital Council of Southern California that links 86 hospitals, failed. Equipment damage and lack of employee training took their toll.

Electricity

About two million customers in the Los Angeles area lost electric power following the earthquake. Although power to most customers was restored, those near the epicenter, including hospitals and police and fire stations, were without power. Electric utilities made significant progress in “hardening” their generating and distribution facilities as a result of lessons learned in the San Fernando, Loma

Prieta, and other earthquakes, but this event presented new problems. For the first time, transmission towers were toppled at a few locations. Power was restored to most of the region within one day and the hardest-hit areas within three days.

Gas

Damage to natural-gas transmission and distribution system caused fires, including a spectacular fire on a major thoroughfare, and interrupted service. The earthquake demonstrated that some older pipelines are vulnerable to failure in areas of ground deformation, but that newer pipelines faired well. Because gas-related fires are a major source of losses, efforts to minimize losses and control leaks are important.

Water

Damage to the area's water supply systems, from northern California and the Colorado River, as well as to distribution lines interrupted supplies and hampered fire fighting. The earthquake damaged five major aqueducts, disrupting the supply from the north. These pipelines serve treatment facilities that prepare water for the areas of Santa Clarita, Simi Valley, and San Fernando Valley. As was the case following the 1971 San Fernando earthquake, significant repairs were also required on local water distribution systems. Water was unavailable to some of the areas hardest hit by the earthquake for several weeks.

The Economy

The $20 billion in losses that often has been quoted as the cost of the Northridge earthquake coves, primarily, the physical damage to structures and lifelines. It does not include many of the costs related to loss of use, loss of business, loss of productivity, and relocation of businesses. Though they are significant, these losses are often overlooked. It was estimated that the loss of use of parts of the transportation system following the earthquake cost $65 billion in delays and lost productivity.

Overall productivity losses in the Los Angeles area in the days following the earthquake were estimated at $1 billion (Romero, 1994). Indirect economic effects such as loss of tax revenue, short- and long-term loss of productivity, and ripple effects such as foreclosures, abandonment of equity, and redistribution of commercial activities are extremely difficult to calculate with any degree of accuracy. Such imprecision doesn't lessen the impact, especially to the victims.

Loss of business is creating major problems in some areas, where these businesses provided both needed services and jobs. Although some businesses, trades, and professions are seeing an increase in demand for their services and products, fueled in part by government grants, low-interest loans, and other assistance, many small businesses remain closed or are struggling because the nearby residential properties that housed their normal customer base remain vacant. Nine months after the earthquake, nearly 50 percent of the small businesses in the most heavily affected area of Northridge were still not open. The commercial district in Fillmore and many commercial properties in communities from the San Fernando Valley to Santa Monica have yet to complete repairs.

Insured losses exceeded insurance industry expectations, illustrating the importance of reducing earthquake risk. The California Department of Insurance estimates that over 300,000 claims for earthquake damage repair had been filed as of October 1, 1994. The size of individual claims from the Northridge earthquake has been, on average, two or three times greater than claims from previous earthquakes. Insurance companies expect to pay approximately $11 billion in claims, and some have been driven to the brink of insolvency. Many insurance companies believing their earthquake insurance risk exceeds their ability to pay future claims, have moved to limit the number of policies written for

earthquake and homeowners' coverage in California. Lasting effects will be felt in terms of the availability of insurance, the amount paid for premiums, and the quality of coverage.

Geologic and Geotechnical Aspects of the Northridge Earthquake

The Northridge earthquake occurred at a depth of approximately nine miles beneath the earth's surface on a buried, or "blind," thrust fault. It produced intense shaking and caused extensive damage that reaffirmed the potential risk from this type of fault – and the need to mitigate that risk.

The earthquake was the most damaging recorded earthquake that has ever occurred in California. Strong-motion instrument recordings were obtained at 257 sites. Over 11,000 aftershocks have been recorded by these instruments. By maintaining and enhancing data collection programs and identifying areas that have faults capable of causing earthquakes, California can learn to better reduce its seismic risk.

The Northridge earthquake also caused secondary hazards, the most prominent of which was localized amplifications of the ground motion caused by local geologic conditions. The identification and mitigation of secondary hazards, such as landslides, liquefaction, and areas that may amplify shaking, need to be integrated into land use planning programs, building codes, and engineering practices.

The Northridge earthquake provided many geologic, seismologic and geotechnical data that are still being compiled and analyzed. A significant value of the Northridge earthquake data is their use in the development and calibration of methods for assessing seismic hazard for planning and engineering applications. For example, the Northridge event occurred on a buried fault, highlighting the need to characterize and include earthquakes on this type of fault in their analysis of the ground motion component of the overall seismic hazard, It also reaffirmed that most of the hazard associated with earthquakes typically comes from strong shaking.

Strong Ground Motion

The Northridge earthquake was a moderate earthquake that produced strong ground motions and intense shaking. The term "moderate" describes the *magnitude* of the earthquake, which in this case was 6.7. Moderate earthquakes (less than magnitude 7.0) generally produce localized shaking of intensity (that is, amplitude of motion and frequency content) on stiff structures similar to that of major earthquakes (magnitudes of 7.0 and above). However, a more extensive area experiences intense shaking in a higher-magnitude earthquake and the duration of the shaking, the length of time the strong motion lasts generally increases with increases in magnitude. Since a higher-magnitude earthquake affects a larger area and lasts longer, it can be expected to cause greater damage.

A number of factors affect the amount of damage to structures in an earthquake, but the intensity of shaking is of paramount importance. Shaking intensity is affected by the magnitude of the earthquake, its style of faulting, local geologic conditions, proximity to the fault rupture, and the rupture geometry along the fault. The Northridge earthquake's strong-motion records reveal extensive information about the nature of the shaking, including acceleration, velocity, displacement, duration, and frequency, the consensus of earth scientists and geotechnical engineers is that the earthquake's motions were not unusual for a thrust-fault earthquake of this magnitude. However, this earthquake clearly points out the importance of near-source effects and local geologic conditions on shaking intensity and the need to incorporate these phenomena in seismic design and construction.

Accelerations

Peak accelerations, which h are not necessarily the best measurement for correlating ground motion with the forces in structures, typically ranged from 0.4g to 0.8g in the regions that suffered significant damage. Recorded peak horizontal accelerations typically ranged between 0.1g and 0.5g at distances between 12 and 30 miles from the rupture zone, although some higher accelerations were recorded due to local geologic or topographic conditions. Horizontal accelerations exceeding 0.9g were recorded in the San Fernando Valley and in Santa Monica, nearly 14 miles away from the epicenter. The highest recorded free-field accelerations, 1.82g horizontal and 1.18g vertical, were at the Cedar Hill Nursery in Tarzana, three miles south and west of the epicenter. Instruments near an abutment to the Pacoima Dam recorded peak accelerations of 2.3g horizontal and 1.5g vertical, although the free-field accelerations on alluvial materials near the base of the dam were less than 0.5g.

There was initial speculation that much of the damage in the Northridge earthquake was caused by abnormally high vertical accelerations. Although vertical accelerations were high in some locations, so was the horizontal acceleration. The ratio of vertical to horizontal acceleration was consistent with previously recorded data. Modern building codes are based on assumptions that the maximum vertical accelerations will be two-thirds of the peak horizontal acceleration. An analysis of Northridge records indicates that, although this ratio was exceeded at a number of locations, on average, it held true (Shakal et al., 1994). The Commission has not received evidence that vertical accelerations played an unusual role in the damage caused by the Northridge earthquake.

Velocity and Displacement

The intensity of shaking is typically described by acceleration recordings. The Northridge earthquake also produced high velocities and displacements not described in acceleration data. A velocity of 56 inches per second was recorded in a parking lot at the Sylmar County Hospital, and a velocity of 72 inches per second was recorded at the Rinaldi receiving station. Peak velocity is important because it is a good indicator of an earthquake's demand potential (or energy) on multistory structures.

Ground displacement also is a significant factor in the design of structures, especially for seismically isolated structures. Ground displacement of 31 inches was measured at the Sylmar County Hospital parking lot. Base-isolate structures are normally separated from the surrounding soil to allow room for

movement. Although seismically isolated structures are isolated from high-frequency shaking during an earthquake, they may collide with building foundation stops or barriers if actual displacements exceed the anticipated or design displacements. Such collisions would result in high impact forces that fan cause significant damage and even collapse.

Near-Source Effects

The near-source region of an earthquake can be defined as the region within several miles of where the projection of the fault rupture plane meets the ground surface. Within this region, the ground motion may be characterized by pulses of high velocity that are potentially damaging to certain types of structures. The near-source area in a strike-slip earthquake would have a different shape (generally longer and narrower, extending on both sides of the fault rupture for the length of the rupture), and the nature of the near-source strong motion would also vary, depending on other non-source effects such as local geologic conditions.

Although seismologists have known of the influence of near-source effects on seismic shaking for some time, near-source effects first gained the interest of California engineers following the 1971 San Fernando earthquake. Failure of the Olive View Hospital in 1971 was attributed, in part, to a large, long-period near-source "seismic pulse." Near-source effects have been considered in the design of some critical facilities for a number of years. However, the implication of near-source effects have only recently been studied for use in the design of conventional structures because previous earthquakes have not struck well-instrumented urbanized areas and, therefore, produced few recorded motions from areas close to the source. At present, near-source effects are not explicitly considered in the building codes except for seismically isolated structures.

Near-source effects of engineering interest are related to the direction and mechanics of the fault rupture. The numerous localized, relatively rapid failures of "patches" of the fault surface causes significant high-frequency motion and allows permanent coseismal displacement of the fault and surrounding area. Known as source-effect phenomena, these factors affect the amplitude and frequ4ency content of shaking.

Of critical importance to the design of engineered structures is that near-source effects combined with local geologic effects an adversely alter the seismic performance of a wide range of structures, including high-rise and base-isolated buildings. Data recorded during the Northridge earthquake clearly indicate the need to incorporate measures to mitigate this hazard in building codes. High-velocity pulses in the near-source area are believed by some to be a cause of much of the damage. These pulses were the largest in the northern San Fernando Valley and Santa Susana Mountains. They were also significant in the southern San Fernando Valley.

Duration of Strong Motion

The longer ground shaking lasts, the greater the damage to structures, natural slopes, and fills. When strong shaking ceases, there is a reasonable possibility that the damage will not continue. However, if the shaking continues after damage has been initiated, structures will continue to degrade and may eventually collapse. Damage caused by seismic consolidation and liquefaction also increases as duration increases. The duration of intense shaking during the Northridge earthquake was relatively short, on the order of nine seconds or less. Had the earthquake's magnitude been larger, there is little doubt that the strong shaking would have lasted longer and the damage would have been greater. Strong shaking has lasted minutes in some other events.

The duration of intense shaking, like near-source effects, is not explicitly considered in out building codes Because an urbanized area of California has not yet been exposed to long-duration near-source effects, the effect of durations on various types of structures is not fully understood.

Response Spectra

Response spectra are graphs that display the response of structures to ground motion associated with earthquakes. A spectrum graphically depicts the variation of spectral accelerations (velocities or displacements) experienced by simple structures with different stiffness or periods of vibrations (expressed in seconds). Although some recorded Accelerations in this earthquake were especially high, most spectra generally agreed with those recommended by site-specific geotechnical studies as the basis for the design of special structures. Similar response spectra have been calculated from data from numerous earthquakes since the 1971 San Fernando event and should be expected in future events.

Engineers use *design* spectra to determine the design parameters to use when designing stuffier. The values of design spectra are not the same as those of response spectra computed from measured ground motion. Design spectra are modified from response spectra to reflect safety factors and the performance of materials and structural systems observed in past earthquakes.

Because of the damage from this earthquake, questions have been raised concerning the adequacy of the building code's definition of the forces that earthquakes can impose on buildings. Code writers and designers know that code spectral values will likely be exceeded in large earthquakes and that this was anticipated when the code was written.

The recorded data from the Northridge earthquake are still being evaluated and are subject to different interpretations. Strong motion instruments also were not located in many of the areas that suffered the most sever damage. Generally speaking, the motions recorded near the Northridge epicenter were compatible with those used as the basis for the code, but the motions exceeded those assumed in the code in some cases. At some locations, particularly in the near-source areas and in areas with unique local geology, shaking exceeded the assumptions underlying design values in the short- to mid-period range. This shaking appears to have affected low- and mid-rise buildings and caused response in higher modes of vibration for tall buildings. Velocity- and displacement-sensitive structures also may have been affected by the velocity pulses described earlier. Near-source and local geological effects must be considered in the design of structures. There is no compelling evidence that changes to the code's assumed force levels are necessary. However, changes are necessary regarding the treatment of effects of near-source and local geologic conditions.

Strong-Motion Instrumentation

The timely release of strong-motion data, especially during the days immediately following an earthquake, is invaluable to building owners, emergency responders, and those who will revise codes and design practices. Much of the evidence of an earthquake's effects disappears quickly as demolition, repair, and reconstruction takes place. The opportunity to compare building performance and earthquake effects with actual motion data helps practicing engineers and researchers understand their observations, which in turn helps strengthen building codes and reduce future earthquake damage.

The Strong Motion Instrumentation Program (SMIP) proved its worth during this earthquake and its aftermath. Within a day of the main shock, SMIP had issued a "Quick Report" containing copies of strong-motion records obtained by four of its stations; copies of records for nine additional stations were released the following day. By the third day, copies of records for 28 stations had been made available, and by January 25, five quick reports had been released, providing peak acceleration data for 68 stations. In mid-February, SMIP issued a report containing pertinent station information, known geologic site conditions, peak acceleration data, and traces of recordings from 193 stations. SMIP also processed significant records rapidly and released processed data from five stations during the first week of February; additional releases followed at three- to four-week intervals. Processed data for

more than 70 stations were released by December 1994. The timeliness and quality of these data were extremely valuable.

The U.S. Geological Survey (USGS), utilities, dam owners, and researchers funded by the National Science Foundation (NSF) operate networks of hundreds of free-field and structural strong-motion instruments scattered throughout California. A considerable public investment has been made in developing and maintaining USGS- and NSF-funded strong-motion networks. For example, the USGS strong-motion network in southern California consists of nearly 100 stations, while the University of Southern California network originally consisted of 80 free-field stations. Many of these instruments are old analog-type devices; the data they collect require considerable processing before they can be used. Because these arrays complement the SMIP instruments and record motion in different areas, data from these networks are vital to understanding the distribution and severity of shaking resulting from the earthquake. The USGS released photocopies of records obtained from 150 individual accelographs in February 1994. However, data from the USGS- and NSF-funded networks were not processed in a timely manner following the Northridge earthquake. USGS data were released to the scientific and engineering community in December 1994, but NSF-funded data were not released as of that date. This situation is unacceptable; a mechanism is urgently needed to correct this problem.

Reference Stations

Most free-field strong-motion stations were installed in locations near active faults to collect data for use in understanding the physics of earthquakes to be better able to estimate ground motion in future earthquakes. Such studies are vital to an understanding of the earthquake processes and such instrument deployments need to continue. However, there is also an urgent need for free-field strong-motion data as references to establish the levels of ground shaking experienced by buildings and other structures. Without such data, engineers cannot assess whether buildings performed as intended and determine the changes needed in codes and design practices to improve performance. For example, there were few free-field instruments in the immediate vicinity of damaged steel-frame buildings, so the levels and character of shaking experienced by these buildings were not well understood. The lack of reliable ground-motion data makes it extremely difficult to understand the causes of these failures and find acceptable solutions. None of the existing programs is directed toward obtaining the reference ground-motion data that are needed.

Updated Fault Parameters

FAULT NAME AND GEOMETRY (ss) strike slip, (r) reverse, (n) normal (rl) rt. lateral, (ll) left lateral, (o) oblique	Fault Length (km)	+/-	Slip Rate (mm/yr)	+/-	Rank (1)	Mmax (2)	Down Dip Width (km) (3)	+/-	Ruptop (4)	Rupbot (5)	Dip	Endpt N (W)	Endpt. S (E)	COMMENTS
Note: Entry highlighted in yellow indicates modifications to 1996 fault parameters. Entry highlighted in grey with red text indicates 1996 source that has been deleted in the 2002 fault parameters.														
A FAULTS														
SAN ANDREAS FAULT ZONE														
San Andreas (Coachella) (rl-ss)	96	10	25.0	5.0	P	7.2	12	2	0	12	90	-116.47; 33.92	-115.71; 33.35	Slip rate based on Sieh and Williams (1990); Sieh (1986); Keller et al. (1982); Bronkowski (1981).
San Andreas (San Bernardino) (rl-ss)	103	10	24.0	6.0	M	7.5	18	2	0	18	90	-117.50; 34.29	-116.48; 33.92	Minor modifications to digitial fault trace and minor length modification.
San Andreas (Mojave) (rl-ss)	103	10	30.0	7.0	P	7.4	12	2	0	12	90	-118.51; 34.70	-117.50 34.29	Minor modifications to digitial fault trace. 1996 slip rate based on Sieh (1984), Salyards et al. (1992), and WGCEP (1995).
San Andreas (Carrizo) (rl-ss)	146	15	34.0	3.0	W	7.4	12	2	0	12	90	-119.87; 35.31	-118.51; 34.70	Minor modifications to digitial fault trace and minor length modification. 1996 slip rate based on Sieh and Jahns (1984).
San Andreas (Cholame) (rl-ss)	63	6	34.0	5.0	P	7.3	12	2	0	12	90	-120.30; 35.75	-119.87; 35.31	Minor modifications to digitial fault trace and minor length modification. 1996 slip rate based on analogy with Carrizo segment.
San Andreas (Parkfield) (rl-ss)	36	4	34.0	5.0	P	6.5	12	2	0	12	90	-120.56; 36.00	-120.30; 35.75	Minor modifications to digitial fault trace.
San Andreas (creeping segment) (rl-ss)	122	12	34.0	5.0	P	6.2	12	2	0	12	90	-121.48; 36.81	-120.56; 36.00	Maximum magnitude based on historic rate of earthquakes.
San Andreas (Santa Cruz Mtn) (rl-ss)	62	8	17.0	4.0	P	7.0	15	2	0	15	90	-122.00; 37.18	-121.48; 36.81	WG99/WG02 source parameters used. Go to the U.S. Geological Survey website for more information on WG99 and WG02.
San Andreas (Peninsula) (rl-ss)	85	13	17.0	4.0	M	7.1	13	2	0	13	90	-122.57; 37.79	-122.00; 37.18	WG99/WG02 source parameters used. Go to the U.S. Geological Survey website for more information on WG99 and WG02.
San Andreas (North Coast North) (rl-ss)	136	14	24.0	3.0	P	7.3	11	2	0	11	90	-124.41; 40.25	-123.79; 39.10	WG99/WG02 source parameters used. Go to the U.S. Geological Survey website for more information on WG99 and WG02.
San Andreas (North Coast South) (rl-ss)	190	19	24.0	3.0	M	7.4	12	2	0	12	90	-123.79; 39.10	-122.57; 37.79	WG99/WG02 source parameters used. Go to the U.S. Geological Survey website for more information on WG99 and WG02.
SAN JACINTO - IMPERIAL FAULT ZONE														
Imperial (rl-ss)	62	6	20.0	5.0	M	7.0	12	2	0	12	90	-115.57; 32.91	-115.17; 32.47	Slip rate based on study by Thomas and Rockwell (1996).
Superstition Hills (rl-ss)	23	2	4.0	2.0	P	6.6	12	2	0	12	90	-115.84; 33.01	-115.64; 32.89	Slip rate and fault length reported by WGCEP (1995).
Superstition Mountain (rl-ss)	24	2	5.0	3.0	M	6.6	12	2	0	12	90	-115.92; 32.99	-115.70; 32.89	Slip rate based on Gurrola and Rockwell (1996).

FAULT NAME AND GEOMETRY (se) strike slip, (r) reverse, (n) normal (rl) rt. lateral, (ll) left lateral, (o) oblique	Fault Length (km)	+/-	Slip Rate (mm/yr)	+/-	Rank (1)	Mmax (2)	Down Dip Width (km) (3)	+/-	Ruptop (4)	Rupbot (5)	Dip	Endpt N (W)	Endpt. S (E)	COMMENTS
San Jacinto (Borrego) (rl-ss)	29	3	4.0	2.0	M	6.6	12	2	0	12	90	-116.19; 33.20	-115.98; 33.01	Slip rate and fault length reported by WGCEP (1995).
San Jacinto (Coyote Creek) (rl-ss)	41	4	4.0	2.0	M	6.8	15	2	0	15	90	-116.51; 33.46	-116.19; 33.20	Slip rate and fault length reported by WGCEP (1995).
San Jacinto (Anza) (rl-ss)	91	9	12.0	6.0	M	7.2	18	2	0	18	90	-116.92; 33.74	-116.12; 33.26	Slip rate and fault length reported by WGCEP (1995).
San Jacinto (San Jacinto Valley) (rl-ss)	43	4	12.0	6.0	P	6.9	18	2	0	18	90	-117.24; 34.02	-116.92; 33.74	Slip rate and fault length reported by WGCEP (1995).
San Jacinto (San Bernardino) (rl-ss)	36	4	12.0	6.0	P	6.7	15	2	0	15	90	-117.51; 34.25	-117.24; 34.02	Slip rate and fault length reported by WGCEP (1995).
ELSINORE FAULT ZONE														
Laguna Salada (rl-ss)	67	7	3.5	1.5	M	7.0	15	2	0	15	90	-115.88; 32.73	-115.40; 32.29	Slip rate reported by Mueller and Rockwell (1995).
Elsinore (Coyote Mountain) (rl-ss)	39	4	4.0	2.0	M	6.8	15	2	0	15	90	-116.36; 32.97	-116.01; 32.78	Slip rate and fault length reported by WGCEP (1995).
Elsinore (Julian) (rl-ss)	76	8	5.0	2.0	P	7.1	15	2	0	15	90	-117.01; 33.38	-116.36; 32.97	Slip rate and fault length reported by WGCEP (1995).
Elsinore (Temecula) (rl-ss)	43	4	5.0	2.0	M	6.8	15	2	0	15	90	-117.35; 33.64	-117.01; 33.38	Slip rate and fault length reported by WGCEP (1995).
Elsinore (Glen Ivy) (rl-ss)	36	4	5.0	2.0	M	6.8	15	2	0	15	90	-117.64; 33.85	-117.35; 33.64	Reported slip rates vary from 3.0-7.2 (Millman and Rockwell, 1986).
Whittier (rl-r-o) (75 NE)	38	4	2.5	1.0	M	6.8	15	2	0	15	-75	-118.02; 33.99	-117.64; 33.85	Fault dip changed from 90° to 75° NE, based on Ziony and Yerkes (1985). 1996 slip rate based on Rockwell et al. (1990); Gath et al. (1992) description of offset drainage.

(1) Slip-rate rank: W - well-constrained; M - moderately constrained; P - poorly constrained; U - unconstrained.

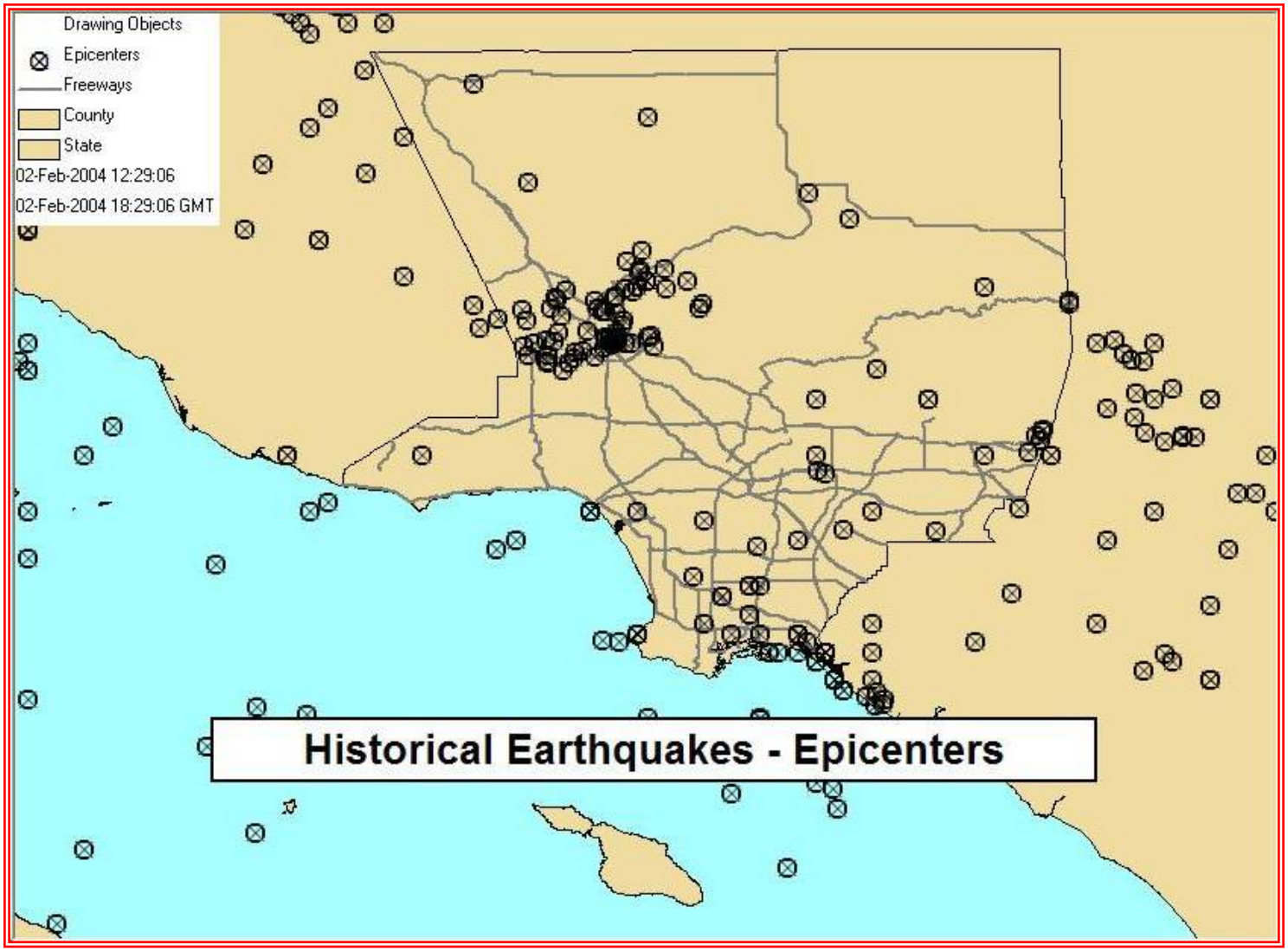
(2) Maximum moment magnitude - representative value for B faults. See discussion on magnitude calculation.

(3) Down-dip width = (rupture bottom minus rupture top) divided by sine of dip angle.

(4) Top of rupture plane.

(5) Bottom of rupture plane.

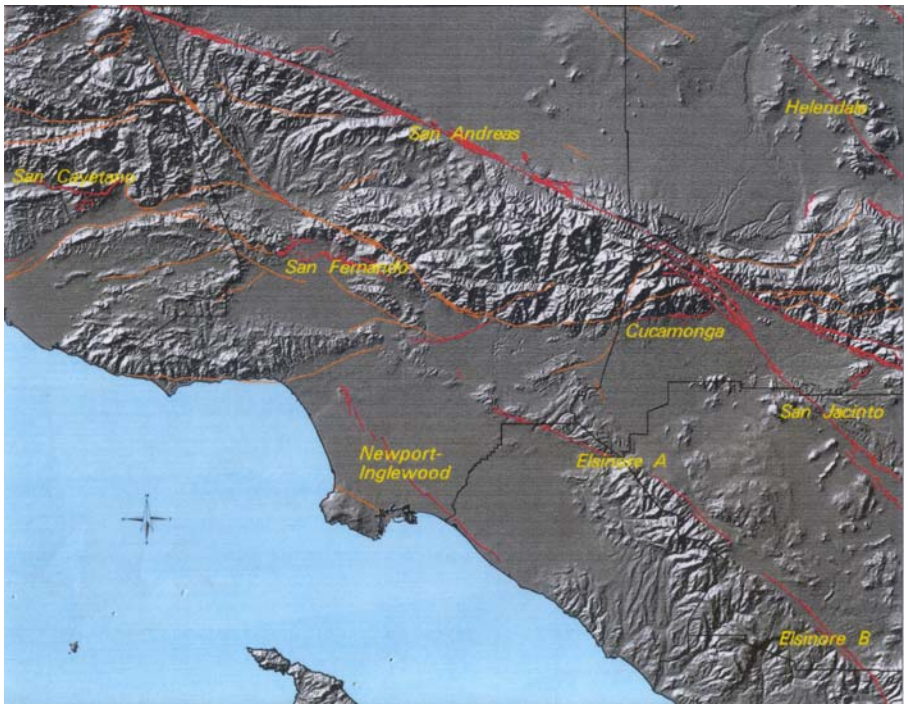
Historic Earthquake Epicenters Los Angeles County GIS Data



Faults

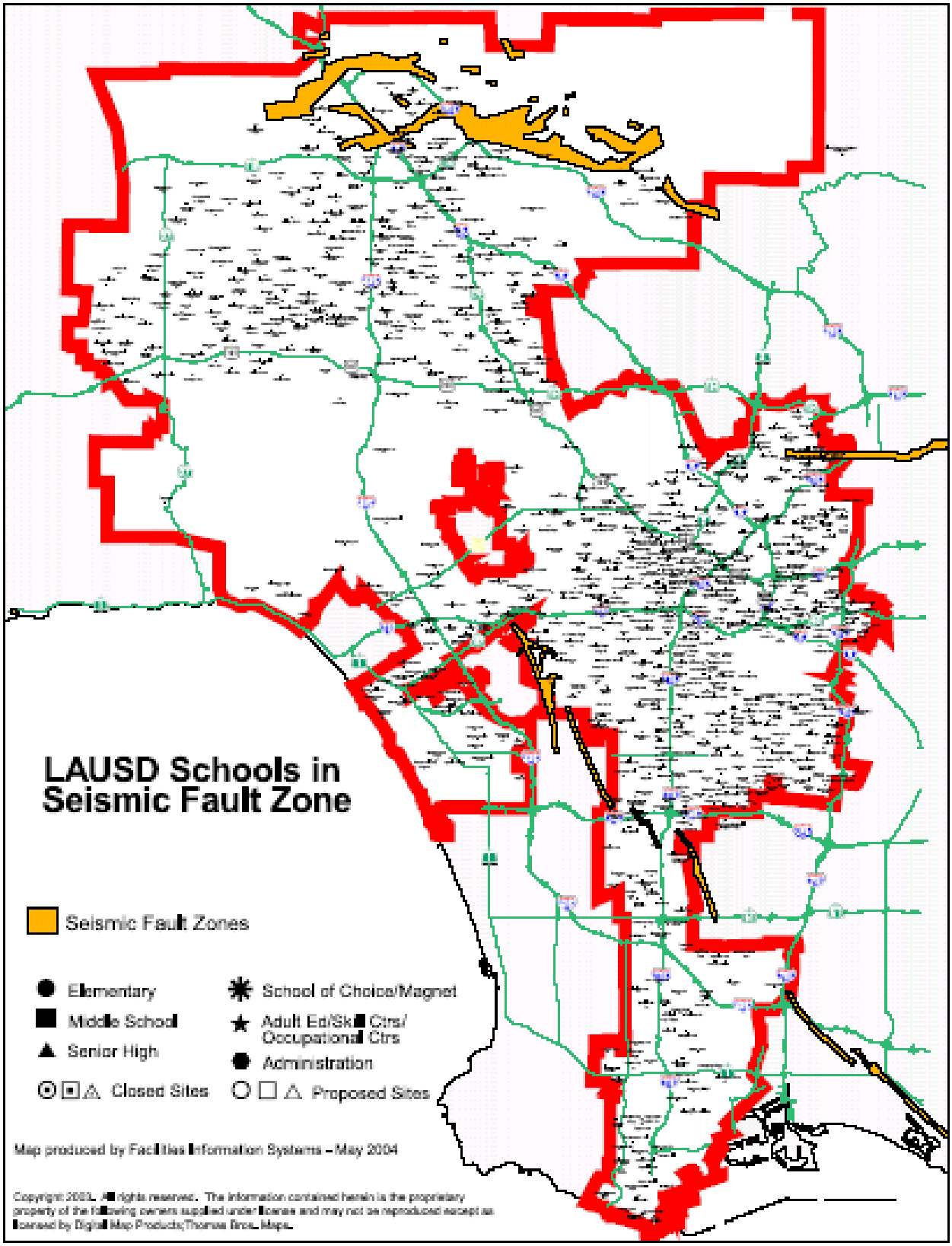
Historical and geological records show that California has a long history of seismic events. Southern California is probably best known for the San Andreas Fault, a 400 mile long fault running from the Mexican border to a point offshore, west of San Francisco. "Geologic studies show that over the past 1,400 to 1,500 years large earthquakes have occurred at about 130 year intervals on the southern San Andreas fault. As the last large earthquake on the southern San Andreas occurred in 1857, that section of the fault is considered a likely location for an earthquake within the next few decades.

But San Andreas is only one of dozens of known earthquake faults that crisscross Southern California. Some of the better known faults include the Newport-Inglewood, Whittier, Chatsworth, Elsinore, Hollywood, Los Alamitos, and Palos Verdes faults. Beyond the known faults, there are a potentially large number of "blind" faults that underlie the surface of Southern California. One such blind fault was involved in the Whittier Narrows earthquake in October 1987.



Although the most famous of the faults, the San Andreas, is capable of producing an earthquake with a magnitude of 8+ on the Richter scale, some of the "lesser" faults have the potential to inflict greater damage on the urban core of the Los Angeles Basin. Seismologists believe that a 6.0 earthquake on the Newport-Inglewood would result in far more death and destruction than a "great" quake on the San Andreas, because the San Andreas is relatively remote from the urban centers of Southern California.

For decades, partnerships have flourished between the USGS, Cal Tech, the California Geological Survey and universities to share research and educational efforts with Californians. Tremendous earthquake mapping and mitigation efforts have been made in California in the past two decades, and public awareness has risen remarkably during this time. Major federal, state, and local government agencies and private organizations support earthquake risk reduction, and have made significant contributions in reducing the adverse impacts of earthquakes. Despite the progress, the majority of California communities remain unprepared because there is a general lack of understanding regarding earthquake hazards among Californians.


LAUSD Schools in Seismic Fault Zone
Seismic Fault Zones
Elementary
Middle School
Senior High
Closed Sites
School of Choice/Magnet
Adult Ed/Skill Ctrs/ Occupational Ctrs
Administration
Proposed Sites
Map produced by Facilities Information Systems – May 2004
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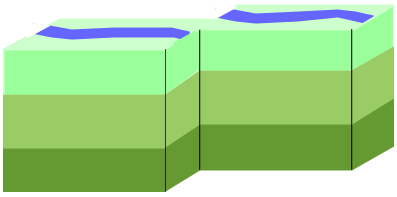
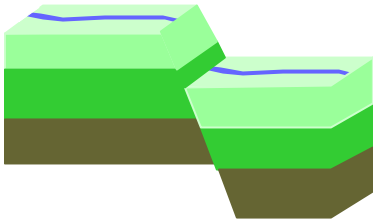
Causes and Characteristics of Earthquakes in Southern California

Fault



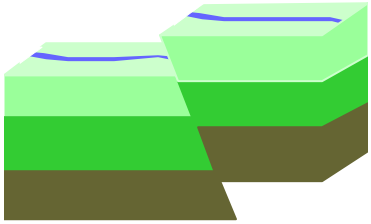
A fault is a fracture along between blocks of the earth's crust where either side moves relative to the other along a parallel plane to the fracture.

Strike-slip



Strike-slip faults are vertical or almost vertical rifts where the earth's plates move mostly horizontally. From the observers perspective, if the opposite block looking across the fault moves to the right, the slip style is called a right lateral fault ; if the block moves left, the shift is called a left lateral fault.

Dip-slip

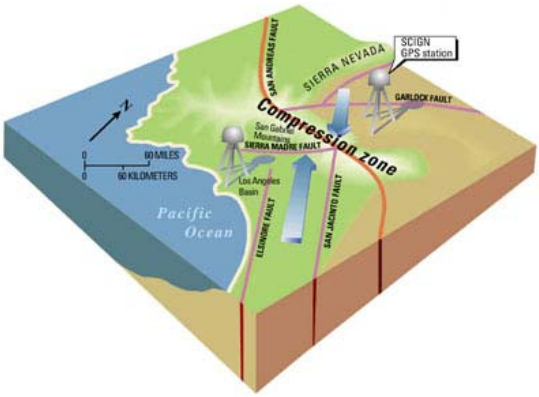


Dip-slip faults are slanted fractures where the blocks mostly shift vertically. If the earth above an inclined fault moves down, the fault is called a normal fault, but when the rock above the fault moves up, the fault is called a reverse fault. Thrust faults have a reverse fault with a dip of 45 ° or less.

The earthquakes of California are caused by the movement of huge blocks of the earth's crust. Southern California straddles the boundary between the Pacific and North American plates. These large sections of the earth's crust (the North American plate extends east to Iceland while the Pacific plate extends west to Japan) are moving past each other. The Pacific plate is moving northwest, scraping horizontally past North America at a rate of about 50 millimeters (2 inches) per year.

About two-thirds of this 50 millimeters per year occurs on the San Andreas fault and some parallel faults—the San Jacinto, Elsinore, and Imperial faults. These four faults are among the fastest moving, and therefore most dangerous, in Southern California. Over time, these four faults produce about half of the significant earthquakes of our region.

However, this is not the whole picture. Unlike central and Northern California, much of this plate movement in Southern California is not parallel to the San Andreas fault. Between the southern end of the San Joaquin Valley and the San Bernardino mountains, in the so-called "big bend," the San Andreas fault runs in a more westerly direction.

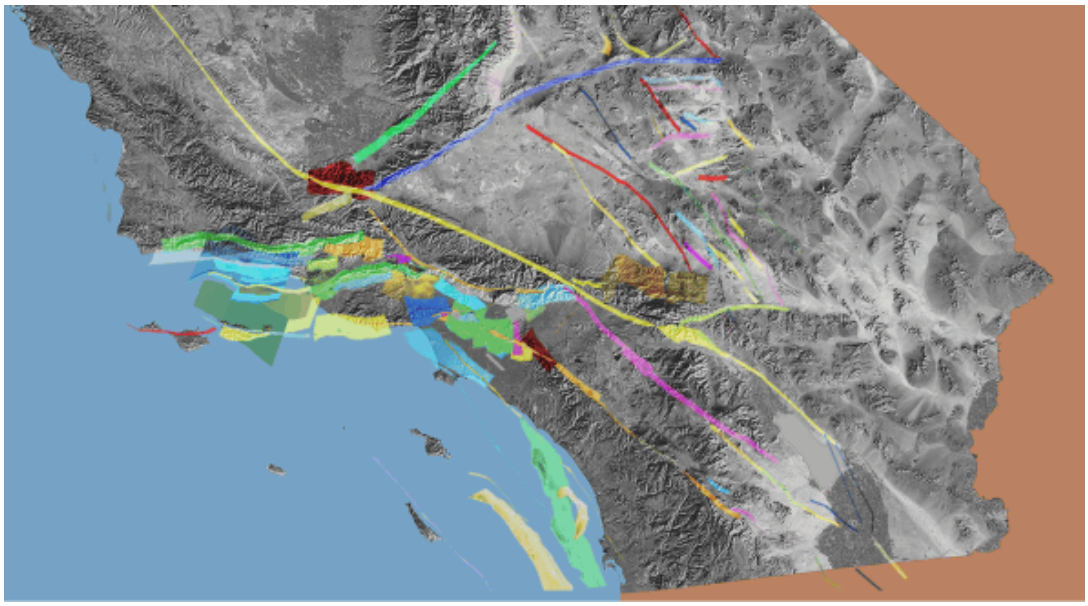


A schematic block model of Southern California showing the motion of the Pacific and North American plates, and the big bend of the San Andreas fault where the plates squeeze together.

Where the fault bends, plate motion is complex. The Pacific and North American plates push into each other, compressing the earth's crust into the mountains of southern California and producing faults and earthquakes. While these 300 or so faults are generally much shorter and slower moving than the four faults mentioned previously, over half of the

significant earthquakes in southern California occur on these faults.

The greatest concentration of these faults is in and near the mountains that have formed around the big bend of the San Andreas fault (the San Bernardino, San Gabriel, and Santa Ynez mountains). These mountains, like most mountains in California, are there because earthquakes are pushing them up. Many of these faults can be detected at the earth's surface, though some are buried beneath the sediments of the Los Angeles basin and the inland valleys.



SCEC Community Fault Model courtesy of Andreas Plesch, Harvard. This map shows the 3-dimensional structure of major faults beneath Southern California. Vertical faults such as the San Andreas (yellow band from top left to bottom right) are shown as a thin strip. Faults that are at an angle to the surface are shown as wider ribbons of color. The nearest fault to you might be a few miles beneath your home. Areas that seem to have few faults can still experience strong shaking from earthquakes on unmapped faults or from large earthquakes on distant faults

Geologic Rates

The movement between the Pacific and North American plates, 50 millimeters (2 inches) each year, is about how fast your fingernails grow, but it has been going on for eons. Los Angeles City Hall is now 3 meters (10 feet) closer to San Francisco than when it was built in 1924. It would take a mere (geologically speaking) 2 million years for your nails to extend 100 kilometers (60 miles) from San Bernardino to Palmdale. It took many millions of years for our faults to slip enough, and rocks to move enough, to shape Southern California's current landscape.

Unknown Faults

As the Northridge earthquake confirmed, some faults are not known until they move in large and damaging earthquakes. What do we do about the faults we can't see and don't know about yet? Do we still have to wait until the next earthquake reveals them?

Not necessarily. In 2001, scientists of the Southern California Earthquake Center completed the Southern California Integrated GPS Network (SCIGN), an advanced system of 250 Global Positioning System (GPS) receivers. With this network the positions of locations throughout Southern California can be precisely measured.

By measuring these locations for several years, we can see how different sites are moving relative to each other—for instance, Palos Verdes is moving toward Pasadena at about 4 millimeters (5/32 inch) per year. If movement between two locations is greater than the movement on known faults, then we have a reasonable idea that there may be another fault in the area, perhaps buried by sediment. This can lead to focused research using other methods to identify the unknown fault.

Information from the Southern California Earthquake Center

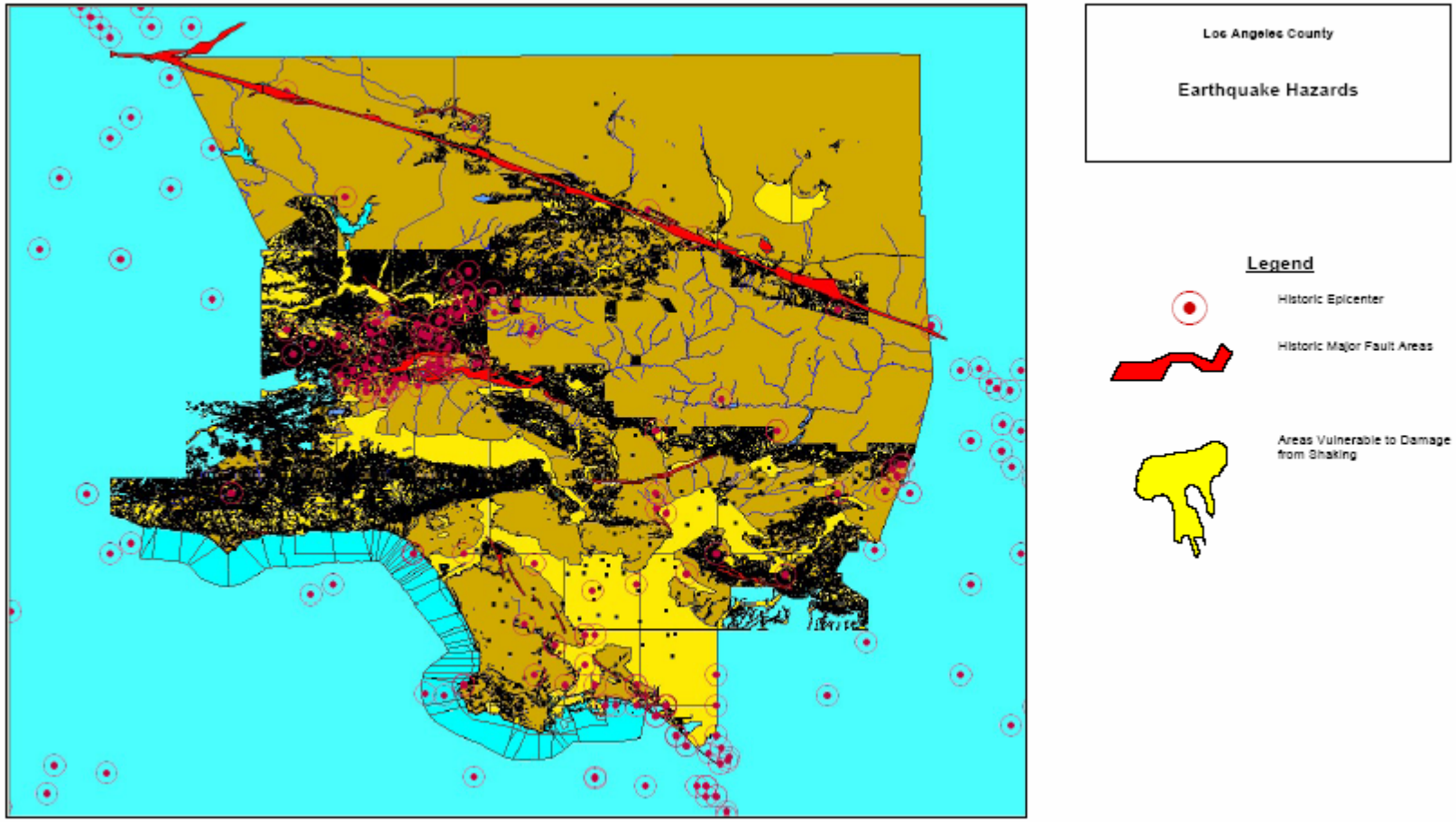
Vulnerability

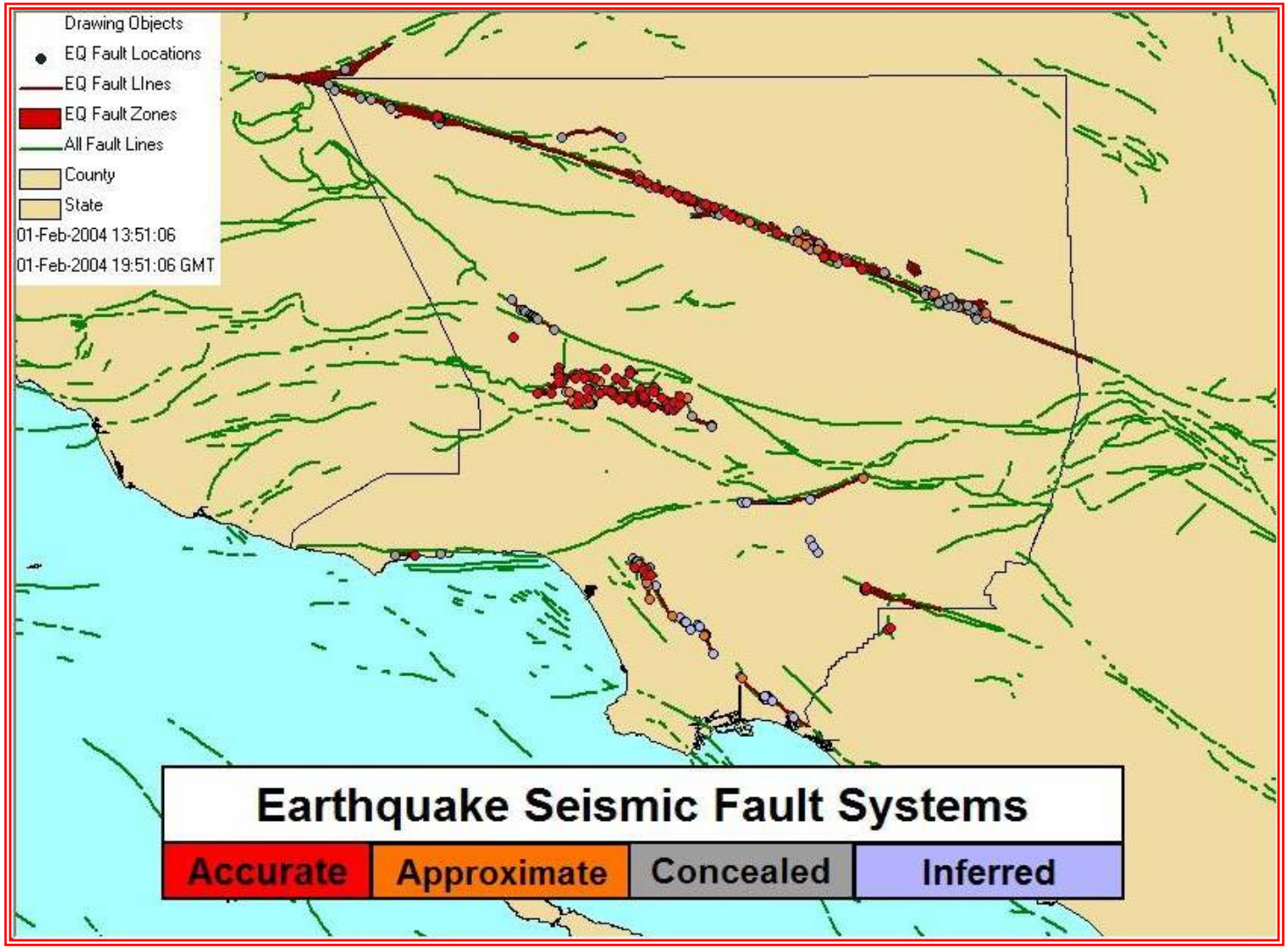
Los Angeles Unified School District's facilities are dotted all around Los Angeles County as depicted in the maps, and are shown to be in 'red' areas where, in the event of a catastrophic earthquake, would be destroyed or severely damaged. The majority of facilities lie within the jurisdictional boundaries of the City of Los Angeles, which is highly vulnerable to damage and destruction (see City of Los Angeles Hazard Mitigation Plan).

Impact

A catastrophic earthquake anywhere in the area would potentially damage or destroy nearly every structure owned by the Los Angeles Unified School District, to some degree.

Earthquake Hazard Map – LA County Los Angeles County GIS Data



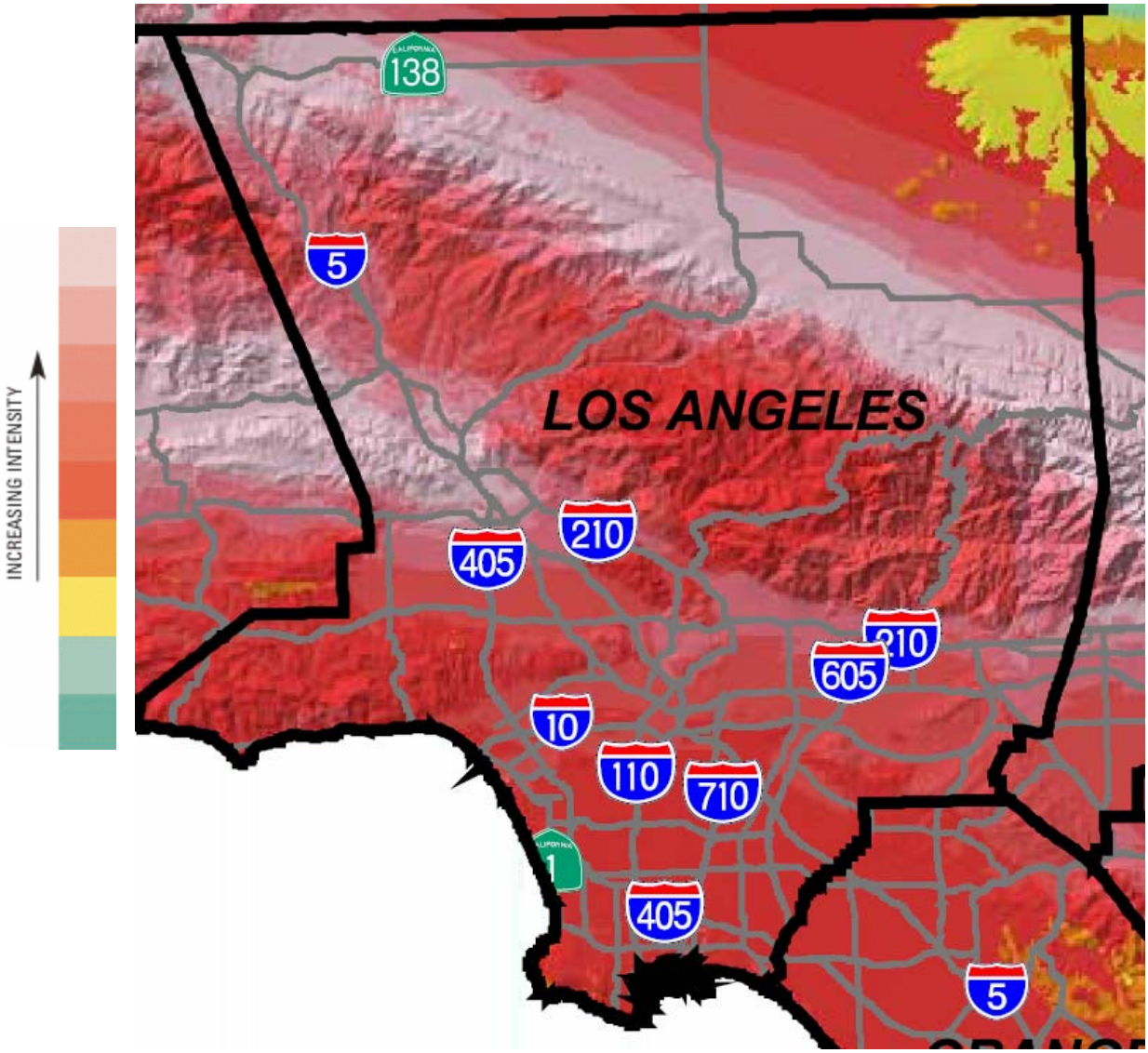

Drawing Objects
EQ Fault Locations
EQ Fault LInes
EQ Fault Zones
All Fault Lines
County
State
01-Feb-2004 13:51:06
01-Feb-2004 19:51:06 GMT
Earthquake Seismic Fault Systems
Accurate
Approximate
Concealed
Inferred

Earthquake Related Hazards

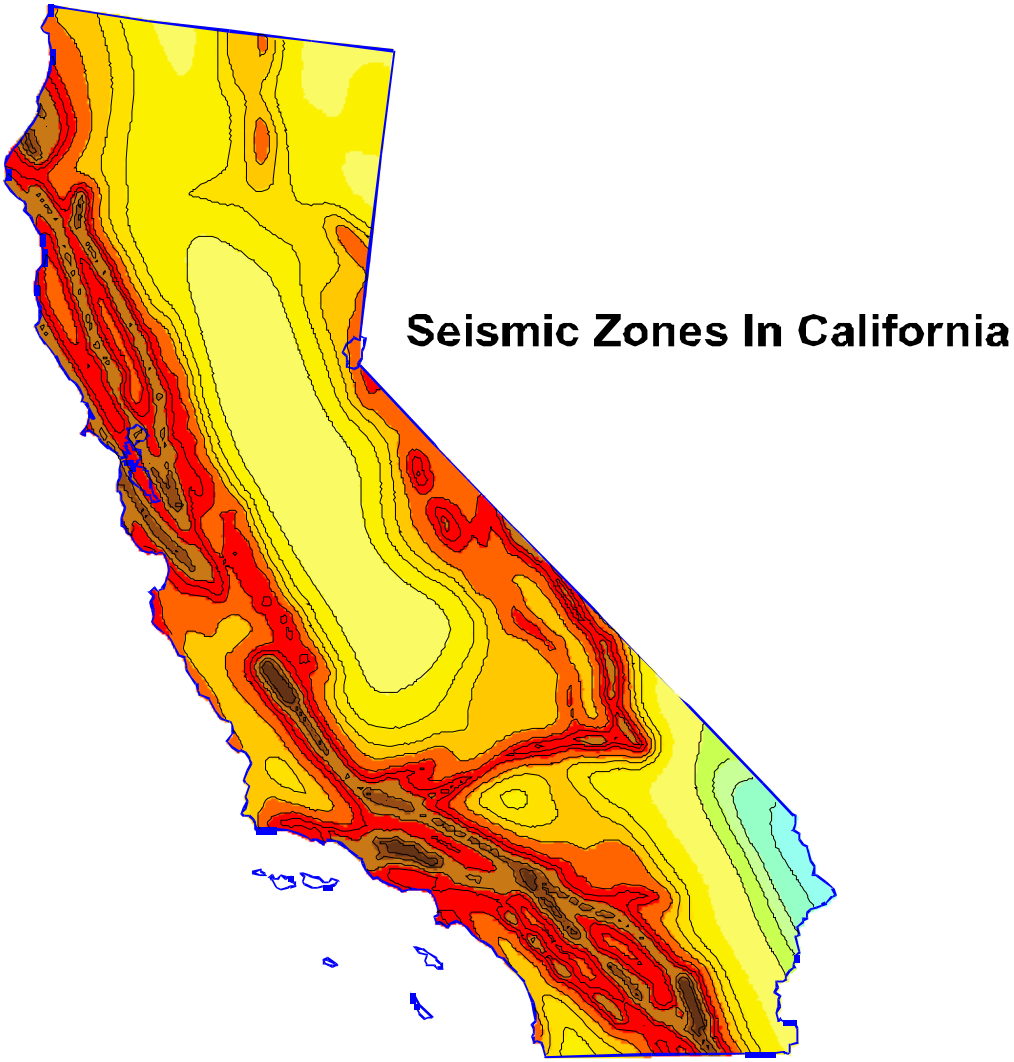
Ground shaking, landslides, liquefaction, and amplification are the specific hazards associated with earthquakes. The severity of these hazards depends on several factors, including soil and slope conditions, proximity to the fault, earthquake magnitude, and the type of earthquake.

Ground Shaking

Ground shaking is the motion felt on the earth's surface caused by seismic waves generated by the earthquake. It is the primary cause of earthquake damage. The strength of ground shaking depends on the magnitude of the earthquake, the type of fault, and distance from the epicenter (where the earthquake originates). Buildings on poorly consolidated and thick soils will typically see more damage than buildings on consolidated soils and bedrock.



These regions are near major, active faults and will on average experience stronger earthquake shaking more frequently. This intense shaking can damage even strong, modern buildings. The regions distant from known, active faults will experience lower levels of shaking.



USGS

Earthquake Shaking Potential in Southern California

Residents cannot live in southern California worrying about every one of the more than 300 faults described on the previous page. We also do not need to. As described on, the ground shaking in an earthquake depends on the magnitude, the distance from the fault and local soil conditions. For, example, look at the patterns of shaking for two different earthquakes in these figures. The magnitude 4.2 earthquake produced stronger shaking near Beverly Hills than did the much larger but more distant magnitude 7.1 Hector Mine earthquake. These patterns can be simulated by computers to make maps of the shaking to expect from any potential earthquake. Shaking intensities from all possible earthquakes are added to determine the total hazard for each site.

Each area of southern California will be shaken by a different set of earthquakes, though larger earthquakes may shake many areas. In the long run most everywhere in southern California will experience heavy earthquake shaking. Some locations will experience such shaking more frequently because they are closer to more faults or have local soil conditions that amplify earthquake shaking.

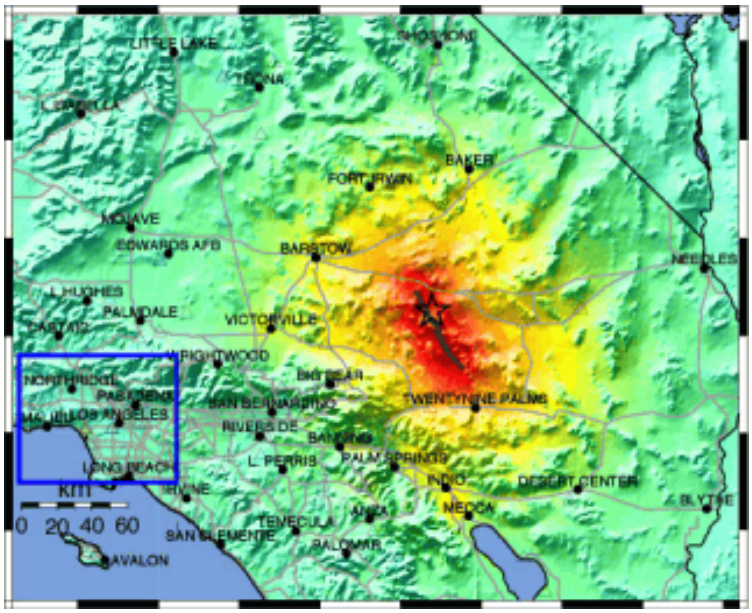
Unfortunately, scientists do not yet have the information needed to predict which earthquakes will happen first, so we must be ready for the shaking in our area from any possible earthquake. To help, scientists have summed up the probable shaking from all our known faults to create this map. It shows the relative intensity of ground shaking in California from all anticipated future earthquakes. Areas in red and pink are nearer major, active faults and on average experience stronger earthquake shaking more frequently. Although the greatest hazard is in these area, no region within the state is immune from the potential for earthquake damage.

Rapid Instrumental Intensity Maps

A small nearby earthquake can cause more shaking than a distant large earthquake, as shown in the intensity maps for the magnitude 7.1 Hector Mine earthquake and the magnitude 4.2 Beverly Hills earthquake (both next page). The blue square on the Hector Mine map (top of next page) shows the location of the map below.

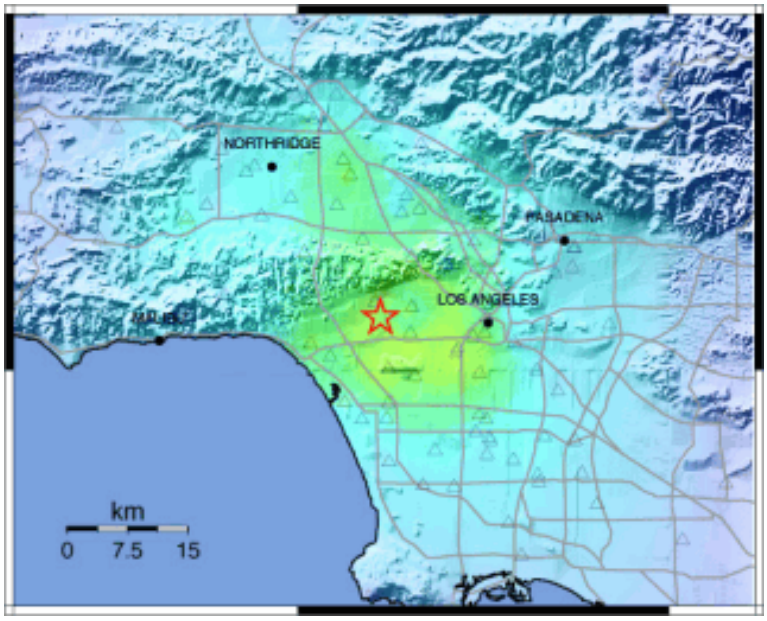
Magnitude 7.1 Hector Mine Earthquake

Saturday, October 16, 1999 03:04:53 a.m. PDT



Magnitude 4.2 Beverly Hills Earthquake

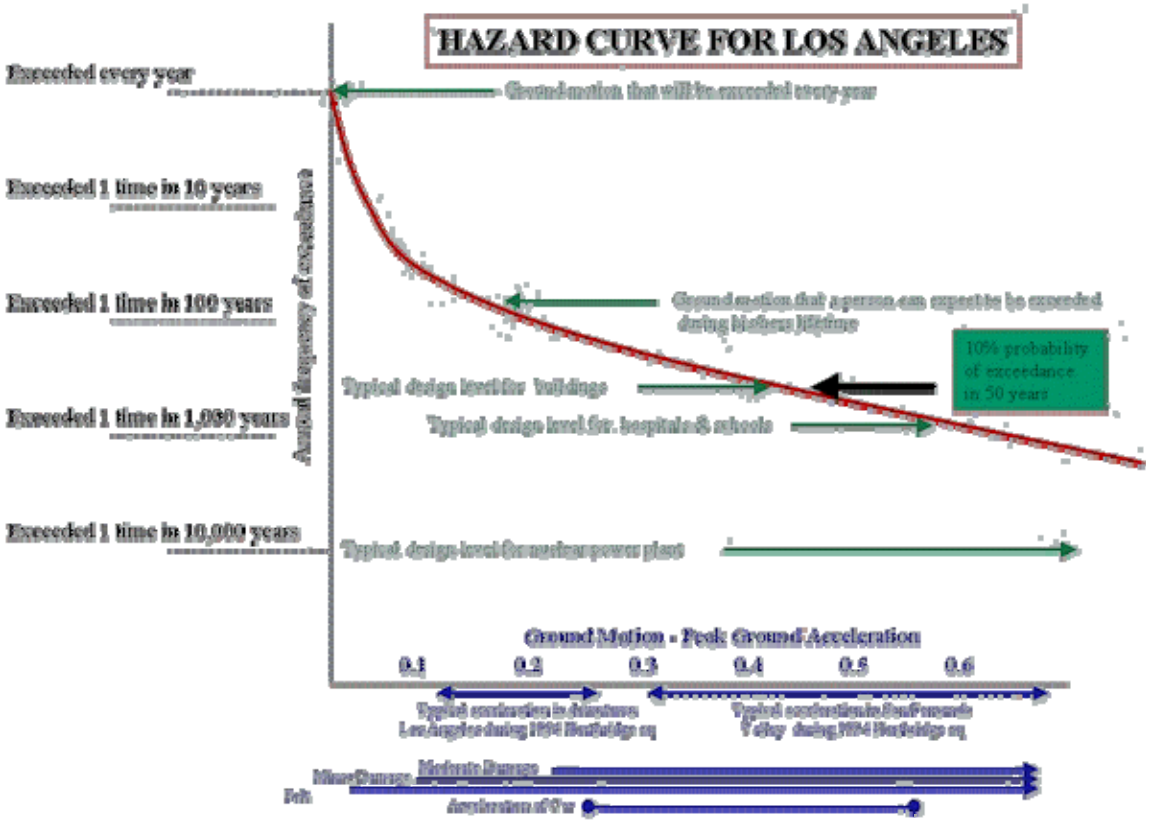
Sunday, September 9, 2001 04:59:18 p.m. PDT



U. S. GEOLOGICAL SURVEY

Hazard Curve

Hazard curves show the probability of exceeding different ground motion values at a site. For example, the 10% probability of exceedance in 50 years is one point on a hazard curve. The hazard curves are important for comparing the hazard at different sites. Some sites may have a high probability of exceeding small ground motions, but a very small probability of exceeding large ground motions. These curves are important for understanding the types of ground motions that one can expect to exceed at a site. Also the hazard curve is important for determining the expected losses. Losses can be caused by frequent smaller events or from less frequent large events. An example of a Hazard Curve is shown below.

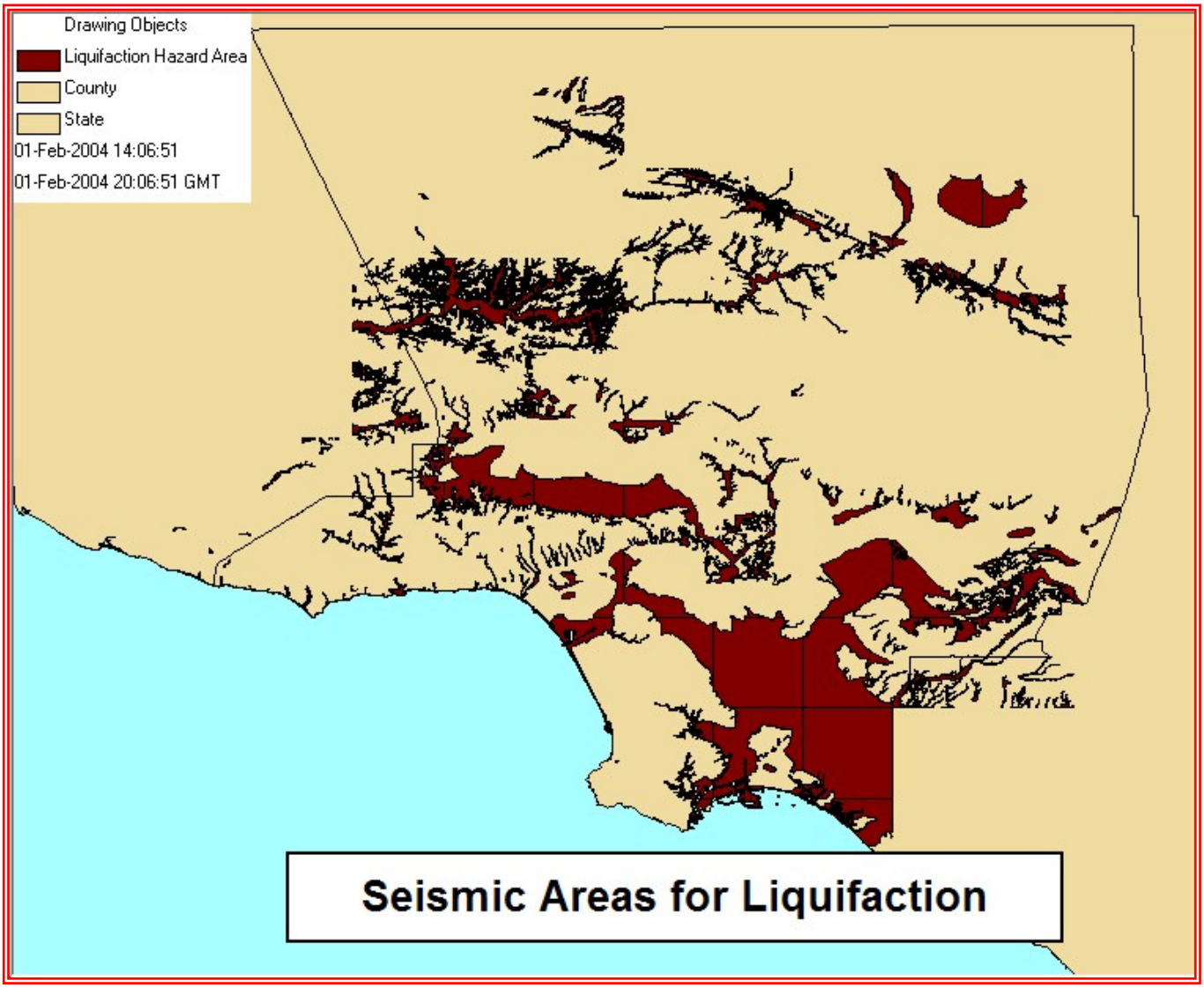


Earthquake Induced Landslides

Earthquake induced landslides are secondary earthquake hazards that occur from ground shaking. They can destroy the roads, buildings, utilities, and other critical facilities necessary to respond and recover from an earthquake. Many communities in Southern California have a high likelihood of encountering such risks, especially in areas with steep slopes. (See Landslide Hazard Description)

Liquefaction

Liquefaction occurs when ground shaking causes wet granular soils to change from a solid state to a liquid state. This results in the loss of soil strength and the soil's ability to support weight. Buildings and their occupants are at risk when the ground can no longer support these buildings and structures. Many communities in Southern California are built on ancient river bottoms and have sandy soil. In some cases this ground may be subject to liquefaction, depending on the depth of the water table.



Amplification

Soils and soft sedimentary rocks near the earth's surface can modify ground shaking caused by earthquakes. One of these modifications is amplification. Amplification increases the magnitude of the seismic waves generated by the earthquake. The amount of amplification is influenced by the thickness of geologic materials and their physical properties. Buildings and structures built on soft and unconsolidated soils can face greater risk.[1] Amplification can also occur in areas with deep sediment filled basins and on ridge tops.

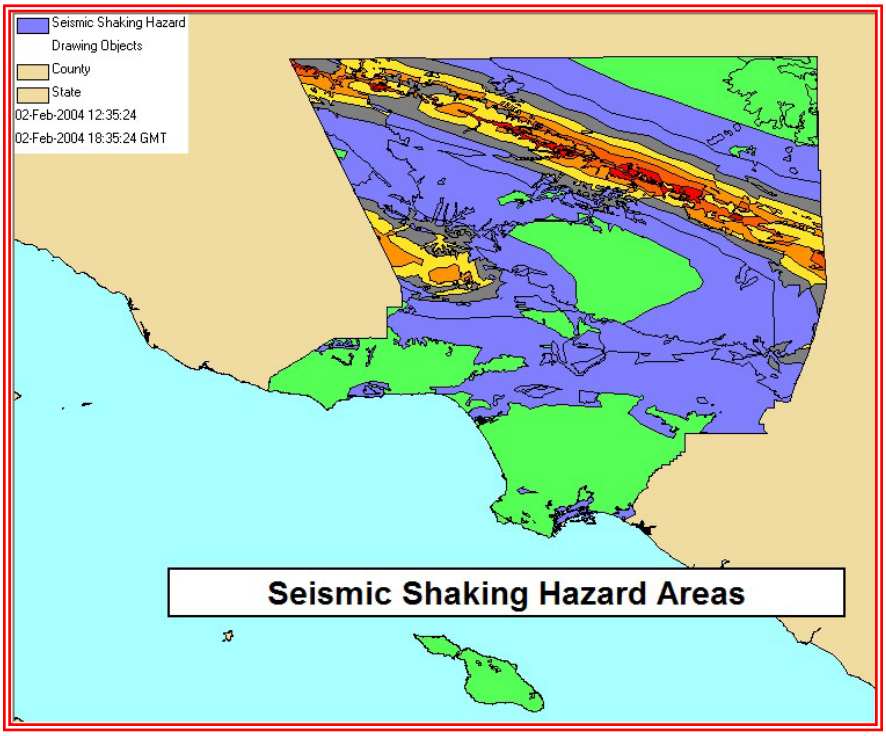
Earthquake Hazard Assessment

Hazard Identification

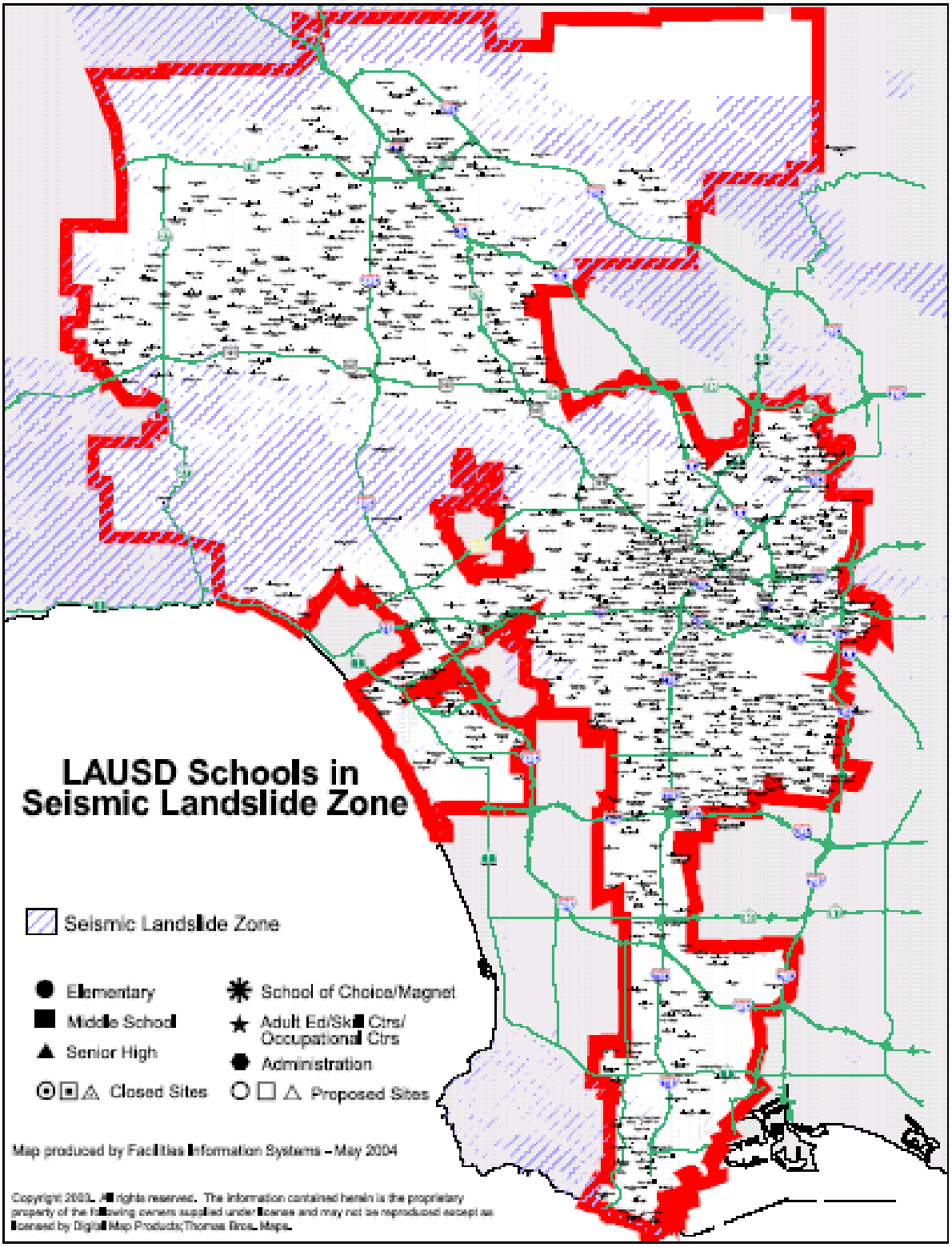
In California, many agencies are focused on seismic safety issues: the State's Seismic Safety Commission, the Applied Technology Council, Governor's Office of Emergency Services, United States Geological Survey, Cal Tech, the California Geological Survey as well as a number of universities and private foundations.

These organizations, in partnership with other state and federal agencies, have undertaken a rigorous program in California to identify seismic hazards and risks including active fault identification, bedrock shaking, tsunami inundation zones, ground motion amplification, liquefaction, and earthquake induced landslides. Seismic hazard maps have been published and are available for many communities in California through the State Division of Mines and Geology. The map below illustrates Seismic Shaking Hazard Areas in Los Angeles County.

Information from the Southern California Earthquake Center



Planning for Natural Hazards: The California Technical Resource Guide, Department of Land Conservation and Development (July 2000)


LAUSD Schools in
Seismic Landslide Zone
Seismic Landslide Zone
Elementary
Middle School
Senior High
Closed Sites
School of Choice/Magnet
Adult Ed/Skill Ctrs/
Occupational Ctrs
Administration
Proposed Sites
Map produced by Facilities Information Systems – May 2004
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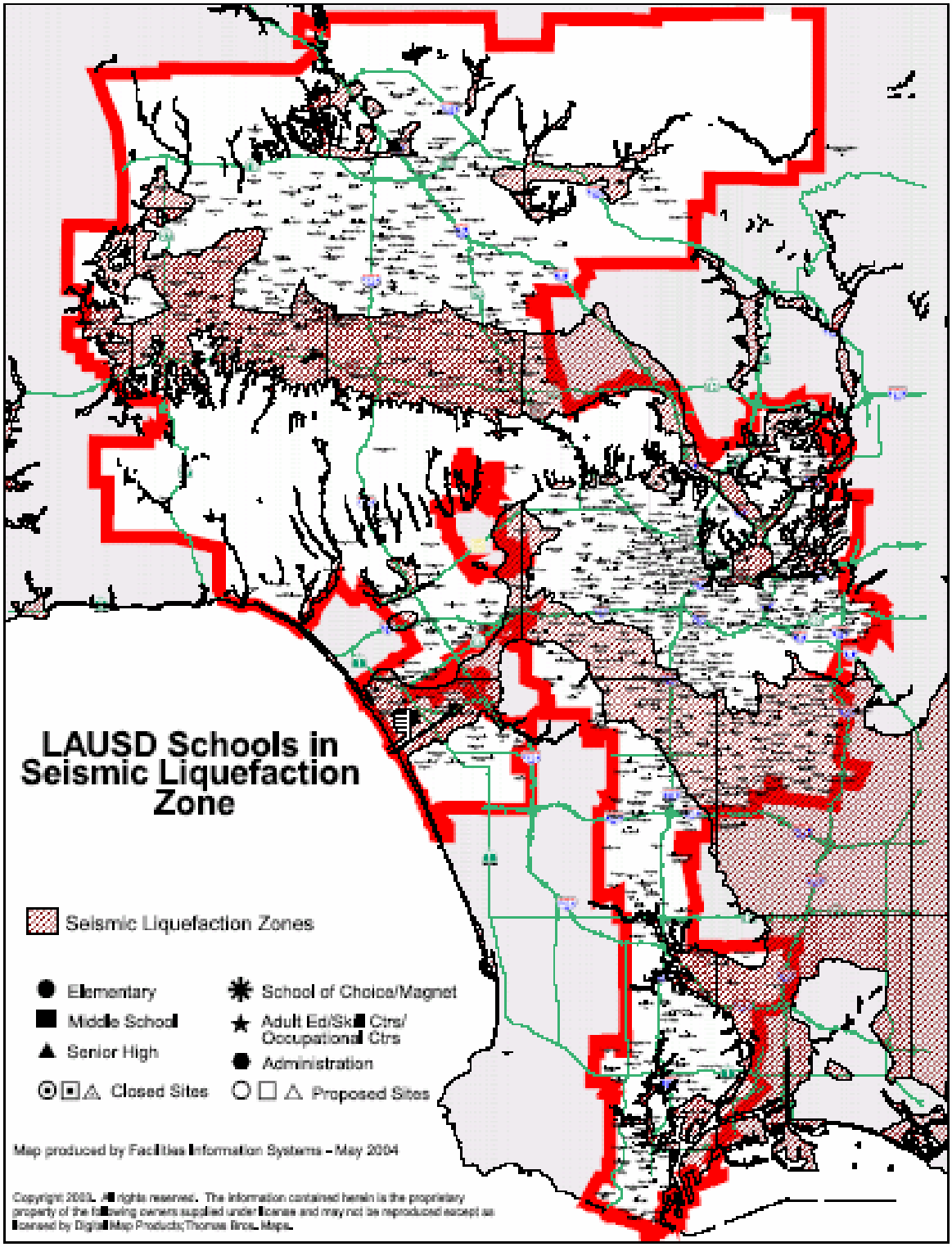
LAUSD Schools in Seismic Liquefaction Zone
Seismic Liquefaction Zones
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Adult Ed/Skill Ctrs/ Occupational Ctrs
Administration
Proposed Sites
Map produced by Facilities Information Systems – May 2004
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Earthquake Threats to Los Angeles County Communities

HAZUS Earthquake Scenario for Los Angeles County

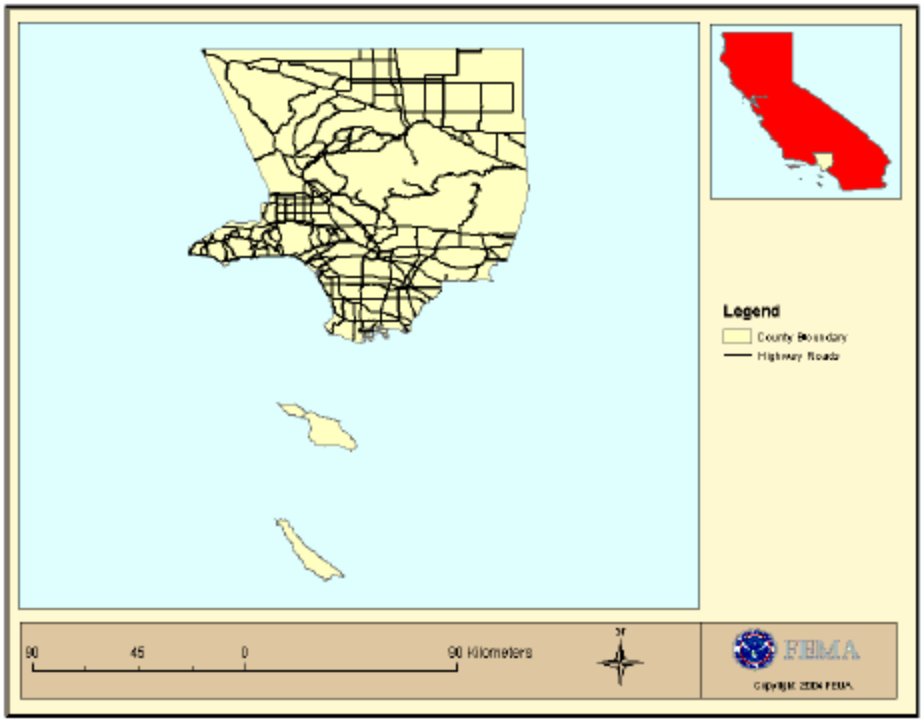
Introduction

HAZUS is a GIS-based regional loss estimation model developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of HAZUS is to provide loss estimates for earthquake, hurricane and flood hazards. These loss estimates may be used by local, state and regional officials to plan and stimulate efforts to mitigate risks from natural hazards and to prepare for emergency response and recovery.

The information provided in this report can be used to support mitigation planning through the assessment of risk and is associated with the earthquake hazard for the region. Similar reports are available for the hurricane and flood hazards. The first section provides earthquake hazard information. The next section provides information on assets associated with building, lifeline infrastructure, and critical facilities. The final section provides loss estimates associated with the earthquake hazard. The six appendices to the report provided additional information on the county's critical facilities.

Los Angeles County, California covers an area of over 4,087 square kilometers and contains 2,054 census tracts (see Figure 1). The population of the county is over 9,519 thousand people (2000 Census data). There are an estimated 2,161 thousand buildings in the region with a building replacement value (excluding contents) of $522,562M. Approximately 98% of the buildings (and 0% of the building value) are associated with residential housing.

Figure 1: County Map - Los Angeles, California

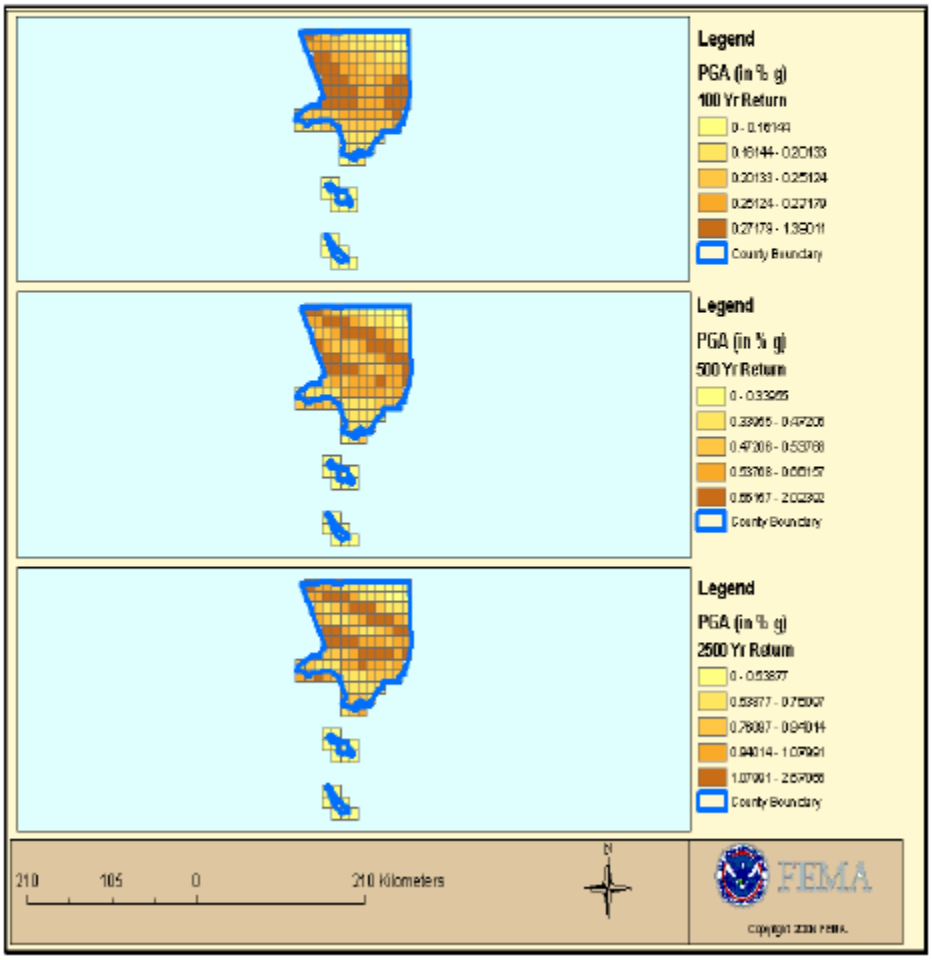


Earthquake Hazard Information

Probabilistic Earthquake Hazard

HAZUS contains probabilistic earthquake hazard information for the entire United States (USGS Open Field Report 02-420) and was used for the 2002 update of the National Seismic Hazard Map. This hazard information was developed by the United States Geological Survey (USGS); Golden, CO. Figure 2 provides earthquake hazard maps for 100, 500, and 2500 year return periods for Los Angeles County. Peak Ground Acceleration (PGA) is the intensity measure used in the maps.

Figure 2: Probabilistic Earthquake Hazard Maps
(PGA for 100, 500 and 2500 year return periods)

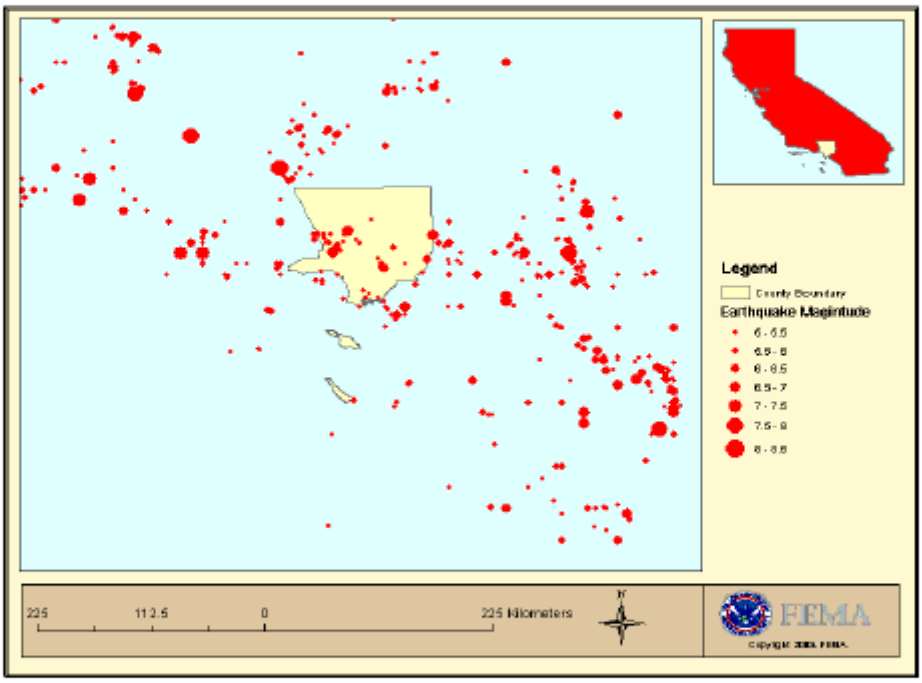


Earthquake Hazard Information (continued)

Historical Earthquake Epicenters

HAZUS contains a catalog of historical earthquake epicenters. The historical epicenter catalog was developed based on information from the CNSS Worldwide Earthquake Catalog (now ANSS), the National Earthquake Information Center (NEIC) database, and the Earthquake Seismicity Catalog Volume 1 (NOAA/USGS).
Figure 3 provides a map of the historical earthquake epicenters that have occurred within 150 km of Los Angeles County. The historical earthquake epicenters (and associated data) shown in the map are also listed in Appendix F of this report.

Figure 3: Historical Earthquake Epicenter Map (within 150 km of county boundary)



Inventory of Assets: Building

Building Inventory

HAZUS estimates that there are 2,161 thousand buildings in the county which have an aggregate total replacement value of $522,562M. Tables 1 and 2 provide information about the building stock in Los Angeles County. Table 1 provides the distribution by occupancy and Table 2 provides the distribution by building type.

Table 1: Building Inventory
(by General Occupancy)

Occupancy	Number of Buildings (In Thousands)	Building Value *	Contents Value *
Residential	2,113.62	$416,398M	$208,199M
Commercial	38.61	$80,334M	$84,345M
Industrial	6.26	$17,934M	$25,958M
Agricultural	0.09	$396M	$396M
Religion	1.32	$3,726M	$3,726M
Government	0.67	$768M	$853M
Education	0.24	$3,005M	$3,609M
Total	2,160.79	$522,562M	$327,085M

Table 2: Building Inventory
(by General Building Type)

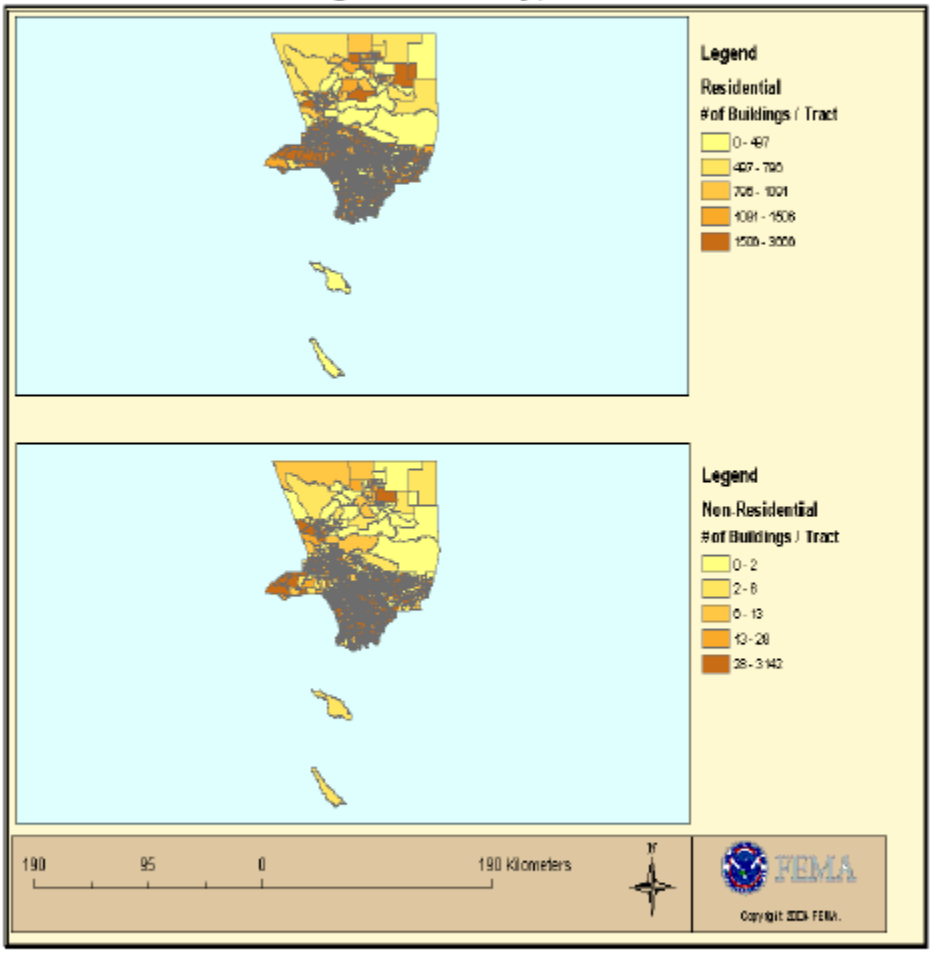
Building Type	Number of Buildings (In Thousands)	Building Value *	Content Value *
Wood	2,015.10	$398,991M	$212,922M
Steel	18.12	$27,795M	$28,392M
Concrete	28.15	$50,347M	$47,554M
Masonry	46.65	$43,511M	$37,145M
Mobile Homes	52.77	$1,918M	$1,073M
Total	2,160.79	$522,562M	$327,085M

* 'M' in Building and Content Value represents Millions.

Inventory of Assets: Building Inventory (continued)

Figure 4 provides a map showing the residential and non-residential building count in the county. The building count is presented by census tract within the county.

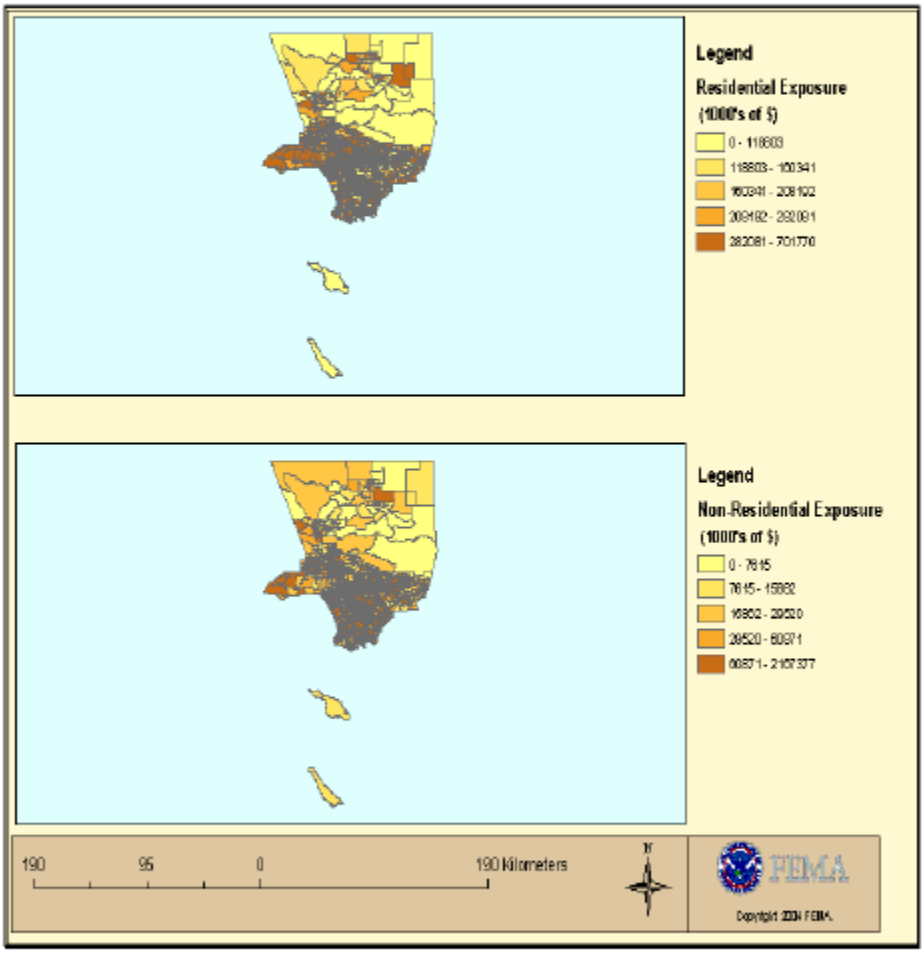
Figure 4: Building Count Map
Los Angeles County, California



Inventory of Assets: Building Inventory (continued)

Figure 5 provides a map showing the residential and non-residential building exposure in the county. The building exposure is presented by census tract within the county.

Figure 5: Building Exposure Map
Los Angeles County, California



Inventory of Assets: Lifeline Infrastructure

Lifeline Inventory

Within HAZUS, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ferry, ports and airports. There are six (6) utility systems that include potable water, waste water, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data is provided in Tables 3 and 4.

Table 3: Transportation System Lifeline Inventory

System	Component	# Locations / Length	Replacement Value*
Highway	Roadways	2,876 km	$11,300.54M
	Bridges	3,128	$10,914.99M
	Tunnels	17	$34.27M
	Sub-Total		**$22,249.80M**
Railway	Tracks	1,011 km	$869.59M
	Bridges	144	$28.36M
	Tunnels	0	$0.00M
	Facilities	84	$216.08M
	Sub-Total		**$1,114.03M**
Light Rail	Tracks	149 km	$128.53M
	Bridges	28	$6.17M
	Tunnels	0	$0.00M
	Facilities	0	$0.00M
	Sub-Total		**$134.70M**
Bus	Facilities	42	$54.02M
	Sub-Total		**$54.02M**
Ferry	Facilities	0	$0.00M
	Sub-Total		**$0.00M**
Port	Facilities	155	$398.72M
	Sub-Total		**$398.72M**
Airport	Facilities	24	$154.34M
	Runways	38	$1,393.63M
	Sub-Total		**$1,547.97M**
	Total		**$25,499.25M**

* **'M'** in Replacement Value represents Millions

Inventory of Assets: Lifeline Infrastructure (continued)

Table 4: Utility System Lifeline Inventory

System	Component	# Locations / Length	Replacement Value*
Potable Water	Pipelines	0 km	$0.00M
	Facilities	15	$589.41M
	Distribution Lines	43,126 km	$862.53M
	Sub-total		**$1,451.94M**
Waste Water	Pipelines	0 km	$0.00M
	Facilities	19	$1,493.17M
	Distribution Lines	25,875 km	$517.52M
	Sub-total		**$2,010.69M**
Natural Gas	Pipelines	0 km	$0.00M
	Facilities	1	$1.29M
	Distribution Lines	17,250 km	$345.01M
	Sub-total		**$346.30M**
Oil Systems	Pipelines	0 km	$0.00M
	Facilities	44	$5.19M
	Sub-total		**$5.19M**
Electrical Power	Facilities	41	$5,321.80M
	Sub-total		**$5,321.80M**
Communication	Facilities	94	$11.09M
	Sub-total		**$11.09M**
	Total		**$9,147.01M**

* 'M' in Replacement Value represents Millions

Inventory of Assets: Essential Facilities

Essential Facility Inventory

Essential facilities include hospitals, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

The following table provides the number of hospitals, emergency response facilities and schools that are in the county and their replacement value. The individual hospitals, schools and emergency response facilities are listed in Appendix A, B and C respectively of this report. The Figures 6, 7 and 8 on following pages provide maps for hospitals, emergency response facilities and schools respectively.

Table 5: Essential Facility Inventory

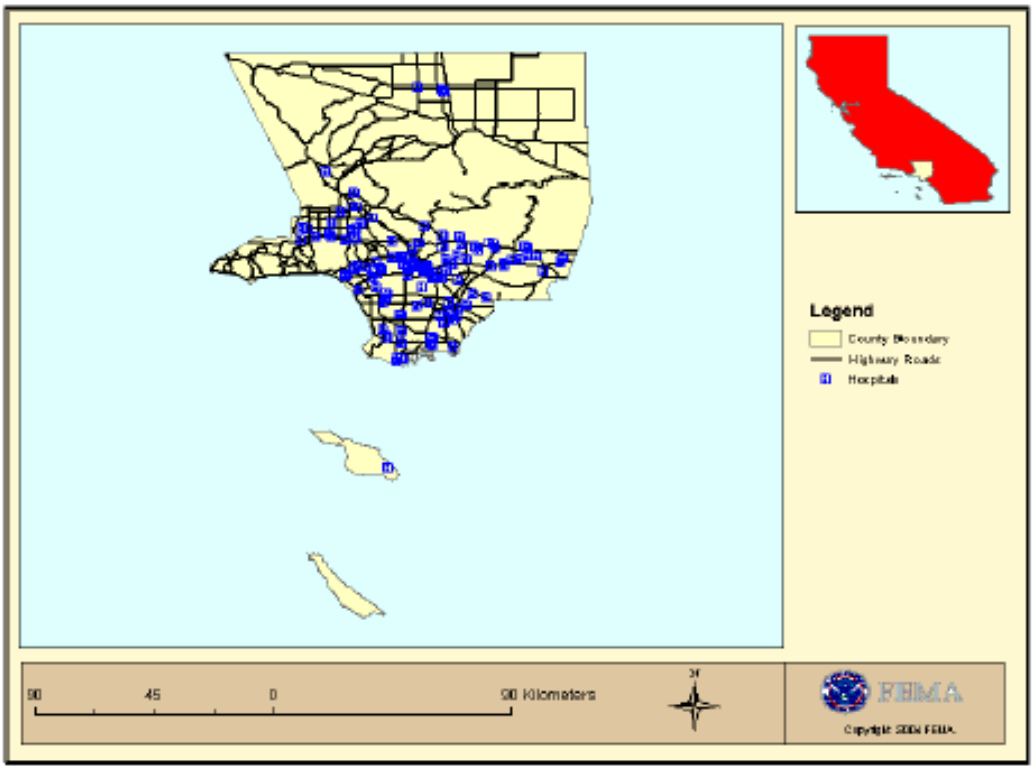
Building Type	Number of Buildings	Replacement Value *
Hospitals	120	$1,569M
Fire Stations	111	$79M
Police Stations	166	$274M
EOCs	12	$14M
Schools	3,022	$1,783M
Total	3,431	$3,719M

* Replacement Value does not include contents, which can be substantial for essential facilities. 'M' in Replacement Value represents Millions.

Inventory of Assets: Essential Facilities (continued)

Figure 6 provides a map of the hospitals in the county.

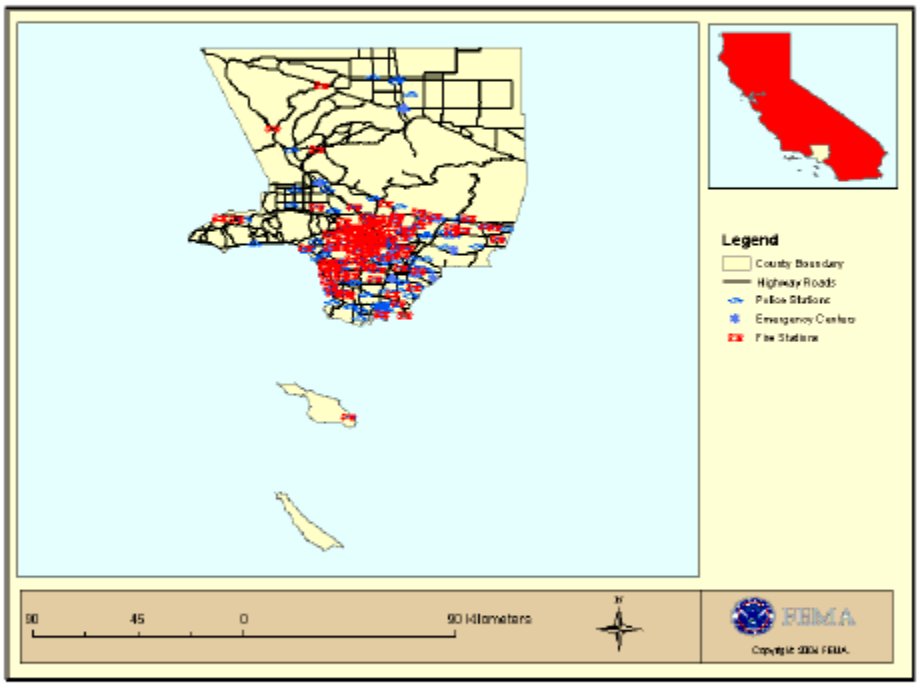
Figure 6: Hospitals Map
Los Angeles County, California



Inventory of Assets: Essential Facilities (continued)

Figure 7 provides a map of the emergency response facilities (police stations, fire stations and emergency operation centers) in the county.

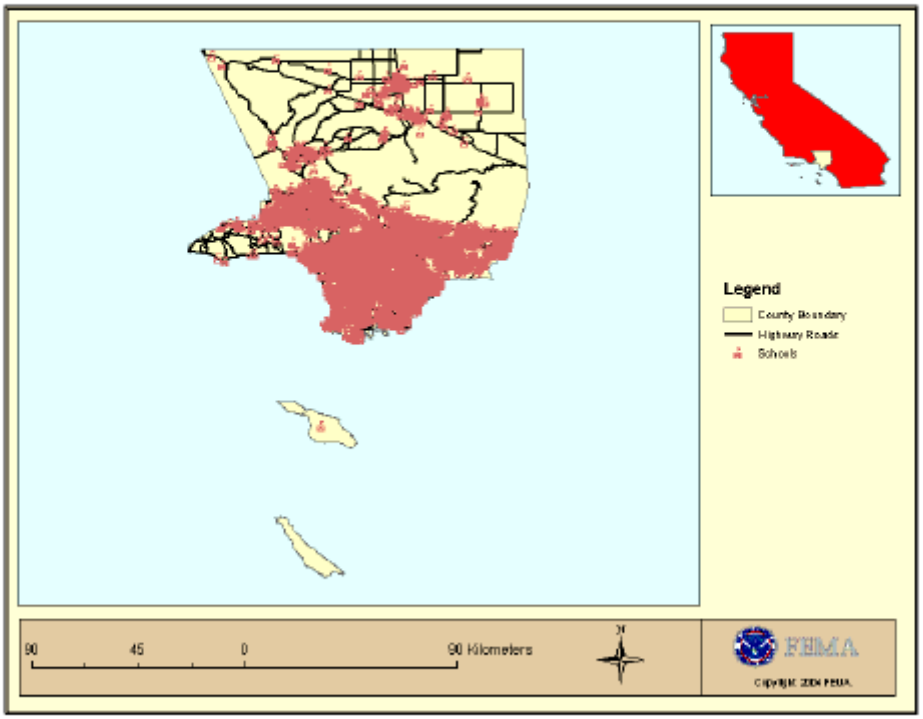
Figure 7: Emergency Response Facilities Map
Los Angeles County, California



Inventory of Assets: Essential Facilities (continued)

Figure 8 provides a map of the schools the county.

Figure 8: Schools Map
Los Angeles County, California



Inventory of Assets: Demographic Information

Demographic Information

HAZUS provides the following statistics (2000 Census data) on the County's population:

- Population by Income
- Population by Age
- Population by Ethnicity
- Population by Gender and
- by Occupancy.

Tables 6-9 present the various groupings.

Table 6: Population by Age and Gender (in thousands)

Category	Age < 16	16 < Age < 65	Age > 65	Total *
Male	1,226.41	3,084.90	381.57	4,692.88
Female	1,166.83	3,111.78	546.28	4,824.88
Total	2,393.24	6,196.68	927.84	9,517.77

Table 7: Population by Ethnicity (in thousands)

	White	Black	Native American	Hispanic	Pacific Islander	Asian	Other	Total *
Population	2,959.61	901.47	25.61	4,242.21	23.27	1,124.57	19.94	9,296.68
Percentage	31.84	9.70	0.28	45.63	0.25	12.10	0.21	

Table 8: Household Distribution by Annual Income (in thousands)

	Income < 20	Income >= 20	Total
Households	730.51	2,558.43	3,288.93
Percentage	22.21	77.79	

Table 9: Household Distribution by Residence Type (in thousands)

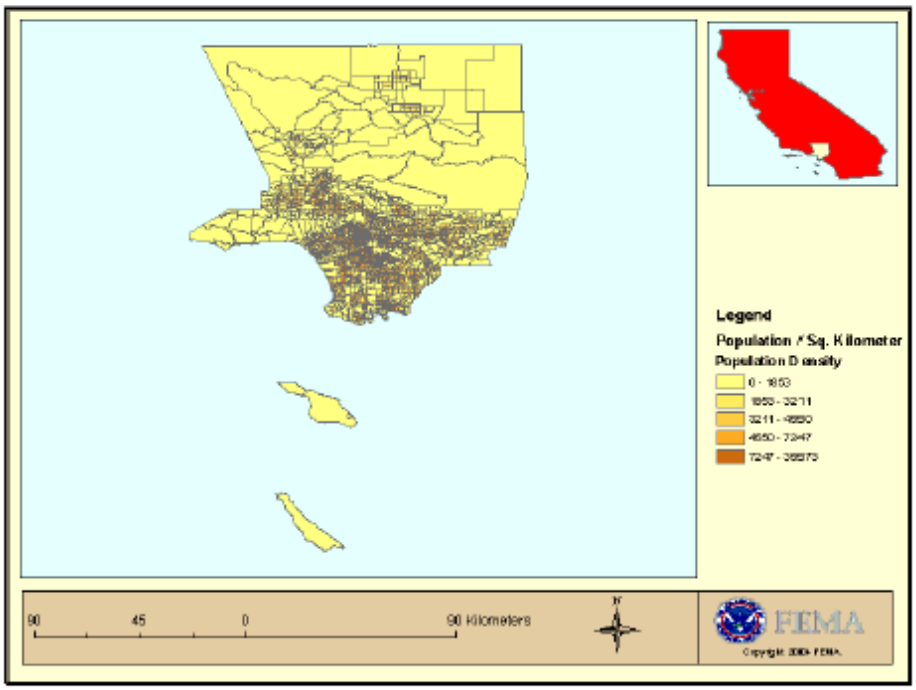
Category	Single Family	Multi-Family	Mobile Homes	Total *
Owner Occupied	1,333.58	128.22	37.83	1,499.63
Renter Occupied	441.95	1,179.89	9.74	1,631.57
Total	1,775.53	1,308.11	47.57	3,131.20

* Total population and household values may not match because of differences in the Census data.

Inventory of Assets: Demographic Information (continued)

The Figure 9 below displays the population density map (number of residents per square kilometer) for the county. The population density is presented by census tract within the county.

Figure 9: Population Density Map
Los Angeles County, California

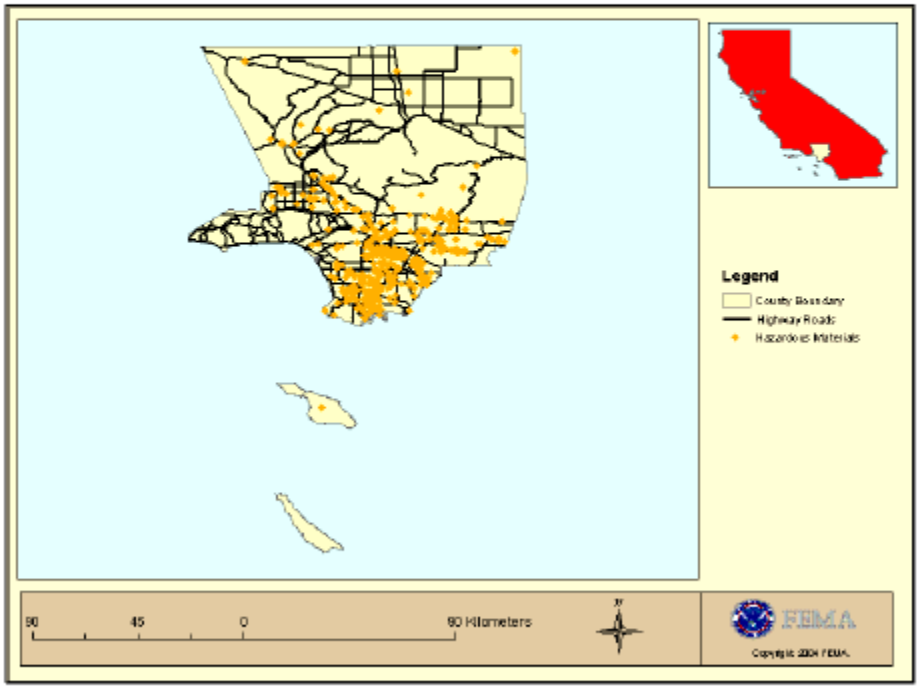


Inventory of Assets: Hazardous Materials Facilities

Hazardous Materials Facilities

Hazardous material sites are identified as High Potential Loss Facilities in HAZUS. In Los Angeles County, there are 1,735 hazardous materials sites. In HAZUS, a 'site' is defined for each facility / chemical combination, so there may be multiple entries for a single facility. Figure 10 provides a map of the sites in the county. The hazardous material sites shown in the map are also listed in Appendix D of this report.

Figure 10: Hazardous Material Sites Map
Los Angeles County, California

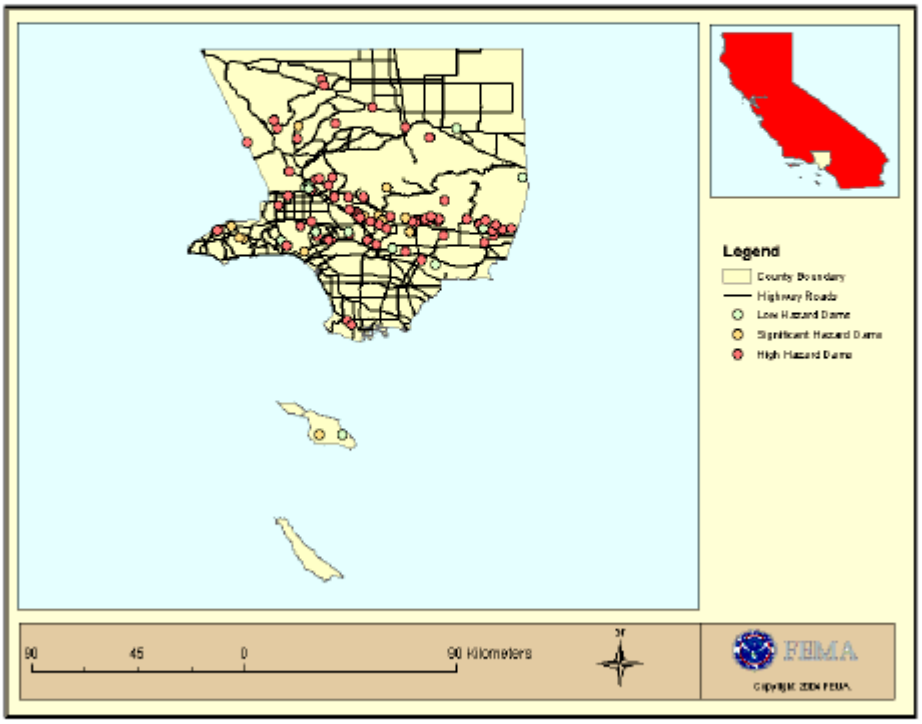


Inventory of Assets: Dams

Dams

Dams are identified as High Potential Loss Facilities in HAZUS. In Los Angeles County, there are 73 high hazard dams, 16 significant hazard dams and 14 low hazard dams. The 'hazard' levels are determined by the US Army Corp of Engineers. Figure 11 provides a map of the dams in the county. The dams shown in the map are also listed in Appendix E of this report.

Figure 11: Dams Map
Los Angeles County, California



Loss Estimates: Buildings

Scenario Definition

Scenario Name:

LA County 100 year prob (6.5)

Building Damage

HAZUS estimates that about 411.34 thousand buildings will be at least moderately damaged. This is over 19% of the total number of buildings in the region. Table 10 below summarizes the expected damage by occupancy for the buildings in the region. Table 11 below summarizes the expected damage by building type.

Table 10: Building Damage by General Occupancy (in thousands of buildings)

Occupancy	None	Slight	Moderate	Extensive	Complete	Total
Residential	921.99	801.56	335.09	44.17	10.82	2,113.62
Commercial	11.51	9.77	11.26	4.87	1.20	38.61
Industrial	1.77	1.47	1.91	0.87	0.23	6.26
Agriculture	0.05	0.02	0.01	0.01	< 0.01	0.09
Religion	0.43	0.36	0.34	0.15	0.04	1.32
Government	0.20	0.17	0.19	0.09	0.02	0.67
Education	0.09	0.06	0.06	0.02	< 0.01	0.24
Total	936.04	813.41	348.86	50.17	12.31	2,160.79

Table 11: Building Damage by Building Type (in thousands of buildings)

Building Type	None	Slight	Moderate	Extensive	Complete	Total
Wood	900.80	782.23	302.23	23.40	6.42	2,015.10
Steel	4.28	3.85	6.19	3.11	0.69	18.12
Concrete	8.10	7.55	7.96	3.74	0.80	28.15
Masonry	18.07	10.15	12.07	5.32	1.03	46.65
Mobile Home	4.78	9.62	20.41	14.59	3.36	52.77
Total	936.04	813.41	348.86	50.17	12.31	2,160.79

Loss Estimates: Buildings (continued)

Economic Loss to Buildings

The total building-related losses were $47,452.90M (2003 dollars); 25% of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 60% of the total loss. Table 12 below provides a summary of the losses associated with the building damage by occupancy. Table 13 below provides a summary of the losses associated with the building damage by building type.

Table 12: Economic Loss by General Occupancy

Occupancy	Structural Damage	Nonstructural Damage	Content Loss	Business Interruption	Total
Residential	$3,353.54M	$18,134.15M	$5,049.49M	$1,576.29M	$28,113.46M
Commercial	$2,089.23M	$5,820.19M	$2,641.16M	$4,846.15M	$15,396.72M
Industrial	$406.45M	$1,292.51M	$869.34M	$349.31M	$2,917.61M
Agriculture	$16.91M	$14.00M	$10.82M	$2.86M	$44.58M
Religion	$83.04M	$259.45M	$114.27M	$36.35M	$493.10M
Government	$16.94M	$58.05M	$25.38M	$24.84M	$125.21M
Education	$40.05M	$196.76M	$97.23M	$28.18M	$362.23M
Total	**$6,006.15M**	**$25,775.11M**	**$8,807.69M**	**$6,863.97M**	**$47,452.91M**

Table 13: Economic Loss by General Building Type

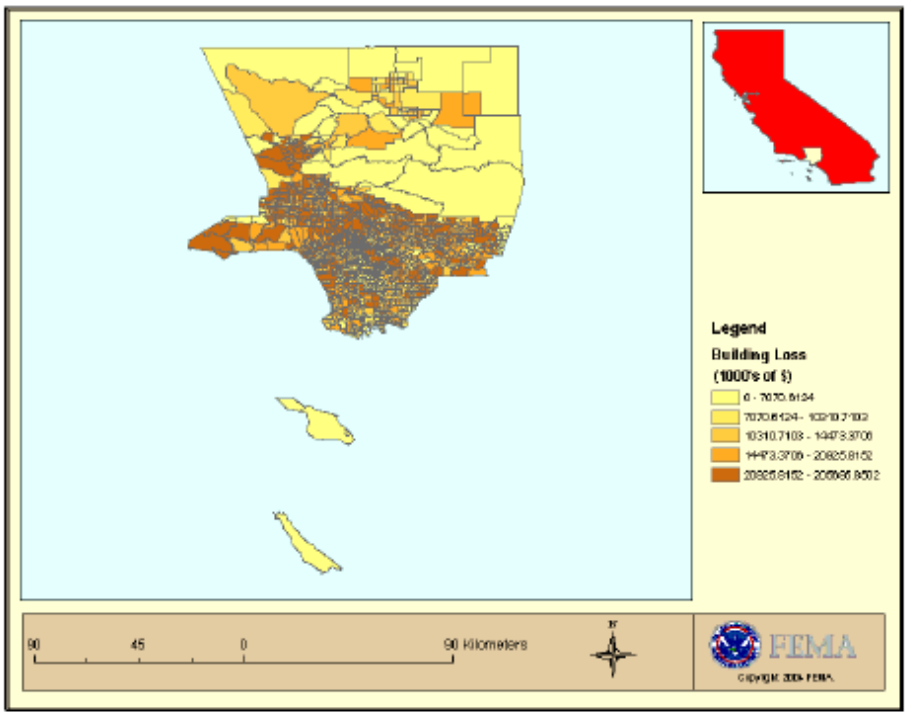
Building Type	Structural Damage	Nonstructural Damage	Content Loss	Business Interruption	Total
Wood	$2,889.51M	$16,329.90M	$5,084.32M	$1,542.81M	$25,846.54M
Steel	$747.87M	$2,327.13M	$892.82M	$1,594.90M	$5,562.72M
Concrete	$1,315.19M	$3,772.70M	$1,561.20M	$1,826.52M	$8,475.60M
Masonary	$967.16M	$3,100.64M	$1,231.73M	$1,889.42M	$7,188.96M
Mobile Home	$86.42M	$244.73M	$37.62M	$10.32M	$379.09M
Total	**$6,006.15M**	**$25,775.11M**	**$8,807.69M**	**$6,863.97M**	**$47,452.91M**

* '**M**' in all the values above represents Millions

Loss Estimates: Buildings (continued)

Figure 12 provides a thematic map of building (structural damage + nonstructural damage) loss in the county.

Figure 12: Building Loss Map
Los Angeles County, California



Loss Estimates: Lifelines Infrastructure

Economic Loss to Lifelines

For the transportation and utility lifeline systems, HAZUS computes the direct repair cost for each component. There are no losses computed by HAZUS for business interruption due to lifeline outages. Tables 14 & 15 provide a breakdown in the expected lifeline losses.

Table 14: Transportation System Lifeline Losses

System	Component	Replacement Value *	Economic Loss *	Loss Ratio (%)
Highway	Roadways	$11,300.54M	$0.00M	0.00
	Bridges	$10,914.99M	$575.40M	5.27
	Tunnels	$34.27M	$0.99M	2.89
	Sub-total	**$22,249.80M**	**$576.39M**	
Railway	Tracks	$869.59M	$0.00M	0.00
	Bridges	$28.36M	$0.77M	2.71
	Tunnels	$0.00M	$0.00M	0.00
	Facilities	$216.08M	$47.26M	21.87
	Sub-total	**$1,114.03M**	**$48.02M**	
Light Rail	Tracks	$128.53M	$0.00M	0.00
	Bridges	$6.17M	$0.17M	2.76
	Tunnels	$0.00M	$0.00M	0.00
	Facilities	$0.00M	$0.00M	0.00
	Sub-total	**$134.70M**	**$0.17M**	
Bus	Facilities	$54.02M	$13.57M	25.12
	Sub-total	**$54.02M**	**$13.57M**	
Ferry	Facilities	$0.00M	$0.00M	0.00
	Sub-total	**$0.00M**	**$0.00M**	
Port	Facilities	$398.72M	$78.66M	19.73
	Sub-total	**$398.72M**	**$78.66M**	
Airport	Facilities	$154.34M	$34.64M	22.44
	Runways	$1,393.63M	$0.00M	0.00
	Sub-total	**$1,547.97M**	**$34.64M**	
	Total	**$25,499.25M**	**$751.45M**	

* **'M'** in Replacement Value and Economic Loss represents Millions

Loss Estimates: Lifelines Infrastructure (continued)

Table 15: Utility System Lifeline Losses

System	Component	Replacement Value *	Economic Loss *	Loss Ratio (%)
Potable Water	Pipelines	$0.00M	$0.00M	0.00
	Facilities	$589.41M	$103.19M	17.51
	Distribution Lines	$862.53M	$161.46M	18.72
	Sub-total	**$1,451.94M**	**$264.65M**	
Waste Water	Pipelines	$0.00M	$0.00M	0.00
	Facilities	$1,493.17M	$215.40M	14.43
	Distribution Lines	$517.52M	$127.70M	24.68
	Sub-total	**$2,010.69M**	**$343.10M**	
Natural Gas	Pipelines	$0.00M	$0.00M	0.00
	Facilities	$1.29M	$0.00M	0.00
	Distribution Lines	$345.01M	$136.51M	39.57
	Sub-total	**$346.30M**	**$136.51M**	
Oil Systems	Pipelines	$0.00M	$0.00M	0.00
	Facilities	$5.19M	$0.73M	13.98
	Sub-total	**$5.19M**	**$0.73M**	
Electrical Power	Facilities	$5,321.80M	$837.78M	15.74
	Sub-total	**$5,321.80M**	**$837.78M**	
Communication	Facilities	$11.09M	$1.88M	16.99
	Sub-total	**$11.09M**	**$1.88M**	
	Total	**$9,147.01M**	**$1,584.65M**	

* 'M' in Replacement Value and Economic Loss represents Millions

Loss Estimates: Essential Facilities

Essential Facility Damage

Of the 3,431 essential facilities in the county, HAZUS estimates that 609 facilities may be at least moderately damaged. This is over 18% of the total number in the region. Table 16 summarizes the expected damage for the essential facilities in the region.

Table 16: Building Damage for Essential Facilities (number of buildings)

Classification	None	Slight	Moderate	Extensive	Complete	Total
Hospitals	54.21	49.87	14.93	0.95	0.02	120
Fire Stations	50.43	48.36	11.62	0.48	0.08	111
Police Stations	78.21	70.65	16.32	0.66	0.12	166
EOCs	5.63	5.13	1.18	0.05	0.01	12
Schools	1,629.78	829.03	496.19	60.27	5.97	3,021
Total	1,818.26	1,003.04	540.24	62.41	6.20	3430

Loss Estimates: Casualties

Casualty Estimates

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. HAZUS estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening
- Severity Level 4: Victims are killed by the earthquake

Table 17 provides a summary of the casualties estimated for this earthquake (by occupancy).

Table 17: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
2 AM	Commercial	265.48	64.23	9.43	18.61
	Commuting	1.08	1.66	2.54	0.51
	Educational	0.00	0.00	0.00	0.00
	Hotels	171.18	38.29	5.24	10.29
	Industrial	270.80	66.84	9.67	19.02
	Other-Residential	6,874.69	1,397.86	160.81	310.32
	Single Family	5,156.54	633.28	22.45	36.85
	Total	**12,739.78**	**2,202.16**	**210.16**	**395.59**
2 PM	Commercial	15,863.10	3,839.35	565.38	1,108.71
	Commuting	9.75	14.94	22.88	4.55
	Educational	1,759.52	401.58	58.32	113.65
	Hotels	32.92	7.37	1.01	1.97
	Industrial	1,993.81	491.16	71.35	138.94
	Other-Residential	1,416.11	291.67	34.72	64.45
	Single Family	1,021.12	127.39	5.60	7.49
	Total	**22,096.33**	**5,173.46**	**759.25**	**1,439.76**
5 PM	Commercial	11,909.01	2,881.98	427.90	821.09
	Commuting	412.12	594.48	949.26	186.56
	Educational	283.01	64.72	9.40	18.38
	Hotels	51.26	11.47	1.57	3.08
	Industrial	1,246.13	306.98	44.59	86.84
	Other-Residential	2,626.28	541.69	64.62	119.97
	Single Family	1,977.95	247.98	10.96	14.66
	Total	**18,505.77**	**4,649.29**	**1,508.30**	**1,250.58**

As a result of damage and losses from previous earthquakes, the Office of Environmental Health and Safety instituted a non-structural seismic-bracing program throughout the District:

OEHS
OFFICE OF ENVIRONMENTAL HEALTH & SAFETY

LOS ANGELES UNIFIED SCHOOL DISTRICT • BOARD OF EDUCATION •

SAFETY ALERT

(213) 241-3199

No. 02-05 | **SEISMIC BRACING** | **June 2002**

District Memorandum N8 (2-5-01) requires seismic bracing for file cabinets, book shelves, and other heavy free standing objects to minimize hazards associated with falling objects in the event of an earthquake.

Staff should not install new equipment, or relocate equipment which has been previously braced. Such work should be undertaken only by Maintenance and Operations staff to ensure that proper seismic bracing occurs, and adequate safeguards are taken to prevent the disturbance of asbestos and lead-containing materials.

Please ensure your facility is in compliance with District Memorandum N8, and that all staff are advised against the relocation or installation of the equipment referenced above. If your facility is not in compliance with the seismic bracing provisions in Memorandum N8, please contact your Complex Project Manager immediately.

If you have any questions, please contact either the Office of Environmental Health and Safety at (213) 241-3199, or the FEMA Project Management Unit at (213) 633-7192.

DISTRIBUTION: All Schools and Offices

Mitigation Division

Are You Ready?

Seismic Retrofitting of Non-Structural Elements: Lighting in the Los Angeles Unified School District

nehrp
National Earthquake Hazards Reduction Program

Along with the structural modification of buildings, there are many non-structural measures that can be taken to protect people and property from seismic hazards. The suspended lighting retrofit project for the Los Angeles Unified School District (LAUSD) that was initiated after the Northridge Earthquake disaster provides one such example.

The LAUSD is second in size only to the New York City School District. At present, the District is composed of over 900 schools, serving a population of over 800,000 students, and employing 57,000 full-time and 24,000 part-time staff.[20] The LAUSD provides public educational services to a 708 square mile area including the Cities of Los Angeles, Bell, Carson, Cudahay, Gardenia, Huntington Park, Lomita, Maywood, San Fernando, South Gate, Vernon, and West Hollywood; portions of 18 other cities; and the unincorporated areas of Los Angeles County.

At the time of the Northridge Earthquake, the LAUSD facilities consisted of about 50 million square feet of building space, of which about 15 million square feet were illuminated with suspended ceiling and imbedded pendant lighting systems.[21] These lights have proven to be dangerous to people who are in schools subject to earthquakes, in that they tend to fall from the ceiling when impacted by strong seismic motion. The Northridge Earthquake caused hundreds of lighting units to fall onto desks in classrooms that the students and teachers would normally occupy during a school day. Fortunately, the earthquake occurred early in the morning when the schools were closed in observance of Dr. Martin Luther King, Jr. Day. As a result of this earthquake experience the LAUSD, with the support of FEMA, decided to undertake the seismic retrofitting or replacement of pendant lights to reduce the earthquake injury risk, and to meet current building code standards.

> *The reinforcement and/or replacement of the unbraced pendant lights in the Los Angeles Unified School District will reduce the high risk of injury to the more than 800,000 school children during the next earthquake event.*

In the Northridge Earthquake, 5500 buildings owned by LAUSD were damaged with total damages currently estimated at $134 million. Under Section 406 of the Stafford Act, FEMA funded $3.1 million for damaged, unbraced pendant ceiling and lights. In addition, $45 million was obligated under Section 404 of the Stafford Act to mitigate unbraced pendant ceiling and light systems of the same design that were not damaged. Detailed benefit/cost analyses were completed for all of these mitigation projects.

It is important to note that the rationale for funding the upgraded ceiling and lighting systems takes into account the probability that earthquakes will occur at all hours of the day (not just school hours). However, if an earthquake were to occur during school hours, the injury and death rates would be much higher than the average assumed for a 24-hour period. Given the potential injury and death rates during school hours, this type of mitigation was considered worthwhile and cost-effective.

Following the Northridge Earthquake, about $162 million was allocated by FEMA to the LAUSD. In repairing the damages from the earthquake, buildings were upgraded to current building code standards which include provisions for safe lighting. With the expenditure of these funds, FEMA is confident that the 800,000 school children of the LAUSD are in a much safer environment and have much less chance of injury or disruption of their education should another earthquake strike.

[20] LAUSD Information, (visited Feb. 11, 1997) (http://www.lausd.k12.ca.us/lausd/lausd.html)

[21] Los Angeles Unified School District, Board of Education Report Number 5, (California: 1994).

Last Updated: Thursday, 29-May-2003 14:43:18 EDT

Biological & Health Emergencies

Biological/Health Emergencies were rated a HIGH PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Los Angeles County has experienced numerous disasters, varying in type and severity. Disasters often result in the need for health and human services as part of the immediate and long-term recovery period. Some disasters are localized with service needs focused in a single location; other disasters, such as earthquakes and civil unrest, result in geographically widespread health and human services needs.

It is essential following a disaster to identify locations where large numbers of people are gathered in open areas. These areas will require evaluation in order to assess health and human service needs. The recovery period may be shortened if health, mental health, and housing problems can be addressed quickly.

This plan is primarily directed to Los Angeles County Departments that will provide the initial team members. Other key human service providers, public and private, will be added to the teams to meet the growing needs of disaster victims.

Mission statements of the following Departments all relate to health and human services; they are annotated below:

Department of Health Services

"...To protect, maintain, and improve the health of the community."

Community Health Services

"... To provide population based public health services and public health clinics in order to assure healthy communities in Los Angeles County through the services of Public Health Nurses, Public Health Investigators, and others."

Environmental Health Services

"... To protect health, prevent disease, and promote health for all persons in Los Angeles County through the management of potentially harmful chemical, physical, or biological agents in the environment."

Department of Mental Health

The Department of Mental Health (DMH) will coordinate and provide mental health services to community disaster victims and disaster workers throughout the entire duration of the disaster and its recovery period. DMH will augment the Department of Health Services by providing disaster mental health services.

Department of Public Social Services:

The Department of Pubic Social Services (DPSS) is responsible, in partnership with the American Red Cross, to ensure that residents receive appropriate emergency shelter. DPSS is the County's liaison with Emergency Network Los Angeles/LA Voluntary Agencies Active in Disaster (ENLA/LAVOAD). In a disaster, DPSS will communicate community needs to this agency.

Department of Children and Family Services

The Department of Children and Family Services (DCFS) is responsible for the safety and well-being of the children in its care, and the children otherwise known as "unaccompanied minors" who may be left unsupervised as a result of a disaster.

Department of Community and Senior Services

The Department of Community and Senior Services (CSS) will manage and staff emergency shelters; contact high-risk IHSS clients; implement the Federal Repatriation Program; staff Disaster Services Centers using volunteers and contract agencies; provide public information through the Information and Referral network; and perform outreach and disaster assistance services through grants received from the California Departments of Aging and Social Services.

Health Hazards

Schools and school support systems have always been, and will continue to be, vulnerable to biological and health hazards, just by their nature as a gathering place for people from all around. Los Angeles County's population is mobile, not only locally, but globally; and the potential for introduction of disease is great. In schools, the public health system starts with teachers and parents. Schools experiencing unusual absenteeism because of a sickness or health issues must report these incidents to public health authorities. Epidemics have been averted because of early detection of a health problem in school children. On the other hand, if an epidemic or pandemic event occurs in one school, the odds are it will affect the entire area unless drastic measures are taken to quarantine or stop the event.

West Nile Virus

Humans

As of August 17, 2004 , a total of 189 WNV infections have been reported from the following local health jurisdictions: San Bernardino (76), Los Angeles (59), Riverside (40), Orange (6), Imperial (1), Kern (2), Fresno (2), Tulare (1), Ventura (1) and Yolo (1) counties. Thirteen of these WNV infections were initially detected in asymptomatic individuals through screening done at blood banks- one of these individuals later became symptomatic. Of the 177 WNV cases with symptoms, 80 are classified as West Nile fever cases, 74 are classified as West Nile neuroinvasive disease, and 23 are of unknown status. The median age for all cases where data was available = 50 years (range: 9 – 91 years). Median age for West Nile fever cases = 46 years (range: 9 – 82 years). Median age for West Nile neuroinvasive disease cases = 59 years (range: 15 – 91 years). 115/177 (65%) of the cases are male. There have been five fatalities to date in California in Orange (1), San Bernardino (2) and Los Angeles (2) counties.

Equines

The California Department of Food and Agriculture confirmed 30 WNV equine cases from the counties of Alpine(1), Butte (1), Fresno (1), Orange (1), Riverside (12), Sacramento (4), San Bernardino (2), San

Diego (1), Tehama (1), and Ventura (1) last week. This represents the first equine cases in the counties of Alpine, Butte, Orange, San Diego, and Ventura and the first indication of WNV in Alpine County-. Forty-eight horses have been euthanized or have died after being infected with WNV.

Dead Birds

The following eleven new counties detected WNV in dead birds by the end of August 2004: Calaveras (1), Lake (1), Lassen (1), Mariposa (1), Plumas (1), San Luis Obispo (1), San Mateo (1), Sierra (1), Sutter (2), Yolo (1), and Yuba (3). An additional 183 WNV positive dead birds were reported last week from Alameda (1), Butte (48), Contra Costa (1), El Dorado (2), Fresno (9), Glenn (5), Kern (3), Los Angeles (37), Mendocino (1), Orange (20), Placer (1), Riverside (1), Sacramento (16), San Diego (1), San Joaquin (2), Santa Barbara (1), Shasta (4), Solano (1), Sonoma (7), Stanislaus (3), Tehama (18), and Tulare (1). In 2004, a total of 1,447 WNV positive dead birds have been detected in California.

Mosquito Pools and Sentinel Chickens:

A total of 109 mosquito pools tested positive for WNV by the end of August 2004, Los Angeles (43), Orange (30), San Bernardino (26), Kern (4), Shasta (3), Riverside (1), Sacramento (1), and San Luis Obispo (1) counties, thus bringing the yearly total to 523. This represents the first positive mosquito activity reported in San Luis Obispo County. Fourteen chickens from Imperial (4), Los Angeles (3), and San Bernardino (7) counties seroconverted to WNV, bringing the yearly total to 214.

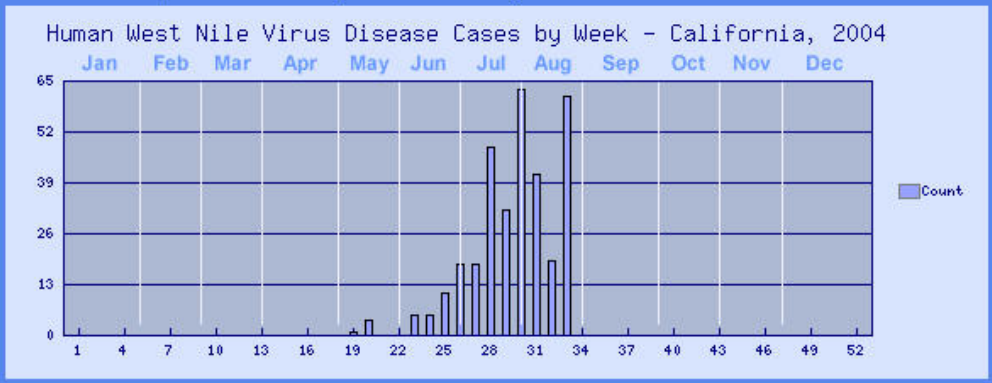
Summary of West Nile Virus Activity in California, 2004

(Los Angeles and neighboring counties)

	Summary of West Nile Virus Activity in California, 2004				
	Humans	Equines	Dead Birds	Mosquito Pools	Sentinel Chickens
Los Angeles	**124**	**4**	**763**	**240**	**37**
Orange	19	1	127	95	-
Riverside	63	59	130	94	121
San Bernardino	119	25	284	121	95
San Diego	1	1	10	-	-
Santa Barbara	-	-	3	-	-
Santa Clara	-	-	21	-	-
Ventura	1	1	9	-	-
State Totals	**343**	**158**	**1,922**	**685**	**313**

California West Nile Virus Surveillance Information Center

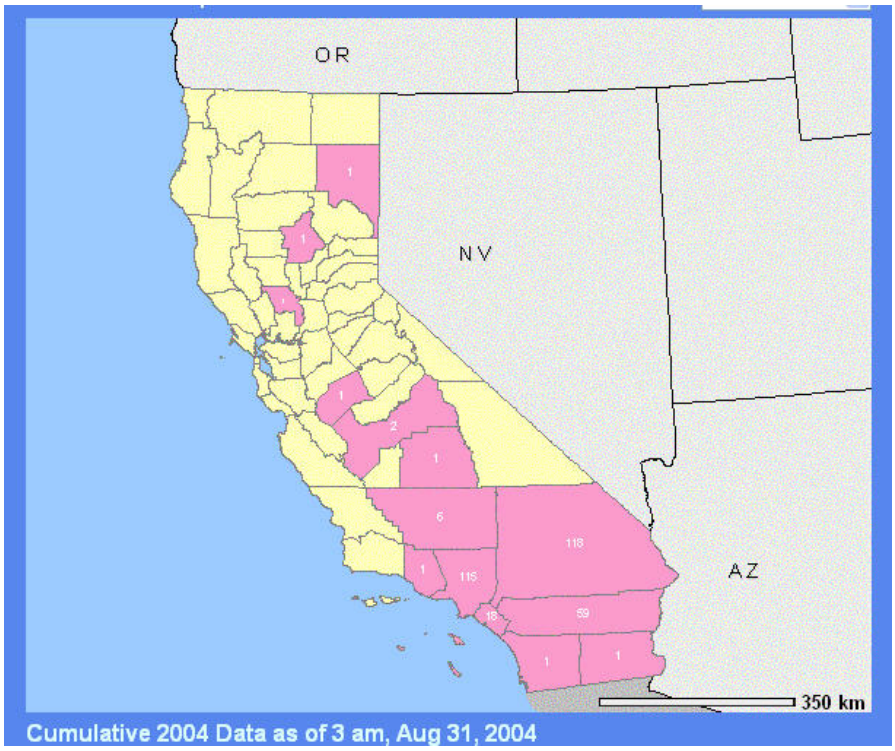
These data are provisional and may be revised or adjusted in the future.



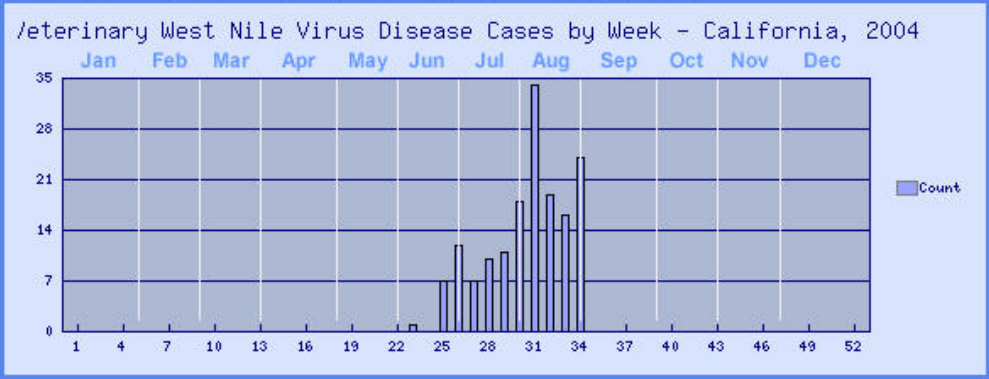
Cumulative Human Disease Cases by County - California, 2004

Butte County	1
Fresno County	2
Imperial County	1
Kern County	6
Lassen County	1
Los Angeles County	115
Merced County	1
Orange County	18
Riverside County	59
San Bernardino County	118
San Diego County	1
Tulare County	1
Ventura County	1

Yolo County 1



These data are provisional and may be revised or adjusted in the future.

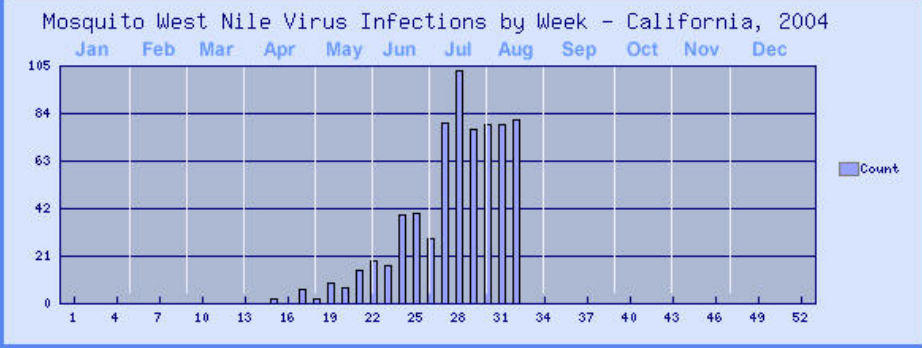


Cumulative Veterinary Disease Cases by County - California, 2004

Alpine County	2	Sacramento County	10
Butte County	8	San Bernardino County	26
Colusa County	2	San Diego County	1
Fresno County	8	Shasta County	4
Glenn County	5	Sutter County	2
Inyo County	1	Tehama County	14
Kern County	9	Tulare County	1
Los Angeles County	4	Ventura County	1
Orange County	1		
Placer County	1		
Riverside County	59		

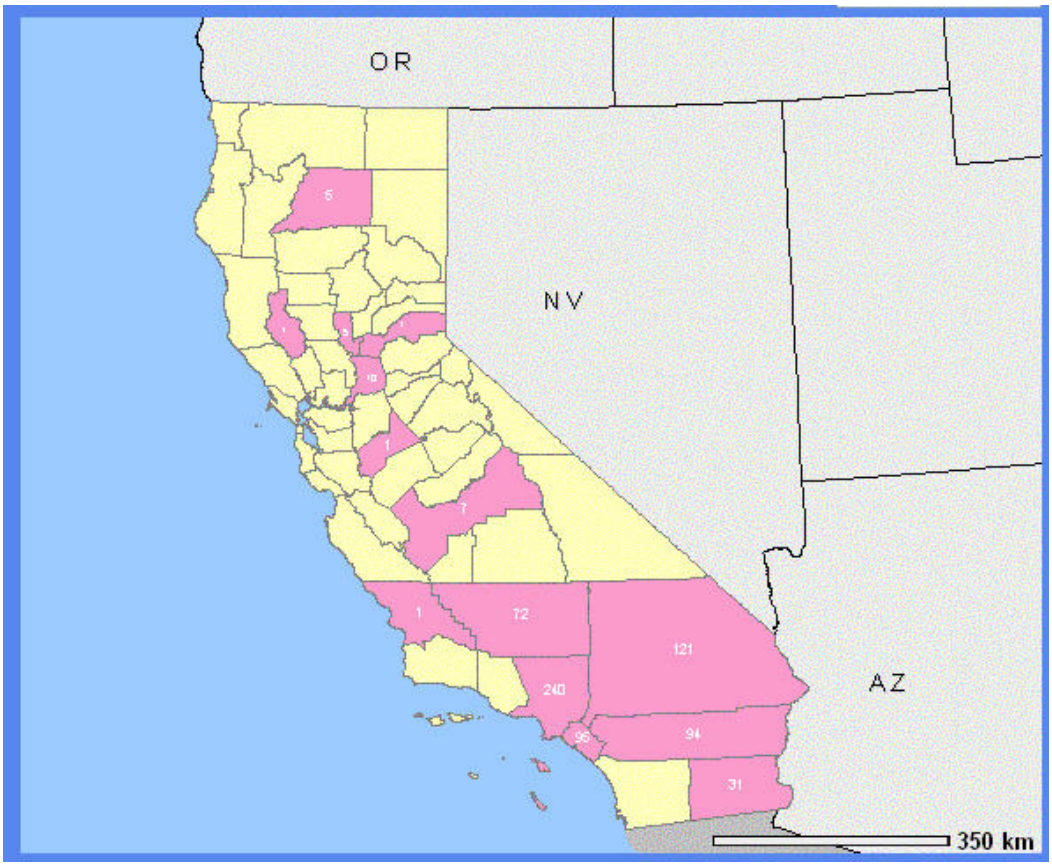
Cumulative 2004 Data as of 3 am, Aug 31, 2004

These data are provisional and may be revised or adjusted in the future.

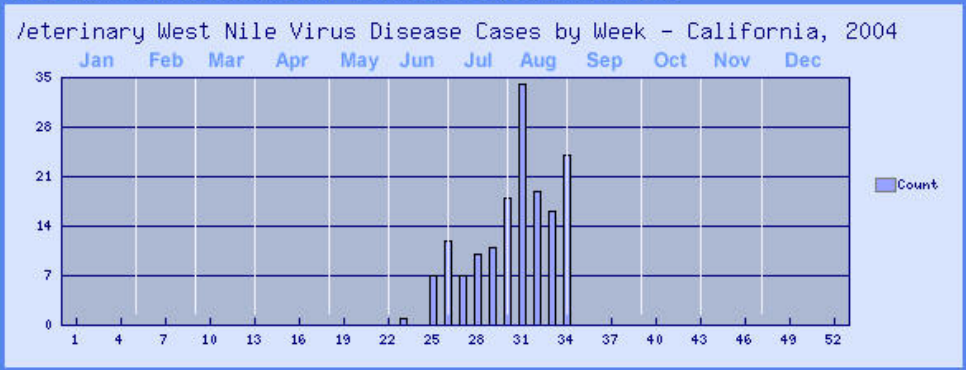


Cumulative Mosquito Infections by County - California, 2004

Fresno County	7	Shasta County	5
Imperial County	31	Stanislaus County	1
Kern County	72	Sutter County	5
Lake County	1		
Los Angeles County	240		
Orange County	95		
Placer County	1		
Riverside County	94		
Sacramento County	10		
San Bernardino County	121		
San Luis Obispo County	1		



These data are provisional and may be revised or adjusted in the future.



Cumulative Veterinary Disease Cases by County - California, 2004

Alpine County	2	Sacramento County	10
Butte County	8	San Bernardino County	26
Colusa County	2	San Diego County	1
Fresno County	8	Shasta County	4
Glenn County	5	Sutter County	2
Inyo County	1	Tehama County	14
Kern County	9	Tulare County	1
Los Angeles County	4	Ventura County	1
Orange County	1		
Placer County	1		
Riverside County	59		

Cumulative 2004 Data as of 3 am, Aug 31, 2004

West Nile Virus Facts

1. West Nile virus (WNV) is a mosquito-borne disease that is common in Africa , west Asia and the Middle East .

2. West Nile virus was first detected in the United States in New York in 1999. Since then, WNV has spread to 46 states, Canada , and Mexico .

3. In 2003, three locally acquired human WNV cases were detected in residents of Los Angeles , Imperial, and Riverside counties, and WNV activity was detected in dead birds, mosquitoes, sentinel chickens, and a horse in six southern California counties. West Nile virus has also been detected in 2004 in southern California .

4. Last year there were almost 10,000 human cases of WNV detected, including 262 deaths in the United States .

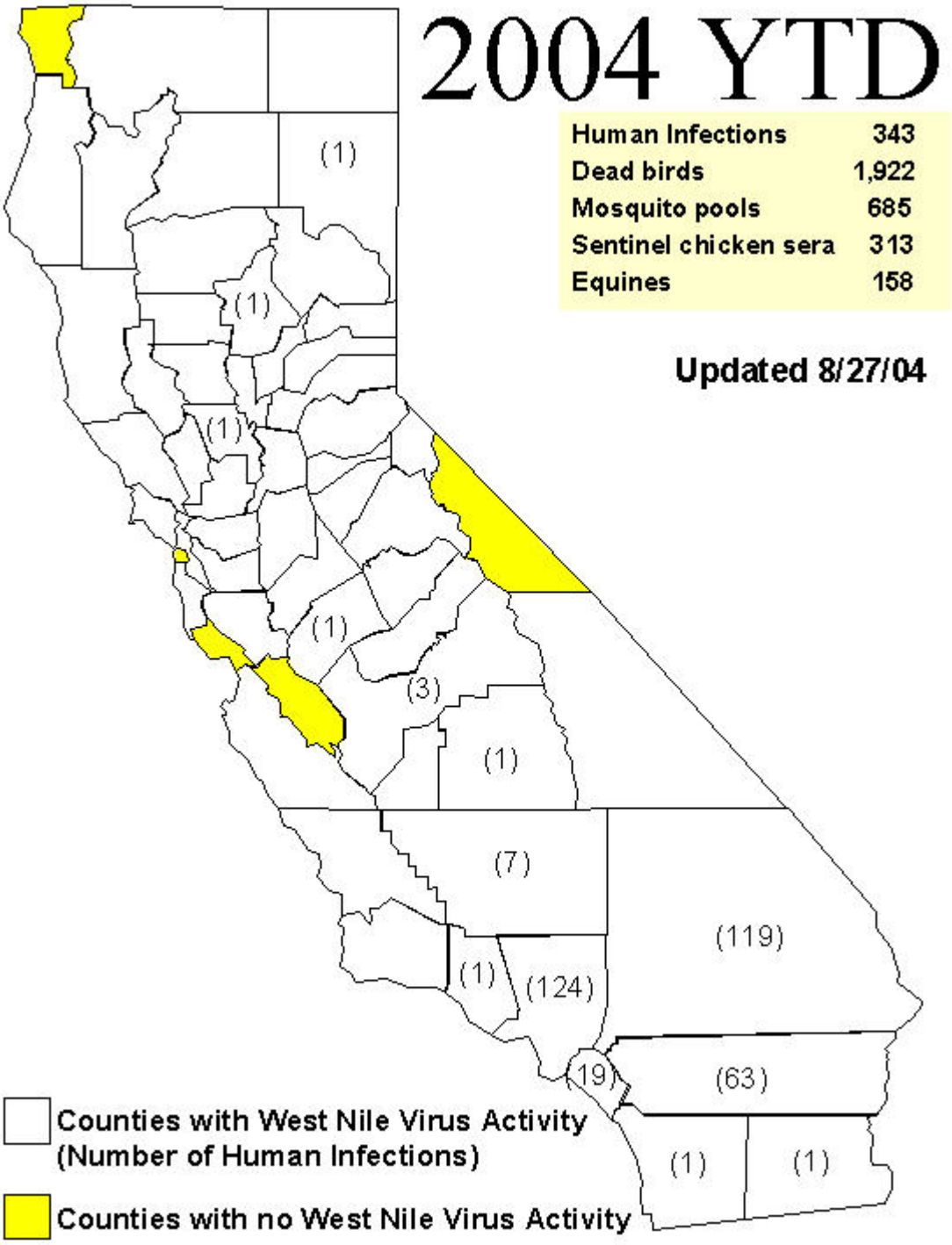
5. People usually get WNV from the bite of an infected mosquito. There is also evidence that WNV can be acquired via a blood transfusion or organ transplant from an infected donor.

6. Most people who are bitten by a mosquito with WNV will not get sick. People who do become ill may experience mild to moderate flu-like symptoms like fever, headache and body ache. It is estimated that less than 1% of the people who are infected with WNV become severely ill and require hospitalization. The elderly and immuno-compromised are particularly susceptible to illness caused by WNV.

7. Currently there is no specific treatment for WNV infection. Since it is a virus it does not respond to antibiotics. In severe cases hospitalization and supportive care is important.

8. California has a long history of conducting surveillance for mosquito-borne viruses and has taken active steps to ensure early detection of WNV. Due to ongoing collaboration between over 70 local mosquito and vector control agencies and state public agencies, California is well prepared to detect, monitor, and respond to WNV. These agencies use a variety of scientific techniques and products to control mosquitoes in their earliest stages and play a key role in reducing the risk of WNV. Also California has launched a statewide public education effort about personal protection measures and reporting dead birds.

9. The public is encouraged to assist in the efforts to detect and monitor WNV by calling the WNV hotline if they find a crow, raven, magpie, jay, sparrow, finch, or hawk that has been dead for about a day. Birds play an important role in maintaining and spreading this virus. Mosquitoes acquire the virus from infected birds, and then transmit the virus to people. Evidence of the virus in dead birds is often the first indication that WNV has been introduced into a new region.


2004 YTD
Human Infections 343
Dead birds 1,922
Mosquito pools 685
Sentinel chicken sera 313
Equines 158
Updated 8/27/04
(1)
(1)
(1)
(1)
(3)
(1)
(7)
(119)
(1)
(124)
(19)
(63)
(1)
(1)
Counties with West Nile Virus Activity (Number of Human Infections)
Counties with no West Nile Virus Activity

Surveillance for Human Cases

Because the primary public health objective of surveillance systems for neurotropic arboviruses is prevention of human infections and disease, human case surveillance alone should not be used for the detection of arbovirus activity, except in jurisdictions where arbovirus activity is rare, or resources to support avian-based and/or mosquito-based arbovirus surveillance are unavailable.

GOALS OF SURVEILLANCE FOR HUMAN CASES: To 1) assess the local, state and national public health impact of WNV disease and monitor national trends; 2) demonstrate the need for public health intervention programs; 3) allocate resources; 4) identify risk factors for infection and determine high-risk populations; 5) identify geographic areas in need of targeted interventions; and 6) identify geographic areas in which it may be appropriate to conduct analytic studies of important public health issues.

Recent Experience

1. In the U.S. during 1999-2002, the peak human risk for WN viral infection occurred in August and September, although in 2002 human illness onset was reported as early as mid-May and as late as mid-December. In many regions, the peak minimum infection rates in mosquitoes and a rapid increase in the number of reported avian and equine WN viral infections occurred just prior to the period of maximal human risk.

2. In 1999-2002, the majority of reported, confirmed, or probable cases of human WN viral disease were among persons with meningo-encephalitis. Testing of patients with aseptic meningitis or unexplained febrile illnesses for evidence of WN viral infection may be beneficial, but can also overwhelm laboratory testing capacity and appears to be of relatively low yield for surveillance purposes since the majority of these cases will not be due to WNV infection.

3. Most patients with WN encephalitis or meningitis (WNME) are older adults, generally over 50 years old. In the U.S. in 1999-2001, the median age among the 142 reported WNME cases was 68 years. In 2002, among 2,942 reported cases of WN meningo-encephalitis, the median age was 59 years. Although 21% of reported cases were in persons younger than 40, only 4% of reported cases were in persons younger than 18.

4. When WN viral infections were first identified in the U.S., WN encephalitis was associated with a Guillain-Barrè-like syndrome with generalized muscle weakness. In 1999-2000, generalized muscle weakness was reported in 29% of WN encephalitis cases. In 2002, at least 2 new neurologic syndromes associated with WN viral infection were identified: acute flaccid paralysis ("WN poliomyelitis-like syndrome") and brachial plexopathy.

5. Using CDC-recommended test methods in public health laboratories, WNV-specific IgM antibody was detected in acute-phase (i.e., those collected 8 or less days after illness onset) serum or CSF specimens, or both, in the large majority of confirmed cases. In contrast, only a small minority of suspected cases were subsequently confirmed in which specific IgM antibody reactivity in acute-phase serum or CSF was in the equivocal or low-positive range.

6. Longitudinal studies of WNME cases have shown that WNV-specific IgM antibody can persist in serum for 12 months or longer.[43] Thus, the presence of WNV-specific IgM antibody in a single serum sample is not necessarily diagnostic of *acute* WN viral infection. For this reason, especially in areas where WNV is known to have circulated previously, suspected, acute WN viral disease cases should be confirmed by observing a fourfold or more change in titer of WNV-specific antibody in serum and the presence of WNV-specific IgM antibody in CSF, when available.

7. In 1999 in the U.S., the sensitivity of polymerase chain reaction (PCR) tests of CSF for the diagnosis of human WN encephalitis cases was only 57%; more recent statistics are currently unavailable. Thus, PCR for the diagnosis of WN viral infections of the human central nervous system (CNS) continues to be experimental and should not replace tests for the detection of WNV-specific antibody in CSF and serum, tests that are far more sensitive.

8. During 1999-2001, 7 cases of uncomplicated WN fever (WNF) were reported in the U.S., which represents 5% of the total number of WNV disease cases reported. In 2002, over 1,100 WNF cases were reported (30% of total). Contributing factors likely include the intensive media attention paid to the 2002 epidemic that may have led to increased consumer demand for WNV diagnostic testing by patients and physicians, and the greater availability of commercial testing. Nevertheless, during 1999-2002, WNF was probably significantly under-diagnosed in the U.S. It has been estimated that approximately 20 WNF cases occur for every WNME case.

9. For suspected WNV disease cases in immuno-compromised patients, WNV-specific antibody may not be present. Since longer viremias may be observed in these patients, testing serum and CSF samples for the presence of virus or viral RNA may be useful.

Vector Control

A surveillance program adequate to monitor WNV activity levels associated with human risk must be in place. Detection of epizootic transmission of enzootic arboviruses typically precedes detection of human cases by several days to 2 weeks or longer (e.g., as found in SLE epidemics). If adequate surveillance is in place, the lead time between detecting significant levels of epizootic transmission and occurrence of human cases can be increased, which will allow for more effective intervention practices. Early-season detection of enzootic or epizootic WNV activity appears to be correlated with increased risk of human cases later in the season. Control activity should be intensified in response to evidence of virus transmission, as deemed necessary by the local health departments.

Such programs should consist of public education emphasizing personal protection and residential source reduction; municipal larval control to prevent repopulation of the area with competent vectors; adult mosquito control to decrease the density of infected, adult mosquitoes in the area; and continued surveillance to monitor virus activity and efficacy of control measures.

As evidence of sustained or intensified virus transmission in an area increases, emergency response should be implemented. This is particularly important in areas where vector surveillance indicates that infection rates in *Culex* mosquitoes are increasing, or that potential accessory vectors (e.g., mammalophilic species) are infected with WNV. Delaying adulticide applications in such areas until human cases occur is illogical and negates the value and purpose of the surveillance system.

Adult Mosquito Control Recommendations

Ground-based (truck-mounted) application of adult mosquito control agents has several positive attributes. Where road access is adequate, such as in urban and suburban residential areas, good coverage may be achieved. In addition, ground-based application can be done throughout the night, thereby targeting night-active mosquito species. Such applications are prone to skips and patchy coverage in areas where road coverage is not adequate or in which the habitat contains significant barriers to spray dispersal and penetration.

Aerial application is capable of covering larger areas in shorter time periods than a ground-based application. This is a critical positive attribute when large residential areas must be treated quickly. In addition, aerial application is less prone to patchy coverage than ground-based application in areas where road coverage is not adequate. One limitation of aerial application is that many applicators will not fly at night, potentially reducing the effectiveness of the applications in Culex species control efforts.

Cost benefits of aerial application over ground application may not be realized unless relatively large areas are treated.

Several formulations of a variety of active ingredients are available for adulticide applications. Material choice for ground-based or aerially applied mosquito control in public health emergency situations is limited by EPA restrictions on the pesticide label and applicable state and local regulations.

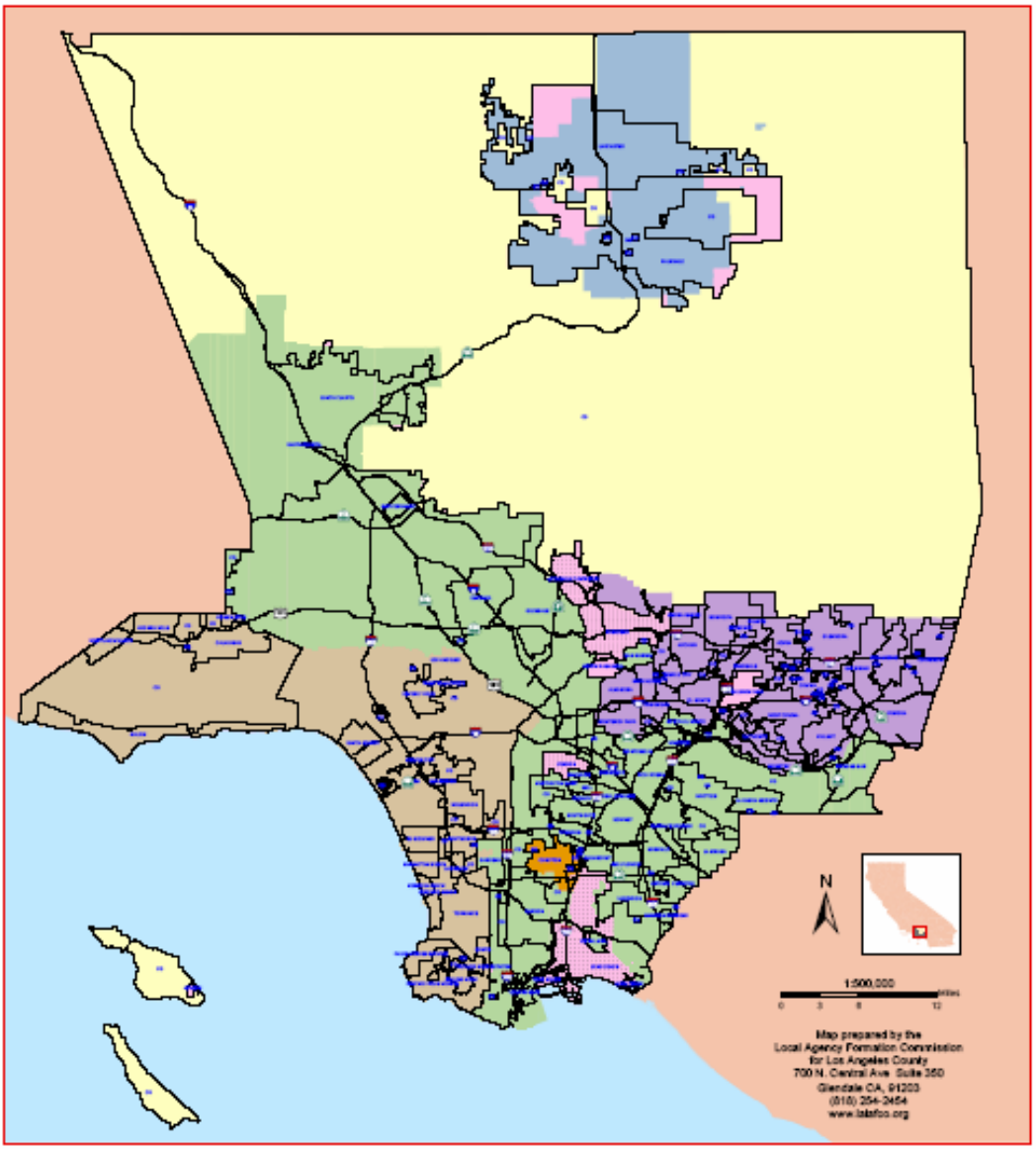
Multiple applications will likely be required to appreciably reduce Culex populations and interrupt arbovirus transmission. An emergency SLE virus response plan developed for New Orleans, Louisiana[63] indicates the need for repeated applications to control Cx.quinquefasciatus, and the need to repeatedly apply adulticides in high-risk areas (areas with human cases or positive surveillance events). Two to three adulticide applications spaced 3-4 days apart may be required to significantly reduce Cx. pipiens populations. Effective surveillance must be maintained to determine if and when re-treatment is required to maintain suppression of the vector populations.

Urban/suburban population centers with multiple positive surveillance events as described above should be treated first to most efficiently protect the largest number of people from exposure to WNV. Applications should be timed to coincide with the peak activity periods of the target species. For example, applications should be made at night to maximize control of night-active Culex species. Other species such as Oc. sollicitans or Ae. vexans are active shortly after sunset and are effectively controlled with appropriately timed applications. Day-active potential accessory vectors (e.g., Oc. japonicus, Oc. triseriatus,

Ae. albopictus) must be addressed separately and are most effectively controlled by residential source reduction efforts, though there is preliminary evidence that early morning ULV applications may be used to control these species.

Centers for Disease Control and Prevention, "Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance, Prevention, and Control"; U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Vector-Borne Infectious Diseases, Fort Collins, Colorado, 3rd Revision, 2003

Mosquito and / or Vector Control Districts
Incorporated and Unincorporated Areas of Los Angeles County



Antelope Valley
Mosquito and Vector Control District
P.O. Box 1192
Lancaster, CA 93584
(661) 942-2917
www.avmosquito.org

Compton Creek
Mosquito Abatement District
1224 S. Santa Fe Ave.
Compton, CA 90221
(310) 639-7375

Greater Los Angeles County
Vector Control District
12545 Florence Ave.
Santa Fe Springs, CA 90670
(562) 944-9656
www.glacvcd.org

San Gabriel Valley
Mosquito & Vector Control District
1145 N. Azusa Canyon Rd.
West Covina, CA 91790
(626) 814-9466
www.sgvmosquito.org

Los Angles County West
Vector Control District
6750 Centinela Ave.
Culver City, CA 90230
(310) 915-7370
www.lawestvector.org

Non-District Mosquito
and / or Vector Control

City of Long Beach
Health and Human Services
2525 Grand Ave. Rm. 220
Long Beach, CA 90815
(562) 570-4132
www.longbeach.gov

City of Pasadena
Public Health Department
1845 N Fair Oaks Ave
Pasadena, CA 91103
(626) 744-6005
www.ci.pasadena.ca.us/publichealth/

City of LaCañada-Flintridge City Hall
1327 Foothill Blvd.
La Cañada Flintridge, CA 91011
(818) 790-6880
www.lacanadaflintridge/cityindex.htm

City of Vernon
4305 South Santa Fe Ave
Vernon, CA 90058
(323) 826-1420
www.cityofvernon.org/index1.htm

Los Angeles County
Public Health
Department of Health Services

Acute Communicable
Disease Control Program
313 N. Figueroa St.
Los Angeles, CA 90012
(213) 240-7941
www.lapublichealth.org/acd/index.htm

Environmental Health
Vector Management
5050 Commerce Dr.
Baldwin Park, CA 91706
(626) 430-5200
www.lapublichealth.org/eh/index.htm

Veterinary Public Health
3634 S. Western Ave., Suite 238
Los Angeles, CA 90062
(323) 730-3723
www.lapublichealth.org/vet/index.htm

State of California Department
of Health Services

Communicable Disease Control
Toll Free Telephone: 877-960-2473
E-mail: arbovirus@dhs.ca.gov
www.westnile.ca.gov

Cities not covered by
Mosquito and/or Vector
Control Districts

Unincorporated County
areas not covered by
Mosquito and/or Vector
Control Districts

This map was made possible by the Epidemiology and Laboratory Capacity (ELC) and Emerging Infections Program (EIP) Cooperative Agreement funds (Grant No. U50/CCU912801-07/3) from the Centers for Disease Control and Prevention (CDC) and dedicated professionals for the independent, city, county and state public services in Los Angeles County.

030104

LOS ANGELES UNIFIED SCHOOL DISTRICT
REFERENCE GUIDE

ROUTING
Local District Superintendents
Local District Operations Coordinators
Safety/Attendance Coordinators
Local District Facilities Directors
Principals
Plant Managers
Nursing Administrators
Student Medical Services
Employee Health Services

TITLE: **WEST NILE VIRUS PRECAUTIONS**

NUMBER: REF-1304

ISSUER: Office of Environmental Health and Safety, Maintenance and Operations, and Student Medical Services

DATE: September 16, 2004

PURPOSE: The purpose of this Reference Guide is to describe the responsibilities and specific actions of District offices in minimizing the risk of exposure to West Nile Virus (WNV) among LAUSD students and staff.

MAJOR CHANGES: None

INSTRUCTIONS: The County Department of Health Services reports that the WNV is spread to humans most commonly through the bite of a mosquito which has been infected with the virus. Most mosquitoes do not carry the virus and the risk of serious human illness is extremely low, with more than 80% of those exposed to the virus experiencing no symptoms at all. Those that develop symptoms may experience headaches, fever, body aches, skin rash or swollen lymph glands within 3 – 14 days after a bite from an infected mosquito and generally those symptoms last a few days. With the rare exception of transmission via blood donation or organ transplantation, individuals infected with WNV are not contagious to others.

The elderly are at greatest risk for developing severe disease such as encephalitis and meningitis. The symptoms of severe infection include headache, high fever, stupor, disorientation, coma, tremors, convulsions, muscle weakness and paralysis. Less than 1% of those infected with WNV will develop severe disease. Among those who have developed a severe illness with WNV, between 3% and 15% have died and most of the deaths have occurred among the elderly.

It is imperative that every effort is made to eliminate or avoid conditions conducive to mosquito breeding on school sites. These conditions include standing pools of water on athletic fields, in tree wells, or elsewhere on the grounds, small amounts of water in birdbaths, old tires, jars, cans, roof drains, air conditioning pans, etc. Mosquitoes will breed in as little as ½ inch of non-flowing water.

Following are the responsibilities and actions of school and central office personnel in reducing the risk of exposure to WNV among students and staff.

Site Administrator

The Site Administrator has overall responsibility for ensuring that site conditions do not encourage mosquito breeding, and that staff report any associated problems to M&O. Specifically, the Site Administrator will direct the Plant Manager to fully implement those actions specified under "Plant Manager" below, and will:

- Ensure staff keep unscreened doors/windows closed and report any broken screens, windows and doors to the Plant Manager.
- Encourage students and staff to stay indoors at dawn, dusk and in the early morning or evening, and to wear long-sleeved shirts and long pants when outdoors, and to use non-aerosol insect repellant before and after school in accordance with label instructions (staff should be informed that if repellant is used by students in a manner inconsistent with label instructions, it should be confiscated until retrieved by a parent or guardian).
- Report any health complaints potentially associated with mosquito spraying by County or City agencies to Student Medical Services at (213) 763-8342 or District Nursing Services at (213) 763-8374.
- Advise staff against the application of pesticides on campus (only the District's Pest Management Technicians are authorized to apply pesticides on campus in accordance with the Integrated Pest Management Policy).

Plant Manager

The Plant Manager is responsible for inspecting the school to ensure site conditions do not encourage mosquito breeding and taking necessary corrective action, such as reporting the problem to M&O. Specifically, the Plant Manager is responsible for:

- Inspecting the site frequently to report any non-flowing water problems, such as plumbing leaks, air conditioner condensation, standing or stagnant water to M&O Trouble Call Desk at (213) 745-1600.
- Using proper procedures to dispose of dead birds or squirrels using gloves or bag to pick up the carcass and double bagging the carcass (see *OEHS Safety Alert No. 04-07, West Nile Virus Precautions*) and reporting dead birds or squirrels immediately to the California Department of Health Services (CDHS) WNV Hotline at (877) 968-2473

- Ensuring grounds and tree wells are not being over-watered resulting in standing pools of water. If so, water schedules should be adjusted and/or a trouble call should be placed to have low areas filled in.
- Ensuring water runoff does not pool when hosing down lunch and other areas. A trouble call may need to be made to request fill for low areas.
- Ensuring that gutters, roof drains and underground drains are free of obstructions.
- Reporting any broken screens, windows and doors to the M&O Trouble Call Desk.
- Emptying or changing water at least every four days in birdbaths, fountains, and other decorative containers with standing pools of water.
- Requesting an inspection by the District's Integrated Pest Management Coordinator at (213) 745-1427 if there is a pond, spring, fountain, bird bath, etc., to ensure that there are no mosquito breeding conditions.
- Notifying the Greater Los Angeles County Vector Control District at (562) 944-9656 if potential breeding grounds (e.g., abandoned pools, drainage channels or street gutters with standing water) are observed on adjacent non-District properties.

Maintenance and Operations (M&O) Branch

The Maintenance and Operations Branch is responsible for corrective actions to address mosquito breeding concerns identified by school staff. Specifically, M&O is responsible for:

- Repairing broken screens or doors to prevent mosquitoes from entering occupied areas.
- Utilizing integrated pest management methodologies to avoid or eradicate mosquitoes and breeding conditions.
- Inspecting suspect ponds or standing water and implementing necessary action to minimize mosquito breeding.

Office of Environmental Health and Safety (OEHS)

The Office of Environmental Health and Safety (OEHS) is responsible for conducting periodic inspections to assess compliance with applicable health and safety standards. Specifically OEHS is responsible for:

- Inspecting school sites, noting conditions that may promote mosquito breeding, and reporting such conditions to the Site Administrator and M&O Trouble Call Desk at (213) 745-1600 while conducting routine inspections.
- Reporting any broken screens or doors to the Site Administrator and M&O Trouble Call Desk.

- Responding to complaints or questions regarding WNV, and if necessary, referring these to the appropriate office or regulatory agency for follow-up action

District Nursing Services

District Nursing Services is responsible for tracking WNV incidents involving District students and staff and reporting these to the appropriate agencies. Specifically, District Nursing Services is responsible for:

- Responding to medical inquiries regarding WNV and if necessary referring these to Student Medical Services or appropriate agency for follow-up action.
- Serving as liaison between the District and County Department of Health Services.
- Referring to the Integrated Pest Management Coordinator at (213) 745-1427 issues associated with pesticide spraying by City or County agencies. The Integrated Pest Management Coordinator may in turn contact agency representatives.

RELATED RESOURCES:

OEHS Safety Alert No. 04-07, West Nile Virus Precautions may be downloaded from http://www.lausd-oehs.org.

"LAUSD Pest of the Month Program Publications Nos. 15, 17, and 18, West Nile Virus Information." These publications have been distributed to all Plant Managers. They are also available through the IPM Program Coordinator at (213) 745-1427.

County of Los Angeles Department of Health Services West Nile Virus Website at http://www.lapublichealth/org/acd/index.htm/

Other helpful websites include: http://www.cdc.gov/ncidod/dvbid/westnile/index.htm; http://www.westnile.ca.gov/; http://www.wipeoutestnile.com; http://vector.ucdavis.edu/arbo.html

ASSISTANCE:

Inquiries may be directed to OEHS at (213) 241-3199 or Pest Management at (213) 745-1435. Medical questions may be directed to Student Medical Services at (213) 763-8342 or District Nursing Services at (213) 763-8374.

Severe Acute Respiratory Syndrome (SARS)

Los Angeles County includes major port cities, and as such diseases anywhere in the world constitute a potential threat. Severe acute respiratory syndrome (SARS), a recently recognized, contagious febrile lower respiratory infection caused by a novel corona virus called SARS-CoV, is an example of a potential threat to a port city.

The worldwide outbreak of SARS that occurred between November 2002 and July 2003 most likely originated in China and then spread through travel. During this outbreak 22 potential SARS cases were investigated in Los Angeles. Seven were considered probable SARS but none of these cases had a specimen that was positive for SARS-CoV infection. The investigation and monitoring required for 22 potential cases was considerable.

It is possible that SARS may re-emerge; therefore, it is important that Los Angeles County be prepared to immediately identify cases and contain the disease.

The California Health and Safety Code (H&S), the California Code of Regulations (CCR) and the Los Angeles County Code (LACC) grant the Los Angeles County Health Officer authority to collect records and data with respect to communicable disease, initiate disease control measures, control property and manage persons (including isolation and quarantine).

SARS Case Count

During November 2002-July 2003, a total of 8,098 probable SARS cases were reported to the World Health Organization (WHO) from 29 countries. In the United States, only 8 cases had laboratory evidence of infection with SARS-CoV. Since July 2003, when SARS-CoV transmission was declared contained, active global surveillance for SARS-CoV disease has detected no person-to-person transmission of SARS-CoV. CDC has therefore archived the case report summaries for the 2003 outbreak.

During the 2003 epidemic, CDC and the Council of State and Territorial Epidemiologists (CSTE) developed surveillance criteria to identify persons with SARS in the United States. The surveillance case definition changed throughout the epidemic, to reflect increased understanding of SARS-CoV disease.

In California, there were a total of 29 cases, 22 of which were suspect, 5 were probably SARS and 2 were confirmed.

SARS Surveillance

The key to controlling a SARS outbreak is prompt detection of cases and their contacts, followed by rapid implementation of control measures. Identification of SARS cases is the basic step in prevention efforts, whereas contact tracing provides a means to focus case-finding and containment efforts on persons who are at greatest risk of SARS-CoV disease. Two features of SARS-CoV disease pose challenges for case surveillance. First, the early signs and symptoms are not specific enough to reliably distinguish SARS-CoV disease from other common respiratory illnesses. Second, existing laboratory diagnostic tests are not adequately sensitive early in the course of illness. Therefore, risk of exposure (i.e., to another case of SARS-CoV disease or to a setting where SARS-CoV transmission is occurring) is key to considering the likelihood of a diagnosis of SARS-CoV disease.

Potential sources of SARS-CoV for future exposures include persistent infection in previously ill persons or reintroduction to humans from an animal reservoir. In the absence of SARS-CoV transmission worldwide, the most likely sites of recurrence are the original site of introduction of SARS-

CoV from animals to humans and locations where person-to-person SARS-CoV transmission previously occurred. Laboratories that contain live SARS-CoV could be a source of further transmission if compromised laboratory techniques result in laboratory-acquired infections and report from the Department of Health, Taiwan Because persons with SARS-CoV disease tended to appear in clusters (e.g., in healthcare facilities, households, and a few special settings) during the 2003 outbreaks, early signals of the reappearance of the illness in U.S. communities could include unusual clusters of unexplained pneumonia.

In the presence of person-to-person SARS-CoV transmission anywhere in the world, patients with SARS-CoV disease or sites of SARS-CoV transmission become the most likely sources of exposure. Contact tracing, the identification of persons who had contact with a potential case of SARS-CoV disease or may have been exposed while present in locations (e.g., hospitals) with known SARS-CoV transmission, is essential for the implementation of appropriate measures to reduce further spread of the disease.

The overall goals of SARS surveillance are to:

- Maximize early detection of cases and clusters of respiratory infections that might signal the re-emergence of SARS-CoV disease while minimizing unnecessary laboratory testing, concerns about SARS-CoV, implementation of control measures, and social disruption.

- If person-to-person SARS-CoV transmission recurs, maintain prompt and complete identification and reporting of potential cases to facilitate outbreak control and management.

- Identify and monitor contacts of cases of SARS-CoV disease to enable early detection of illness in persons at greatest risk.

Lessons Learned

The following lessons from the global experience with SARS surveillance have been considered in developing this document:

- Astute healthcare providers will likely be the key to early detection and reporting of initial cases of SARS-CoV disease.

- The key to recognizing persons with SARS-CoV disease is identification of an epidemiologic link of exposure to another case of SARS-CoV disease or to a setting (e.g., hospital) where SARS-CoV transmission is occurring.

- Screening criteria for epidemiologic linkages need to reflect 1) the status of SARS-CoV transmission globally and the risk of exposure from international and domestic travel, and 2) the status of SARS activity in the community, at the work site, or in other settings where a patient with SARS-like illness may have been.

- In a setting of extensive SARS-CoV transmission, the possibility of SARS-CoV disease should be considered in all persons with a fever or lower respiratory illness, even if an epidemiologic link cannot be readily established.

- Healthcare facilities were disproportionately affected by SARS-CoV, and healthcare workers were among the first and most severely affected groups in every large outbreak reported.

- Contact tracing is resource intensive yet critical to containment efforts since it allows early recognition of illness in persons at greatest risk.

- Collection of appropriate and timely clinical specimens for laboratory testing is central to monitoring the status of SARS-CoV transmission at the local, state, and federal levels.

- Timely reporting of cases, updates on the clinical status and disposition of patients, real-time analysis of data, and timely dissemination of information are essential for outbreak-management decisions.

- Paper-based reporting systems are too slow and labor intensive to manage a large SARS outbreak. A rapid and efficient electronic reporting system that facilitates real-time analysis of clinical, epidemiologic, and laboratory information at the local level is essential.

- Frequent communication and data sharing among public health officials and healthcare providers are needed to update the status of potential and confirmed cases of SARS-CoV disease.

Mad Cow Disease (Creutzfeldt-Jakob disease (vCJD))

Background

New variant CJD (vCJD) is a rare, degenerative, fatal brain disorder in humans. Although experience with this new disease is limited, evidence to date indicates that there has never been a case of vCJD transmitted through direct contact of one person with another. However, a case of probable transmission of vCJD through transfusion of blood components from an asymptomatic donor who subsequently developed the disease has been reported.

As of December 1, 2003, a total of 153 cases of vCJD had been reported in the world: 143 from the United Kingdom, six from France, and one each from Canada, Ireland, Italy, and the United States (note: the Canadian, Irish, and U.S. cases were reported in persons who resided in the United Kingdom during a key exposure period of the U.K. population to the BSE agent).

Almost all the 153 vCJD patients had multiple-year exposures in the United Kingdom between 1980 and 1996 during the occurrence of a large UK outbreak of bovine spongiform encephalopathy (BSE, commonly known as mad cow disease) among cattle.

There has never been a case of vCJD that did not have a history of exposure within a country where this cattle disease, BSE, was occurring.

It is believed that the persons who have developed vCJD became infected through their consumption of cattle products contaminated with the agent of BSE. There is no known treatment of vCJD and it is invariably fatal.

Since 1996, evidence has been increasing for a causal relationship between ongoing outbreaks in Europe of a disease in cattle, called bovine spongiform encephalopathy (BSE, or "mad cow disease"), and a disease in humans, called variant Creutzfeldt-Jakob disease (vCJD). Both disorders are invariably fatal brain diseases with unusually long incubation periods measured in years, and are caused by an unconventional transmissible agent.

On December 23, 2003, the U.S. Department of Agriculture (USDA) announced a presumptive diagnosis of bovine spongiform encephalopathy (BSE, or "mad cow" disease) in an adult Holstein cow from Washington State. The diagnosis was confirmed by an international reference laboratory in Weybridge, England, on December 25. Preliminary trace-back based on an ear-tag identification number suggests that the BSE-infected cow was imported into the United States from Canada in August 2001.

Description

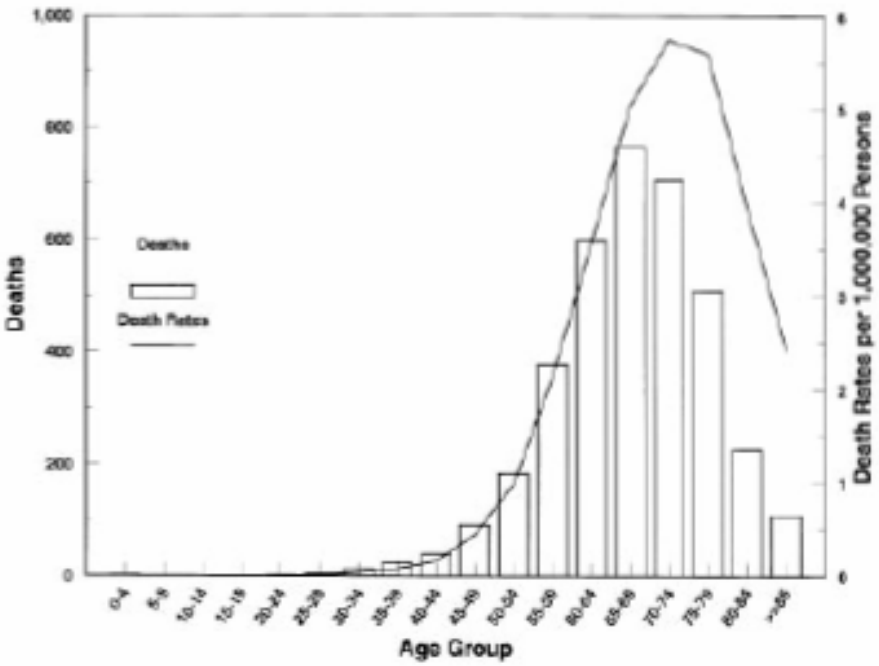
Since 1996, strong evidence has accumulated for a causal relationship between ongoing outbreaks in Europe of disease in cattle called bovine spongiform encephalopathy (BSE, or "mad cow disease") and a disease in humans originally called new variant Creutzfeldt-Jakob disease or more recently simply variant CJD (vCJD). Both disorders are invariably fatal brain diseases with unusually long incubation periods measured in years and are caused by an unconventional transmissible agent. Although there is very strong evidence that the agent responsible for the human disease is the same agent responsible for the BSE outbreaks in cattle, the specific foods that might be associated with the transmission of this agent from cattle to humans are unknown. However, bioassays have identified the presence of the BSE agent in the brain, spinal cord, retina, dorsal root ganglia (nervous tissue located near the backbone), distal ileum, and the bone marrow of cattle experimentally infected with this agent by the oral route.

In addition to cattle, sheep are susceptible to experimental infection with the BSE agent by the oral route. Thus, in countries where flocks of sheep and goats may have been exposed to the BSE agent through contaminated feed, a theoretical risk exists that these animals might have developed infections caused by the BSE agent and that these infections are being maintained in the flocks, even in the absence of continued exposure to contaminated feed (for example, through maternal transmission). Regardless, as of July 2002, cattle remain the only known food animal species with disease caused by the BSE agent.

U.S. Surveillance for CJD

The Centers for Disease Control and Prevention (CDC) monitors the trends and current incidence of CJD in the United States by analyzing death certificate information from U.S. multiple cause-of-death data, compiled by the National Center for Health Statistics, CDC. By 3- or 4-year periods from 1987 through 2001, the average annual death rates of CJD (not vCJD) have remained relatively constant, ranging from 0.95 cases per 1 million in 1999-2001 to 1.14 cases per 1 million in 1995-1998. In addition, deaths from non-iatrogenic CJD in persons aged <30 years in the United States remain extremely rare (<5 cases per 1 billion per year). In contrast, in the United Kingdom, over half of the patients who died with vCJD were in this young age group.

In addition, CDC collects, reviews and, when indicated, actively investigates reports by health care personnel or institutions of possible CJD or vCJD cases. Also, in 1996-97, CDC established, in collaboration with the American Association of Neuro-pathologists, the National Prion Disease Pathology Surveillance Center at Case Western Reserve University, which performs special diagnostic tests for prion diseases, including post-mortem tests for vCJD.



Creutzfeldt-Jakob disease deaths and death rates by age group. United States, 1979 through 1994.

California Creutzfeldt-Jakob Disease (CJD) Surveillance Project

The California Creutzfeldt-Jakob Disease Surveillance Project is funded by the federal Centers for Disease Control and Prevention (CDC) through the California Emerging Infections Program (EIP) to improve the public health capacity to detect cases of CJD. In 1996, the first cases of variant CJD occurring in unusually young persons and resulting from ingestion of bovine spongiform encephalopathy (BSE)-contaminated beef were identified in the United Kingdom. Since then, the CDC and the EIP have conducted enhanced surveillance and death certificate reviews. National surveillance has indicated that the incidence of CJD in the United States is about 1 case per million population per year (JAMA, Vol. 284, No. 18, November 8, 2000). Recently, one confirmed case of variant CJD was identified in a Florida resident and another in a Canadian resident, both of whom resided in the United Kingdom during the height of the BSE epidemic. In addition, the identification of chronic wasting disease (CWD), a form of transmissible spongiform encephalopathy affecting deer and elk in the mid-western United States, has led to heightened awareness and surveillance efforts for any associated potential human public health risks.

CDC Dispatch, Vol. 2, No. 4—October-December 1996 Emerging Infectious Diseases

Influenza (Flu)

Epidemics of influenza typically occur during the winter months and have been responsible for an average of approximately 36,000 deaths/year in the United States during 1990–1999. Influenza viruses also can cause pandemics, during which rates of illness and death from influenza-related complications can increase dramatically worldwide. Influenza viruses cause disease among all age groups. Rates of infection are highest among children, but rates of serious illness and death are highest among persons aged ≥ 65 years and persons of any age who have medical conditions that place them at increased risk for complications from influenza.

Influenza vaccination is the primary method for preventing influenza and its severe complications. In this report from the Advisory Committee on Immunization Practices (ACIP), the primary target groups recommended for annual vaccination are 1) groups that are at increased risk for influenza-related complications (e.g., persons aged ≥ 65 years and persons of any age with certain chronic medical conditions); 2) the group aged 50–64 years because this group has an elevated prevalence of certain chronic medical conditions; and 3) persons who live with or care for persons at high risk (e.g., health-care workers and household contacts who have frequent contact with persons at high risk and who can transmit influenza to persons at high risk). Vaccination is associated with reductions in influenza-related respiratory illness and physician visits among all age groups, hospitalization and death among persons at high risk, otitis media among children, and work absenteeism among adults. Although influenza vaccination levels increased substantially during the 1990s, further improvements in vaccine coverage levels are needed, chiefly among persons aged <65 years who are at increased risk for influenza-related complications among all racial and ethnic groups and among blacks and Hispanics aged ≥ 65 years. ACIP recommends using strategies to improve vaccination levels, including using reminder/recall systems and standing orders programs. Although influenza vaccination remains the cornerstone for the control and treatment of influenza, information is also presented regarding antiviral medications, because these agents are an adjunct to vaccine.

Biology of Influenza

Influenza A and B are the two types of influenza viruses that cause epidemic human disease. Influenza A viruses are further categorized into subtypes on the basis of two surface antigens: hemagglutinin (H) and neuraminidase (N). Influenza B viruses are not categorized into subtypes. Since 1977, influenza A (H1N1) viruses, influenza A (H3N2) viruses, and influenza B viruses have been in global circulation. In 2001, influenza A (H1N2) viruses that probably emerged after genetic re-assortment between human A (H3N2) and A (H1N1) viruses began circulating widely. Both influenza A and B viruses are further separated into groups on the basis of antigenic characteristics. New influenza virus variants result from frequent antigenic change (i.e., antigenic drift) resulting from point mutations that occur during viral replication. Influenza B viruses undergo antigenic drift less rapidly than influenza A viruses.

A person's immunity to the surface antigens, including hemagglutinin, reduces the likelihood of infection and severity of disease if infection occurs. Antibody against one influenza virus type or subtype confers limited or no protection against another. Furthermore, antibody to one antigenic variant of influenza virus might not protect against a new antigenic variant of the same type or subtype. Frequent development of antigenic variants through antigenic drift is the virologic basis for seasonal epidemics and the reason for the usual incorporation of ≥ 1 new strains in each year's influenza vaccine.

Influenza Epidemic

The influenza (flu) epidemics that happen nearly every year are important events. Influenza is a respiratory illness that makes hundreds of thousands of people sick each year. The illness can cause

severe health problems for the elderly and younger people with diseases, such as diabetes, heart or lung disease, and illness that can weaken the immune system. Typical primary influenza illness lasts about a week and is characterized by abrupt onset of fever, muscle aches, sore throat, and nonproductive cough. In some persons, severe malaise and cough can persist for several days or weeks.

Influenza infection not only causes primary illness but also can lead to severe secondary medical complications, including influenza viral pneumonia, secondary bacterial pneumonia, worsening of underlying medical conditions, such as congestive heart failure, asthma, or diabetes, or other complications such as ear infections (i.e., otitis media) in children.

Elderly persons (i.e., those 65 years and over) and persons with certain underlying medical conditions, such as chronic heart or lung disease, are at increased risk for developing complications from influenza infection. These complications increase the risk for hospitalization or death.

One of the most important features about influenza viruses is that their structure changes slightly but frequently over time (a process known as “drift”), and that this process results in the appearance of different strains that circulate each year. The composition of the flu vaccine is changed each year to help protect people from the strains of influenza virus that are expected to be the most common ones circulating during the coming flu season.

The ability of the vaccine to protect against influenza during a particular season depends on several factors, but particularly 1) the match between influenza strains in the vaccine and strains circulating in the community, and 2) the ability of each person's immune system to mount a protective response as a result of the vaccination. Although the vaccine may not prevent everyone who takes it from getting sick, it does reduce the risk of severe illness, hospitalization, and death. That's why it is so important for anyone who wants to reduce his or her risk of getting severely ill from influenza to receive the vaccine each year.

Influenza Pandemic

By contrast to the more gradual process of drift, in some years, the influenza virus changes dramatically and unexpectedly through a process known as “shift.” Shift results in the appearance of a new influenza virus to which few (if any) people are immune. If this new virus spreads easily from person to person, it could quickly travel around the world and cause increased levels of serious illness and death, affecting millions of people. **This is called an influenza pandemic.**

Fortunately, pandemics don't occur very often. There has not been an influenza pandemic since 1968. In 1997, however, a flu virus, that had previously infected only birds, caused an outbreak of illness in humans. This virus, known as the “avian flu,” resulted in 18 illnesses and six deaths in Hong Kong but did not easily spread from person to person. Still, it provided a frightening reminder that the next pandemic could occur at any time. Governments around the world took notice. The U.S. government worked with State and local governments, and private-sector partners, to develop strategies and programs that would prepare our country for a pandemic.

Influenza Pandemic Start

There are three main types of influenza viruses: A, B, and C. Influenza C causes only mild disease and has not been associated with widespread outbreaks. Influenza types A and B, however, cause epidemics nearly every year. Influenza A viruses are divided into subtypes, based on differences in two surface proteins: hemagglutinin (H) and neuraminidase (N). Influenza B viruses are not divided into subtypes. During an influenza flu season, usually one or more influenza A subtype and B viruses circulate at the same time.

A pandemic is possible when an influenza A virus makes a dramatic change (i.e., "shift") and acquires a new H or H+N. This shift results in a new or "novel" virus to which the general population has no immunity. The appearance of a novel virus is the first step toward a pandemic. However, the novel influenza A virus also must spread easily from person to person (and cause serious disease) for a pandemic to occur. Influenza B viruses do not undergo shift and do not cause influenza pandemics.

The reservoir for Type A influenza viruses is wild birds, but influenza A viruses also infect animals such as pigs and horses, as well as people. The last two pandemic viruses were combinations of bird and human influenza viruses. Many persons believe that these new viruses emerged when an intermediate host, such as a pig, was infected by both human and bird influenza A viruses at the same time. A new virus was created. Events in Hong Kong in 1997, however, showed that this is not the only way that humans can become infected with a novel virus. Sometimes, an avian influenza virus can "jump the species barrier" and move directly from chickens to humans and cause disease.

Since, by definition, a novel virus is a virus that has never previously infected humans, or hasn't infected humans for a long time, it's likely that almost no one will have immunity, or antibody to protect them against the novel virus. Therefore, anyone exposed to the virus--young or old, healthy or weak--could become infected and get sick. If the novel virus is related to a virus that circulated long ago, older people might have some level of immunity. It is possible that the novel virus may be especially dangerous to some age groups that are not usually at risk of severe illness or death from annual influenza (such as healthy young adults). Such widespread vulnerability makes a pandemic possible and allows it to have potentially devastating impact.

Influenza Pandemic Impact

There's no simple answer to the question of how serious a pandemic might be. It all depends on how virulent (severe) the virus is, how rapidly it can spread from population to population, and the effectiveness of pandemic prevention and response efforts. The 1918 Spanish flu is an example of a worst-case scenario because the strain was highly contagious and quite deadly. This pandemic killed more Americans than all the wars of the 20th century. Since our world today is vastly more populated, and people travel the globe with ease, the spread of a next pandemic could be more rapid than that of previous pandemics.

The impact of a pandemic isn't measured only by how many people will die. If millions of people get sick at the same time, major social consequences will occur. If many doctors and nurses become ill, it will be difficult to care for the sick. If the majority of a local police force is infected, the safety of the community might be at risk. If air traffic controllers are all sick at once, air travel could grind to a halt, interrupting not only business and personal travel, but also the transport of life-saving vaccines or anti-viral drugs. Therefore, a vital part of pandemic planning is the development of strategies and tactics to address all these potential problems.

Avian Influenza (Bird Flu)

Influenza viruses that infect birds are called " avian influenza viruses." Only influenza A viruses infect birds. All known subtypes of influenza A virus can infect birds. However, there are substantial genetic differences between the subtypes that typically infect both people and birds. Within subtypes of avian influenza viruses there also are different strains (described in "Strains").

Avian influenza H5 and H7 viruses can be distinguished as "low pathogenic" and "high pathogenic" forms on the basis of genetic features of the virus and the severity of the illness they cause in poultry; influenza H9 virus has been identified only in a "low pathogenicity" form. Each of these three avian influenza viruses (H5, H7, and H9) can theoretically be partnered with any one of nine neuraminidase

surface proteins; thus, there are potentially nine different forms of each subtype (e.g., H5N1, H5N2, H5N3, …H5N9).

Below is summary information about these three prominent subtypes of avian influenza virus:

Influenza A H5

- Potentially nine different subtypes
- Can be highly pathogenic or low pathogenic
- H5 infections have been documented among humans, sometimes causing severe illness and death

Influenza A H7

- Potentially nine different subtypes
- Can be highly pathogenic or low pathogenic
- H7 infection in humans is rare, but can occur among persons who have close contact with infected birds; symptoms may include conjunctivitis and/or upper respiratory symptoms

Influenza A H9

- Potentially nine different subtypes
- Documented only in low pathogenic form
- Three H9 infections in humans have been confirmed.

Spread of Avian Influenza Viruses among Birds

Avian influenza viruses circulate among birds worldwide. Certain birds, particularly water birds, act as hosts for influenza viruses by carrying the virus in their intestines and shedding it. Infected birds shed virus in saliva, nasal secretions, and feces. Susceptible birds can become infected with avian influenza virus when they have contact with contaminated nasal, respiratory, or fecal material from infected birds. Fecal-to-oral transmission is the most common mode of spread between birds.

Most often, the wild birds that are host to the virus do not get sick, but they can spread influenza to other birds. Infection with certain avian influenza A viruses (for example, some H5 and H7 strains) can cause widespread disease and death among some species of domesticated birds.

Avian Influenza Infection in Humans

Although avian influenza A viruses do not usually infect humans, several instances of human infections and outbreaks of avian influenza have been reported since 1997. Most cases of avian influenza infection in humans are thought to have resulted from contact with infected poultry or contaminated surfaces. However, there is still a lot to learn about how different subtypes and strains of avian influenza virus might affect humans. For example, it is not known how the distinction between low pathogenic and highly pathogenic strains might impact the health risk to humans. Of the documented cases of human infection with avian influenza viruses, illnesses caused by highly pathogenic viruses appear to be more severe.

Because of concerns about the potential for more widespread infection in the human population, public health authorities closely monitor outbreaks of human illness associated with avian influenza. To date, human infections with avian influenza viruses detected since 1997 have not resulted in sustained human-to-human transmission. However, because influenza viruses have the potential to change and gain the ability to spread easily between people, monitoring for human infection and person-to-person transmission is important.

To date, there have been no recorded cases of Avian Influenza in California. Documented cases in North America include: British Columbia, Canada; The Eastern United States; and Texas.

Small Pox

Smallpox virus is a high-priority "Category A" agent that poses a risk to Los Angeles County, California and national security because it can be easily disseminated and transmitted from person to person, results in high mortality rates and has the potential for major public health impact, might cause public panic and social disruption, and requires special action for public health preparedness.

The Los Angeles County Department of Health Services (LAC DHS) developed this Smallpox Preparedness, Response and Recovery Plan for the County to prepare for the possibility of an outbreak of smallpox in the County.

If an outbreak of smallpox were to occur, several factors could contribute to a more rapid spread of smallpox than was routinely seen before this disease was eradicated in 1977. These factors include: 1) virtually non-existent immunity to smallpox in the absence of naturally occurring disease and the discontinuation of routine vaccination in the United States in the early 1970's, 2) potentially delayed recognition of smallpox by health personnel who are unfamiliar with the disease, 3) increased mobility and crowding of the population, and 4) potential use of higher virulence "weaponized" viruses with decreased incubation periods. Because of these factors, a single case of smallpox would require an immediate and coordinated public health and medical response to contain the outbreak and prevent further infection of susceptible individuals.

Vaccination

The federal government has not yet provided definitive guidance on the extent of preparedness vaccination (smallpox vaccination of persons prior to a confirmed case of smallpox). It is anticipated that the guidance will be forthcoming in the near future. Such guidance, and release of sufficient quantities of smallpox vaccine, may be for: (1) specified first responders only, (2) a larger group of health care workers, law enforcement, and emergency responders, or (3) the entire population on a voluntary basis. Guidance may be provided in a phased manner for these, or other, groups over time.

The LAC DHS is prepared to implement the guidance received from the federal government on preparedness vaccination. Since this vaccination will take place prior to a smallpox emergency and there will be no urgency to complete vaccination within a few days (as required in a smallpox emergency), existing facilities and staff are deemed sufficient to carry out preparedness vaccination of the first two groups. It may even be that federal personnel will be utilized for this preparedness vaccination of limited numbers of persons. LAC DHS has developed its own recommendations for preparedness smallpox vaccination prioritization.

Los Angeles County Smallpox Preparedness Plan

Monkey Pox

The Centers for Disease Control and Prevention (CDC) and state and local health departments continue to investigate cases of monkeypox among persons who had close contact with wild or exotic mammalian pets or persons with monkeypox. Results of serologic testing, polymerase-chain-reaction analysis, viral culture and gene sequencing performed at the CDC indicate that the causative agent is monkeypox virus, a member of the orthopoxvirus group of viruses. CDC is updating previous interim guidance concerning infection control precautions and exposure management in the health-care and community settings. The guidance will be further updated as additional information about the epidemiology of disease transmission is better understood.

Limited data on transmission of monkeypox virus are available from studies conducted in Africa. Person-to-person transmission is believed to occur primarily through direct contact and also by respiratory droplet spread. Transmission of monkeypox within hospitals has been described, albeit rarely. Extrapolating from smallpox for which airborne transmission has been clearly described, airborne transmission of monkeypox virus cannot be excluded, especially in patients presenting with cough.

To date in the United States there has been no evidence of person-to-person transmission of monkeypox. However, recovery of monkeypox virus from skin lesions and tonsillar tissue demonstrates the potential for contact and droplet transmission, and at least a theoretical risk for airborne transmission.

A recent modification of CDC.s infection control guidance is based on the accumulating experience in the United States that suggests a relatively low risk of person-to-person transmission. All health-care settings, i.e., hospitals, emergency departments, physician offices, have the capacity to care for monkeypox patients and protect health-care workers and other patients from exposure.

Centers for Disease Control and Prevention

Hepatitis

Hepatitis is inflammation of the liver. Several different viruses cause viral hepatitis. They are named the hepatitis A, B, C, D, and E viruses.

All of these viruses cause acute, or short-term, viral hepatitis. The hepatitis B, C, and D viruses can also cause chronic hepatitis, in which the infection is prolonged, sometimes lifelong.

Other viruses may also cause hepatitis, but they have yet to be discovered and they are obviously rare causes of the disease.

Hepatitis Incidence/Epidemiology

Hepatitis A occurs sporadically and epidemically worldwide, with a tendency to cyclic recurrences.

Epidemics are uncommon in developing countries where adults are generally immune. Improved sanitation and hygiene conditions in different parts of the world leave large segments of the population susceptible to infection, and outbreaks may result whenever the virus is introduced.

Common-source epidemics, related to contaminated food or water, may evolve explosively, as did the largest mollusc-linked epidemic in Shanghai, in 1988, involving about 300 000 people.

Worldwide, HAV infections account for 1.4 million cases annually.

Strain	Disease Spread	People at Risk	Prevention	Treatment
Hepatitis A	Primarily through food or water contaminated by feces from an infected person. Rarely, it spreads through contact with infected blood	International travelers; people living in areas where hepatitis A outbreaks are common; people who live with or have sex with an infected person; during outbreaks, day care children and employees, men who have sex with men, and injection drug users	The hepatitis A vaccine, also, avoiding tap water when traveling internationally and practicing good hygiene and sanitation	Hepatitis A usually resolves on its own over several weeks
Hepatitis B	Through contact with infected blood, through sex with an infected person, and from mother to child during childbirth	People who have sex with an infected person, men who have sex with men, injection drug users, children of immigrants from disease-epidemic areas, infants born to infected mothers, people who live with an infected person, health care workers, hemodialysis patients, people who received a transfusion of blood or blood products before July 1992 or clotting factors made before 1987, and international travelers	Hepatitis B vaccine	For chronic hepatitis B: drug treatment with alpha interferon, peginterferon, lamivudine, or adefovir dipivoxil. Acute hepatitis B usually resolves on its own. Very severe cases can be treated with lamivudine
Hepatitis C	Primarily through contact with infected blood, less commonly, through sexual contact and childbirth	Injection drug users, people who have sex with an infected person, people who have multiple sex partners, health care workers, infants born to infected women, hemodyalysis patients, and people who received a transfusion of blood or blood products before July 1992 or clotting factors made before 1987	There is no vaccine for hepatitis C; the only way to prevent the disease is to reduce the risk of exposure to the virus. This means avoiding behaviors like sharing drug needles or sharing personal items like toothbrushes, razors, and nail clippers with an infected person	Chronic hepatitis C: drug treatment with perginterferon alone or combination treatment with peginterferon and the drug ribavirin. Acute hepatitis C: treatment is recommended if it does not resolve within 2 to 3 months
Hepatitis D	Through contact with infected blood. This disease occurs only in people who are already infected with hepatitis B	Anyone infected with hepatitis B: injection drug users who have hepatitis B have the highest risk. People who have hepatitis B are also at risk if they have sex with a person infected with hepatitis D or if they live with an infected person. Also at r	Immunization against hepatitis B for those not already infected; also. avoiding exposure to infected blood, contaminated needles, and an infected person's personal items.	Chronic hepatitis D: drug treatment with alpha interferon
Hepatitis E	Through food or water contaminated by feces from an infected person. This disease in uncommon in the United States	International travelers; people living in areas where hepatitis E outbreaks are common; and people who live or have sex with an infected person	There is no vaccine for hepatitis E; the only way to prevent the disease is to reduce the risk of exposure to the virus. This means avoiding tap water when traveling internationally and practicing good hygiene and sanitation	Hepatitis E usually resolves on its own over several weeks or months

Hepatitis Facts

- An estimated 40,000 people were infected with the hepatitis C virus (HCV) in 1998.
- There are an estimated 3.9 million people who are or have been infected with hepatitis C, 2.7 of whom are chronically infected; approximately 70% of people infected do not know they have the virus.
- 8,000 – 10,000 people die of hepatitis C each year. The Centers for Disease Control and Prevention (CDC) estimate that the number of annual deaths from hepatitis C will triple in the next 10 –20 years.
- Hepatitis B is responsible for 5,000 deaths annually, including 3,000 – 4,000 from cirrhosis and approximately 1,000 – 1,500 from primary liver cancer.
- One out of every 250 people is a carrier of hepatitis B and can pass it on to others, often unknowingly.
- There were approximately 80,000 estimated new infections of hepatitis B in the United States in 1999.
- Up to 90% of pregnant women who are carriers of the hepatitis b virus could transmit the virus to their children. Vaccinations of the newborns would prevent them from becoming carriers.
- Due to the screening of pregnant women for HBV and vaccinations of newborns with the hepatitis B vaccine, there has been a decline in that number of infected newborns.
- Hepatitis B is 100 times more infectious than HIV, the virus that causes AIDS. There are 500 million hepatitis B viral particles in one teaspoon of blood compared to 5-10 HIV particles.
- The estimated medical and work loss cost per year of hepatitis B is $700 million; the estimated medical and work loss cost per year of hepatitis C is $600 million.
- One out of every 20 people will be infected with hepatitis B in his/her lifetime.
- Approximately 5,000 liver transplants were performed in 2000. Because of the shortage of organs, it is estimated that nearly 1,700 prospective recipients died in 2001 while waiting for a liver for transplantation. There are currently over 18,000 people waiting for a liver transplant.
- Non-Hispanic African Americans have the highest infection rate for hepatitis C; Asian and Pacific Islanders have the highest rate for hepatitis B infection.

Other Diseases

Plague

Plague is transmitted to humans by fleas or by direct exposure to infected tissues or respiratory droplets; the disease is characterized by fever, chills, headache, malaise, prostration, and leukocytosis that manifests in one or more of the following principal clinical forms:

- Regional lymphadenitis (bubonic plague)
- Septicemia without an evident bubo (septicemic plague)
- Plague pneumonia, resulting from hematogenous spread in bubonic or septicemic cases (secondary pneumonic plague) or inhalation of infectious droplets (primary pneumonic plague)
- Pharyngitis and cervical lymphadenitis resulting from exposure to larger infectious droplets or ingestion of infected tissues (pharyngeal plague)

Brucellosis

Brucellosis is an infectious disease caused by the bacteria of the genus *Brucella*. These bacteria are primarily passed among animals, and they cause disease in many different vertebrates. Various *Brucella* species affect sheep, goats, cattle, deer, elk, pigs, dogs, and several other animals. Humans become infected by coming in contact with animals or animal products that are contaminated with these bacteria. In humans brucellosis can cause a range of symptoms that are similar to the flu and may include fever, sweats, headaches, back pains, and physical weakness. Sever infections of the central nervous systems or lining of the heart may occur. Brucellosis cab also cause long-lasting or chronic symptoms that include recurrent fevers, joint pain, and fatigue.

Brucellosis is not very common in the United States, where100 to 200 cases occur each year. But brucellosis can be very common in countries where animal disease control programs have not reduced the amount of disease among animals.

Botulism (Food-borne)

Ingestion of botulinum toxin results in an illness of variable severity. Common symptoms are diplopia, blurred vision, and bulbar weakness. Symmetric paralysis may progress rapidly.

Botulism (Wound)

An illness resulting from toxin produced by *Clostridium botulinum* that has infected a wound. Common symptoms are diplopia, blurred vision, and bulbar weakness. Symmetric paralysis may progress rapidly.

Wildland Urban Interface Fire

Wildland Urban Interface Fire was rated a HIGH PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Levels of Wildland Fire Protection Services

The history of California wildfires indicates that the following trends will continue. Risk from wildfire to life, property, natural resources, and firefighter safety is increasing.

- Population will grow and more people will live and use wildland areas, especially in the Central Sierra and in the Southern California counties of Riverside, San Bernardino and San Diego.
- Topography and climate support ecosystems where large wildfires can be expected.
- Drought and fuel moisture conditions will be unpredictable but almost always dangerous in fire season.
- More structures will be constructed in areas that are very susceptible to wildfire.
- Historical legacy of narrow roads, difficult entrance, insufficient water supplies, flammable building construction and location that make many communities and homes wildfire-prone still exits.
- Public demand for wildland fire protection and other services will increase.

Deteriorating forest health, increasing fuel loads and other factors have led to more intense, destructive wildfires; unabated this pattern will continue.

Assets at risk will increase, especially watershed assets, because of the rapid rise in the demand for water to supply more people. Based on population projections, the potential for accelerating loss of protected assets, especially life and property, will be greater from disastrous wildfires.

Large wildfires do not respect political or property boundaries. Historically, a strength of California's firefighting agencies is found within a concept of mutual cooperation at the federal, state, and local levels of government. Day-to-day mutual aid for initial attack, as well as a statewide mutual-aid system for fire disasters, is the basis of this cooperation and coordination. The ability to rapidly mobilize, effectively deploy and support large numbers of specialized firefighting resources is essential to cope with large multiple fires. Hence, CDF, in cooperation with other fire agencies, must maintain infrastructure, including communications and capital improvements necessary to facilitate such a response.

Fire protection forces in California must have sufficient depth to respond to large, multiple wildfires and still prevent other small fires from becoming large damaging fires. CDF plays a key role in supplying and coordinating such forces; it should maintain and enhance this ability. The Fire Plan includes a model to provide adequate depth of resources that show CDF needing additional equipment and personnel for managing large fires using the Incident Command System.

California Fire Plan 2003

Wildland Fire Protection Fiscal Issues

Multi-year fiscal problems are occurring at all governmental levels, constraining the availability of funding to address the increasing workload, costs and losses of the California wildland fire protection system.

The increasing number of structures and people in California wild lands and the growing importance of the state's natural resources create a growing demand to fund additional wildland fire protection services for both the structures and the wildland resource assets.

The primary fiscal responsibilities for the initial attack responsibilities: (1) for federal wildland fire protection are the federal taxpayers, (2) for privately owned wildland fire protection are the state taxpayers, and (3) for structure fire protection in wildland areas are the local taxpayers. However, during the annual fire season, the state and federal taxpayers provide a minimum level of structural fire protection that is incidental to their primary missions of wildland fire protection. Similarly, in most wildland areas, local taxpayers provide year-round wildland fire protection on both state and federal responsibility areas that is incidental to the local government primary mission of structural fire protection.

Over the last decade, part of the increased costs for additional initial attack wildland resource protection and structural protection have been funded by local taxpayers through property taxes, fire district fees and volunteer firefighters. However, when a wildland fire overwhelms local resources and reaches a major fire status, both the state and the federal taxpayers pay for the costs of wildfires, structure protection, and the resulting disaster relief.

For the local taxpayers, the following continue to increase: (1) the structural values and number of people being protected on wild lands, (2) the costs of wildland and structure initial attack fire suppression funded at the local levels, and (3) the losses from the extended attack and larger fires.

For state and federal taxpayers, the following will continue to increase: (1) extended and large fire emergency fund expenditures for wildland fires, (2) protecting structures during initial attack and extended attack fires, and (3) state and federal agency disaster expenditures for damages to wildland resources and structures.

Health and Safety Code Section 13009 allows for recovery of fire suppression costs which, when obtained, be placed back into the state's general fund rather than invested in a pre-fire management program.

There is a direct relationship between reduced expenditures for pre-fire management and suppression and increased emergency fund expenditures, disaster funding, and private taxpayers expenditures and losses. Reduction of pre-fire management or suppression resources allows more fires to become major disastrous fires. Major fires create additional suppression and disaster relief costs at all levels of government and increase citizen and business losses.

According to representatives of the insurance industry that insures structures in California wildland areas, (1) the insurer average costs and losses are about $1.09 for each $1.00 received in premiums, and (2) the urban dwellers are subsidizing the wildland homeowner through service-wide rating schedules.

Fire-Safe and Land Use Planning

Population increases in wildland areas have raised strategic concerns about wildfire protection. Clearance laws, zoning, and related fire safety requirements implemented by state and local authorities need to address these factors:

Fire-resistant construction standards: We can no longer view a wildland fire as affecting only watershed, wildlife and vegetation resources; we must now consider their effect on people and their structures. Further, this increase in people and structures have provided increasing ignition sources for fire which, due to their proximity, can spread into the wildland. Building construction standards that encompass such items as roof covering, opening protection and fire resistance are designed to both protect the structure from external fires and to contain internal fires for longer periods.

Hazard reduction near structures (defensible space): The public image of defensible space as part of pre-fire management should be expanded to include such immediate benefits as improved aesthetics, increased health of large remaining trees and other valued plants, and enhanced wildlife habitat. The use of defensible space that provides landscape naturalness, along with its compatibility with wildlife, water conservation and forest health, should be emphasized.

Infrastructure: Effective fire protection in the wild land urban interface cannot be accomplished solely through the acquisition of equipment, personnel and training. The area's infrastructure also must be considered during the formulation of development plans. Specific fire hazard areas should be evaluated and reasonable safety standards adopted, covering such elements as adequacy of nearby water supplies, routes or throughways for fire equipment, addresses and street signs, and maintenance. The ultimate objectives for fire-safe planning and construction are (1) improve the ability of communities and other high value assets that will survive a large, high intensity wildfire with minimal fire suppression effort and (2) provide for improved citizen and firefighter safety.

California Fire Plan 2003

Fire History

Large Fires (over 300 acres) in 2003

INCIDENT #	% CONT.	COUNTY / UNIT	FIRE NAME	DATE START	DATE CONT.	ORIGIN DPA	ACRES BURNED CDF	ACRES BURNED OTHER	ACRES BURNED TOTAL	VEG. TYPE	CAUSE	STRUCTURES DEST.	STRUCTURES DAM.	FATALITIES FIRE	FATALITIES CIVIL
LAC-0300429	100%	Los Angeles	Pacific	1/6/2003	1/8/2003	CC	1300		1300		Under Inv.				
LAC-150988	100%	Los Angeles	Hauser	07/24/03	07/27/03	CC	2,044		2,044	B	Under Inv.	0	0	0	0
LAC-03220027	100%	Los Angeles	Verdale	10/24/03	10/28/03	CC	8,650		8,650	GB	Under Inv.	1	0	0	0
ANF-4490	100%	Los Angeles	Padua	10/21/03	11/02/03	USFS		10,446	10,446	B	Human	59	0	0	0
ANF-3468	100%	Los Angeles	Alamos	08/23/03	08/26/03	USFS		300	300		Under Inv.	0	0	0	0
ANF-003154	100%	Los Angeles	Middle	08/07/03	08/09/03	USFS		300	300	BT	Under Inv.	0	0	0	0

CDF Statistics

20 Largest California Wildland Fires by Structures Destroyed

	FIRE NAME/*CAUSE*	DATE	COUNTY	ACRES	*STRUCTURES*	DEATHS
1	TUNNEL *(REKINDLE)*	October 1991	ALAMEDA	1,600	2,900	25
*2	CEDAR *(HUMAN)*	October 2003	SAN DIEGO	273,246	2,820	15
*3	OLD *(HUMAN)*	October 2003	SAN BERNARDINO	91,281	1,003	6
4	JONES *(UNDETERMINED)*	October 1999	SHASTA	26,200	954	1
5	PAINT *(ARSON)*	June 1990	SANTA BARBARA	4,900	641	1
6	FOUNTAIN *(ARSON)*	August 1992	SHASTA	63,960	636	0
7	CITY OF BERKELEY *(POWERLINES)*	September 1923	ALAMEDA	130	584	0
8	BEL AIR *(UNDETERMINED)*	November 1961	LOS ANGELES	6,090	484	0
9	LAGUNA FIRE *(ARSON)*	October 1993	ORANGE	14,437	441	0
*10	PARADISE *(HUMAN)*	October 2003	SAN DIEGO	56,700	415	2
11	LAGUNA *(POWERLINES)*	September 1970	SAN DIEGO	175,425	382	5
12	PANORAMA *(ARSON)*	November 1980	SAN BERNARDINO	23,600	325	4
13	TOPANGA *(ARSON)*	November 1993	LOS ANGELES	18,000	323	3
14	49ER *(BURNING DEBRIS)*	September 1988	NEVADA	33,700	312	0
*15	SIMI *(UNDER INVESTIGATION)*	October 2003	VENTURA	108,204	300	0
16	SYCAMORE *(MISC. - KITE)*	July 1977	SANTA BARBARA	805	234	0
17	CANYON *(VEHICLE)*	September 1999	SHASTA	2,580	230	0
18	KANNAN *(ARSON)*	October 1978	LOS ANGELES	25,385	224	0
19	KINNELOA *(CAMPFIRE)*	October 1993	LOS ANGELES	5,485	196	1
*19	GRAND PRIX *(HUMAN)*	October 2003	SAN BERNARDINO	69,894	136	0
20	OLD GULCH *(EQUIP. USE)*	August 1992	CALAVERAS	17,386	170	0

Note that this list does not include fire jurisdiction. These are the Top 20 within California, regardless of whether they were state, federal, or local responsibility. Also note that "structures" is meant to include all loss - homes and outbuildings, etc.

4/22/2004

Los Angeles County accounts for 20%

20 Largest California Wildland Fires by Acres Burned

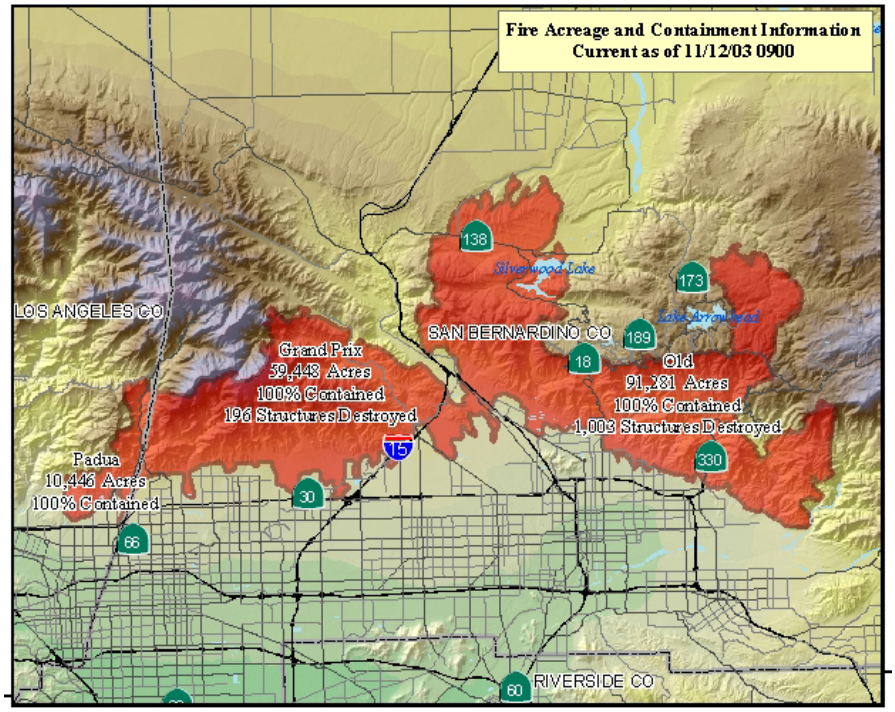
	FIRE NAME/CAUSE	DATE	COUNTY	*ACRES*	STRUCTURES	DEATHS
*1	CEDAR *(HUMAN)*	October 2003	SAN DIEGO	273,246	2,820	15
2	MATILIJA *(UNDETERMINED)*	September 1932	VENTURA	220,000	0	0
3	MARBLE CONE *(LIGHTNING)*	July 1977	MONTEREY	177,866	0	0
4	LAGUNA *(POWERLINES)*	September 1970	SAN DIEGO	175,425	382	5
5	MCNALLY *(HUMAN)*	July 2002	TULARE	150,696	17	0
6	STANISLAUS COMPLEX *(LIGHTNING)*	August 1987	TUOLUMNE	145,980	28	1
7	BIG BAR COMPLEX *(LIGHTNING)*	August 1999	TRINITY	140,948	0	0
8	CAMPBELL COMPLEX *(POWERLINES)*	August 1990	TEHAMA	125,892	27	0
9	WHEELER *(ARSON)*	July 1985	VENTURA	118,000	26	0
*10	SIMI *(UNDER INVESTIGATION)*	August 1996	VENTURA	108,204	300	0
11	HWY. 58 *(VEHICLE)*	August 1996	SAN LUIS OBISPO	106,668	13	0
12	CLAMPITT *(POWERLINES)*	September 1970	LOS ANGELES	105,212	86	4
13	WELLMAN *(EQUIP. USE)*	June 1966	SANTA BARBARA	93,600	0	0
*14	OLD *(HUMAN)*	October 2003	SAN BERNARDINO	91,281	1,003	6
15	KIRK *(LIGHTNING)*	September 1999	MONTEREY	86,700	0	0
16	REFUGIO *(MISC. - STRUCTURE)*	September 1955	SANTA BARBARA	84,770	20	0
17	FORK *(UNDETERMINED)*	August 1996	LAKE	82,980	40	0
18	SCARFACE *(LIGHTNING)*	August 1977	MODOC	79,904	0	0
19	LAS PILITAS *(EQUIP. USE)*	July 1985	SAN LUIS OBISPO	74,640	41	0
20	MANTER *(UNDER INVESTIGATION)*	July 2000	TULARE	74,439	15	0

There is no doubt that there were fires with significant acreage loss in years prior to 1932, but those records are less reliable, and this list is meant to give an overview of the large acreage-loss fires in more recent times. (Also note that this list does not include fire jurisdiction. These are the top 20 within the state, regardless of whether they were state, federal, or local responsibility.)

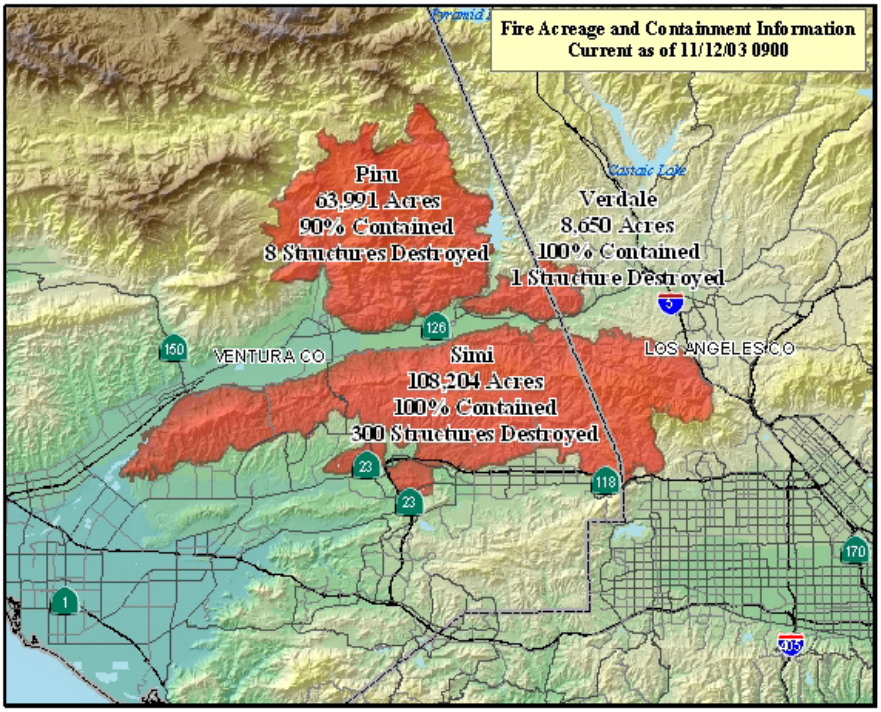
Los Angeles County accounts for 5%

Wild Fires of 2003

Grand Prix Fire within Los Angeles County (11/2003)



Simi & Verdale Fires within Los Angeles County (11/2003)



Wildfire Smoke

Characteristics of Wildfire Smoke

The behavior of smoke depends on many factors, including the fire's size and location, the topography of the area and the weather. Inversions are common in mountainous terrain. Smoke often fills the valleys, where people usually live. Smoke levels are unpredictable: a wind that usually clears out a valley may simply blow more smoke in, or may fan the fires, causing a worse episode the next day. Smoke concentrations change constantly. By the time public health officials can issue a warning or smoke advisory, the smoke may already have cleared. National Weather Service satellite photos, weather and wind forecasts, and knowledge of the area can all help in predicting how much smoke will come into an area, but predictions are rarely accurate for more than a few hours.

Estimating Particulate Matter Levels

Particulate matter levels are measured as micrograms (*m*g) of particles per cubic meter of air. Most particle monitoring devices measure particulate matter with a median diameter of 10 micrometers or less (PM_{10}). An increasing number of monitors now measure smaller particles, also known as fine particles, which have median diameters of 2.5 micrometers or less ($PM_{2.5}$). In wildfire smoke, most particles are less than one micrometer, so the values obtained by measuring either PM_{10} or $PM_{2.5}$ are virtually interchangeable, and are treated as such in this document.

Communities with established air quality programs may issue public alerts based on predicted 24-hour average concentrations of particulate matter. Smoke emergencies need to be handled differently, however, as smoke concentrations generally tend to be very high for only a few hours at a time. These short-term peaks may cause some of the most deleterious health effects.

Another factor is public perception. Since smoke is so effective at scattering light, visibility changes drastically as smoke concentrations increase. Even without being told, the public can tell when the smoke is getting worse, and they want authorities to respond to changes as they are happening. Many communities don't have continuous PM monitoring, and therefore need to estimate particle levels. Continuous PM monitors give an instant reading of particulate matter concentrations. However, visibility can sometimes serve as a good surrogate. Even in areas with monitors, this index can be useful, since smoke levels change constantly and can vary dramatically even between monitors that are near one another. A visibility index gives members of the public a quick way to assess smoke levels for themselves.

Estimating particulate matter concentrations from visibility assessment

Categories	Visibility in Miles	Particulate matter levels* (1-hour average, $\mu g/m^3$)
Good	10 miles and up	0 - 40
Moderate	6 to 9	41 - 80
Unhealthy for Sensitive Groups	3 to 5	81 - 175
Unhealthy	1 1/2 to 2 1/2	176 - 300
Very Unhealthy	1 to 1 1/4	301 - 500
Hazardous	3/4 mile or less	over 500

*In wildfire smoke, most particles are less than one micrometer, so the values obtained by measuring either PM_{10} or $PM_{2.5}$ are virtually interchangeable, and are treated as such in this document. Therefore, in the table above, the different particle levels can be measured using either PM_{10} or $PM_{2.5}$ monitors.

Smoke Hazards as a Result of Wildland Fires

Smoke is composed primarily of carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons and other organic chemicals, nitrogen oxides, trace minerals and several thousand other compounds. The actual composition of smoke depends on the fuel type, the temperature of the fire, and the wind conditions. Different types of wood and vegetation are composed of varying amounts of cellulose, lignin, tannins and other polyphenolics, oils, fats, resins, waxes and starches, which produce different compounds when burned.

Particulate matter is the principal pollutant of concern from wildfire smoke for the relatively short-term exposures (hours to weeks) typically experienced by the public. Particulate matter is a generic term for particles suspended in the air, typically as a mixture of both solid particles and liquid droplets. Particles from smoke tend to be very small - less than one micrometer in diameter. For purposes of comparison, a human hair is about 60 micrometers in diameter. Particulate matter in wood smoke has a size range near the wavelength of visible light (0.4 – 0.7 micrometers). Thus, smoke particles efficiently scatter light and reduce visibility. Moreover, such small particles can be inhaled into the deepest recesses of the lung and are thought to represent a greater health concern than larger particles.

Another pollutant of concern during smoke events is carbon monoxide. Carbon monoxide is a colorless, odorless gas, produced by incomplete combustion of wood or other organic materials. Carbon monoxide levels are highest during the smoldering stages of a fire. Other air pollutants, such as acrolein, benzene, and formaldehyde, are present in smoke, but in much lower concentrations than particulate matter and carbon monoxide.

The effects of smoke range from eye and respiratory tract irritation to more serious disorders, including reduced lung function, bronchitis, exacerbation of asthma, and premature death. Studies have found that fine particles are linked (alone or with other pollutants) with increased mortality and aggravation of pre-existing respiratory and cardiovascular disease. In addition, particles are respiratory irritants, and exposures to high concentrations of particulate matter can cause persistent cough, phlegm, wheezing and difficulty breathing. Particles can also affect healthy people, causing respiratory symptoms, transient reductions in lung function, and pulmonary inflammation. Particulate matter can also affect the body's immune system and make it more difficult to remove inhaled foreign materials from the lung, such as pollen and bacteria. The principal public health threat from short-term exposures to smoke is considered to come from exposure to particulate matter.

Wildfire smoke also contains significant quantities of respiratory irritants. Formaldehyde and acrolein are two of the principal irritant chemicals that add to the cumulative irritant properties of smoke, even though the concentrations of these chemicals individually may be below levels of public health concern.

Sensitive Populations

Most healthy adults and children will recover quickly from smoke exposures and will not suffer long-term consequences. However, certain sensitive populations may experience more severe short-term and chronic symptoms from smoke exposure. Much of the information about how particulate matter affects these groups has come from studies involving airborne particles in cities, though a few studies examining the effects of exposure to smoke suggest that the health effects of wildfire smoke are likely to be similar.

More research is needed to determine whether particles from wildfires affect susceptible subpopulations differently.

Individuals with asthma and other respiratory diseases: Levels of pollutants that may not affect healthy people may cause breathing difficulties for people with asthma or other chronic lung diseases. Asthma, derived from the Greek word for panting, is a condition characterized by chronic inflammation of the airways, with intermittent bronchial-constriction and airflow obstruction, causing shortness of breath, wheezing, chest tightness, coughing, sometimes accompanied by excess phlegm production. During an asthma attack, the muscles tighten around the airways and the lining of the airways becomes inflamed and swollen, constricting the free flow of air. Because children's airways are narrower than those of adults, irritation that would create minor problems for an adult may result in significant obstruction in the airways of a young child. However, the highest mortality rates from asthma occur among older adults. Individuals with chronic obstructive pulmonary disease (COPD), which is generally considered to encompass emphysema and chronic bronchitis, may also experience a worsening of their conditions because of exposure to wildfire smoke. Patients with COPD often have an asthmatic component to their condition, which may result in their experiencing asthma-like symptoms. However, because their pulmonary reserve has typically been seriously compromised, additional bronchial-constriction in individuals with COPD may result in symptoms requiring medical attention. Epidemiological studies have indicated that individuals with COPD run an increased risk of requiring emergency medical care after exposure to particulate matter or forest fire smoke. Exposure to smoke may also depress the lung's ability to fight infection. People with COPD may develop lower respiratory infections after exposure to wildfire smoke, which may require urgent medical care as well. In addition, because COPD is usually the result of many years of smoking, individuals with this condition may also have heart disease, and are potentially at risk from both conditions.

Individuals with airway hyper-responsiveness: A significant fraction of the population may have airway hyper-responsiveness, an exaggerated tendency of the bronchi and bronchioles to constrict in response to respiratory irritants and other stimuli. While airway hyper-responsiveness is considered a hallmark of asthma, this tendency may also be found in many non-asthmatics, as well; for example, during and following a lower respiratory tract infection. In such individuals, smoke exposure may cause bronchial-spasm and asthma-like symptoms.

Individuals with cardiovascular disease: Diseases of the circulatory system include, among others, high blood pressure, cardiovascular diseases, such as coronary artery disease and congestive heart failure, and cerebro-vascular conditions, such as atherosclerosis of the arteries bringing blood to the brain. These chronic conditions can render individuals susceptible to attacks of angina pectoris, heart attacks, sudden death due to a cardiac arrhythmia, acute congestive heart failure, or stroke. Cardiovascular diseases represent the leading cause of death in the United States, responsible for about 30 to 40 percent of all deaths each year. The vast majority of these deaths are in people over the age of 65. Studies have linked urban particulate matter to increased risks of heart attacks, cardiac arrhythmias, and other adverse effects in those with cardiovascular disease. People with chronic lung or heart disease may experience one or more of the following symptoms: shortness of breath, chest tightness, pain in the chest, neck, shoulder or arm, palpitations, or unusual fatigue or lightheadedness. Chemical messengers released into the blood because of particle-related lung inflammation may increase the risk of blood clot formation, angina episodes, heart attacks and strokes.

The elderly. In several studies researchers have estimated that tens of thousands of elderly people die prematurely each year from exposure to particulate air pollution,

probably because the elderly are more likely to have pre-existing lung and heart diseases, and therefore are more susceptible to particle-associated effects. The elderly may also be more affected than younger people because important respiratory defense mechanisms may decline with age. Particulate air pollution can compromise the function of alveolar macrophages, cells involved in immune defenses in the lungs, potentially increasing susceptibility to bacterial or viral respiratory infections.

Children. Children, even those without any pre-existing illness or chronic conditions, are considered a sensitive population because their lungs are still developing, making them more susceptible to air pollution than healthy adults. Several factors lead to increased exposure in children compared with adults: they tend to spend more time outside; they engage in more vigorous activity, and they inhale more air (and therefore more particles) per pound of body weight. Studies have shown that particulate pollution is associated with increased respiratory symptoms and decreased lung function in children, including symptoms such as episodes of coughing and difficulty breathing. These can result in school absences and limitations of normal childhood activities.

Pregnant women. While there have not been studies of the effects of exposure to wildfire smoke on pregnancy outcomes, there is substantial evidence of adverse effects of repeated exposures to cigarette smoke, including both active and passive smoking. Wildfire smoke contains many of the same compounds as cigarette smoke. In addition, recent data suggest that exposures to ambient air pollution in cities may result in low birth weight and possibly other, more serious adverse reproductive effects. Therefore, it would be prudent to consider pregnant women as a potentially susceptible population as well.

Smokers. People who smoke, especially those who have smoked for many years, have already compromised their lung function. However, due to adaptation of their lungs to ongoing irritation, smokers are less likely to report symptoms from exposure to irritant chemicals than are nonsmokers. However, they may still be injured by wildfire smoke. Therefore, some smokers may unwittingly put themselves at greater risk of potentially harmful wildfire smoke exposures, believing that they are not being affected.

Vulnerability

Los Angeles Unified School District facilities are largely located in areas where wild land fires would not pose a hazard; however, a few facilities are located in the interface (see LAUSD Wild Fire Vulnerability Map). An urban conflagration caused by an encroaching wild land fire poses a serious danger to these facilities and their occupants.

Impact

LAUSD facilities that would be damaged or destroyed by a catastrophic wild land fire and resulting urban conflagration is estimated at .12%.

LOS ANGELES UNIFIED SCHOOL DISTRICT
REFERENCE GUIDE

TITLE:	**REFERENCE GUIDE NO. 886 HEALTH ADVISORY/AIR POLLUTION EPISODES PROCEDURES**
NUMBER:	REF-886
ISSUER:	Office of Environmental Health and Safety
DATE:	March 22, 2004

ROUTING

All Offices and Schools

PURPOSE: This Reference Guide is to establish procedures for the notification of appropriate school sites and offices in the event of an air pollution episode. For purposes of this Reference Guide, an air pollution episode has occurred whenever: air pollution levels exceed Federal Clean Air Standards; a health advisory issued; or an episode is declared by the South Coast Air Quality Management District (SCAQMD) or California Air Resources Board (CARB).

MAJOR CHANGES: This Reference Guide replaces Bulletin No. 6, Health Advisory / Air Pollution Episodes – Notification Procedures and Restriction of Physical Activities (Rev) issued on July 18, 1996. Affected sites will now be notified of all health advisories or air pollution episodes via "Inside LAUSD". Daily air pollution information can also be obtained from the SCAQMD by calling 1-800-CUT-SMOG (1-800-288-7664).

INSTRUCTIONS: I. ALERT NOTIFICATION AND TERMINATION PROCEDURES

In the event a health advisory is issued or air pollution episode declared, OEHS will initiate the following procedures:

A. ALERT NOTIFICATION – OEHS will fax or telephone the following message to Student Information Systems Branch and each Local District Office:

"This is an emergency procedure message from the Superintendent. The South Coast Air Quality Management District has declared a _____ episode for Source Receptor Area(s) _____ as of _____ today. Principals are directed to follow the Office of Environmental Health and Safety Reference Guide No. 886, dated March 22, 2004"

LOS ANGELES UNIFIED SCHOOL DISTRICT
REFERENCE GUIDE

B. AIR POLLUTION ALERT TO SCHOOLS INITIATED

Schools will be notified by a notice posted on the "Inside LAUSD" intranet site. Schools must check "Inside LAUSD" at approximately 12:00 noon each day to determine if a health advisory or air pollution episode has been predicted for the following day, or if one is currently in progress.

C. TERMINATION OF AIR POLLUTION ALERT TO SCHOOLS

OEHS will fax or telephone the following message to each Local District Office and to Student Information Systems Branch for posting on" Inside LAUSD" to terminate an alert.

"This is an emergency procedure message from the Superintendent. The South Coast Air Quality Management District has terminated the _____ episode for the Source Receptor Area(s) _____ as of _____ today."

II. SITE ADMINISTRATOR RESPONSIBILITIES

A. Determine if your school is located in the Source Receptor Area described in the alert by reviewing Attachment A - SCAQMD Receptor Area. If your school is listed in the SCAQMD Receptor Area table mentioned in the alert, implement the following procedures:

B. Regular School Program

1. Alert teachers, staff and all other site users (e.g., Youth Services, Children's Centers, Continuation Schools and Adult Schools) regarding the health advisory.
2. Implement physical activity restrictions described in the following Section III.

3. Students and staff with special health problems should follow any additional precautions recommended in writing by their physician. This information must be recorded on the student/employee health card.
4. School site administrators should consider sending notification of predicted air pollutions levels for the following day by issuing a letter to parents (See Attachment B sample letter).

C. Interscholastic Athletic Programs

1. Observe physical activity restrictions described in Section III.
2. If a pollution episode is expected but has not yet occurred at the time an outdoor interscholastic game or event is scheduled to begin, that event may begin as scheduled.
3. If an outdoor interscholastic game or event is scheduled to begin and a Stage 1 Episode is in effect, the event should be canceled and rescheduled, if possible. If a Stage 2 or 3 Episode is in effect, the event must be cancelled and rescheduled. The school should communicate with the Interscholastic Athletics Office to coordinate cancellation or rescheduling of the game or event, as appropriate.

III. OEHS and SCAQMD recommend the following limits on physical activities for each type of episode:

A. For periods of **Unhealthful Air Quality** (exceeding the Federal Clean Air Standards):

1. Susceptible individuals (e.g., children with heart or lung disease) or healthy individuals that are experiencing adverse health effects should minimize outdoor activity. For example participation in calisthenics, basketball, running, soccer, football, tennis, swimming and water polo should be cancelled.

B. For **Health Advisory Episodes** (applies only to ozone):

1. All children should discontinue vigorous outdoor exercise lasting longer than one hour.
2. Susceptible individuals, such as those with heart or lung disease, should avoid outdoor activities.

C. **For Stage 1 Episodes**:

1. Children must discontinue all vigorous outdoor activities regardless of duration.
2. All outdoor physical education classes, sports practice and athletic competitions should be canceled and rescheduled, if possible.

D. **For Stage 2 and 3 Episodes**:

1. All children must discontinue outdoor activity.
2. Implement Rainy Day Procedure. Children should remain indoors during lunch and nutrition breaks.
3. All outdoor physical education classes, sports practice and athletic competitions must be canceled and rescheduled.

IV. POSTING SMOG ALERT SIGNS

Smog alert signs must be posted at main entrances and the Main Office following notification of a predicted air pollution episode (see Attachment C; select the sign corresponding to the smog alert level: Stage 1, Stage 2, or Stage 3). Written or public address system announcements may be used in conjunction with posting signs to notify students and staff of the predicted health advisory or air pollution levels for the following day and the resulting changes in scheduled activities.

RELATED RESOURCES:

OEHS Website: http://www.laschools.org/oehs

South Coast Air Quality Management District Website: http://www.aqmd.gov
Telephone SCAQMD: 1-800-CUT-SMOG (1-800-288-7664).

ASSISTANCE:

For assistance or further information on student medical issues call Student Medical Services (213) 763-8342.

For information regarding air quality compliance issues, call the Office of Environmental Health and Safety (213) 241-3199.

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety

Reference Guide No. 886 ATTACHMENT A

SCAQMD RECEPTOR AREA #1 Schools and Offices

ELEMENTARY

Albion
Aldama
Alexandria
Alexandria New #1
Allesandro
Alta Loma
Angeles Mesa
Ann Street
Aragon Avenue
Arco Iris Primary Center
Arlington Heights
Ascot Avenue
Atwater Avenue
Baldwin Hills
Bellevue Primary
Belmont New #6
Belmont New #9
Belmont New #10
Belmont New PC#11
Belmont New PC#12
Belvedere
Breed Street
Bridge Street
Bright, Birdielee V.
Buchanan Street
Bushnell Way
Cahuenga
Cahuenga New #1
Carthay Center
Castelar
Cheremoya Avenue
Cienega
City Terrace
Clifford Street
Coliseum Street
Commonwealth Avenue
Crescent Heights
Dana Primary Center

ELEMENTARY (cont)

Dayton Heights
Dena
Doris Place
Eastman Avenue
El Sereno
Elysian Heights
Esperanza
Euclid Avenue
Evergreen Avenue
Farmdale
First Street
Fishburn
42nd Street
49th Street
52nd Street
54th Street
Fletcher Drive
Franklin Avenue
Gardner Street
Gates Street
Glassell Park
Glen Alta
Glenfeliz Blvd.
Grant
Gratts, Evelyn Thurman
Gratts New PC
Griffin Avenue
Hammel Street
Hancock Park
Harrison
Hillcrest Drive
Hillside
Hobart Blvd.
Holmes Avenue
Hooper Avenue
Hooper PC
Hoover Street
Huntington Drive
Huntington Park #3

ELEMENTARY (cont)

Ivanhoe
Jefferson New #1
Jefferson New #2
Jefferson New #7
Jefferson New PC #6
Kennedy, Robert F.
King Jr., Martin Luther
Lafayette Park PC
Latona Avenue
Laurel
Lockwood
Logan
Loma Vista
Lorena Street
Loreto Street
Los Angeles
Los Angeles New#1
Los Angeles New #5
Los Feliz
Magnolia
Main Street
Malabar Street
Manual Arts #1
Manual Arts #3
Manual Arts PC #2
Marianna Avenue
Marshall New PC #1
Marvin Avenue
Mayberry Street
Maywood New #5
McArthur Park PC
Melrose Avenue
Menlo Avenue
Micheltorena Street
Monte Vista Street
Mount Washington
Multnomah Street
Murchison Street
Nevin Avenue

(There are 11 more pages in this attachment specifying receptor areas)

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety

Reference Guide No. 886 ATTACHMENT B

SAMPLE LETTER TO PARENTS

(School Letterhead)

(Date)

(It is recommended that this letter be used as a guide to notify parents of a pending health advisory episode from the South Coast Air Quality Management District.)

Dear Parent or Guardian:

A health advisory episode (smog alert) has been issued for tomorrow by the South Coast Air Quality Management District (SCAQMD). When the alert is given, school staff will reduce physical outdoor activities to minimize the effect on children. It is suggested that parents do the same at home after school, if the smog alert is still in effect. Have children avoid strenuous outdoor activities at home. For up-to-date, on-the hour information, call the SCAQMD at (800) 288-7664.

During a health advisory episode, we can all help by reducing our driving. Automobiles cause the most smog. Fewer cars on the road during smog alerts will help reduce the smog in the air. Let us all do our part to help the children.

Sincerely,

Principal

DISTRITO ESCOLAR UNIFICADO DE LOS ANGELES
Office of Environmental Health and Safety

GUÍA DE REFERENCIA 886 ADJUNTO B

MODELO DE CARTA PARA LOS PADRES DE FAMILIA

(Se recomienda que esta carta se utilice como una guía para notificar a los padres de familia sobre un aviso de peligro para la salud emitido por el Distrito para el Control de la Calidad del Aire en la Costa Sur.)

Estimado Padre de Familia o Tutor:

El Distrito para el Control de la Calidad del Aire en la Costa Sur, (SCAQMD, por su acrónimo en inglés) emitió un advertencia sobre una situación de peligro para la salud (alerta de niebla tóxica) para mañana. Cuando la advertencia entre en efecto, el personal de la escuela reducirá las actividades físicas al aire libre para minimizar el efecto de la toxicidad sobre los niños. Se sugiere que los padres de familia hagan lo mismo en sus hogares después de las horas de clase si la advertencia está todavía vigente. Indíquele a los niños que eviten actividades extenuantes afuera. Si desea información actualizada cada hora puede llamar al SCAQMD, teléfono 1-800-288-7664.

Durante una advertencia de este tipo todos podemos ayudar disminuyendo el uso de los automóviles. Los vehículos son la causa de la mayor parte de la niebla tóxica. La presencia de menos automóviles en las carreteras durante advertencies de niebla tóxica reduce la contaminación del aire. Pongamos todos nuestra parte para el bienestar de los niños.

Atentamente,

Director

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety

Reference Guide No. 886 ATTACHMENT C

SMOG ALERT SIGNS

STAGE 1
SMOG ALERT

PREDICTED FOR TOMORROW

AIR QUALITY
UNHEALTHFUL

Reschedule Vigorous Outdoor Activities

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety

Reference Guide No. 886 ATTACHMENT C

SMOG ALERT SIGNS

STAGE 2
SMOG ALERT

PREDICTED FOR TOMORROW

AIR QUALITY

VERY UNHEALTHFUL

No Outdoor Physical Activities

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety

Reference Guide No. 886 ATTACHMENT C

SMOG ALERT SIGNS

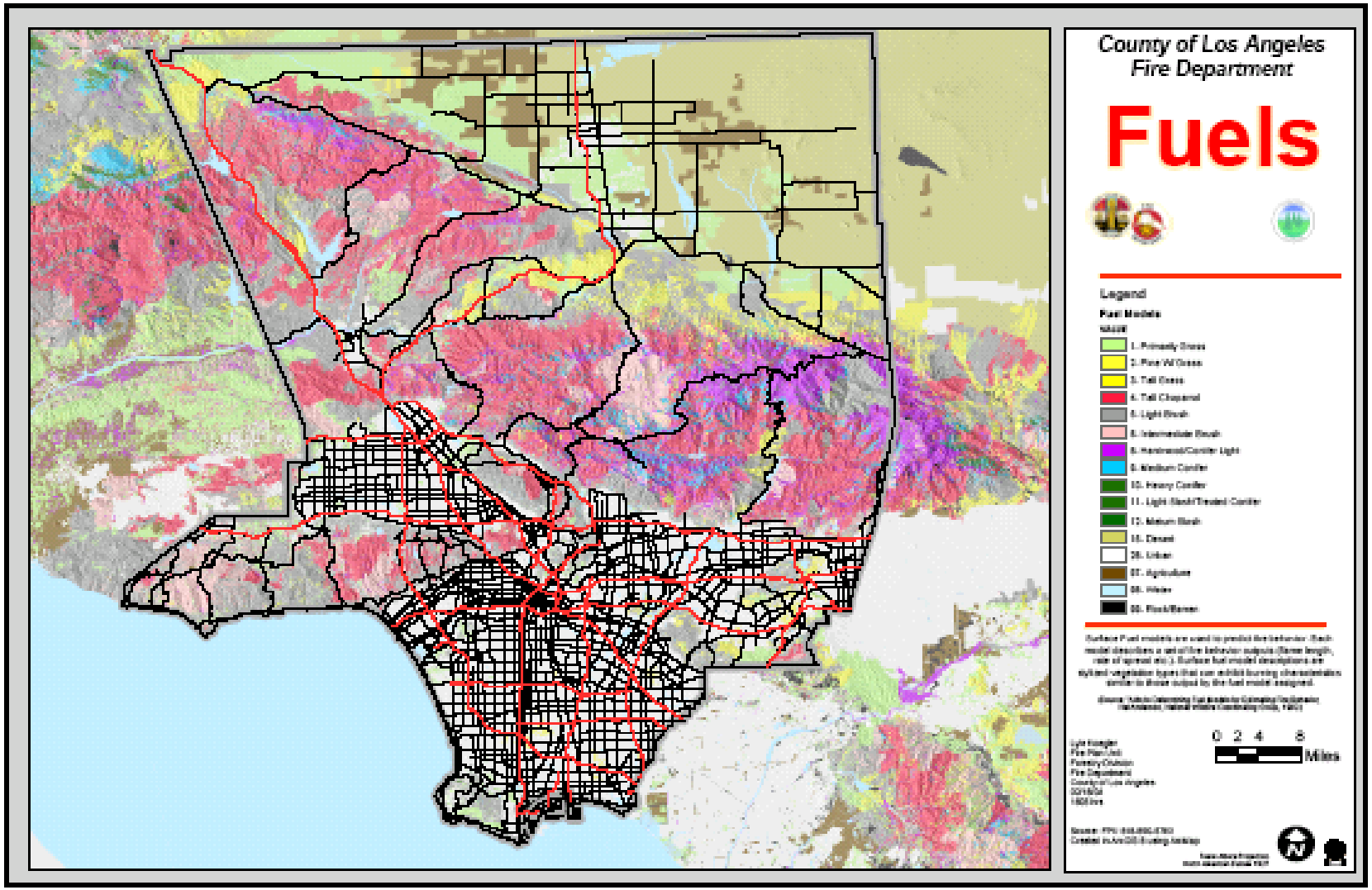
STAGE 3
SMOG ALERT

PREDICTED FOR
TOMORROW

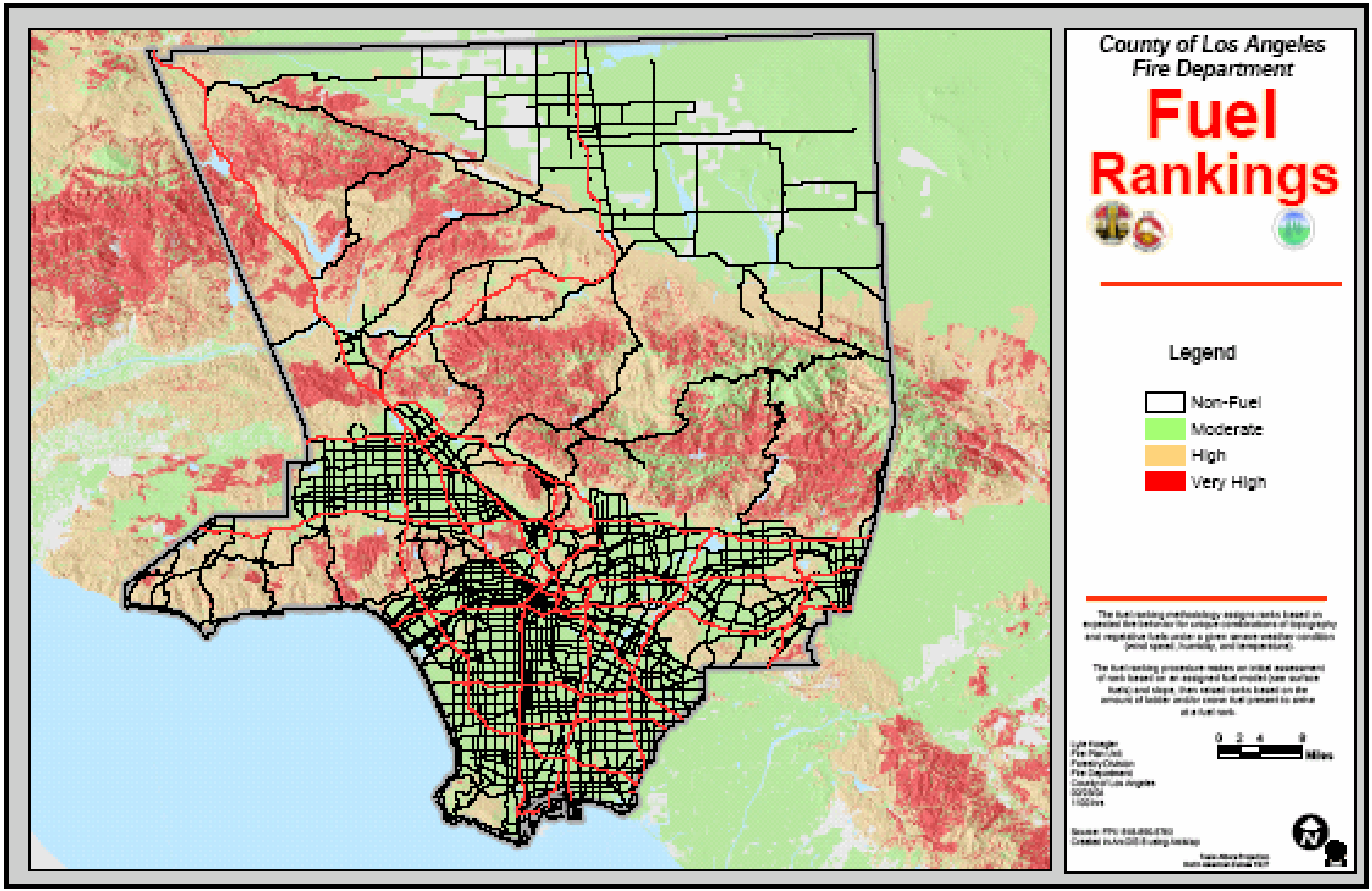
AIR QUALITY
HAZARDOUS

No Outdoor
Physical Activities

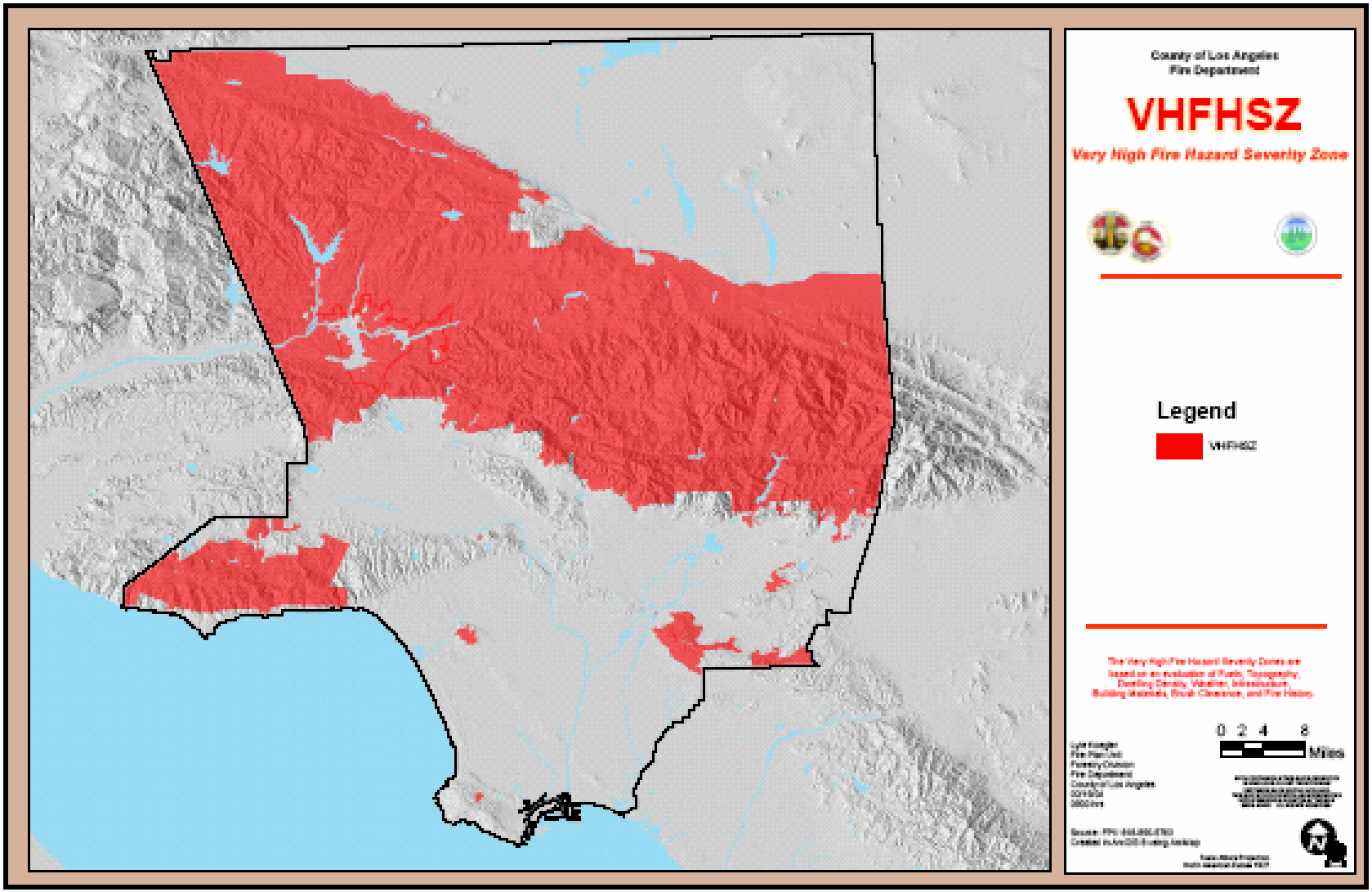
Wild Land Fire Fuel Distribution

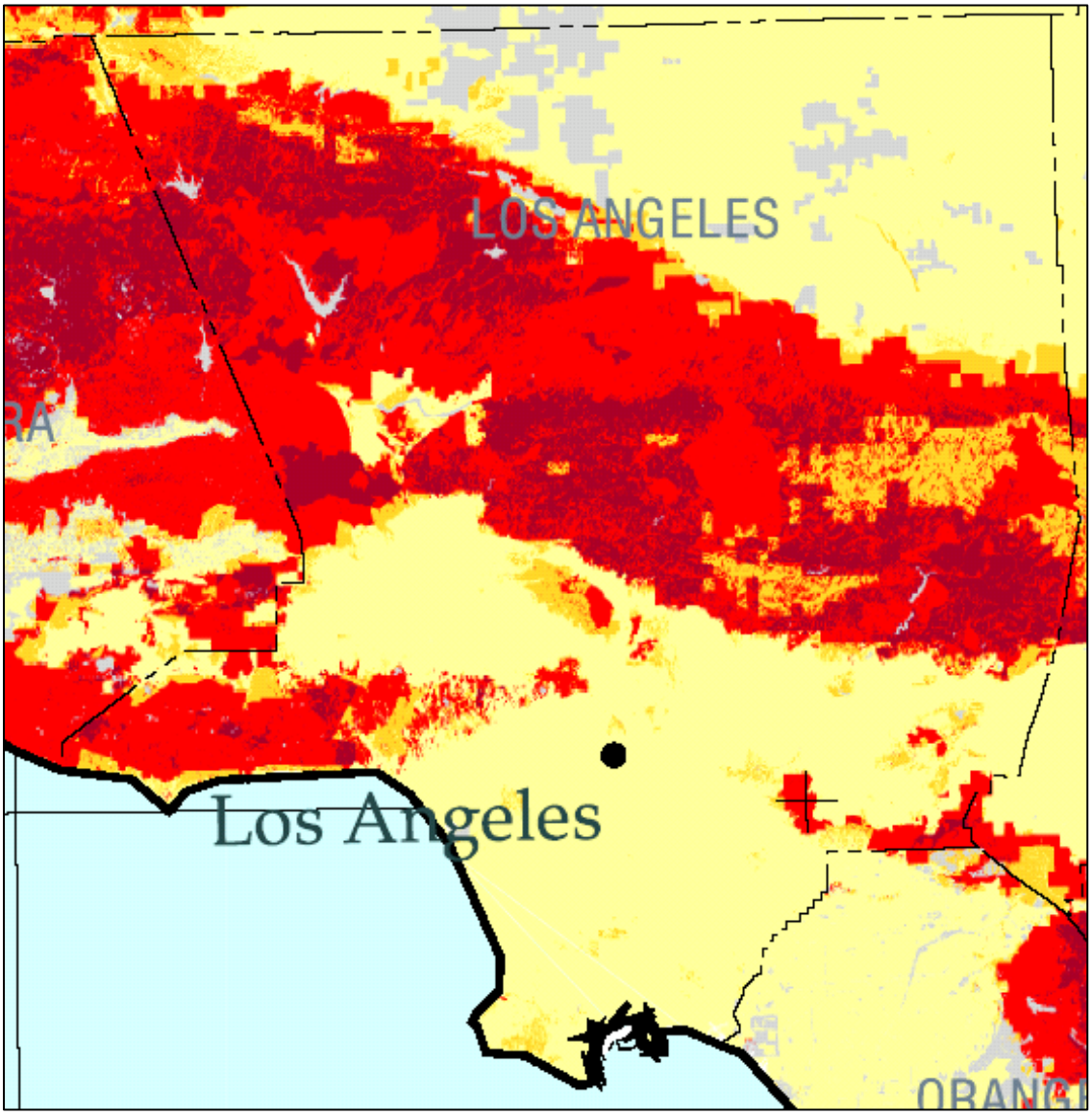


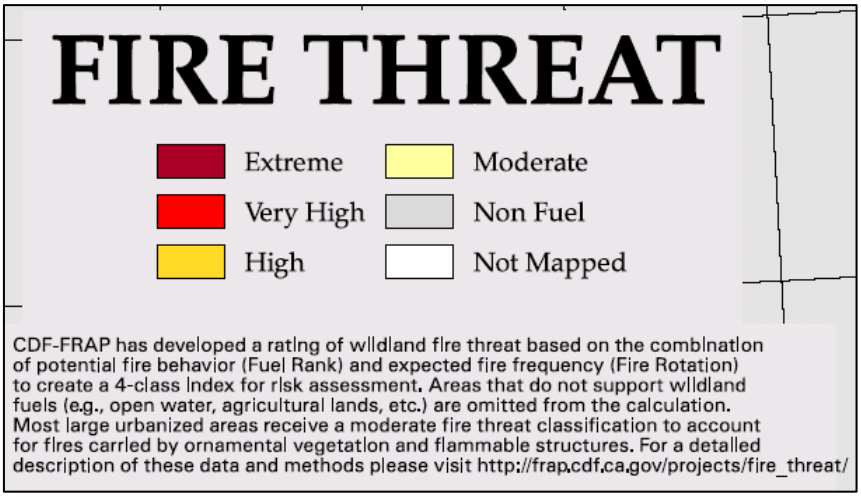
Wild Land Fire Fuel Rankings



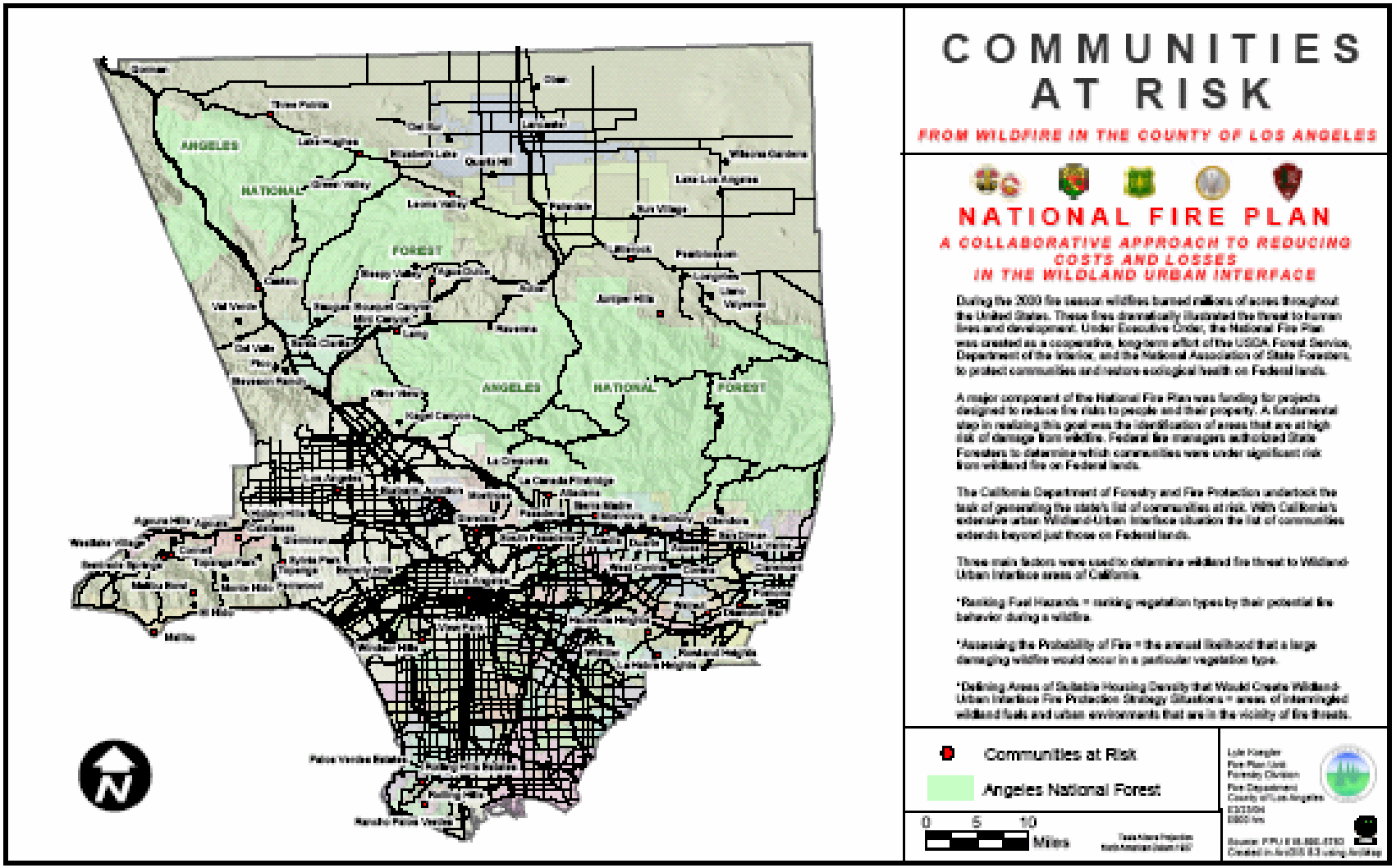
Very High Fire Hazard Severity Zone



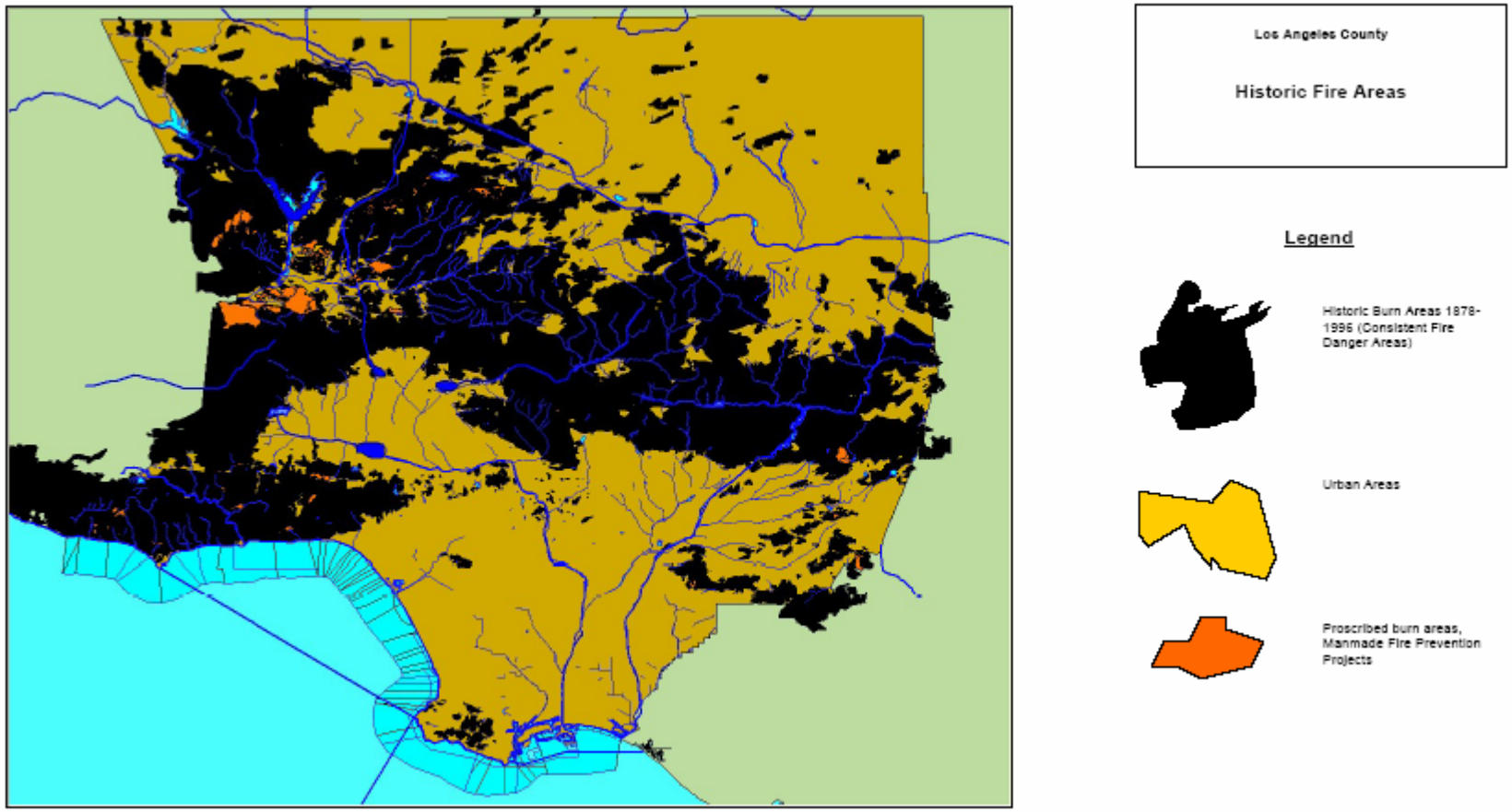

LOS ANGELES
Los Angeles

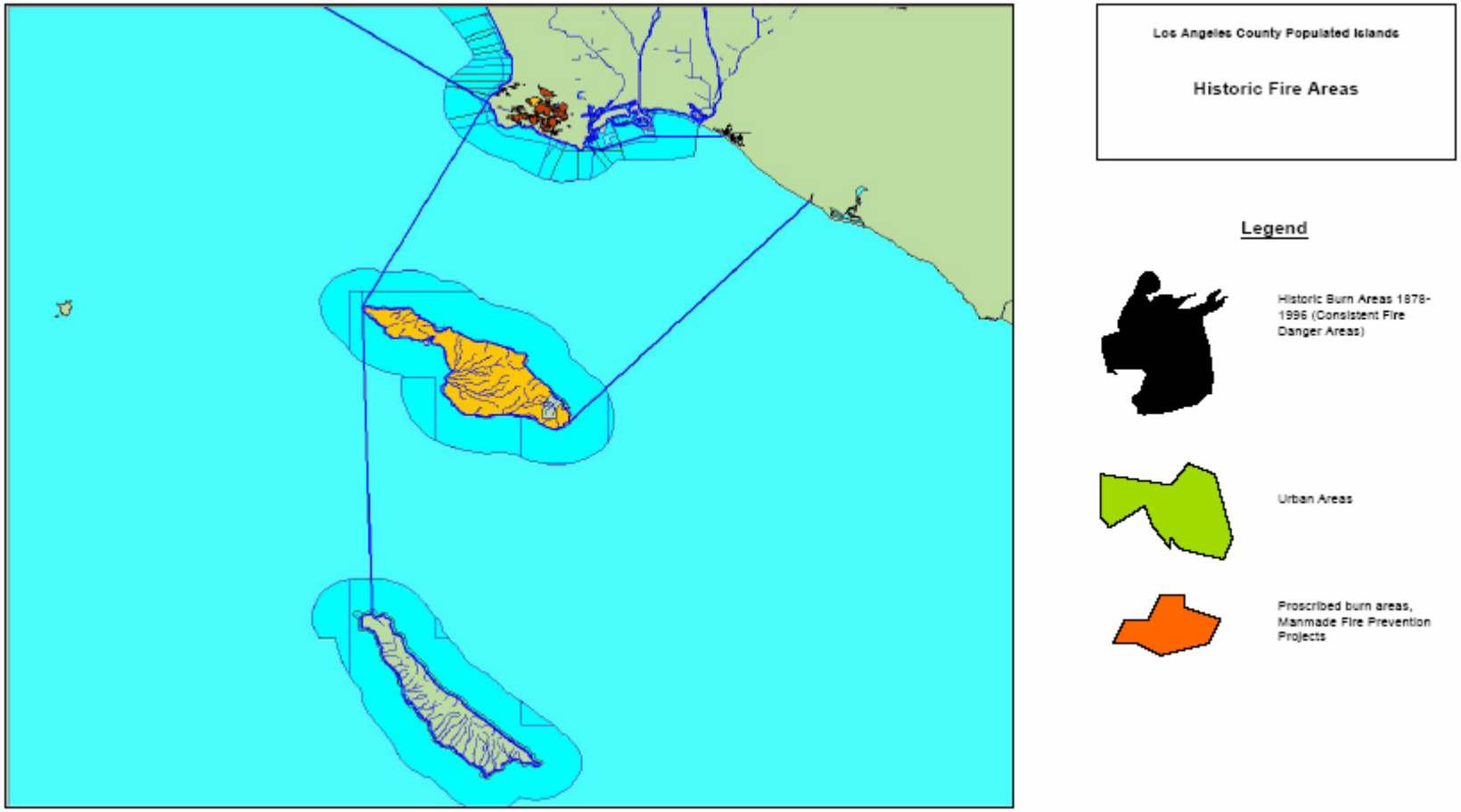

FIRE THREAT
Extreme
Very High
High
Moderate
Non Fuel
Not Mapped
CDF-FRAP has developed a rating of wildland fire threat based on the combination of potential fire behavior (Fuel Rank) and expected fire frequency (Fire Rotation) to create a 4-class index for risk assessment. Areas that do not support wildland fuels (e.g., open water, agricultural lands, etc.) are omitted from the calculation. Most large urbanized areas receive a moderate fire threat classification to account for fires carried by ornamental vegetation and flammable structures. For a detailed description of these data and methods please visit http://frap.cdf.ca.gov/projects/fire_threat/

Communities at Risk

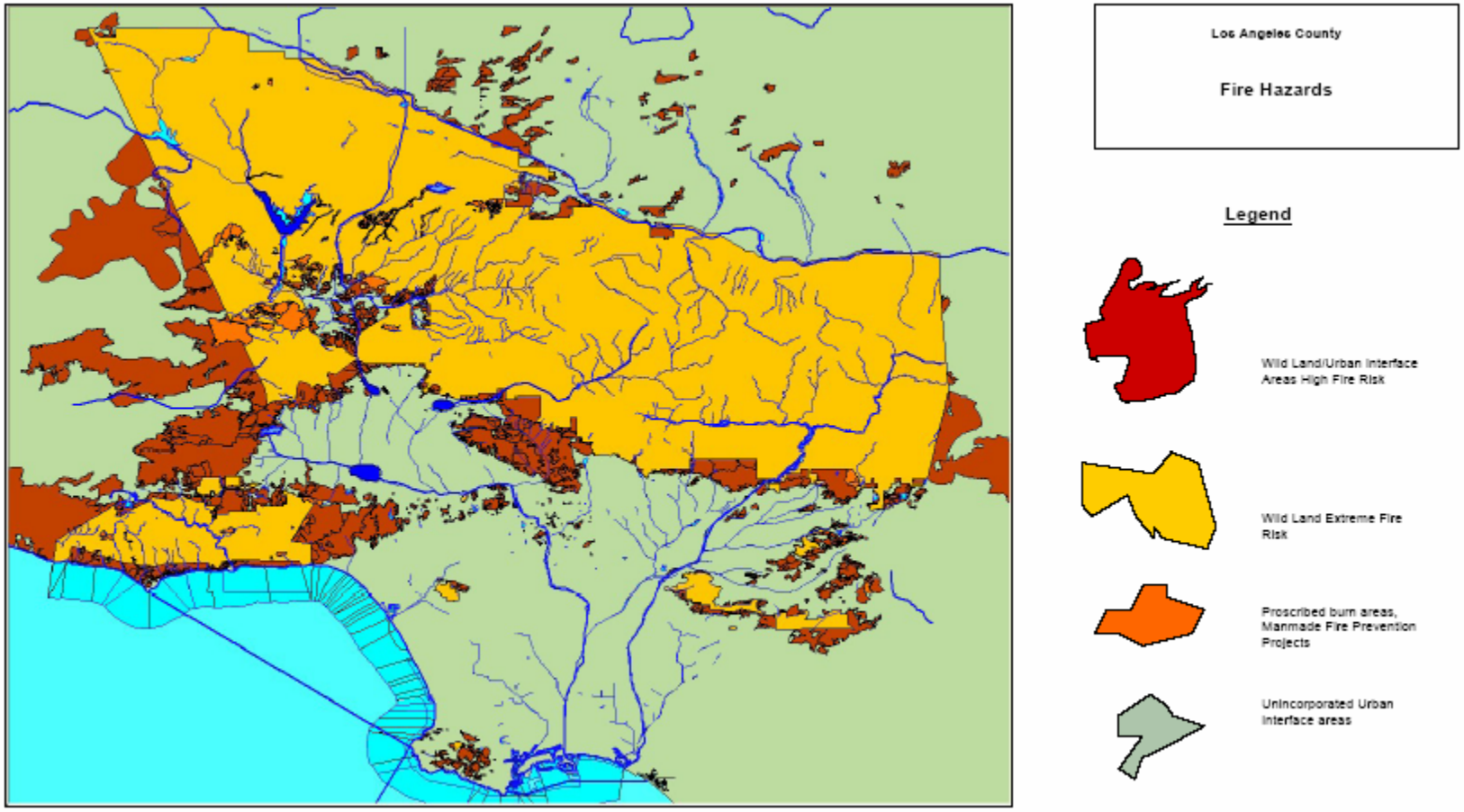


Los Angeles County Map of Historic Fire Areas Los Angeles County GIS Data

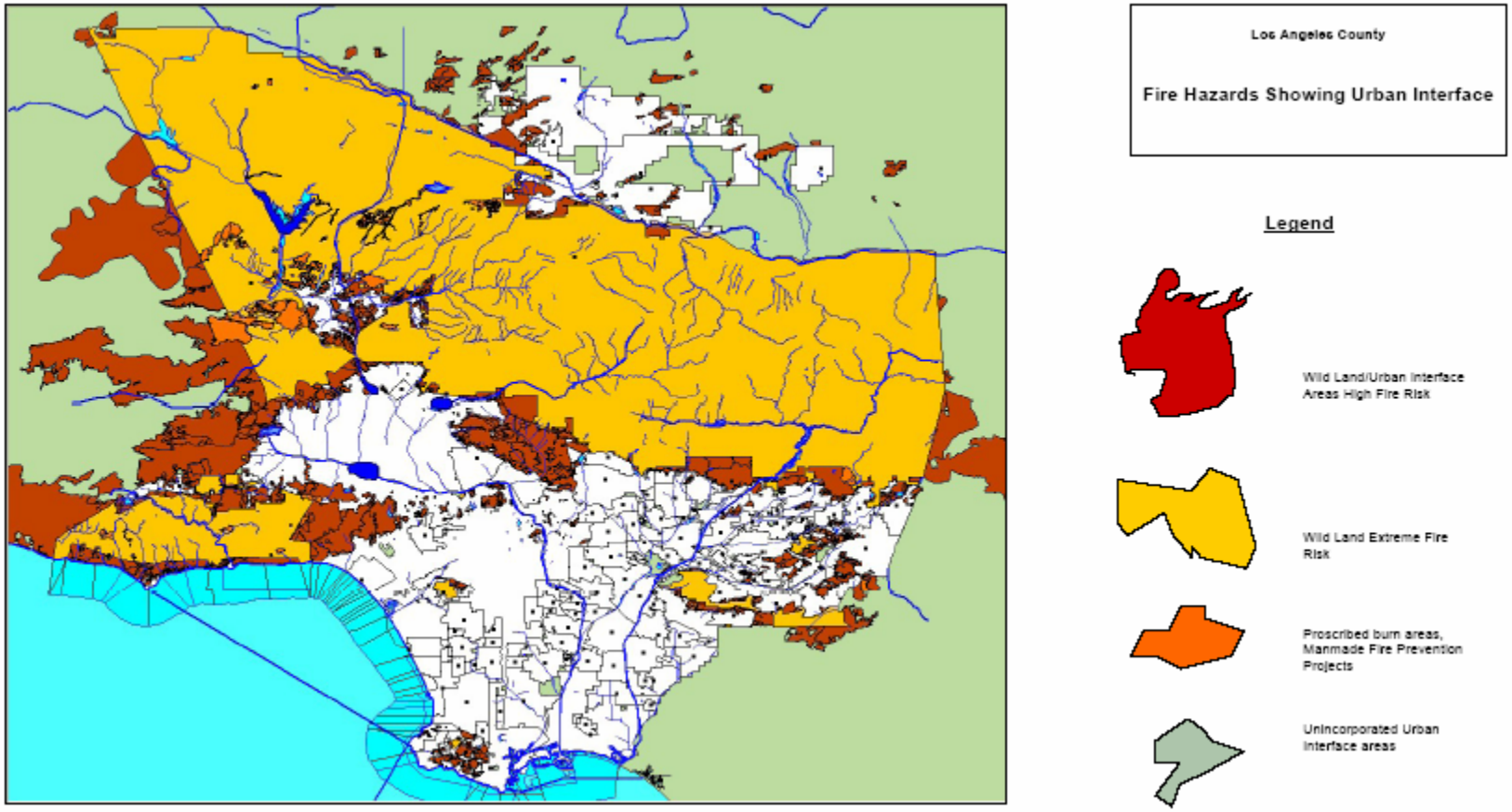


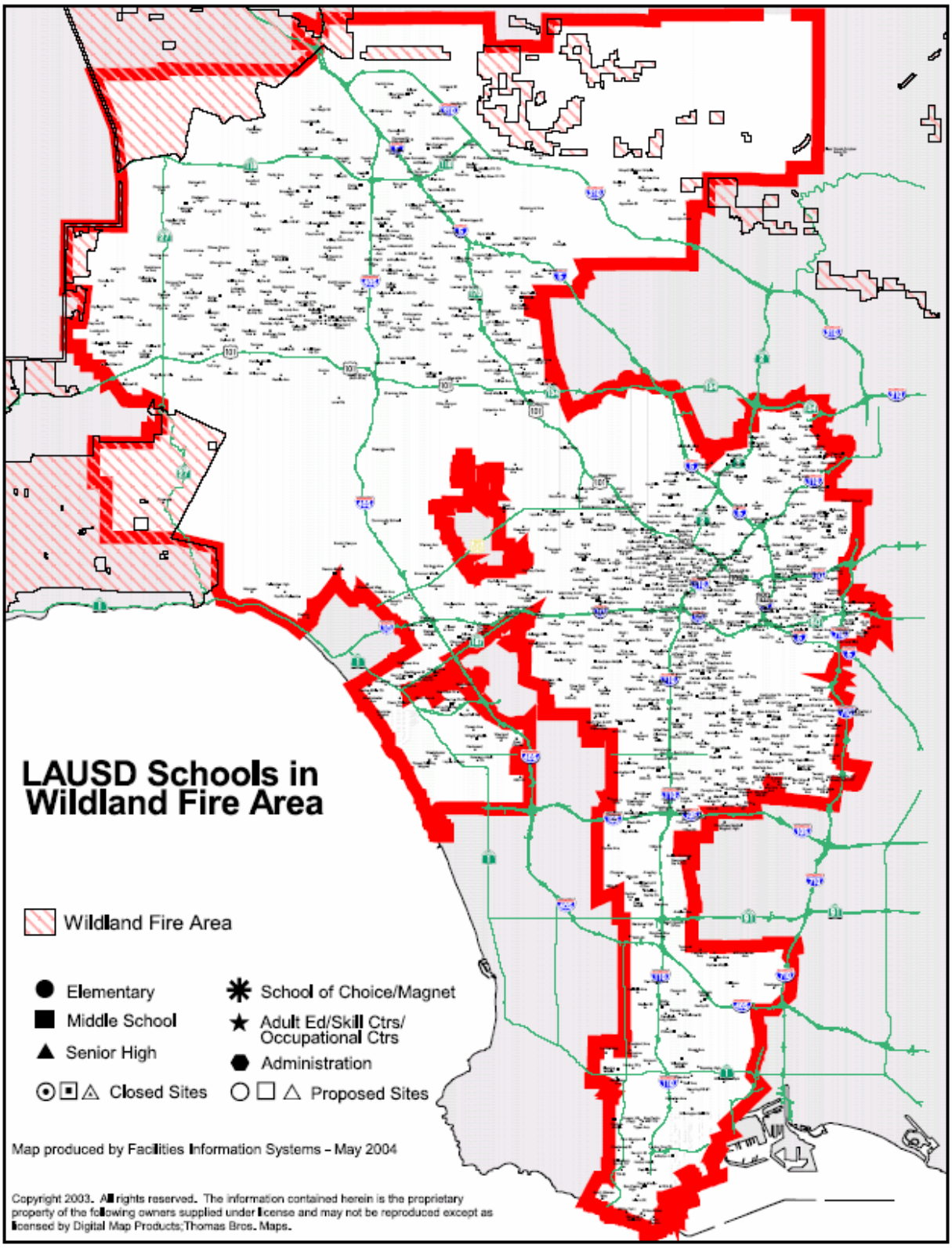

Los Angeles County Populated Islands
Historic Fire Areas
Legend
Historic Burn Areas 1878-1996 (Consistent Fire Danger Areas)
Urban Areas
Proscribed burn areas, Manmade Fire Prevention Projects

Los Angeles County Fire Hazard Areas Los Angeles County GIS Data



Los Angeles County Fire Hazard Areas Depicting Urban Interface Los Angeles County GIS Data




LAUSD Schools in Wildland Fire Area
Wildland Fire Area
Elementary
Middle School
Senior High
Closed Sites
School of Choice/Magnet
Adult Ed/Skill Ctrs/ Occupational Ctrs
Administration
Proposed Sites
Map produced by Facilities Information Systems – May 2004
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Terrorism & Weapons of Mass Destruction (WMD)

Terrorism & Weapons of Mass Destruction were rated as HIGH PRIORITY HAZARDS by LAUSD Hazard Mitigation Planning Task Force.

The complexity, scope, and potential consequences of a terrorist threat or incident require that there be a rapid and decisive capability to resolve the situation. The resolution to an act of terrorism demands an extraordinary level of coordination of crisis and consequence management functions and technical expertise across all levels of government. No single Federal, State, or local governmental agency has the capability or requisite authority to respond independently and mitigate the consequences of such a threat to national security. The incident may affect a single location or multiple locations, each of which maybe a disaster scene, a hazardous scene and/or a crime scene simultaneously.

Differences Between WMD Incidents and Other Incidents

As in all incidents, WMD incidents may involve mass casualties and damage to buildings or other types of property. However, there are several factors surrounding WMD incidents that are unlike any other type of incidents that must be taken into consideration when planning a response. First responders' ability to identify aspects of the incident (e.g., signs and symptoms exhibited by victims) and report them accurately will be essential to maximizing the use of critical local resources and for triggering a Federal response.

1. The situation may not be recognizable until there are multiple casualties. Most chemical and biological agents are not detectable by methods used for explosives and firearms. Most agents can be carried in containers that look like ordinary items.

2. There may be multiple events (e.g., one event in an attempt to influence another event's outcome).

3. Responders are placed at a higher risk of becoming casualties. Because agents are not readily identifiable, responders may become contaminated before recognizing the agent involved. First responders may, in addition, be targets for secondary releases or explosions.

4. The location of the incident will be treated as a crime scene. As such, preservation and collection of evidence is critical. Therefore, it is important to ensure that actions on-scene are coordinated between response organizations to minimize any conflicts between law enforcement authorities, who view the incident as a crime scene, and other responders, who view it as a hazardous materials or disaster scene.

5. Contamination of critical facilities and large geographic areas may result. Victims may carry an agent unknowingly to public transportation facilities, businesses, residences, doctors' offices, walk-in medical clinics, or emergency rooms because they don't realize that they are contaminated. First responders may carry the agent to fire or precinct houses, hospitals, or to the locations of subsequent calls.

6. The scope of the incident may expand geometrically and may affect mutual aid jurisdictions. Airborne agents flow with the air current and may disseminate via ventilation systems, carrying the agents far from the initial source.

7. There will be a stronger reaction from the public than with other types of incidents. The thought of exposure to a chemical or biological agent or radiation evokes terror in most people. The fear of the unknown also makes the public's response more severe.

8. Time is working against responding elements. The incident can expand geometrically and very quickly. In addition, the effects of some chemicals and biological agents worsen over time.

9. Support facilities, such as utility stations and 911 centers along with critical infrastructures, are at risk as targets.

10. Specialized State and local response capabilities may be overwhelmed.

State of California Terrorism Guidance

The catastrophic attacks on the World Trade Center Building in New York City and the Alfred P. Murrah Federal Building in Oklahoma City shocked the nation into the reality that there are no domestic safe havens from acts of terrorism. These two apparently unrelated events punctuate our nation's vulnerability, and highlight California's risk of similar attack against its public officials, private and multi-national corporations, public infrastructure, and government facilities.

Historically, California has had a long experience combating terrorist groups, both domestic and international. Domestic terrorist groups in the state have been largely issue-oriented, while the few known internationally based incidents have mostly targeted the state's émigré communities and been related to foreign disputes. Today, however, both groups are more likely to be aligned nationally and/or internationally through electronic networking. The issues and politics of these groups remain essentially unchanged but now include increasing expressions of hatred for existing forms of government. The World Trade Center Incident demonstrates that international terrorist groups have the potential to operate with deadly effectiveness in this country. Such groups may offer no allegiance to any particular country but seek political or personal objectives that transcend national/state boundaries.

There is appropriate concern that such attacks as witnessed in Tokyo, New York City, and Oklahoma City could occur in California. A terrorist acting alone or in concert with any of the known national or international groups could readily commit acts of terrorism in California. The open availability of basic shelf-type chemicals and mail order biological research materials, coupled with an access to even the crudest laboratory facilities, could enable the individual extremist or an organized terrorist faction to manufacture proven highly lethal substances or to fashion less sophisticated weapons of mass destruction. The use of such weapons could result in mass casualties, long term contamination, and wreak havoc to both the state and national economies.

The freedom of movement and virtually unrestricted access to government officials, buildings, and critical infrastructure afforded to California's citizens and foreign visitors, presents the terrorist with the opportunity and conditions of anonymity to deliver such devastation and its tragic consequences with only the crudest devices of nuclear, chemical, or biological content.

Terrorist incidents create a unique environment in which to manage emergency response. Local responders are typically the first on scene during an actual incident and local government has primary responsibility for protecting public health and safety. Ordinarily, the local first response will be conducted under California's Standardized Emergency Management System (SEMS) which forms the basis of California's concept of operations for managing any kind of emergency or disaster, including terrorist incidents. The local responders will manage all aspects of the incident until the FBI assumes command, by virtue of its legal authority, of the law enforcement aspects relating to identifying, apprehending, and neutralizing the terrorists and their weapons. Local and state authorities always maintain control of their response resources and continue to operate utilizing SEMS.

Governor's Office of Emergency Services Terrorism Response Plan

Los Angeles County Terrorism Early Warning (TEW) Group

Effective and rapid dissemination of indications and warnings to local emergency response agencies is an essential yet problematic element of terrorism management efforts. For bio-terrorist threats, such efforts must integrate ongoing real-time surveillance efforts. Terrorism Early Warning Groups are a multilateral, multidisciplinary effort to monitor open source data to identify trends and potential threats, monitor potential threat information during periods of heightened concern, assess potential targets and perform net assessments to guide decision making during actual events. TEW provides integrated threat and net assessment from a multi-jurisdictional perspective. City and county fire departments work together with emergency management, FBI, local law enforcement agencies, Department of Health Services, as well as other state and federal offices. The formation of TEW groups supports field response in the preparation for and response to acts of terrorism.

IAFC, October 2001 (et sec)

The Los Angeles Operational Area TEW Group provides Unified Command Structure with the impact of an attack on the operational area, gauges resource needs and shortfalls, continuously monitors and assesses situational awareness and status, and acts as the point of contact for inter-agency liaison in order to develop options for courses of action for incident resolution. TEW is an Emerging Threat Workspace (Civil Battle Lab) for stimulating National Strategy for emerging threat issues:

- Terrorism and Infrastructure Protection
- Public Order (Riots/Disturbances)
- Civil-Military Interoperability for Urban Operations
- Civilian Police (CIVPOL) for Peace Officers
- Networked Threats and Emerging Threats
- Counterterrorism Technology Test Bed

Biological & Chemical Terrorism

The Public Health Response to Biological and Chemical Terrorism: Interim Planning Guidance for State Public Health Officials (hereafter referred to as the Planning Guidance) outlines steps for strengthening the capacity of the public health system to respond to and protect the nation against the dangers of a terrorism incident. Although the Planning Guidance focuses on the biological and chemical terrorism preparedness efforts of state-level health department personnel, it can be used as a planning tool by anyone in the response community, regardless of his or her position within that community or level of government.

The public health community at large also can use this document to improve its terrorism preparedness and develop terrorism response plans. The preparedness program outlined in this Planning Guidance, once implemented, should improve the ability of all public health agencies to respond to emergency situations arising from all sources, not just terrorism.

The Planning Guidance focuses on the capabilities that state health departments are likely to need to respond effectively to a terrorism incident. Despite the public health focus of this document, the terrorism plan ultimately should not be agency-specific. Instead, the terrorism plan should be integrated, outlining the roles and responsibilities of all agencies that participate in a response. This coordinated terrorism plan should then be annexed to the state's all-hazard Emergency Operations Plan (EOP)

Background

The intentional release of sarin, an organophosphate nerve agent, into the Tokyo subway system helped to focus the United States on its need to prepare for what was once unthinkable. Aum Shinrikyo, the group responsible for the Tokyo incident, disbursed botulinum toxin and anthrax bacteria, and the group attempted to obtain Ebola.

The World Trade Center and Oklahoma City bombings confirm that terrorism is not an event that occurs only on foreign soil. Terrorism incidents or threats involving *Salmonella* and ricin amply demonstrate that the United States is vulnerable not only to bombs but to biological and chemical threats as well.

These and other events caused health departments across the country to consider their ability to respond to a terrorism incident. In addition to their more traditional responsibilities in disease surveillance and management, health departments are defining their roles to respond effectively to an intentional release of biological organisms or hazardous chemicals into an unsuspecting population.

Because states differ in size, population, risks, needs, and capabilities, terrorism preparedness and response efforts inevitably must differ. This document does not establish a Aone-size-fits-all model; rather, it addresses important areas of preparedness and response that can be tailored to meet the needs of individual jurisdictions. Health department officials should consider the information contained in this guidance, identify the health and medical effects that an explosion or the intentional release or threatened release of a biological organism or hazardous chemical could have on the population, and prepare to address the public health consequences of those effects.

Well-developed surveillance and epidemiologic capacity is the foundation on which health departments will detect, evaluate, and design effective responses to terrorism events. Not only will this capacity facilitate the initial detection and response in a terrorism event, it will be essential to monitoring the impact of these events and the effectiveness of public health responses. Detection of acute or insidious terrorism attacks using biological (or certain chemical) agents also will require linking of data from a variety of sources. An effective public health response will depend on the timeliness and quality of communications among numerous public health agencies at local, state, and federal levels; clinicians; laboratories; poison centers; medical examiners; and other health response partners.

Complementing the need for accurate and timely case reports is the need for expertise to analyze the information properly. Epidemiologic expertise is critical to judging whether the incident involves biological or chemical agents or is a consequence of a natural phenomenon, an accident, or terrorism. Expertise also is critical in determining the likely site and time of the exposure; size and location of the population exposed; prospect for delayed exposure or secondary transmission of an infectious agent; and whether any people should receive prophylaxis (either medications or vaccines) and, if so, which population groups.

Timely and accurate information and analysis must be coupled with effective and rapid dissemination of information to those who need to know (e.g., response partners and the public) to instill confidence in both the short- and long-term response of the affected community.

Terrorism Mitigation

Because the primary mechanism for past terrorist incidents has been bombings and because of the potential for mass casualties from a WMD terrorist event, the primary focus of the state's hazard mitigation strategy for terrorism is on mitigation measures that reduce risk from bomb blast and nuclear, biological, and chemical attacks to critical state facilities and population. Measures include:

Hardening (construction/retrofitting)

- Relocation/retrofitting of air intakes
- Ventilation system upgrade/retrofit
- Protect tower bases of bridges
- Seismic retrofitting
- Upgrade/retrofit water main system
- Blast guard window film/glazing, frames
- Egress improvements

Barriers and Fencing

- Fencing around air intakes
- Fencing around fuel supply
- Vehicle barriers, bollards, popup gates, hydraulic barriers
- Waterfront security system
- Perimeter fencing

Redundant systems

- Fire protection system
- Communications systems
- Information technology
- Utility (Gas/Heat/Water)
- Utility (Electric)

Security Measures

- Security systems/early warning systems
- Warning and alarms systems directly related to system protection/shut down
- Smart utility management systems on all critical services.

Planning/Studies

- Telecommunications plans
- IT disaster recovery plans
- Business continuity/resumption plans
- Intelligence gathering and sharing
- Threat, vulnerability, and risk assessments
- Evacuation plans
- Site security planning

Seismic Study

- Retrofitting
- Interior lighting
- Exterior lighting
- Staging areas

Surveillance

- Secure Access & Entry Points
- Card swipe system
- Magnetometer
- Metal detectors
- Surveillance cameras & closed circuit TVs
- Personnel detection equipment
- Vehicle detection equipment
- Radar systems
- Building access system
- Motion detectors
- Replacing door locks and keys

IT Systems

- Security management system
- Building access system
- Employee identification system
- Coding protocol for sensitive records.

These above-listed measures are already being used in many communities and situations and have proven effective in reducing or eliminating hazard risk. Each of these measures directly meets an objective stated in the state's Hazard Mitigation Strategy.

OEHS
OFFICE OF ENVIRONMENTAL HEALTH & SAFETY

SAFETY ALERT

(213) 241-3199

No. 01-03 PROCEDURES –SUSPICIOUS SUBSTANCES (WHITE POWDER, ETC.) October 2001

Schools and offices should exercise extreme caution in the event that suspicious packages, substances or materials are discovered. Should this situation occur, the procedures below should be followed:

1. Do not shake or empty the contents of any suspicious envelope or package. Place the envelope or package in a plastic bag or some other type of container to prevent leakage of contents. If no container is available, cover the suspicious item with anything (e.g., clothing, paper, trash can, etc.)
2. If a suspicious substance such as powder is discovered, **do not clean up the substance**. Cover it immediately with clothing, paper, or a trash can, and leave the area immediately.
3. Call 911, School Police at (213)625-6631 and the Office of Environmental Health and Safety at (213)241-3199. Immediate intervention by law enforcement and trained response personnel is critical. Suspicious substances should be left intact until the Office of Environmental Health and Safety makes a recommendation as to its disposition.
4. All personnel should leave the affected room immediately. Close the door or section, and label it "DO NOT ENTER" to prevent others from coming into contact with the substance.
5. Turn off local fans or ventilators in the area and shut down the building's air handling system, if possible.
6. Wash your hands with soap and water to prevent spreading the substance to your face. *Do not use bleach or other disinfectant on your skin.*
7. List all people who were in the room or area, especially those who had actual contact with the substance. This list will be used to ensure proper medical follow-up and for further investigation of the incident.

If you have questions regarding this safety precaution, please call the Office of Environmental Health and Safety at (213) 241-3199 or School Police at (213)625-6631.

DISTRIBUTION: All Schools and Offices

OEHS
OFFICE OF ENVIRONMENTAL HEALTH & SAFETY

SAFETY ALERT

(213) 241-3199

No. 03-04 **HOMELAND SECURITY ADVISORY SYSTEM RECOMMENDATIONS** **March 2003**

Threat Level	Recommended Actions
SEVERE *(Red)*	• *Complete recommended actions at lower levels.* • Listen to radio, TV, or KLCS for current information/instructions. • Be alert to suspicious activity and immediately report it to LAPD Homeland Security Bureau at **1-877-A-THREAT** and School Police at (213) 625-6631. • Close school if recommended to do so by appropriate authorities. • 100% identification check (i.e. driver's license retained at front office) and escort anyone entering school other than students, staff and faculty. • Continue offering lessons from Masters of Disaster "Facing Fear: Helping Young People Deal with Terrorism and Tragic Events" curriculum. • Ensure School Site Crisis Team members are available for students, staff and faculty.
HIGH *(Orange)*	• *Complete recommended actions at lower levels.* • Be alert to suspicious activity and report it to LAPD Homeland Security Bureau at 1-**877-A-THREAT** and School Police at (213) 625-6631. • Review emergency plans and supplies. • Offer Masters of Disaster "Facing Fear: Helping Young People Deal with Terrorism and Tragic Events" lessons in grades K-12. • Prepare to handle inquiries from anxious parents and media. • Discuss children's fears concerning possible terrorist attacks.
ELEVATED *(Yellow)*	• *Complete recommended actions at lower levels.* • Be alert to suspicious activity and report it to LAPD Homeland Security Bureau at 1-**877-A-THREAT** and School Police at (213) 625-6631. • Ensure all emergency supplies are stocked and ready. • Obtain copies of *Terrorism: Preparing for the Unexpected* brochure from your local Red Cross Chapter and send it home with students in grade K-12, staff and faculty.
GUARDED *(Blue)*	• *Complete recommended actions at lower levels.* • Be alert to suspicious activity and report it to LAPD Homeland Security Bureau at 1-**877-A-THREAT** and School Police at (213) 625-6631. • Conduct safety training/emergency drills following the school's written emergency plan for all grades. • Ensure emergency communication plan is updated and purchase needed equipment. • Continue offering lessons from "Masters of Disaster" curriculum for grades K-8 regarding emergency preparedness for natural disasters.
LOW *(Green)*	• Develop written emergency plans using District bulletins *Q-48 (Emergency Drills and Procedures), Q-50 (School Site Emergency Disaster Supplies), N-53 (Evaluating and Updating the Integrated Safe School Plan), and N-58 (Essential Safety Standards Checklist),* and *OEHS Model Safe School Plan and OEHS Model Emergency Response Plan.* • Initiate offering American Red Cross "Masters of Disaster" curriculum for grades K-8 regarding emergency preparedness for natural disasters (available at local chapters). • Ensure selected staff members take a Red Cross CPR/AED and first aid course.

References: ***American National Red Cross – www.redcross.org; American Red Cross, Los Angeles Chapter – www.acrossla.org; Office of Environmental Health and Safety – www.lausd-oehs.org***

OEHS
OFFICE OF ENVIRONMENTAL HEALTH & SAFETY

SAFETY ALERT

(213) 241-3199

No. 03-06 **SCHOOLS AS POTENTIAL TARGETS OF TERRORISM** **March 2003**

Homeland Security authorities have identified schools as potential targets of terrorism; including the use of car bombs, site localized bombs, or the contamination of air handling units or food supplies. In response to this threat, the following security procedures are recommended:

- Issue parking placards to identify student and staff vehicles. Report unauthorized or suspicious vehicles to school police at 213-625-6631.
- All employees and contractors should wear ID badges.
- Report unfamiliar people loitering, or taking an unusual interest in school procedures or property.
- Secure perimeter fences, gates, and doors and admit persons through a monitored entrance.
- Restrict access to utilities, boilers, HVAC systems and chemical storage areas.
- Familiarize staff with the emergency shut down procedures for air handling units, natural gas or fuel supply lines, and electricity.
- Increase security precautions for food shipments, storage, and processing.
- Review attendance records and confer with Nursing Services on apparent abnormal absenteeism.
- Report anonymous phone calls or email threats to School Police.

Inquiries may be directed to the Office of Environmental Health and Safety (OEHS) at (213) 241-3199.

DISTRIBUTION: All Schools and Offices

Severe Weather

Severe Weather was rated a HIGH PRIORITY HAZARD by LAUSD Hazard Mitigation Planning Task Force.

Windstorms

The potential risk of widespread damage in Los Angeles County from wind is not as considerable as the risk from earthquakes or wildfires. Nevertheless, severe windstorms pose a significant risk to life and property by creating conditions that disrupt essential systems such as public utilities, telecommunications, and transportation routes.

High winds can and do occasionally cause damage to homes and businesses. Severe windstorms can present a very destabilizing effect on the dry brush that covers local hillsides and urban wildland interface areas and increase wildfire threat. Destructive impacts to trees, power lines, and utility services also are associated with high winds.

Santa Ana Winds

Based on local history, most incidents of high wind in the Los Angeles County are the result of Santa Ana wind conditions. While high impact wind incidents are not frequent in the area, significant Santa Ana wind events have been known to negatively impact areas of the County.

Santa Ana winds are blustery, warm – (often hot) – dry winds that blow from the east or northeast. These occur below the passes and canyons of the coastal ranges of Southern California and in the Los Angeles basin. Typically they occur from October to March when cooler air in the desert increases air pressure and creates strong westerly winds. Generally speaking, wind speed must reach 25 knots to be classified as a Santa Ana wind.

The map above shows the direction of the Santa Ana winds as they travel from the stable, high-pressure weather system called the Great Basin High through the canyons and towards the low pressure system off the Pacific. Areas of Los Angeles County are in the direct path of the ocean-bound Santa Ana winds.

While the effects of Santa Ana Winds are often overlooked, it should be noted that in 2003, two deaths in Southern California were directly related to the fierce condition. A falling tree struck one woman in San Diego. The second death occurred when a passenger in a vehicle was hit by a flying pickup truck cover launched by Santa Ana winds.

In windstorms, reports of dislodged roofs and fallen trees and power lines are common. The winds are not considered major widespread threats to population and property, but do involve responses from emergency service personnel. Fallen power lines may cause widespread power outages and fire. Falling trees can occasionally cause fatalities and serious structural damage. These incidents are rare as well as localized.

Hazard Extent

Windstorms that affect Los Angeles County, notably Santa Ana winds, are not location specific but rather impact much of the area. Passes between hillsides are susceptible to slightly higher wind speeds, although the amount of unsheltered development in hillside passes is not substantial.

In the case of a Santa Ana wind – which can last several days – hazards created by wind-fallen trees or utility poles can threaten property and have the potential for personal injury and even death. Many older neighborhoods have larger trees. Although these trees are usually well-rooted enough to withstand higher speed winds, broken and falling tree limbs can create significant hazards.

Strong Santa Ana winds typically occur annually. It is unlikely that Los Angeles County will be subject to widespread damage from wind storm activity but there is potential for isolated events, such as damage to property or communications. Although Santa Ana winds are frequent, the occurrence wind with enough velocity to cause significant damage is much less.

Vulnerabilities

There have been past occurrences of winds strong enough to create damage to property in Los Angeles County. However, there has not been a recorded instance of a windstorm strong enough to create wide spread damage. Damage is usually done to roofs and trees damage, and is generally isolated.

Life and Property

Based on the historical data for the region, windstorm events can be expected, perhaps annually, across widespread areas of the County. This can result in many emergency responses. Both residential and commercial structures with vulnerable or weak construction are susceptible to damage. Wind pressure can create a direct and frontal assault on a structure, pushing walls, doors, and windows inward. Conversely, passing currents can create lift suction forces that pull building components and surfaces outward. With extreme wind forces, roofs or entire buildings can fail, causing considerable damage. Debris carried by strong winds can contribute directly to loss of life, and indirectly to the failure of protective building envelopes, siding, or walls. When severe windstorms strike a community, resulting downed trees, power lines, and damaged property are major hindrances to emergency response and disaster recovery.

Utilities

Historically, falling trees have been the major cause of power outages in the region as a result of high winds. Windstorms can cause flying debris that cut utility lines. For example, tree limbs breaking in winds of only 45 mph can be thrown over 75 feet. As such, overhead power lines may receive damage in even relatively minor windstorms. Falling trees bringing electric power lines down to the ground create the possibility of electric shock.

Infrastructure

Windstorms can damage buildings, power lines, and other property and infrastructure because of falling trees and branches. During wet winters, saturated soils cause trees to become less stable and more vulnerable to uprooting from high winds. Windstorms can result in collapsed or damaged buildings or blocked roads and bridges, damaged traffic signals, streetlights, and parks. Roads blocked by fallen trees during a windstorm may have severe consequences to people who need to be accessed by emergency workers.

Emergency response operations can be complicated when roads are blocked or when power supplies are interrupted. Industry and commerce can suffer losses from interruptions in electric services and from extended road closures. They can also sustain direct losses from damaged buildings, injured personnel, and damage to other vital equipment. There are direct consequences to the local economy resulting from windstorms related to both physical damages and interrupted services.

Transportation

Windstorm activity can have an impact on local transportation in addition to the problems caused by downed trees and electrical wires blocking streets and highways. During periods of extremely strong Santa Ana winds, major highways may require temporarily closure to truck and recreational vehicle traffic. Typically these disruptions are not long lasting, nor do they generally carry a severe long-term economic impact on the region.

Increased Fire Threat

Perhaps the greatest danger from in Southern California comes from the combination of the always present threat of wild fires and the drying hot Santa Ana winds that occur every few years in the urban/wildland interface. With the Santa Ana winds driving the flames, the speed and reach of the wild fires is much greater than in times of calm wind conditions. The higher fire hazard raised by Santa Ana wind conditions requires that even more care and attention be paid to proper brush clearances on property in the wildland/urban interface areas.

Losses

Losses from damage caused by windstorms are generally limited to isolated property such as roofs or tree damage. There are no areas of specific risk in Los Angeles County. Losses are seldom significant in the County.

Existing Mitigation

As stated, one of the most common problems associated with windstorms are power outages. High winds may cause trees to bend, sag, or break (tree limbs or entire trees). They may come in contact with nearby electrical distribution power lines. Fallen trees can cause short-circuiting and conductor overloading. Wind induced damage to the power system may cut power to customers, be costly to repair, and in some cases cause wild land fires.

California Code

One of the strongest and most widespread existing mitigation strategies pertains to tree clearance. Currently, California State Law requires utility companies to maintain specific clearances – depending on the type of voltage running through the line – between electrical power lines and all vegetation.

The following California Public Resource Code Sections establish tree pruning regulations:

- 4293: Power Line Clearance Required
- 4292: Power Line Hazard Reduction
- 4291: Reduction of Fire Hazards Around Buildings
- 4171: Public Nuisances

The following pertain to tree pruning regulations and are taken from the California Code of Regulations:

- Title 14: Minimum Clearance Provisions • Sections 1250-1258
- General Industry Safety Orders
- Title 8: Group 3: Articles 12, 13, 36, 37, 38
- California Penal Code Section 385

The following California Public Utilities Commission section has additional guidance:

- California Public Utilities Commission • General Order 95: Rule 35

Failure to allow a utility company to comply with the law can result in liability to the homeowner for damages or injuries resulting from a vegetation hazard. Many insurance companies do not cover this type of damage if the policy owner has refused to allow the hazard to be eliminated. The power companies, in compliance with the above regulations, collect data about tree failures and their impact on power lines. This mitigation strategy assists the power company in preventing future tree failure.

El Niño

On February 9, 1998, President Clinton, in response to a request from Governor Wilson, declared a major disaster for 27 counties in the State of California. The disaster was designated as FEMA-1203-DR-CA. On February 13, 1998 four additional counties were added; on February 26, four more counties were added, and on March 6, 1998, six additional counties were designated, bringing the total to 41.

The County of Los Angeles established a special task force comprised of county department members to distribute sandbags and clear flood channels. In Monterey County, farmers and landowners along the Salinas River banded together to reduce flooding that caused $240 million in damages in 1995. They formed a coalition and spent $2 million to clean out vegetation, sandbars, and other flow impediments along 40 miles of the river, and increased water flow capacity by 33 percent. As a result, the Salinas River did not flood during the El Nino ’98 Storms. In anticipation of El Nino-driven pounding surf and high tides, City and Orange County crews built, along the beach, a 10-foot high berm several hundred yards long to protect scores of beach-front homes in the City of Seal Beach.

The National Flood Insurance Program reported a surge in Californians purchasing flood insurance following the El Nino Community Preparedness Summit held in October, 1997. The number of policies went from a pre-summit total of 264,914 to 333, 753 by the end of November. This number climbed to 365,000 by the end of December according to FEMA.

Disasters have unique and defining characteristics. The El Nino '98 Storms are no exception. The most distinct characteristic of FEMA-1203-DR-CA has been the landslides, coastal erosion, and related earth movement problems brought on by rapidly recurring storms which produce heavy rains, high winds, and large waves.

Overview of FEMA-1203-DR-CA

Disaster Declaration

On February 9, 1998, President Clinton signed a major disaster declaration that designated "El Nino '98, FEMA-1203-DR-CA." As a result of the Presidential declaration, section of the Robert T. Stafford Disaster Relief and Emergency Assistance Act were implemented, providing Individual Assistance and Public Assistance to the designated counties. The declaration also activated the Hazard Mitigation Grant Program (HMGP) which is applicable to all counties in the State. After the initial declaration by President Clinton, 14 additional counties requested to receive a federal declaration, bringing the total number of designated counties to 41.

The 41 designated counties were: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Nor6te, Fresno, Glenn, Humboldt, Kern, Lake, **Los Angeles**, Marin, Mendocino, Merced, Monterey, Napa, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francis o, San Joaquin, San Luis Obispo, San Mateo, Santa Ba5bara, Santa Clara, Santa Cruz, Solano, Sonoma, Stanislaus, Sutter, Tehema, Trinity, Tulare, Ventura, Yolo, Yuba.

El Nino '98

In the spring of 1997, Pacific Ocean temperatures along the equator from South America to Australia were rising above normal, changing wind patterns in the area. This is phenomenon known as El Nino. As part of the global impact of El Nino, heavy storms for 1997-1998 were predicted for the State of California.

In anticipation of a serious El Nino winter season, emergency services agencies throughout the State started making preparations. During summit convened on October 6, 1997, Governor Pete Wilson directed the State to take a series of actions in to prepare for the severe storms that were predicted to hit California as a result of El Nino. The Governor directed the Office of Emergency Services (OES) and the Department of Water Resources (DWR) to conduct a series of regional briefings over the next two months to assist local communities in their El Nino preparations. In October 1997, the first of six briefings for local and state agencies was held. FEMA held the "El Nino Community Preparedness Summit" in Santa Monica, on October 14, 1997

Agencies such as DWR and the Corps of Engineers accelerated efforts to complete projects and work which began as a result of the prior year's disastrous flooding. Many local agencies accelerated repairs, cleaned storm channels, and implemented community education efforts, while the State issued environmental permits that allowed repair and mitigation work to move forward prior to the arrival of the storms. Although difficult to quantify, it is clear that without these and a multitude of other efforts, the devastation from the disaster would have been far greater.

About 170% of normal precipitation was experienced in most areas, with several locations receiving 300% or more above normal. Rainstorms occurred continuously in February, ranging in

duration from 1 to 3 days, with only a day of rest between cycles. The season's most severe storm occurred on February 2nd, and a series of storms continued until February 24, 1998. A strong jet stream was present across the Pacific during this time and this colder air mass also increased rain and snow. February rains were three times normal, and the mountain snow pack rose from 15% to 185%. The pattern was similar to the winter of 1982-83, the most serious past El Nino year. The El Nino '98 Storms were of average temperature --unlike those of 1997, which were warmer, resulting in rainfall at higher elevations.

Description of Damage and Impact

Damage occurred almost as soon as the first heavy rains began in November, 1997. In Orange County, the damage became serious enough for a local disaster declaration on December 6, 1997. This was followed by a gubernatorial disaster declaration on December 10, 1997.

Casualties included 17 confirmed deaths and 29 confirmed injuries. The total amount of residential damage was estimated at over $120 million. Roads, utilities, and levees were also damaged. As of April 29, 1998, the Disaster Field Office (DFO) estimated damages as follows: 91 homes have been destroyed, 2,303 homes suffered major damages, and 4,252 homes incurred minor damage.

According to the California Coastal Commission, *Storm Summary Report for Coastal California, March 10, 1998,* the El Nino '98 Storms caused extensive damage along Coastal California. In many cases, coastal bluff and mountain soils lost stability due to saturation from copious precipitation and large waves. High river levels caused flooding of several low elevation areas. There was a great deal of beach erosion in Los Angeles, Orange, and San Mateo Counties, as well as other parts of California. Storm waves damaged many low-lying oceanfront structures. The Coastal Commission issued approximately 75 emergency coastal permits, mostly for rip rap and seawall repairs to protect residential structures.

Impacts to Individuals

By April 28, 1998, FEMA's Human Services Division had received over 70,125 tele-registrations for FEMA disaster assistance. The Disaster Housing Program had received a total of 46,730 applications, and had provided $20.6 million in assistance. As of April 15th the Small Business Administration (SBA) had issued 31,509 home and personal property loan applications and had approved more than $16 million in low interest loans. In addition, the SBA had issued 9,699 business loan applications and approved $6,504,400 in business loan funds. The Individual and Family Grant Program (IFGP) had received 37,093 requests as of April 28th. For serious, unmet needs beyond the maximum IFGP award, the State Supplemental Grant (SSG) could provide up to an additional $10,000, and had awarded 17 grants for an additional $82,663 in aid to individuals. The Public Assistance (Infrastructure) Program had received 269 Damage Survey Reports (DSRs) totaling $26,582,560 as of April 28, 1998. According to the preliminary damage assessment, damage to local government facilities was estimated at $300 million.

Shelters

The El Nino '98 Storms created a need to feed and shelter thousands of people. The American Red Cross (ARC), members of the National Volunteer Organizations Active in Disaster (NVOAD), and numerous other voluntary agencies, are usually the first to respond to the needs of disaster victims. The Red Cross provided housing for 5,112 people at 91 shelter locations, more than 140,000 meals were served, and financial assistance was extended to more than 2,300 households. The Red Cross relief efforts for the El Nino winter storms exceeded $4.6 million.

Levees

Unlike the flooding in the previous year (FEMA-1155-DR-CA), California Winter Storms of 1997), there were less widespread floods and levee problems. Due in part top the lower temperatures, the duration of rains, and pre-storm repair efforts to shore-up levees at risk, there were only a few levee breaks and seepage. According to DWR, The Sacramento River was not strained to capacity. The San Joaquin River briefly approached flood stage at the Vernalis Gage, but did not exceed it. Many of the areas that flooded were predictable, such as Rio Linda in Sacramento County and the residential areas along the Pajaro River in Monterey County. The area around Clear Lake in Lake County repeated its flooding history, and set a record for the stage height. The Russian River at Guerneville was above flood stage, as was the Petaluma River.

Landslides

Landslides and debris flows had a greater impact during this disaster than in the federal disasters of 1995 and 1997. The severity of the problems ranged from the catastrophic losses in the Rio Nido community of Sonoma County, to small erosion problems with minor impact. Landslides and erosion also caused residential damage and destruction in Alameda County, Humboldt County, Los Angeles County, San Mateo County, San Francisco County, Santa Cruz County, Ventura County, and various other sites within the state.

Geological Discussion

The frequent storms that occurred in February 1998 saturated soils and triggered numerous debris flows and landslides, resulting in severe damage throughout river valleys and coastal areas. Eroding cliffs jeopardized homes, and debris flows forced many residents to evacuate their homes. Such headline grabbing events focused attention on the geologic problems produced by the wet season. It should be noted, however, that deep-seated landslide movements could continue after the heavy rains have stopped.

Soil and rock that comprises hill slopes will eventually move downhill. Some of this material will move grain-by-grain thorough erosion and soil creep, and some will move as larger slabs or liquefied masses, commonly called landslides and mudslides. Geologists generally classify landslides on their shape, rate (speed) of movement, type of motion, and material properties. In most classification schemes, there are three distinct types of movement: flow (e.g. debris flows and mudflows); sliding along a discrete plane or failure (e.g. debris slide); and falling (e.g. rock falls and avalanches).

Landslides can be small, involving only a few cubic yards of material, or large, involving more than a square mile of land. Some landslides are shallow, only a few feet deep, while others can be hundreds of feet deep. Landslides can be slow, and move only a few inches a year. It can also be fast and move at tens to hundred of miles per hour.

While most hill slopes are marginally stable under dry conditions, the addition of water from rainfall, snowmelt, or human activities (e.g. watering lawns) can radically alter the character of the soil and weathered rock and lessen the stability of slopes. Generally, all other conditions being equal, if groundwater is at or near the ground surface, there is a great probability that a landslide or debris flow will occur.

Another major factor that may trigger landslides is sudden changes in the shape of the slope. Slope changes that may trigger landslides include, but are not limited to, man-made cuts and fills, undermining of slopes by stream erosion or formation of gullies, or undermining and overloading of slopes due to landslide movement on adjacent land. In fact, landslide

movement in one part of a hill slope can radically affect the stability of adjacent slopes. Events at Rio Nido in Sonoma County illustrate how complex the changes in stability can be. In simplified terms, the Rio Nido landslide began when a block of soil and rock, high on a ridge, rotated down and out on the slope. This movement pushed a bulge of material onto the existing steep slope at the toe of the landslide. Fissures opened at both the top of the rotational block and within the toe of the landslide. The rotational movement of the landslide also undermines up-slope areas (decreasing stability), changing the groundwater flow patterns (increasing stability in parts of the slide while decreasing stability in other). Because the toe of the landslide was no longer supported by the surrounding slope (the slope became overly steep), the saturated outside edge failed by toppling and breaking apart. This loose material then mobilized as debris flow down a stream channel, picking up additional debris, including sediment and trees, as it flowed toward the houses on the canyon flow below. Immediate concerns were that the landslide mass would continue to move high on the slope, and as it did, the entire mass would break apart and fail as a massive debris flow that would inundate a much larger down slope area. Currently, the rotational component of the Rio Nido landslide has not shifted since monitoring equipment was installed two weeks after the failure began.

Hillsides may also be more vulnerable to debris flows following wildfires. Removal of vegetation generally makes hillsides more susceptible to erosion and landslides. After a forest fire there is reduction in the amount of vegetation on the hillsides to hold the soil in place. Also, the roots decay over a period of years following the fire. This results in an increased landslide hazard for 3 to 5 years following a large fire. In 1997, Southern California had 27 wildfires greater than 300 acres. At least 22 of those sites had some erosion damage in 1987, and it came in the form of debris flows and minor flooding.

There is evidence to suggest that most landslides and debris flows occur where they have happened in the past. For example, the Rio Nido landslide is next to an existing landslide deposit identified on a CA Division of Mines and Geology (DMG) map.

Though landslides are fairly common in California's hillside areas, there is considerable pressure to construct new homes at these locations. Some communities require site-specific investigations prior to permitting development. Engineers attempt to stabilize slopes by providing drainage, flattening slopes, and filing-in valleys. Sometimes, these modified slopes and fills require maintenance and while many of these modified slopes could last decades, some failures occur. This is what happened to houses in Laguna Niguel, Orange County, which were built on an engineered slope that had shown signs of distress for three years.

Just as there is pressure to develop hill slope areas, the beautiful ocean views from sea cliffs make them desirable places to live. During the recent disaster, accelerated cliff erosion in Pacifica resulted from slightly higher than normal seasonal ground water infiltration. When the ground becomes saturated, wave action can more easily remove materials that have fallen to the bottom of the cliffs, temporarily accelerating cliff retreat in the areas up slope. The rocks in these particular cliffs are highly fractured and nonresistant. They include sandstone, shale, and metamorphic rocks that are prone to rapid erosion during the rainy season. Erosion usually has occurred episodically, not continually at the same time. This year the cliffs locally eroded as much as 10 feet, compared to the frequently noted annual averages of 3 to 4 inches.

Vulnerability and Impact

Los Angeles Unified School District Facilities are all located in areas subject to Severe Weather and are considered vulnerable to damage. Depending on the severity and scope of a catastrophic severe storm, it is estimated that 10% of LAUSD assets would be impacted.

Data/Telecommunications Disruption

Data/Telecommunications Disruption was rated a HIGH PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

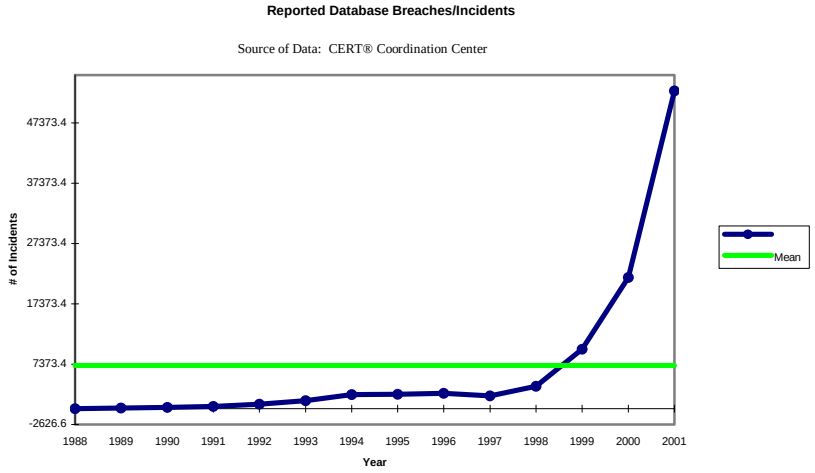
The Los Angeles Unified School District depends upon information systems and communications networks to carry out nearly all aspects of day to day business. In this digital era, as we use automated information technology (IT) systems to process information for better support of our missions, risk management plays a critical role in protecting an our information assets, and therefore our missions, from IT-related risk.

An effective risk management process is an important component of a successful IT security program. The principal goal of an organization's risk management process should be to protect the *organization and its ability to perform their mission*, not just its IT assets. Therefore, the risk management process should not be treated primarily as a technical function carried out by the IT experts who operate and manage the IT system, but as an essential management function of the organization.

Computer Security Breaches

Computer breach incidents have risen sharply since the 1980s. These include viruses, worms, Trojan horses, break–ins, and other damaging breaches. Whereas only six incidents were reported in 1988, the number rose gradually during the late 1980s and 1990s, they made a sharp rise beginning in 1998, and have risen exponentially since. To date, there have been over 142, 500 computer breaches.

The 2002 Computer Security Institute (CSI) Computer Crime and Security Survey revealed that each year, over half of all databases have some kind of breach and that the average breach amounts to nearly $4 million in losses. This percentage is staggeringly high given that these are the security problems that companies are reporting. Organizations don't want to advertise the fact that their internal people have access to customer data, can steal that data, cover their tracks, give the data to anybody and stay undetected and employed while a crime is committed.



California recently enacted a law mandating the public disclosure of computer security breaches involving confidential information. The law covers not just state agencies but all private enterprises doing business in California. Starting July 1, 2003, any entity that fails to disclose that a breach has occurred could be liable for civil damages or face class action suits.

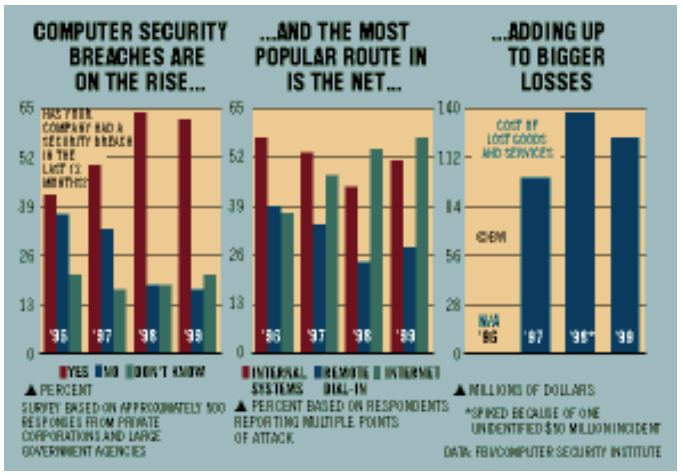
Cyber Crime

"…Cyber crime is becoming one of the Net's growth businesses. The recent spate of attacks that gummed up Web sites for hours--known as "denial of service"--is only one type. Today, criminals are doing everything from stealing intellectual property and committing fraud to unleashing viruses and committing acts of cyber terrorism in which political groups or unfriendly governments nab crucial information. Indeed, the tactic used to create mayhem in the past few days is actually one of the more innocuous ones. Cyber thieves have at their fingertips a dozen dangerous tools, from "scans" that ferret out weaknesses in Web site software programs to "sniffers" that snatch passwords. All told, the FBI estimates computer losses at up to $10 billion a year.

As grim as the security picture may appear today, it could actually get worse as broadband connections catch on. Then the Web will go from being the occasional dial-up service to being "always on," much as the phone is. That concept may be nirvana to e-tailers, but could pose a real danger to consumers if cyber crooks can come and go into their computer systems at will. Says Bruce Schneier, chief technical officer at Counterpane Internet Security Inc. in San Jose, Calif.: "They'll keep knocking on doors until they find computers that aren't protected."

Sadly, the biggest threat is from within. Law enforcement officials estimate that up to 60% of break-ins are from employees. Take the experience of William C. Boni, a digital detective for PricewaterhouseCoopers in Los Angeles. Last year, he was called in by an entertainment company that was suspicious about an employee. The employee, it turns out, was under some financial pressure and had installed a program called Back Orifice on three of the company's servers. The program, which is widely available on the Internet, allowed him to take over those machines, gaining passwords and all the company's financial data. The employee was terminated before any damage could be done.

The dirty little secret is that computer networks offer ready points of access for disgruntled employees, spies, thieves, sociopaths, and bored teens. Once they're in a corporate network, they can lift intellectual property, destroy data, sabotage operations, even subvert a particular deal or career. "Any business on the Internet is a target as far as I'm concerned," says Paul Field, a reformed hacker who is now a security consultant.



It's point and click, then stick 'em up. Interested in a little mayhem? Security experts estimate that there are 1,900 Web sites that offer the digital tools--for free--that will let people snoop, crash computers, hijack control of a machine, or retrieve a copy of every keystroke. Steve O'Brien, vice-president for information operation assessments at Info-Ops.com, an Annapolis (Md.)-based company that provides intrusion detection services and security solutions, says the number of ways to hack into computers is rising fast. He tracks potential threats both from hacker groups and from the proliferation of programs. Once a rare find, he now discovers at least three new nasty software programs or vulnerabilities every day. And those tools aren't just for the intellectually curious. "Anyone can get them off the Internet--just point and click away," says Robert N. Weaver, a Secret Service agent in charge of the New York Area Electronic Crimes Task Force.

Experts say the first step for companies is to secure their systems by searching for hacker programs that might be used in such attacks. They also suggest formal security policies that can be distributed to employees letting them know how often to change passwords or what to do in case of an attack. An added help: Constantly updating software with the latest versions and security patches. Down the road, techniques that can filter and trace malicious software sent over the Web may make it harder to knock businesses off the Net. Says Novell Inc. CEO Eric Schmidt: "Security is a race between the lock makers and the lock pickers." Regulators say that cybercrime thrives because people accord the Internet far more credibility than it deserves. "You can get a lot of good information from the Internet--95% of what you do there is bona fide," says G. Philip Rutledge, deputy chief counsel of the Pennsylvania Securities Commission. "Unfortunately, that creates openings for fraud."…"

Excerpts from "Business Week Online, Ira Sager in New York, with Steve Hamm and Neil Gross in New York, John Carey in Washington, D.C., and Robert D. Hof in San Mateo, Calif.

Top Ten Computer Security Breaches

Systems affected: All system and network devices

BIND weaknesses: The Berkeley Internet Name Domain (BIND) package is the most widely used implementation of Domain Name Service (DNS) by which we locate systems on the Internet by name, without having to know specific IP addresses. In a typical example of a BIND attack, intruders erase system logs, and install tools to gain administrative access. They then compile and install IRC utilities and network scanning tools, which are used to scan more than a dozen class-B networks in search of additional systems running vulnerable versions of BIND. In a matter of minutes, they can use the compromised system to attack hundreds of remote systems.

Systems affected: Multiple UNIX and Linux systems

Vulnerable CGI (Common Gateway Interface) programs and application extensions (e.g., ColdFusion) installed on Web servers: Most Web servers support CGI for data collection and verification. Intruders are known to have exploited vulnerable CGI programs to vandalize Web pages, steal credit card information, and set up back doors to enable future intrusions, even if the CGI programs are secured. As a general rule, sample programs should always be removed from production systems.

Systems affected: All Web servers

Remote procedure call (RPC) weaknesses: Remote procedure calls (RPC) allow programs on one computer to execute programs on a second computer. They are widely used to access network services such as shared files in NFS. There is compelling evidence that the vast majority of distributed denial of service attacks launched during 1999 and early 2000 were executed by systems that had been victimized because they had RPC vulnerabilities. The broadly successful attack on US military systems during the Solar Sunrise incident also exploited an RPC flaw found on hundreds of Department of Defense systems.

Systems affected: Multiple UNIX and Linux systems

RDS security hole in Microsoft Internet Information Server (IIS): Programming flaws in Microsoft's Internet Information Server (IIS) used to host websites deployed on Microsoft Windows NT and Windows 2000 are employed by malicious users to run remote commands with administrator privileges. Some participants who developed the "Top Ten" list believe that exploits of other IIS flaws, such as .HTR files, are at least as common as exploits of RDS.

Systems affected: Microsoft Windows NT systems using Internet Information Server

Sendmail: Sendmail is the program that handles most e-mail on the Internet. It's widespread use makes it a prime target. In one of the most common exploits, the attacker sends a crafted mail message to the machine running Sendmail, and Sendmail reads the message as instructions requiring the victim machine to send its password file to the attacker's machine (or to another victim) where the passwords can be cracked.

Systems affected: Multiple UNIX and Linux systems

Sadmind and mountd: Sadmind allows remote administration access to Solaris systems, providing graphical access to system administration functions. Mountd controls and arbitrates access to NFS mounts on UNIX hosts. Buffer overflows in these applications can be exploited, allowing attackers to gain control with root access.

Systems affected: Multiple UNIX and Linux systems; Sadmind: Solaris machines only

Global file sharing and inappropriate information sharing via NetBIOS and Windows NT ports: These services allow file sharing over networks. When improperly configured, they can expose critical system files or give full file system access to hostile parties.

Systems affected: UNIX, Windows and Macintosh systems.

User IDs, especially root/administrator with no passwords or weak passwords: Some systems come with "demo" or "guest" accounts with no passwords or with widely-known default passwords. Service workers

often leave maintenance accounts with no passwords, while some database management systems install administration accounts with default passwords. In addition, busy system administrators often select system passwords that are easily guessable ("love," "money," "wizard" are common) or just use a blank password. Many attackers try default passwords and then try to guess passwords before resorting to more sophisticated methods.

Systems affected: All systems.

IMAP and POP buffer overflow vulnerabilities or incorrect configuration: IMAP and POP are popular remote access mail protocols, allowing users to access their e-mail accounts. The "open access" nature of these services makes them especially vulnerable to exploitation because openings are frequently left in firewalls to allow for external e-mail access. Attackers who exploit flaws in IMAP or POP often gain instant root-level control.

Systems affected: Multiple UNIX and Linux systems

Default SNMP community strings set to 'public' and 'private': The Simple Network Management Protocol (SNMP) is widely used by network administrators to monitor and administer all types of network-connected devices, ranging from routers to printers to computers. SNMP uses an unencrypted "community string" as its only authentication mechanism. Lack of encryption is bad enough, but the default community string used by the vast majority of SNMP devices is "public", with a few clever network equipment vendors changing the string to "private". Attackers can use this vulnerability in SNMP to reconfigure or shut down devices remotely.

Express Computer Business Weekly

Information Technology Security Practices

Computer Security Policy

The term *computer security policy* has more than one meaning. Policy is senior management's directives to create a computer security program, establish its goals, and assign responsibilities. The term policy is also used to refer to the specific security rules for particular systems. Additionally, policy may refer to entirely different matters, such as the specific managerial decisions setting an organization's e-mail privacy policy or fax security policy.

Program Management

Managing computer security at multiple levels brings many benefits. Each level contributes to the overall computer security program with different types of expertise, authority, and resources. In general, executive managers (such as those at the headquarters level) better understand the organization as a whole and have more authority. On the other hand, front-line managers (at the computer facility and applications levels) are more familiar with the specific requirements, both technical and procedural, and problems of the systems and the users. The levels of computer security program management should be complementary; each can help the other be more effective. Many organizations have at least two levels of computer security management; the *central* level and the *system* level.

Risk Management

Risk is the possibility of something adverse happening. Risk management is the process of assessing risk, taking steps to reduce risk to an acceptable level and maintaining that level of risk. Risk management requires the analysis of risk, relative to potential benefits, consideration of alternatives, and, finally, implementation of what management determines to be the best course of action. Risk management

consists of two primary and one underlying activity; risk assessment and risk mitigation are the primary activities and uncertainty analysis is the underlying one. An organization should consider the following when assessing risks.

Life Cycle Planning

Security, like other aspects of an IT system, is best managed if planned for *throughout* the IT system life cycle. There are many models for the IT system life cycle but most contain five basic phases: initiation, development/acquisition, implementation, operation, and disposal.

Personnel/User Issues

Many important issues in computer security involve users, designers, implementers, and managers. A broad range of security issues relate to how these individuals interact with computers and the access and authorities they need to do their job. No IT system can be secured without properly addressing these security issues.

Preparing for Contingencies and Disasters

Contingency planning directly supports an organization's goal of continued operations. Organizations should practice contingency planning because it makes good business sense. Contingency planning addresses how to keep an organization's critical functions operating in the event of disruptions, both large and small. This broad perspective on contingency planning is based on the distribution of computer support throughout an organization. The following six steps describe the basic functions an organization should employ when developing contingency plans.

Computer Security Incident Handling

A computer security incident can result from a computer virus, other malicious code, or a system intruder, either an insider or an outsider. The definition of a computer security incident is somewhat flexible and may vary by organization and computing environment. An incident handling capability may be viewed as a component of contingency planning, because it provides the ability to react quickly and efficiently to disruptions in normal processing. Incident handling can be considered that portion of contingency planning that responds to malicious technical threats.

Awareness and Training

An effective computer security awareness and training program requires proper planning, implementation, maintenance, and periodic evaluation.

Security Considerations in Computer Support and Operations

Computer support and operations refers to system administration and tasks external to the system that support its operation (e.g., maintaining documentation). Failure to consider security as part of the support and operations of IT systems is, for many organizations, a significant weakness. Computer security system literature includes many examples of how organizations undermined their often expensive security measures because of poor documentation, no control of maintenance accounts, or other shoddy practices.

Physical and Environmental Security

Physical and environmental security controls are implemented to protect the facility housing system resources, the system resources themselves, and the facilities used to support their operation. An organization's physical and environmental security program should address the following seven topics. In

doing so, it can help prevent interruptions in computer services, physical damage, unauthorized disclosure of information, loss of control over system integrity, and theft.

Identification and Authentication

Identification and Authentication is a critical building block of computer security since it is the basis for most types of access control and for establishing user accountability. Identification and Authentication is a technical measure that prevents unauthorized people (or unauthorized processes) from entering an IT system. Access control usually requires that the system be able to identify and differentiate among users. For example, access control is often based on *least privilege*, which refers to the granting to users of only those accesses minimally required to perform their duties. User accountability requires the linking of activities on an IT system to specific individuals and, therefore, requires the system to identify users.

Logical Access Control

Access is the ability to do something with a computer resource (e.g., use, change, or view). Logical access controls are the system-based means by which the ability is explicitly enabled or restricted in some way. Logical access controls can prescribe not only who or what (e.g., in the case of a process) is to have access to a specific system resource but also the type of access that is permitted.

Audit Trails

Audit trails maintain a record of system activity by system or application processes and by user activity. In conjunction with appropriate tools and procedures, audit trails can provide a means to help accomplish *several* security-related objectives, including individual accountability, reconstruction of events, intrusion detection, and problem identification.

Cryptography

Cryptography is a branch of mathematics based on the transformation of data. It provides an important tool for protecting information and is used in many aspects of computer security. Cryptography is traditionally associated only with keeping data secret. However, modern cryptography can be used to provide many security services, such as electronic signatures and ensuring that data has not been modified. Several important issues should be considered when designing, implementing, and integrating cryptography in an IT system.

Flood

Flood was rated a HIGH PRIORITY HAZARD by LAUSD Hazard Mitigation Planning Task Force.

Flood Facts

Historic Flooding in Los Angeles County Records show that since 1811, the Los Angeles River has flooded 30 times, on average once every 6.1 years. But averages are deceiving, for the Los Angeles basin goes through periods of drought and then periods of above average rainfall. Between 1889 and 1891 the river flooded every year, and from 1941 to 1945, the river flooded 5 times. Conversely, from 1896 to 1914, a period of 18 years, and again from 1944 to 1969, a period of 25 years, the river did not have serious floods.

The towering mountains that give the Los Angeles region its spectacular views also wring a great deal of rain out of the storm clouds that pass through. Because the mountains are so steep, the rainwater moves rapidly down the slopes and across the coastal plains on its way to the ocean.

"The Santa Monica, Santa Susana and Verdugo Mountains, which surround three sides of the valley, seldom reach heights above three thousand feet. The western San Gabriel Mountains, in contrast, have elevations of more than seven thousand feet. These higher ridges often trap eastern-moving winter storms. Although downtown Los Angeles averages just fifteen inches of rain a year, some mountain peaks in the San Gabriels receive more than forty inches of precipitation annually.

Naturally, this rainfall moves rapidly down stream, often with severe consequences for anything in its path. In extreme cases, flood-generated debris flows will roar down a canyon at speeds near 40 miles per hour with a wall of mud, debris and water, tens of feet high.

Flooding. occurs when climate, geology, and hydrology combine to create conditions where water flows outside of its usual course.

Winter Rainfall

Over the last 125 years, the average annual rainfall in Los Angeles is 14.9 inches. But the term "average" means very little as the annual rainfall during this time period has ranged from only 4.35 inches in 2001-2002 to 38.2 inches in 1883-1884. In fact, in only fifteen of the past 125 years, has the annual rainfall been within plus or minus 10% of the 14.9 inch average. And in only 38 years has the annual rainfall been within plus or minus 20% of the 14.9 inch average. This makes the Los Angeles basin a land of extremes in terms of annual precipitation.

Monsoons

Another relatively regular source for heavy rainfall, particularly in the mountains and adjoining cities is from summer tropical storms. These tropical storms usually coincide with El Niño years.

Geography and Geology

The greater Los Angeles Basin is the product of rainstorms and erosion for millennia. "Most of the mountains that ring the valleys and coastal plain are deeply fractured faults and, as they (the mountains) grew taller, their brittle slopes were continually eroded. Rivers and streams carried boulders, rocks, gravel, sand, and silt down these slopes to the valleys and coastal plain....In places these sediments are as much as twenty thousand feet thick.

Much of the coastal plain rests on the ancient rock debris and sediment washed down from the mountains. This sediment can act as a sponge, absorbing vast quantities of rain in those years when heavy rains follow a dry period. But like a sponge that is near saturation, the same soil fills up rapidly when a heavy rain follows a period of relatively wet weather. So even in some years of heavy rain, flooding is minimal because the ground is relatively dry. The same amount of rain following a wet period of time can cause extensive flooding.

The greater Los Angeles basin is for all intents and purposes built out. This leaves precious little open land to absorb rainfall. This lack of open ground forces water to remain on the surface and rapidly accumulate. If it were not for the massive flood control system with its concrete lined river and stream beds, flooding would be a much more common occurrence. And the tendency is towards even less and less open land. In-fill building is becoming a much more common practice in many areas. Developers tear down an older home which typically covers up to 40% of the lot size and replacing it with three or four town homes or apartments which may cover 90-95% of the lot.

Another potential source of flooding is “asphalt creep.” The street space between the curbs of a street is a part of the flood control system. Water leaves property and accumulates in the streets, where it is directed towards the underground portion of the flood control system. The carrying capacity of the street is determined by the width of the street and the height of the curbs along the street. Often, when streets are being resurfaced, a one to two inch layer of asphalt is laid down over the existing asphalt. This added layer of asphalt subtracts from the rated capacity of the street to carry water. Thus the original engineered capacity of the entire storm drain system is marginally reduced over time. Subsequent re-paving of the street will further reduce the engineered capacity even more.

Flood Terminology

Floodplain

A floodplain is a land area adjacent to a river, stream, lake, estuary, or other water body that is subject to flooding. This area, if left undisturbed, acts to store excess flood water. The floodplain is made up of two sections: the floodway and the flood fringe.

100-Year Flood

The 100-year flooding event is the flood having a one percent chance of being equaled or exceeded in magnitude in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years. The 100-year floodplain is the area adjoining a river, stream, or watercourse covered by water in the event of a 100-year flood.

Floodway

The floodway is one of two main sections that make up the floodplain. Floodways are defined for regulatory purposes. Unlike floodplains, floodways do not reflect a recognizable geologic feature. For NFIP purposes, floodways are defined as the channel of a river or stream, and the over-bank areas adjacent to the channel. The floodway carries the bulk of the flood water downstream and is usually the area where water velocities and forces are the greatest. NFIP regulations require that the floodway be kept open and free from development or other structures that would obstruct or divert flood flows onto other properties.

The NFIP floodway definition is "the channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. *Floodways are not mapped for all rivers and streams but are generally mapped in developed areas.*

Flood Fringe

The flood fringe refers to the outer portions of the floodplain, beginning at the edge of the floodway and continuing outward.

Base Flood Elevation (BFE)

The term "Base Flood Elevation" refers to the elevation (normally measured in feet above sea level) that the base flood is expected to reach. Base flood elevations can be set at levels other than the 100-year flood. Some communities choose to use higher frequency flood events as their base flood elevation for certain activities, while using lower frequency events for others. For example, for the purpose of storm water management, a 25-year flood event might serve as the base flood elevation; while the 500-year flood event may serve as base flood elevation for the tie down of mobile homes. The regulations of the NFIP focus on development in the 100-year floodplain.

Development and Flooding

When structures or fill are placed in the floodway or floodplain, water is displaced. Development raises the river levels by forcing the river to compensate for the flow space obstructed by the inserted structures and/or fill. When structures or materials are added to the floodway or floodplain and no fill is removed to compensate, serious problems can arise. Flood waters may be forced away from historic floodplain areas. As a result, other existing floodplain areas may experience flood waters that rise above historic levels. *Local governments must require engineer certification to ensure that proposed developments will not adversely affect the flood carrying capacity of the Special Flood Hazard Area (SFHA).*

Displacement of only a few inches of water can mean the difference between no structural damage occurring in a given flood event, and the inundation of many homes, businesses, and other facilities. Careful attention should be given to development that occurs within the floodway to ensure that structures are prepared to withstand base flood events. In highly urbanized areas, increased paving can lead to an increase in volume and velocity of runoff after a rainfall event, exacerbating the potential flood hazards. Care should be taken in the development and implementation of storm water management systems to ensure that these runoff waters are dealt with effectively.

Flood Prone Area Identification

Flood maps and Flood Insurance Studies (FIS) are often used to identify flood-prone areas. The NFIP was established in 1968 as a means of providing low-cost flood insurance to the nation's flood-prone communities. The NFIP also reduces flood losses through regulations that focus on building codes and sound floodplain management. NFIP regulations (44 Code of Federal Regulations (CFR) Chapter 1, Section 60, 3) require that all new construction in floodplains must be elevated at or above base flood level.

Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) Floodplain maps are the basis for implementing floodplain regulations and for delineating flood insurance purchase requirements. A Flood Insurance Rate Map (FIRM) is the official map produced by FEMA which delineates SFHA in communities where NFIP regulations apply. FIRMs are also used by insurance agents and mortgage lenders to determine if flood insurance is required and what insurance rates should apply.

Water surface elevations are combined with topographic data to develop FIRMs. FIRMs illustrate areas that would be inundated during a 100-year flood, floodway areas, and elevations marking the 100-year-flood level. In some cases they also include base flood elevations (BFEs) and areas located within the 500-year floodplain. Flood Insurance Studies and FIRMs produced for the NFIP provide assessments of the probability of flooding at a given location. FEMA conducted many Flood Insurance Studies in the late 1970s and early 1980s. These studies and maps represent flood risk at the point in time when FEMA completed

the studies. However, it is important to note that not all 100-year or 500-year floodplains have been mapped by FEMA.

FEMA flood maps are not entirely accurate. These studies and maps represent flood risk at the point in time when FEMA completed the studies, and does not incorporate planning for floodplain changes in the future due to new development. Although FEMA is considering changing that policy, it is optional for local communities. Man-made and natural changes to the environment have changed the dynamics of storm water run-off since then.

Michael E. Martinet, 2004

Flood Loss Information

California has a chronic and destructive flood history. Of seventy-two federally declared disasters in the state between 1950 and 2000, half were flood related.

While the "Great Flood" of 1861-62 may be unmatched in scope, the devastating effects of recent floods far exceed the damage of a century ago. Despite the construction of massive and relatively effective flood control projects, California remains vulnerable to flooding. A steady rise in population and accompanying development contribute to increased flood risks throughout the state.

Between 1992 and 2002, every county in California was declared a federal disaster area at least once for a flooding event. The counties of Los Angeles, Orange, and San Bernardino were declared federal flood disaster areas five times, and sixteen other counties were declared disaster areas four times.

The South Coast hydrologic region extends up from the U.S.-Mexico border to the Tehachapi, San Bernardino, San Gabriel, and San Jacinto mountains. Nearly one-third of the area is coastal plain. Major stream systems in the South Coast region include:

- Calleguas Creek Basin
- Malibu and Santa Monica Bay streams
- Ventura River
- Santa Clara River
- Los Angeles River
- San Gabriel River
- Santa Ana River
- Santa Margarita River
- San Luis Rey River
- San Dieguito River
- San Diego River
- Sweetwater River
- Otay-Tijuana River

This region contains major urban centers, including the counties of Los Angeles, Orange, and San Diego. Much of the flooding is sudden and severe, resulting in massive slides, debris flows, and mudflows. Typical of the flooding that occurs in this area were the 1969 winter storms that killed forty-seven and resulted in $300 million in property damage. During these storms, an alluvial flood and debris flow on Deer Creek in San Bernardino County killed eleven. Normally Deer Creek is dry and is not considered a special flood hazard area on the National FIRMs. However, the region has experienced tremendous population growth since 1969 and the area of the Deer Creek alluvial fan is now home to several public schools and Ontario International Airport.

Types of Flooding in California

Flood Type	Problems
Alluvial Fan	Alluvial fan flooding occurs in the steep arid or semiarid mountains found throughout the state. Alluvial fans are fan-shaped deposits of eroded rock and soil carried out of mountains and into valley floors by landslides, mudslides, mudflows, and surface runoff (sheetflows and streamflows.) At the beginning of the valley, alluvial fans are steep and narrow with boulders and other course material. The deposited material becomes increasingly fine as the gradient decreases and the material, mainly gravels, sand and mud, spreads. When rain falls, runoff from the canyon walls flows as a high-velocity sheet that channels into rivulets, and then to natural drainage courses. The rapidly moving water often carries large boulders and other material from the watershed depositing them into runoff channels, blocking the flow of water. Floodwater then spills out onto the fan, with each event finding a new channel that soon fills up with deposits and overflows. Flooding in alluvial fans often can cause greater damage than clear-water flooding.
Coastal	Coastal flooding and erosion present some of the most complex and serious high-risk problems. In California, coastal erosion is most often caused by a combination of factors: winter storms, rising sea levels, tidal action, currents and waves, and high winds.
Flash	Flash floods are quick events, particularly where the topography enhances rainfall from Pacific or Gulf storms and thunderstorms. Flash floods are caused by the rapid buildup of runoff after high-intensity rainfall. The precipitation is often so intense that both perennial streams and dry watercourses are rapidly transformed into torrents, sweeping away whatever lies in their path. Loss of life in such a flooding is common because of the suddenness of high flows. A flash flood can occur in mountainous regions and urban areas. In the mountains, a stream level may rise quickly in a heavy rainstorm. Dry desert washes, especially those near mountains, can reach flood stage within minutes as a result of thunderstorms miles away. Urban flash flooding can occur in any terrain. It is particularly aggravated where natural cover has been removed to construct buildings, roads and parking lots. Streets become rivers, inundating vehicles and causing heavy damage to residential and industrial properties situated along stream channels.
Fluvial	California rivers generally flow west to the Pacific Ocean and may fall as much as 5,000 feet within the first 20 miles. This relatively steep slope creates a high-velocity flow that carries eroded material. As the slope of the river flattens, the velocity slows and the material is deposited. As a result, the lower reaches of many streams pass through the sandy alluvial plains they have formed. Flood flows can cause these streams to migrate, resulting in a higher and wider floodplain. Developed areas on land originally outside the defined floodplain can later flood.
Lake	Lake level fluctuations primarily concern shoreland property owners, but impact local, state and federal agencies with regulatory or financial responsibilities for water and related land use associated with lakes. Both natural and human actions cause changing lake levels. Natural factors include direct precipitation, surface runoff, evaporation, ground water inflow, ice formation, aquatic growth, meteorological disturbances, and, in larger lakes, tidal and crustal movement. Human factors include dredging, diversion, consumptive uses and intruding structures.
Levee	Levees are a basic means of providing flood protection along rivers and waterways in regions where development exists, or is planned, and in agricultural areas. Levees confine floodwaters to the main river channel or protect inland areas from high tides. The causes of levee problems are structural failures, foundation failures of underlying soils, and overtopping by flood flows, tides and waves. Contributing factors include poor construction materials, erosion by current and wave action, seepage through or under the levee, burrowing rodents, and improper repairs. Lack of adequate and regular maintenance to correct these problems also contributes to levee failure. Most failures are composites of several of these factors.
Mudslides	Mud floods and mudflows cause several types of flood damage that are not characteristic of clear-water flooding. These include: • The force of debris-laden water, which can be tens or hundreds of times greater than that generated by clear water, destroys retaining walls and other protective works; • Mud and debris may fill drainage channels, river or stream channels, and sediment basins, causing otherwise normal runoff to suddenly inundate areas outside the floodplains; and • Sediment and debris are more damaging to houses and their contents than clear water. Frame structures are often total losses, and if they remain intact, sediment and mud must be removed and washed out. Stains, mildew and dry rot often result. Major floods almost always involve heavy intrusions of mud, sediment and debris. Such conditions are caused or worsened by forest and brush fires. Once the hills have been denuded of vegetation, there is more runoff and less infiltration. Even light rainfall can develop into rapid runoff with severe erosion occurring in such areas.
Riverine	Riverine flooding, the most common type of flooding in the state, occurs when a stream channel fills with more water than it can carry. The water rises and flows over the channel banks onto the adjacent floodplain.
Seiche and Tsunami	Tsunamis, or seismic sea waves, are usually created by undersea earthquakes or landslides. Seiches are similar, large waves in lakes. Waves are generated by a crustal disturbance giving a vertical impulse to the sea surface. These are long-period waves that travel long distances at speeds of up to 600 miles per hour with little or no loss of energy. When tsunami waves approach a coastal region in which water depth decreases rapidly, their height is increased by refraction, shoaling, and local bay or harbor conditions, and speed is creased. Tsunamis frequently arrive in a series of spaced intervals.

Local Flood Information

Federal Flood Disaster Declarations (Local County Comparison)

County	Total Pop in FIRM Zone	Pop in Zone A - 100YR	Population of County	# PA Applicants	PA Amt Eligible	% PA Amt Eligible	% IA Damage Locations
LOS ANGELES	**390,305**	**98,371**	**9,519,338**	**2,908**	**$61,466,583**	**10.35**	**45.36**
ORANGE	1,384,403	428,779	2,846,289	1,391	$32,167,618	5.42	2.39
RIVERSIDE	295,081	72,628	1,545,387	615	$7,846,555	1.32	1.00
SAN BERNARDINO	196,945	61,247	1,709,434	951	$10,734,165	1.81	1.63
SAN DIEGO	181,757	82,807	2,813,833	798	$11,163,308	1.88	1.54
SANTA BARBARA	54,731	24,772	399,347	1,465	$36,227,678	6.10	1.82
SANTA CLARA	304,511	143,822	1,682,585	712	$23,463,356	3.95	2.80
VENTURA	187,179	56,113	753,197	1,120	$33,556,411	5.65	1.38
STATEWIDE NonSpecific	**5,227,897**	**1,973,712**	**33,871,648**	**30,713**	**$593,611,817**	**100.00%**	**100.00%**

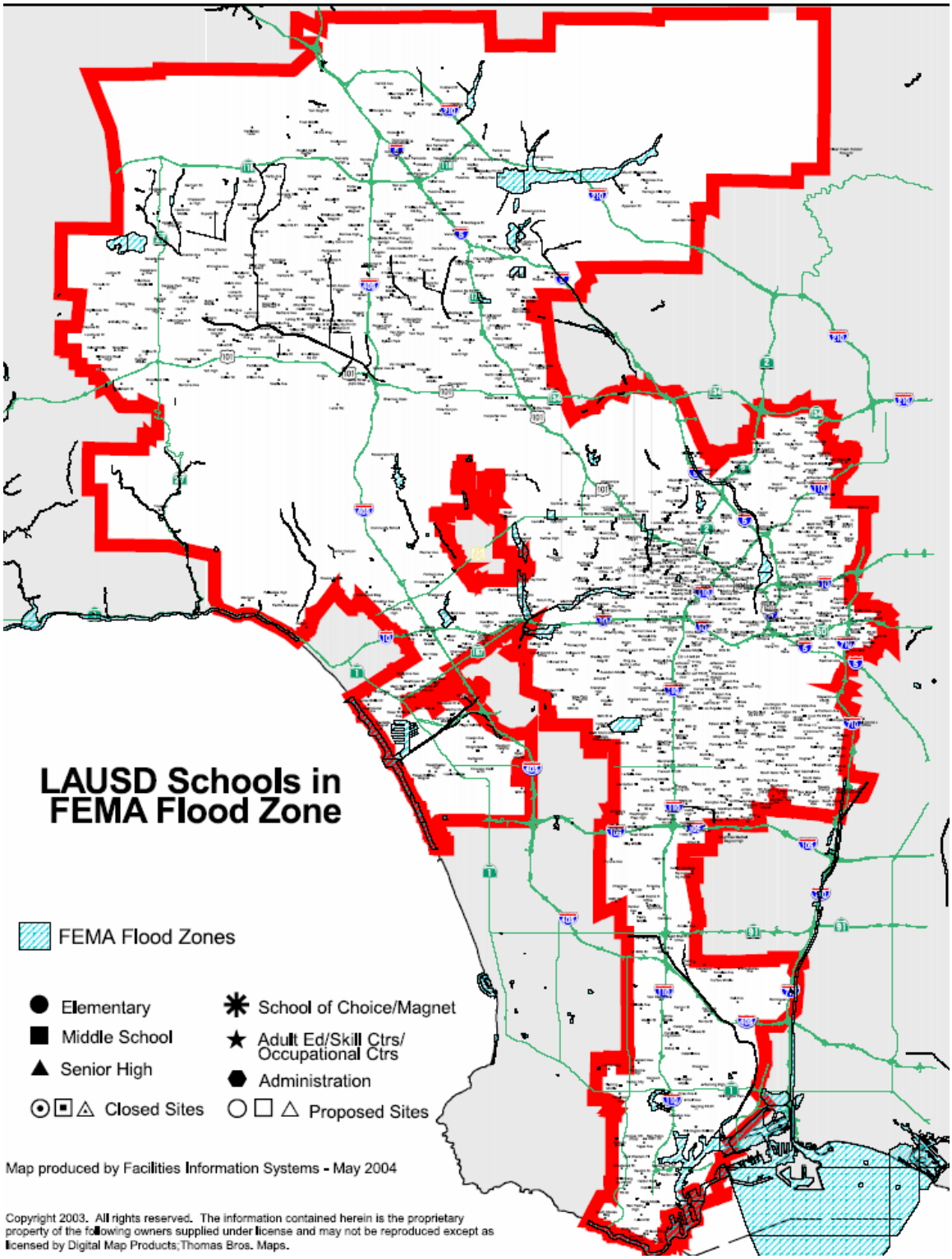
Vulnerability

Certain Los Angeles Unified School District facilities (see LAUSD Flood Hazard Map) are located in areas vulnerable to flooding and have been determined to be at risk for damage or destruction in a catastrophic flood event.

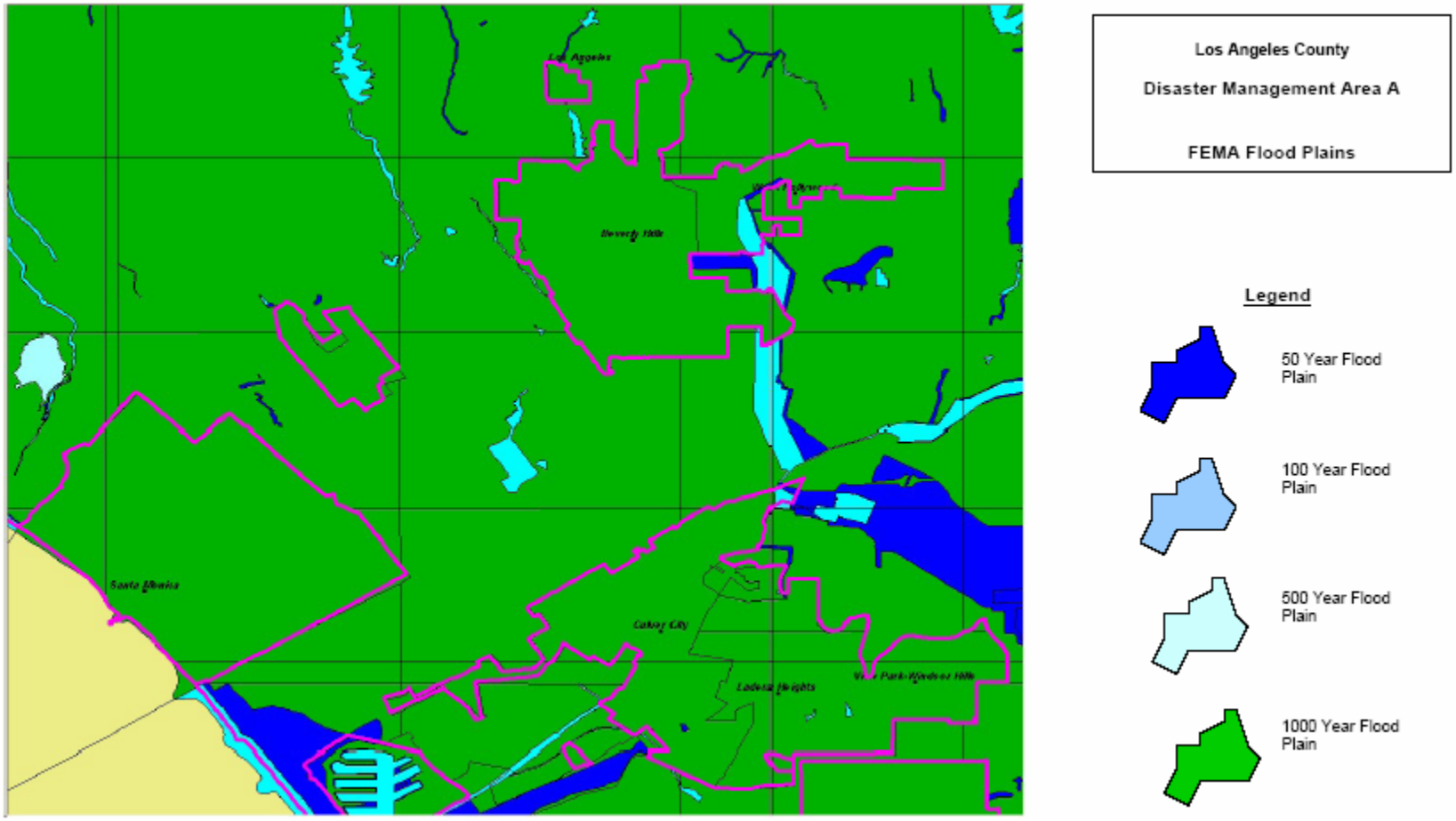
Impact

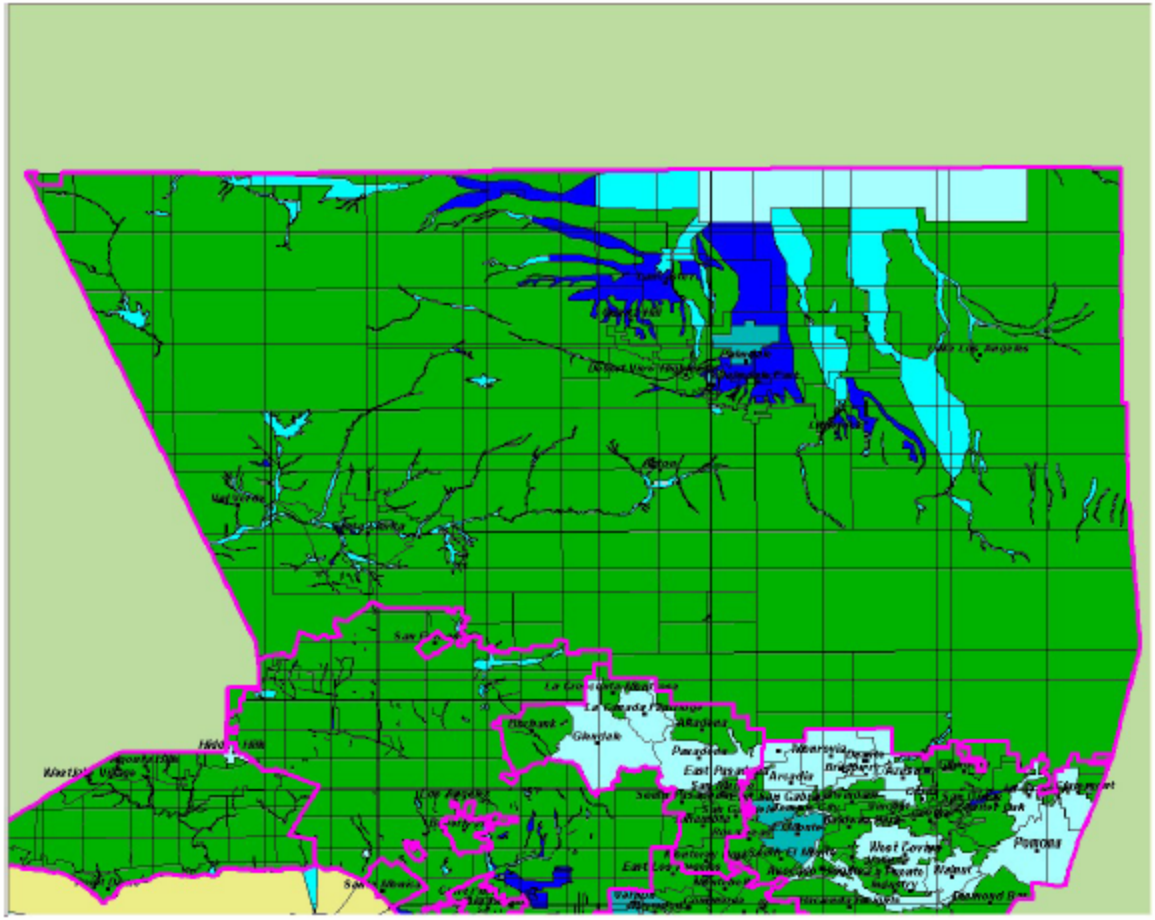
The impact on LAUSD facilities and infrastructure, as a result of a catastrophic flood event, is estimated at 10% of its assets.

LAUSD Flood Hazard Map



FIRM Maps of Los Angeles County by Disaster Management Area (see Section 3) Los Angeles County GIS Data





Los Angeles County

Disaster Management Area B

FEMA Flood Plains

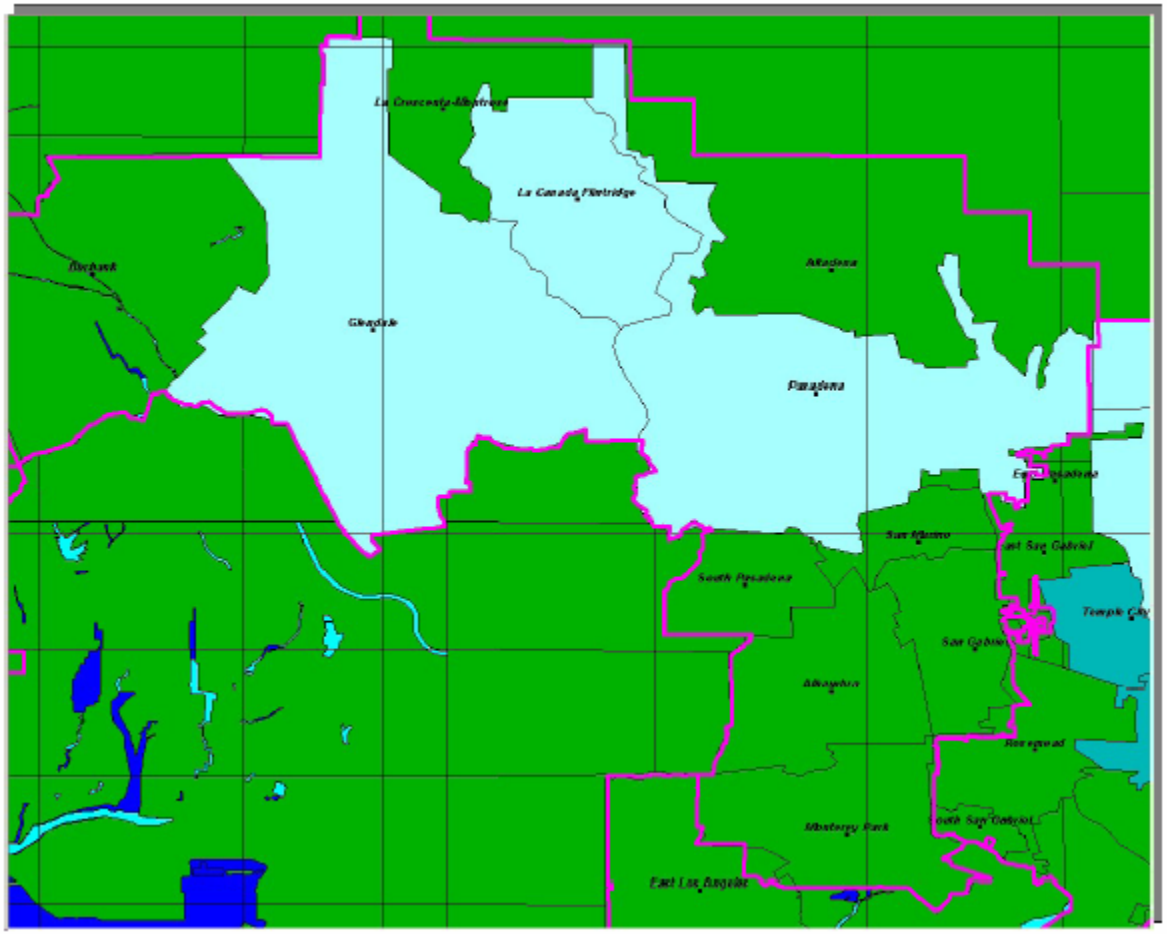
Legend

50 Year Flood Plain

100 Year Flood Plain

500 Year Flood Plain

1000 Year Flood Plain



Los Angeles County

Disaster Management Area C

FEMA Flood Plains

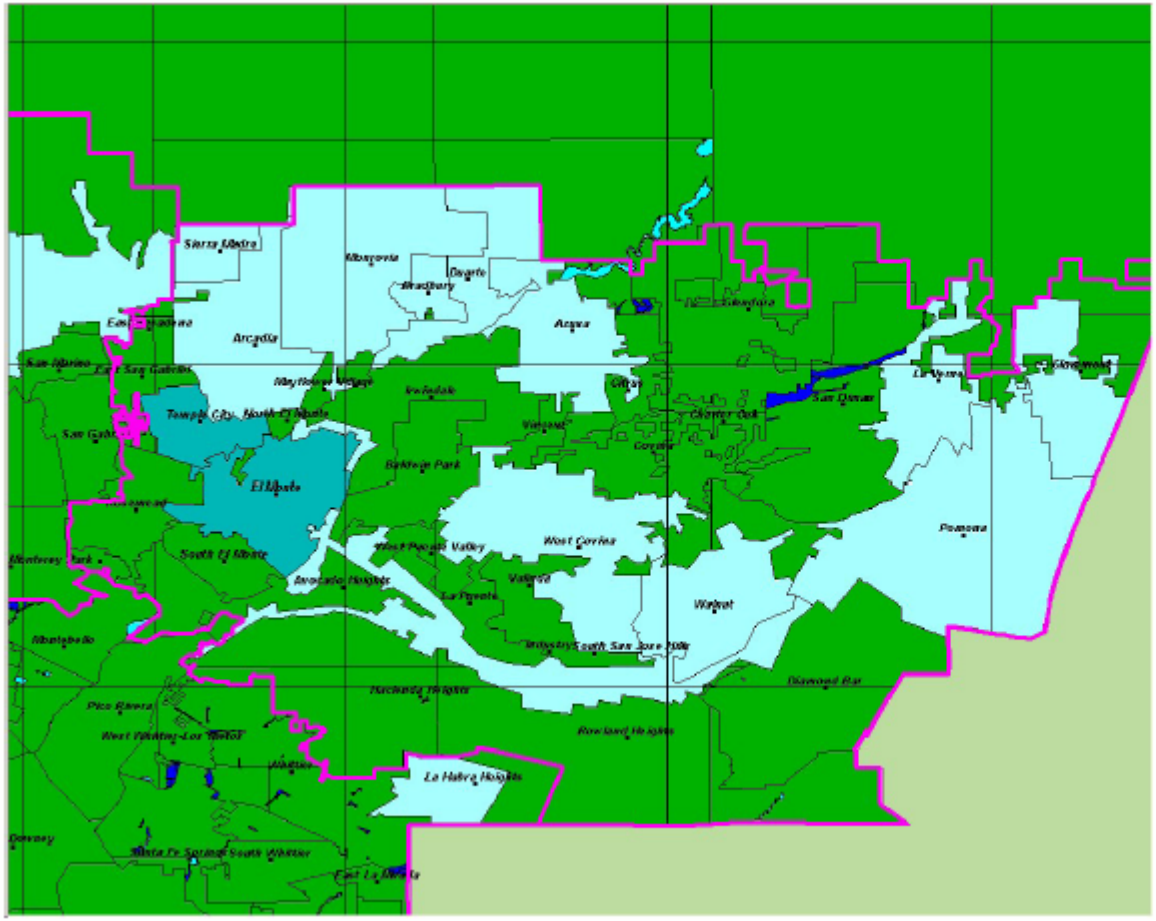
Legend

50 Year Flood Plain

100 Year Flood Plain

500 Year Flood Plain

1000 Year Flood Plain



Los Angeles County

Disaster Management Area D

FEMA Flood Plains

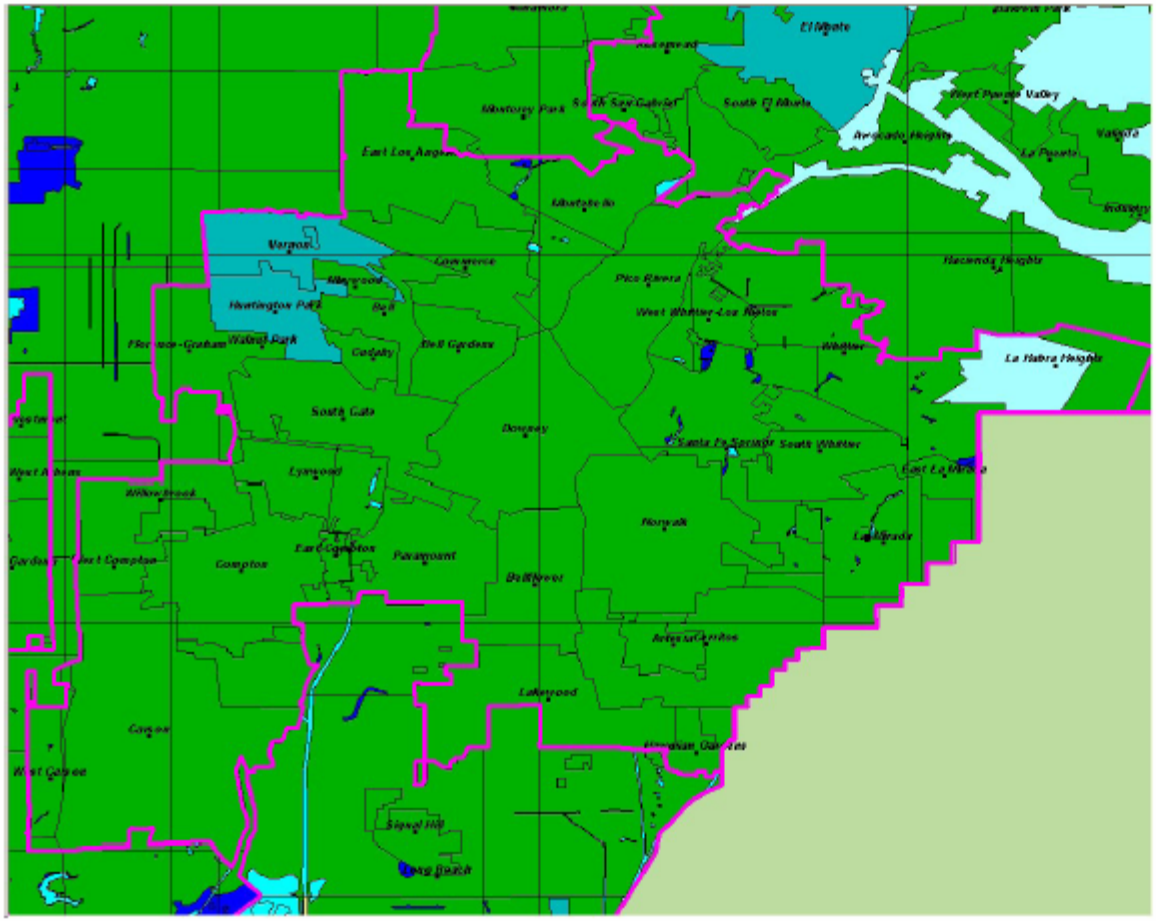
Legend

50 Year Flood Plain

100 Year Flood Plain

500 Year Flood Plain

1000 Year Flood Plain



Los Angeles County

Disaster Management Area E

FEMA Flood Plains

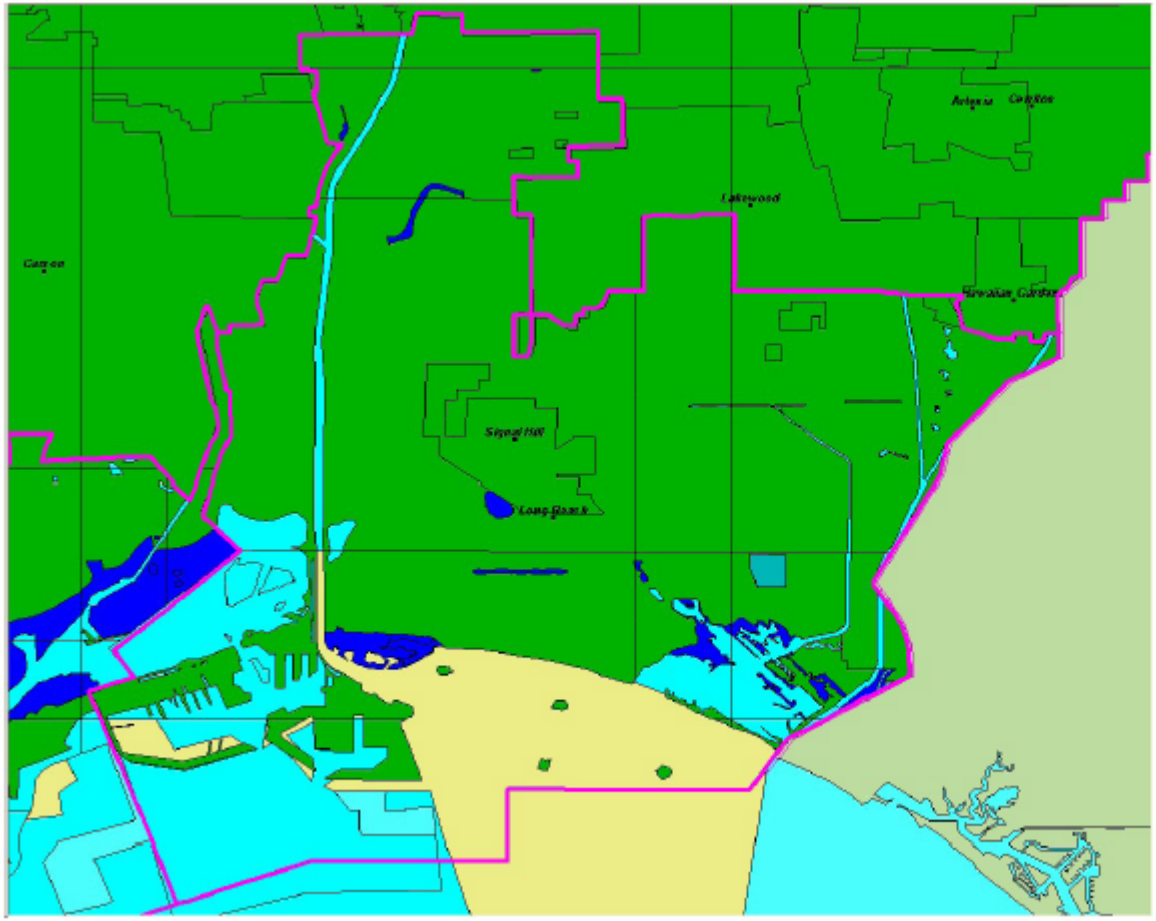
Legend

50 Year Flood Plain

100 Year Flood Plain

500 Year Flood Plain

1000 Year Flood Plain



Los Angeles County

Disaster Management Area F

FEMA Flood Plains

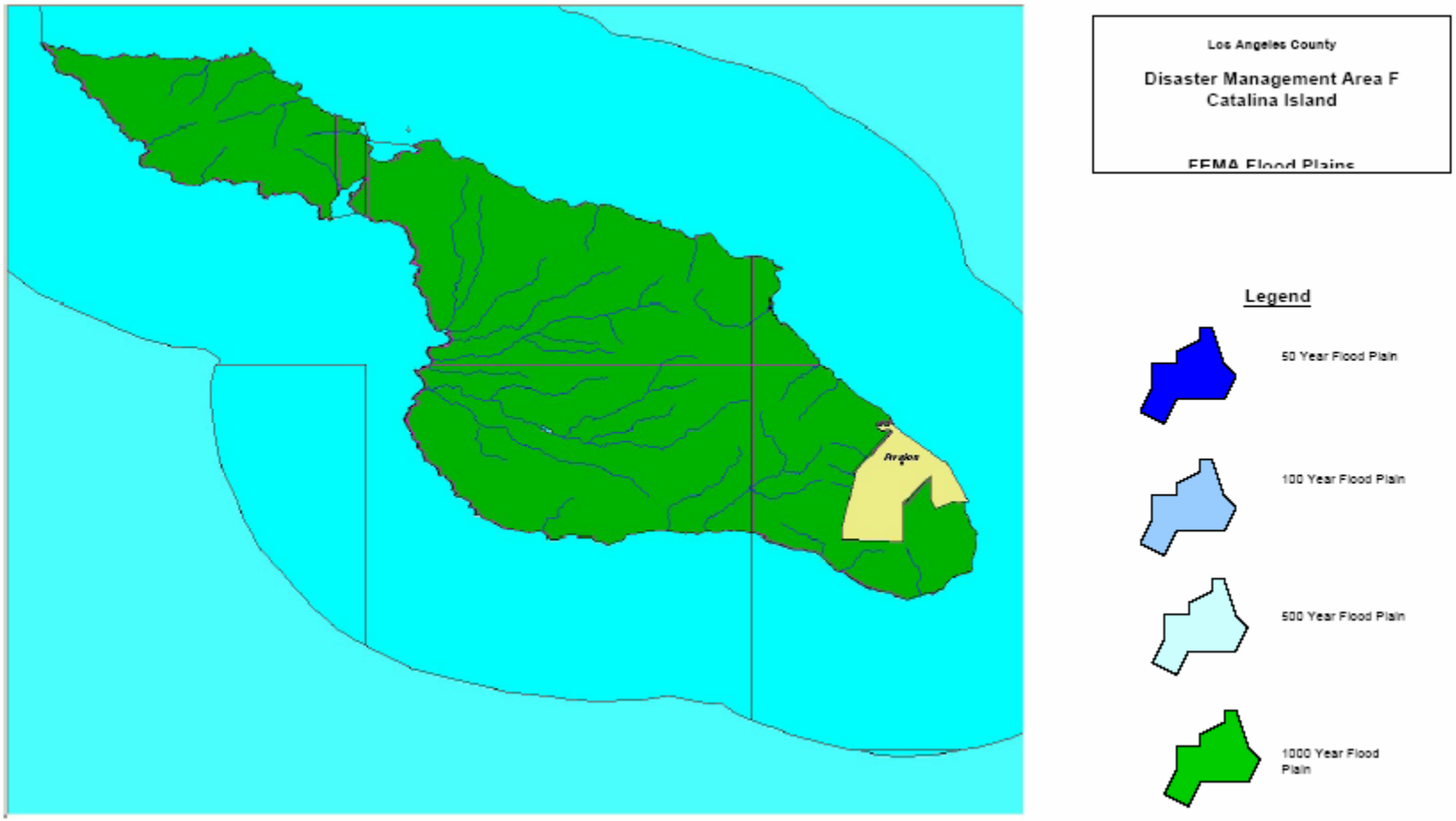
Legend

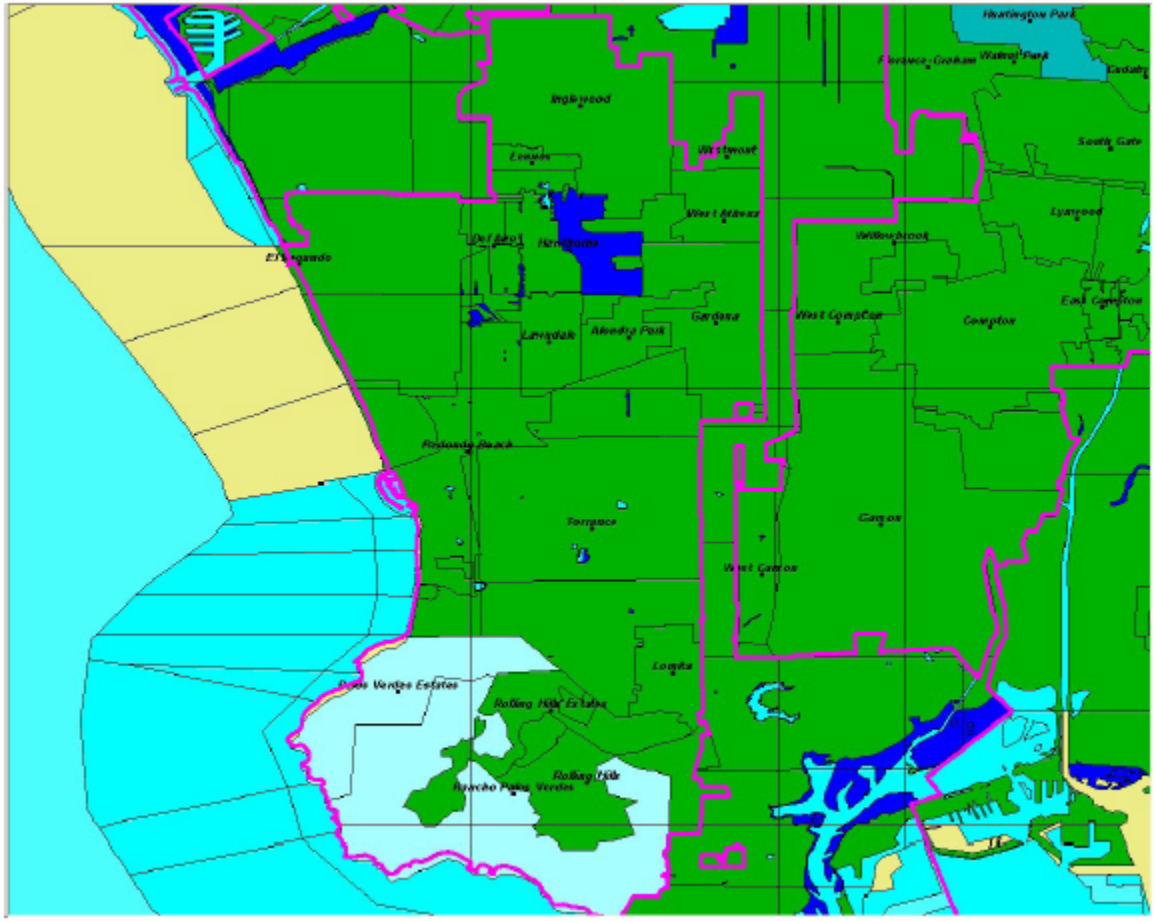
50 Year Flood Plain

100 Year Flood Plain

500 Year Flood Plain

1000 Year Flood Plain


Los Angeles County
Disaster Management Area F
Catalina Island
FEMA Flood Plains
Avalon
Legend
50 Year Flood Plain
100 Year Flood Plain
500 Year Flood Plain
1000 Year Flood Plain


Los Angeles County
Disaster Management Area G
FEMA Flood Plains
Legend
50 Year Flood Plain
100 Year Flood Plain
500 Year Flood Plain
1000 Year Flood Plain

MODERATE RISK Priority Hazards

Economic Disruption

Economic Disruption was rated a MODERATE PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force..

Los Angeles County is the most populous county in the nation. With approximately 10 million residents, it is home to about 30 percent of the state's population. The county has grown by nearly 2 million residents in the past 20 years, including more new immigrants than any other region of the country except the New York City area. Today, the county's population is 45 percent Latino, 31 percent non-Latino white, 12 percent Asian, and 10 percent black—similar to the racial/ethnic profile that state demographers predict for California by 2040. The county is also home to large numbers of low-income residents. Reflecting the size and diversity of the county, local government is large and complex, as are the problems of delivering local services to residents. In recent years, local governments in Los Angeles County have confronted difficult issues such as providing health care for the uninsured, reducing air pollution, improving low-performing schools, coping with racial/ethnic tensions involving police actions, and coming to terms with local efforts to secede from the city of Los Angeles. There are also housing, transportation, land use, and environmental issues relating to population growth and development. These factors tend to contribute negatively, on a large scale, to any economic downturn or disruption in the community.

"…Los Angeles County's suburban areas, like Orange County, are becoming so densely settled that they could be said to be urbanizing. Financial and social elites are withdrawing from civic leadership. "People think that most countries and cities and societies are moving away from industrialization," he says. "The notion of a postindustrial society is just wrong."

For example, the rise and decline of manufacturing jobs in American cities has taken a surprising twist in Los Angeles. The Chicago model of urban development assumed a growing industrial base. But in the 1960's and 70's, the traditional assembly-line factories that employed so many urban workers succumbed to cheaper labor overseas.

In the 1980's, the Pentagon's military buildup buoyed L.A.'s aerospace and defense companies and insulated the region from the industrial decline. After the cold war ended, however, cutbacks in defense spending hit Southern California particularly hard and deepened the recession of the early 1990's…."

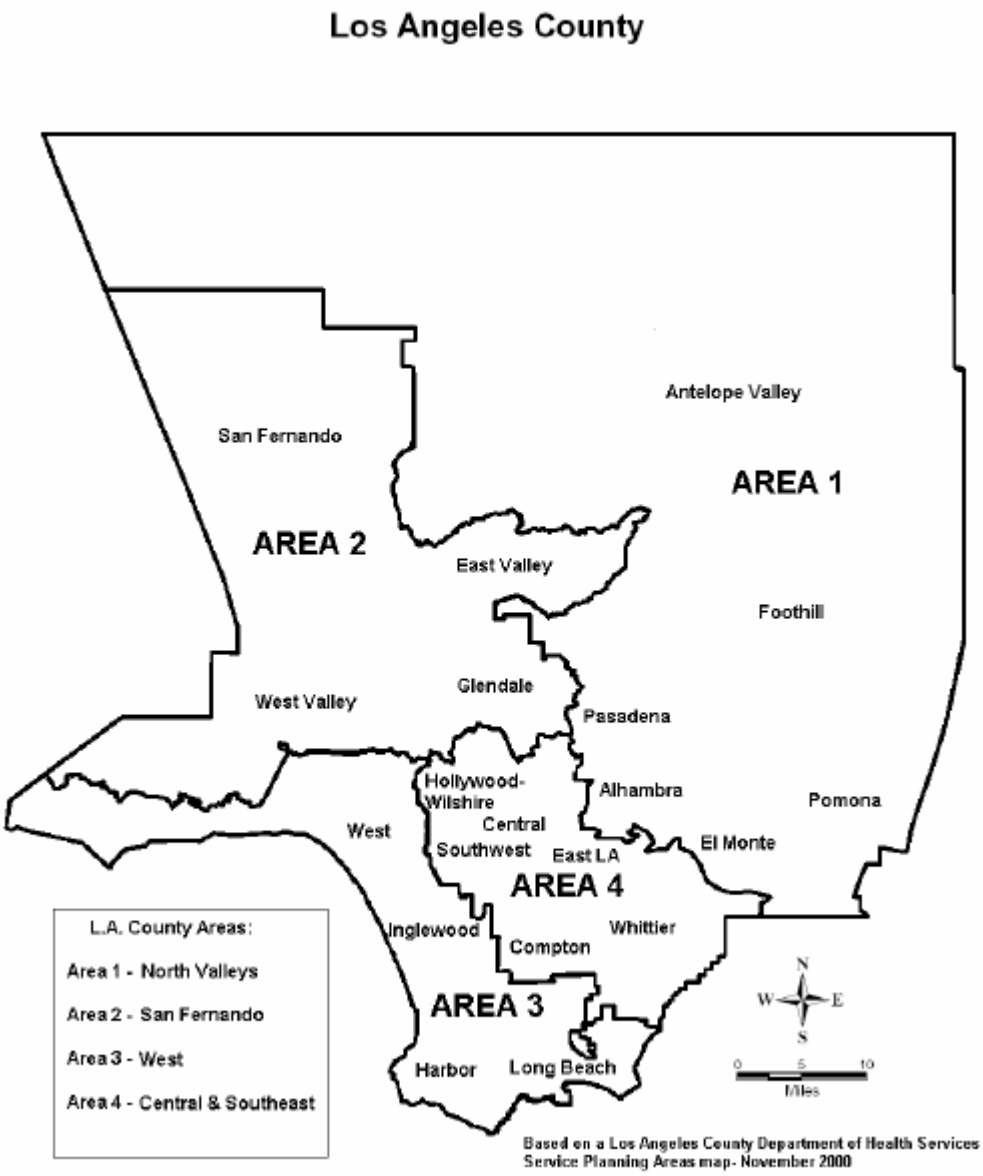
"The New Urban Studies"; Los Angeles scholars use their region and their ideas to end the dominance of the 'Chicago School'; By D.W. MILLER.

Recession

When asked to evaluate the LA County economy today, only 24 percent of residents rate it as excellent or good, while 48 percent say it is fair, and 27 percent poor. Half of county residents report that their area is in a mild (12%), moderate (25%), or serious (14%) recession, with Latinos (58%) and blacks (57%) more likely than whites (44%) to say their area is in recession. And far more residents today (67%) than just one year ago (52%) predict bad economic times for the state during the next 12 months. This economic angst is also taking its toll on residents' overall perception of the county:

- 40 percent of county residents say that the region is headed in the right direction, and 43 percent believe it is headed in the wrong direction, with whites, blacks, and San Fernando area residents more negative than others about the county's prospects.

- Residents are divided about whether the county will be a better or worse place to live in the future (32% each), with an equal percentage (31%) expecting little change.



Government Perceptions

Economic and social conditions — as well as the lingering effects of recent secession efforts — are also affecting attitudes about local government. Seventy-one percent of residents say that the county government is fair (49%) or poor (22%) at solving problems, while only 24 percent rate it as excellent or good. San Fernando area residents (28%) are more likely than others to view county government

in a negative light. While more residents (39%) say their city governments are excellent or good at solving problems, a majority (54%) still gives them low ratings. Residents of LA City are far more critical than others. Given their disenchantment with government, LA residents are open to a number of proposals for reform.

Given the vast differences in attitudes among racial and ethnic groups in LA County, it is not surprising that many residents are concerned about the state of race relations in the region. A majority of residents (53%) believes race relations are not so good (39%) or poor (14%) in the county today. Blacks (65%) are more negative than Latinos (58%), whites (50%), or Asians (45%).

Percent seeing the issue as a big problem in their part of Los Angeles County	All Adults	County Area			
		North Valleys	San Fernando	West	Central / Southeast
Traffic congestion on freeways and major roads	67%	64%	69%	70%	63%
Availability of housing that you can afford	54	47	52	57	59
Crime	41	32	36	38	55
Lack of opportunities for well-paying jobs	40	37	35	36	49
Population growth and development	38	34	43	37	37
Air pollution	37	30	34	32	47

Overall Outlook

Los Angeles County residents are in a sour mood when it comes to the state of the economy in California, the county, and their local areas. Two in three county residents predict bad economic times for California during the next 12 months. This is a considerably higher percentage than we found in PPIC Statewide Surveys in 2000, 2001, and 2002. These pessimistic views are shared across geographic, racial/ethnic, demographic, and political groups.

"Turning to economic conditions in California, do you think that during the next 12 months we will have good times financially or bad times?

	Los Angeles County Adults			
	Feb 00	Jan 01	Feb 02	Mar 03
Good times	77%	50%	38%	25%
Bad times	16	39	52	67
Don't know	7	11	10	8

When asked to evaluate the Los Angeles County economy today, only 24 percent of residents rate it as excellent or good—48 percent say it is fair, and 27 percent rate it as poor. The low ratings are consistent across geographic areas and demographic groups.

As for their parts of Los Angeles County, half of county residents report their areas are now in a mild (12%), moderate (25%) or serious (14%) recession. The Central/Southeast area has the highest percentage of residents (58%) who say their part of the county is in a recession. Higher percentages of

Latinos (58%) and blacks (57%) than whites (44%) say their areas are in a recession. Residents with lower incomes and less education and immigrants are also more likely than others to share this view.

Residents are divided about their overall outlook for the county: Forty percent say that Los Angeles County is headed in the right direction, and 43 percent believe that it is headed in the wrong direction. As for the future, 32 percent think the county will be a better place to live than it is today, 32 percent think it will be a worse place to live, and 31 percent think it will be about the same as now. Whites, blacks, and San Fernando area residents are more negative than others about the county's overall outlook.

Concerning quality of life, 61 percent of Los Angeles County residents say things are going well, and 36 percent say they are not. More than one-third of residents in all four areas believe things are going badly. Although 51 percent see themselves living in the same neighborhood five years from now, 22 percent expect to be living elsewhere in the county, and 17 percent expect to be living outside the county. Younger and more educated residents are most likely to say they will move out of the county in the next five years.

"Do you think that things in Los Angeles County are generally going in the right direction or the wrong direction?

	All Adults	County Area			
		North Valleys	San Fernando	West	Central / Southeast
Right direction	40%	41%	37%	42%	41%
Wrong direction	43	40	49	42	42
Don't know	17	19	14	16	17

State Budget Deficit and Local Tax Increases

Only 3 percent of county residents identify the state budget deficit as the most important issue facing Los Angeles County. Nevertheless, 92 percent of county residents say they are very concerned (71%) or somewhat concerned (21%) that the state budget deficit will cause severe cuts in areas such as city and county government and local schools. This concern is shared across the county's major areas and racial/ethnic groups. Women tend to be more concerned than men that the deficit will cause severe cuts in local services: 77% are very concerned, compared to 64% of men. Majorities in all partisan groups are concerned about potential cuts. However, Democrats (78%) are more likely than independents (68%) and Republicans (66%) to be very concerned.

Los Angeles County residents are willing to raise certain new taxes to fund some local services in light of the large state budget deficit. For example, 64 percent of county residents favor new taxes on alcoholic beverages and cigarettes in order to fund county-level public health and medical emergency services. However, there are large partisan differences: 69 percent of Democrats, 60 percent of independents, and 52 percent of Republicans support new alcohol and cigarette taxes. Women (69%) are much more likely than men (60%) and those under age 35 (68%) are more likely than those ages 55 and older (57%), to favor these so-called "sin taxes." Some six in 10 residents in each of the four geographic areas would support this tax increase to fund county-level services.

Public Policy Institute of California; Special Survey of Los Angeles in collaboration with the University of Southern California; Mark Baldassare, Research Director & Survey Director

Utility Loss

Utility Loss was rated a MODERATE PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

The 2000-2001 California electricity crisis brought to light many critical issues surrounding the state's power generation and distribution system, including its dependency on out-of-state resources. Although California has implemented effective energy conservation programs, the state continues to experience both population growth and weather cycles that contribute to a heavy demand for power.

Hydro-generation provides approximately 25 percent of California's electric power, with the balance coming from fossil fuels, nuclear, and green sources. As experienced in 2000 and 2001, blackouts can occur due to losses in transmission or generation and/or extremely severe temperatures that lead to heavy electric power consumption.

The Impact of Loss of Power on Water & Sewer Systems

California is a populous state that receives minimal rainfall. Approximately 70% of the population obtains its drinking water from surface sources with the remainder relying on ground water supplies. The basic types of system used by the water companies are pressurized (pressure fed) and non-pressurized (gravity fed) systems. The basic types of system used by the sewer companies are collection and treatment systems that use force pumps to move sewerage.

Drinking water is supplied to California residents through a myriad of governmental agencies, cities, districts, private utilities, mutual water companies, private businesses, and individually owned wells. There are over 10,000 public water suppliers in the state serving water to approximately 29 million consumers. Less than 10% of the public water systems in the state serve collectively more than 95% of the state's population. The remaining 90% of the systems serves less than 5% of the population. D.01-05-089 added Category M (limited other customers as necessary to protect public health and safety, to the extent exempted by the Commission) to the list of essential customers normally exempt from rotating outages.

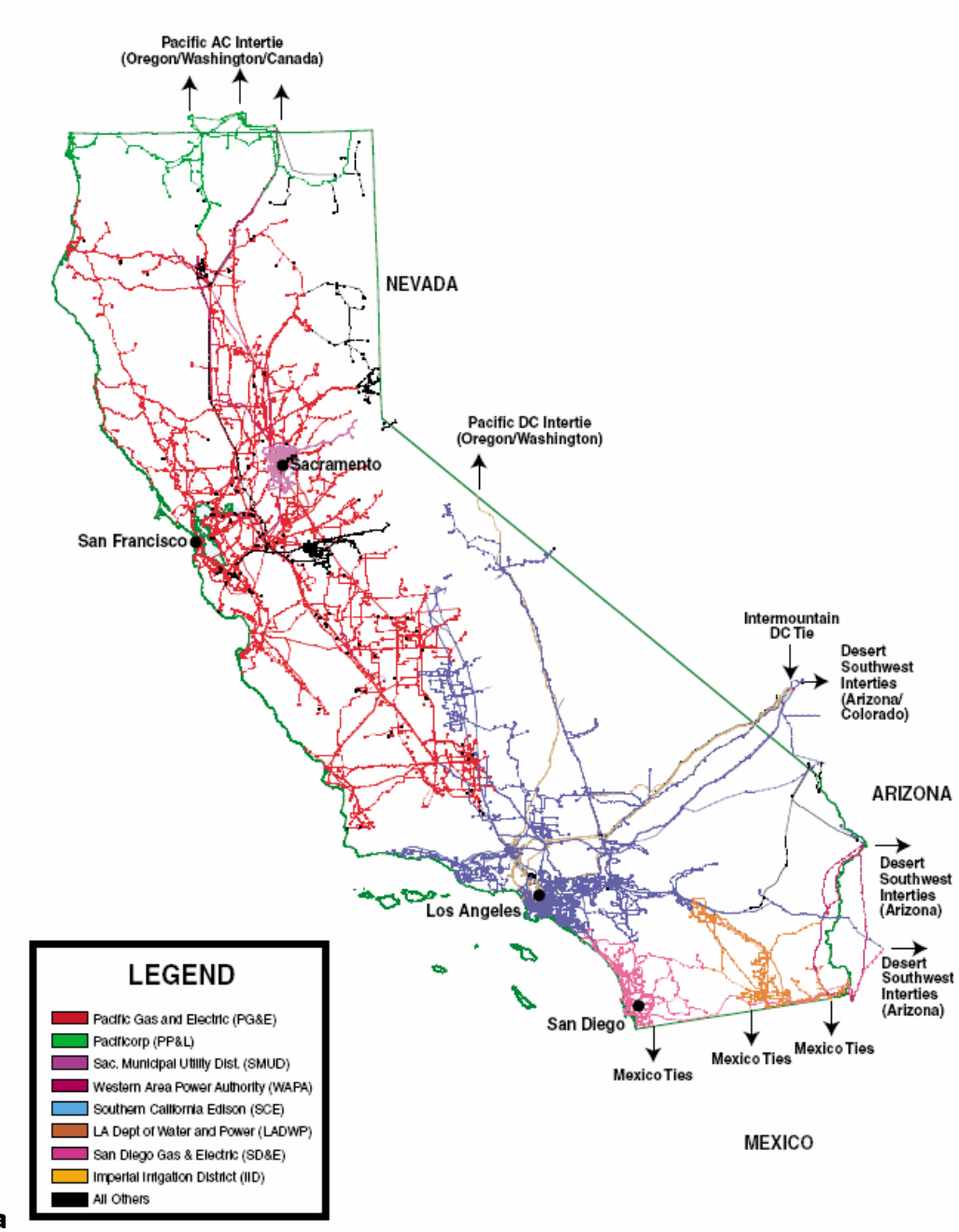
Due to the energy situation and rolling blackouts that occurred earlier in the year, the Water Division has conducted an informal inquiry into the impact of the rolling blackouts and has concluded that during the first four months of the year, California energy situation and rolling blackouts have had no significant impact upon the California Water and Sewer System Industries, in part due to the "Y2K" efforts in 1999. Water utilities and sewer system utilities appear to have the matter well under control with little to no impact on customer service at this time.

The Effects on Public Health & Safety

Public health and safety must be the primary factor used to evaluate a customer's eligibility for exemption from rotating outages. Exempting a fire department from rotating outages is of little value if the water resources needed to fight these fires are not available to it, particular during the high fire season. Fires that start during extreme fire weather conditions are a high risk to

the safety of the residents and firefighters, and have a high probability of spreading rapidly and inflicting major property loss, if water pumping facilities are compromised.

Power Transmission Lines in



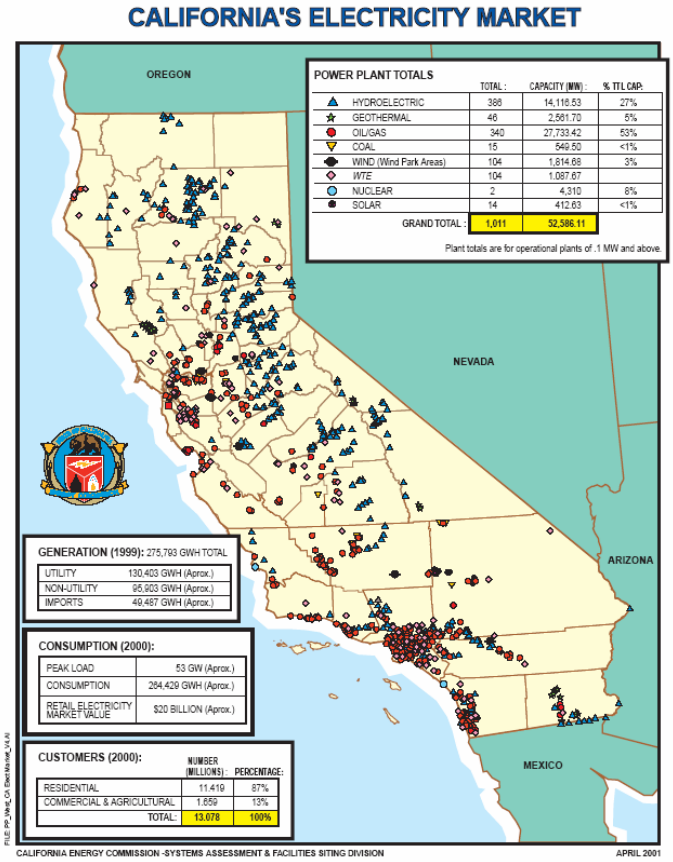
California

California Department of Energy

A review of the Chief of the Los Angeles County Fire Department's (LACFD) comments indicated that the emergency restoration procedures are likely inadequate and do not ensure that sufficient water supplies will be available in an emergency. LACFD also is concerned that the procedures have not been activated nor tested, the procedures may not have been communicated consistently between the electric utilities, water agencies and fire fighting forces, the procedures do not provide for the instantaneous supply of water required in a fire emergency, and the current procedures require the caller to identify the exact location of the power restoration.

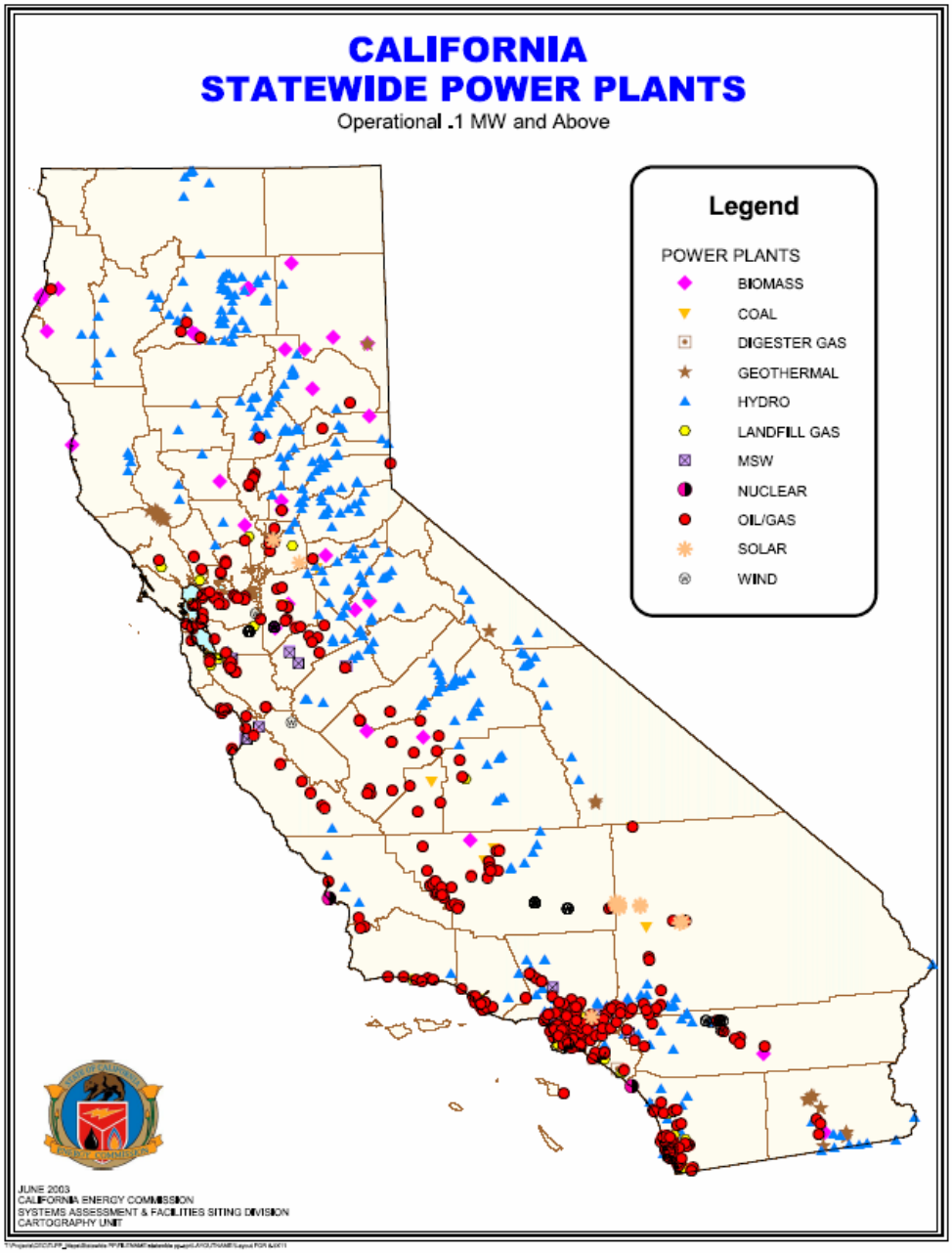
California has experienced many power outages from natural disasters such as fires, floods, earthquakes, and rainstorms. This means that water and sewer systems must have adequate back up power for extended electric outages independent of rolling blackouts. Many large water systems have adequate storage facilities and have installed backup generators to maintain system pressures during power failure due to "Y2K" efforts. Rotating power outage duration is usually less than two hours or between two to four hours. Therefore, rolling blackouts have little impact on customer service.

In addition, water and sewer treatment utilities may request partial or complete rotating outage exemption from electric utilities in times of emergency identified as requiring their service, such as fire fighting. The Water Division believes that it is reasonable to order electric companies to notify all of their water and sewer customers and test the emergency restoration procedures to minimize the effects on public health and safety. The Water Division recommends that water and sewer companies be excluded from the Category M.



Mitigation measures available for these systems

Backup power was a big issue due to the energy situation and rolling blackouts that occurred this summer. Many water systems have argued that backup power was not necessary since they received electrical power from more than one substation, but the power shortage has negated that argument. Many large water systems have adequate storage facilities and have installed backup generators to maintain system pressures during power failures due to "Y2K" efforts. It is the smaller systems that generally do not have backup power. To mitigate possible public health and safety impacts due to a loss of power, the Water Division recommends that all water companies with pressurized systems and sewer companies install backup generators on the wells with the largest pumping capacity or the lead wells. This will assure system integrity.



Transportation Incidents

Transportation Incidents were rated a MODERATE PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Because of the tremendous volume of transportation (commercial and private) into and out of LA County, the potential for a disastrous transportation-related event exists. Generally, transportation accidents are incidents that are handled by local jurisdictions or by jurisdictional mutual aid responses. A transportation accident, combined with a volatile hazardous substance or a large number of people, has the potential for becoming an event that requires a major mobilization of local, county, state and federal agencies.

According to the Department of Transportation, from 1994 to 2000 there were more than 1,800 fatal tractor-trailer accidents in the state, and from 1990 to 2001 more than 4,200 train accidents.

Aircraft Incidents

Airline crashes are listed as a less significant hazard because individually they are less likely to result in a state or federal disaster declaration. However, LAUSD recognizes the severity of these incidents as they often lead to deaths and injuries, especially if the disaster takes place on or near school property.

Airline(s)/Flight	Location	Airline(s)/Flight	Location
South West 1455	Burbank	Swift Air Lines, Inc.	Marina Del Rey
Phoenix Air 35A	Fresno	Pacific Southwest Airlines	San Diego
USAIR 1493/Skywest 5569	Los Angeles	Continental Airlines	Los Angeles
Bell	Alamo	Jet Aviation, Ltd.	Palm Springs
North Star/Cessna	Oakland	Mercer Airlines	Van Nuys
Aero naves De Mexico/Piper	Cerritos	Golden West Airlines	Whittier
China Airlines	San Francisco	Sierra Pacific Airlines	Bishop
Western Helicopters	Valencia	Trans World Airlines	Los Angeles
McDonell Douglas Corp.	Edwards AFB	Spectrum Air, Inc.	Sacramento
Air California 336	Orange County	Trans World Airlines	San Francisco

Most Recent Accident

On March 5, 2000, about 1811 Pacific standard time (PST),[1] Southwest Airlines, Inc., flight 1455, a Boeing 737-300 (737), N668SW, overran the departure end of runway 8 after landing at Burbank-Glendale-Pasadena Airport (BUR), Burbank, California. The airplane touched down at approximately 182 knots, and about 20 seconds later, at approximately 32 knots, collided with a metal blast fence and an airport perimeter wall. The airplane came to rest on a city street near a gas station off of the airport property. Of the 142 persons on board, 2 passengers sustained serious injuries; 41 passengers and the captain sustained minor injuries; and 94 passengers, 3 flight attendants, and the first officer sustained no injuries. The airplane sustained extensive exterior damage and some internal damage to the passenger cabin. During the accident sequence, the forward service door (1R) escape slide inflated inside the airplane; the nose gear collapsed; and the forward dual flight attendant jump seat, which was occupied by two flight attendants, partially collapsed.

The National Transportation Safety Board determines that the probable cause of this accident was the flight crew's excessive airspeed and flight path angle during the approach and landing and its failure to abort the approach when stabilized approach criteria were not met. Contributing to the accident was the controller's positioning of the airplane in such a manner as to leave no safe options for the flight crew other than a go-around maneuver.

Rail Incidents

Train derailments are so localized that the incidents themselves would not constitute a disaster. However, if there are volatile or flammable substances on the train and the train is in a highly populated or densely forested area, death, injuries, damage to homes, or wild fires could occur.

There have been 14 MAJOR train accidents in California since 1950.

Incident	Location
Metrolink collision	Glendale
Southern Pacific collision	Beaumont
Union Pacific derailment	Kelso
Freight train derailment	Cajon
Atchison, Topeka, & Santa Fe/Union Pacific collision	Cajon
Atchison, Topeka, & Santa Fe/ATSF collision	Corona
Amtrak passenger train collision	Stockton
Southern Pacific derailment	San Bernardino
Southern Pacific derailment	West Surf
Union Pacific collision	Kelso
Western Pacific derailment	Hayward
Southern Pacific collision	Thousand Palms
Southern Pacific collision	Tracy
Two Southern Pacific trains collision	Indio

In Los Angeles County, there was a total of 148 train accidents from January 2000 to June 2004.

The following statistics append this figure:

- Deaths – 0
- Injuries – 13
- Loss - $7,978,342

TYPE OF ACCIDENT

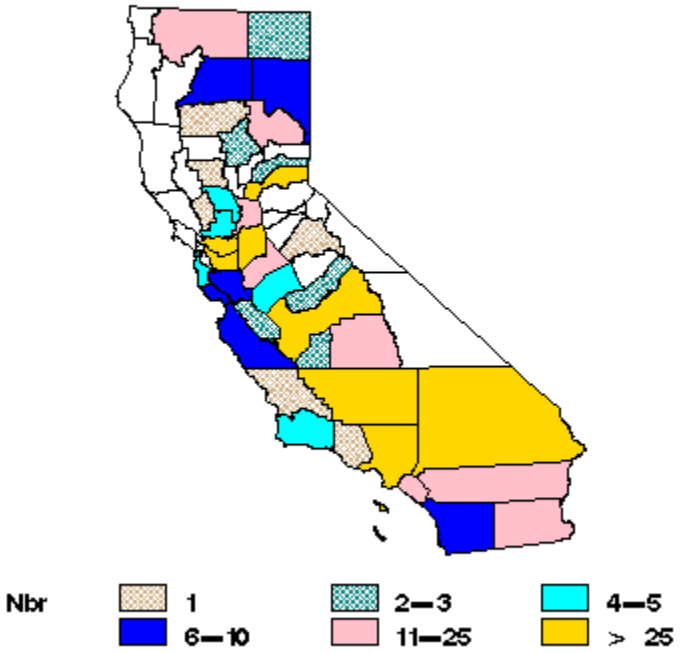
- Collisions – 9
- Derailments – 112
- Other – 27

CAUSE OF ACCIDENT

- Equipment – 1
- Human Error – 84
- Other – 13
- Signal Malfunction – 1
- Track Faulty – 49

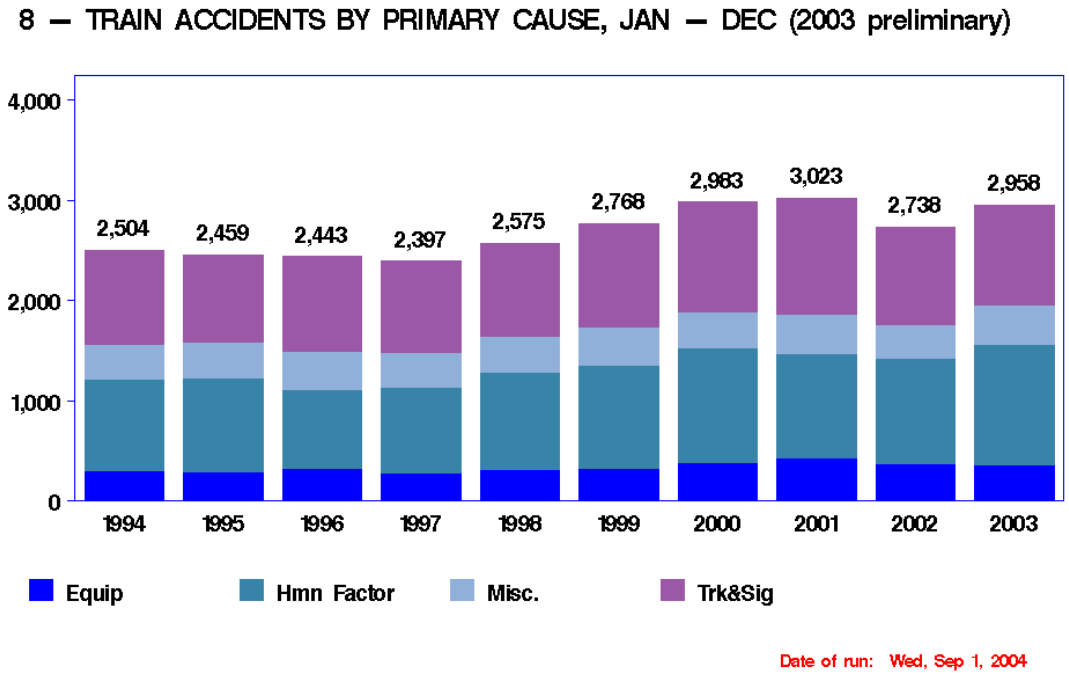
TRAIN ACCIDENTS FOR CALIFORNIA, January 2000 TO June 2004

RAILROAD: ALL TYPE OF TRACK: All



Excludes Highway Rail Incidents

Federal Railroad Administration, Office of Safety Analysis



Highway Incidents

On any given day, Los Angeles County highways have thousands of large trucks carrying all sorts of cargos (including hazardous materials). The potential for a highway accident involving one or more trucks carrying volatile cargo is great. Generally, these accidents are handled as incidents by the appropriate jurisdiction; however, because of the dense population and shear volume of vehicular traffic, the risk of a crash becoming a catastrophic event grows.

In 2001, 429,000 large trucks (gross vehicle weight rating greater than 10,000 lbs.) were involved in traffic crashes in the United States: 4,793 were involved in fatal crashes. A total of 5,082 people died (12 percent of all the traffic fatalities reported in 2001) and an additional 131,000 were injured in those crashes.

In 2000, large trucks accounted for 4 percent of all registered vehicles and 7 percent of total vehicle miles traveled (2001 registered vehicle and vehicle miles traveled data not available). In 2001, large trucks accounted for 8 percent of all vehicles involved in fatal crashes and 4 percent of all vehicles involved in injury and property-damage-only crashes.

According to a 1999 study performed by the FMCSA (*Cost of Large Truck- and Bus-Involved Crashes*), the average cost per crash involving a large truck is $75,637. With 429,000 large truck-related crashes in 2001, the total monetary expense for 2001 is minimally $32,448,273,000.00 using 1999 cost estimates.

Chain reaction accidents on crowded interstate highways that intertwine Los Angeles County are also another consideration. These events can quickly grow into localized disasters that overstrain local responders. Potentially, they could expand into catastrophic incidents involving hazardous materials, mass casualties, fire, and transportation disruption. Depending on the occurrence, the response could involve mass evacuation, mutual aid and other aspects of managing a disaster.

Maritime Incidents

There is ever-present danger of boat collisions and crashes in the crowded waters off Los Angeles County. There is also the constant potential for plane crashes in the ocean. A recent development was enforcement of FAA policy mandating disaster response plans for planes taking off over the ocean from L.A. International Airport. The U.S. Coast Guard, L.A. County Lifeguards, County Fire Department, L.A. City Fire Department, L.A. County Sheriffs, and other allied agencies have developed a response plan for airliner crashes in the Santa Monica Bay.

Part of the plan calls for personnel from L.A. County Fire Station 110, USAR1, and the Air Operations Section to fly rescue swimmers to the crash site, deploy them from helicopters with inflatable life boats, and to begin rescue operations while other agencies respond with boats and helicopters to remove people from the water. These "Blue Water Rescue" teams may also be dispatched to boating accidents in the open ocean.

U.S. ports are foreign flag vessels. Operators of shallow-draft vessels are more likely to be U.S. corporations. In many ports, there are more shallow-draft vessel movements than deep-draft arrivals. In 1993, nearly 5,200 towing vessels, 26,800 dry cargo barges, and 4,000 tank barges traveled through U.S. waterways (U.S. Army Corps of Engineers, 1993), most of them stopping at coastal ports while on canal or river voyages.

Many commercial vessels carry passengers, heightening the need for attention to safety. Ferries and specialty vessels, such as casino ships and sport fishing boats, number in the thousands and may carry several hundred passengers at once (National Research Council, 1995). The cruise industry is a growing maritime presence, with single ships carrying as many as 3,300 persons and many of the leading cruise markets in or adjacent to U.S. waters (National Research Council, 1995).

Public reaction to major ship accidents and resulting catastrophic oil spills have been the driving force behind major government initiatives to develop new or improved VTS systems in U.S. ports. In 1971, two tankers collided in the fog near the Golden Gate Bridge in San Francisco spilling about 3,000 tons of heavy oil and setting in motion legislation that led to the VTS systems now installed in San Francisco, Puget Sound, New York, and Houston. A subsequent report stated that the overriding cause of the accident was the lack of Coast Guard authority to control traffic, a situation that allowed vessels to forgo communications with traffic advisers (Office of Technology Assessment, 1975). Instead of counting on radar and radio technologies, the ships used only foghorns, which went unheard (Office of Technology Assessment, 1975).

The years following that accident were marked by many maritime safety initiatives, including improvements in navigation information technologies and the deployment of VTS systems. But in 1989, when the **Exxon Valdez** ran aground outside the Prince William Sound VTS surveillance area and spilled 35,000 tons of Alaskan crude oil, the resulting damage and clean-up costs totaled several billion dollars (Office of Technology Assessment, 1990) and provoked enduring public distrust of assurances about tanker safety. This accident and its aftermath led to the congressional legislation that, in turn, resulted in the VTS-2000 program.

The public outcry over maritime safety tends to run in cycles, reaching a peak just after major accidents and then appearing to diminish with time. However, with major oil spills occurring around the world and spills reported regularly in the United States, the safety of U.S. ports and waterways is likely to remain a continuing concern.

SAFETY ALERT

(213)-241-3199	Office of Environmental Health and Safety	
No. 03-09	**PREPARATIONS FOR SHELTERING-IN-PLACE**	**May 2003**

When a hazardous substance is released in outdoor air, "Shelter-in-Place" is a common method of protecting personnel from potential exposure. To be effective, this method depends on the rapid movement of personnel indoors, and the prompt shutdown of building ventilation systems to prevent outside air from entering. "Shelter-in-Place" should not be confused with "Lock-Down", which isolates students from an act of violence or other physical hazard, and does not include shutdown of air handling systems.

In order to quickly implement the Shelter-in-Place procedure, it is necessary that facility personnel be familiar with the location and operation of the heating, ventilation and air conditioning (HVAC) system. In order to prepare for effective Sheltering-in-Place, the Plant Manager and other members of the Security/Utilities Team should:

1. Identify and document the location of all air intake vents for each building. Intake vents are typically located on exterior building walls or rooftops.
2. Identify and document the location of all HVAC shutdown switches and access keys. Some buildings may have multiple air handling units.
3. Identify and document the location of all other points where outside air can enter the building (e.g. ventilation grills, gaps under doors).
4. Review HVAC system diagrams and plans.
5. Identify a method for determining wind direction during emergencies (e.g., flag, wind sock). This information may be useful in assessing whether the airborne contaminant is moving toward or away from the school.
6. Ensure members of the Security/Utilities Team are familiar with their assigned responsibilities as specified in the school's emergency plan.

The Shelter-in-Place procedure is described in the OEHS *Model Safe School Plan, Volume 2 – Emergency Procedures*. Copies of the *Model Plan* may be downloaded at www.laschools.org/oehs. Inquiries may be directed to OEHS at 888-455-4665.

DISTRIBUTION: All Schools and Offices

Drought

Drought was rated a MODERATE PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Unlike weather forecasting, Climatologists deal with years. One 6 inch rainstorm out of nowhere could make the predictions for this year look foolish. Therefore drought forecasts are tempered with, "indications are" "likely" and "overdue".

Vulnerability and Impact

All Los Angeles Unified School District facilities are vulnerable to the affects of drought in that their landscaping and playing fields would be adversely affected from water shortages and heat. The impact of the affects of a catastrophic drought is estimated at 16% of LAUSD assets.

Definition of Drought

There are four different ways that drought can be defined: Meteorological - a measure of departure of precipitation from normal. Due to climatic differences what is considered a drought in one location may not be a drought in another location. Agricultural - refers to a situation when the amount of moisture in the soil no longer meets the needs of a particular crop. Hydrological - occurs when surface and subsurface water supplies are below normal. Socioeconomic - refers to the situation that occurs when physical water shortage begins to affect people.

Agricultural Definition of Drought

Drought is a protracted period of deficient precipitation resulting in extensive damage to crops, resulting in loss of yield.

Lack of rainfall for an extended period of time can bring farmers and major metropolitan areas to their knees. It does not take very long; a few rain-free weeks spreads panic and shrivels crops. We are told to stop washing our cars, cease watering the grass and take other weather conservation steps. Continued sunshine without sufficient rain can turn a rain forest into a desert; so maybe sunny weather is not always the best weather.

The Dust Bowl days of the 1930's affected 50,000,000 acres of land, rendering the farmers helpless. In the 1950's the Great Plains suffered a severe water shortage when seven years went by with rainfall well below normal. Crop yields failed, the water supply fell.

Concept of Drought

A good definition of agricultural drought should be able to account for the variable susceptibility of crops during different stages of crop development, from emergence to maturity. deficient topsoil moisture at planting may hinder germination, leading to low plant populations per hectare and a reduction of final yield. However, if topsoil moisture is sufficient for early growth requirements, deficiencies in subsoil moisture at this early stage may not affect final yield if subsoil moisture is replenished as the growing season progresses or if rainfall meets plant water needs.

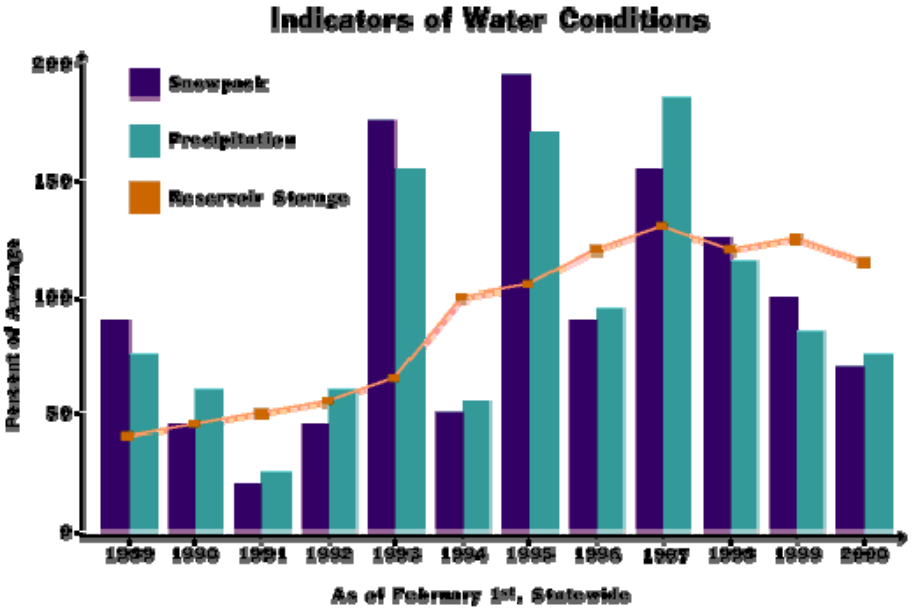
Drought is an insidious hazard of nature. Although it has scores of definitions, it originates from a deficiency of precipitation over an extended period of time, usually a season or more. This deficiency

results in a water shortage for some activity, group, or environmental sector. Drought should be considered relative to some long-term average condition of balance between precipitation and evapo-transpiration (i.e., evaporation + transpiration) in a particular area, a condition often perceived as "normal". It is also related to the timing (i.e., principal season of occurrence, delays in the start of the rainy season, occurrence of rains in relation to principal crop growth stages) and the effectiveness of the rains (i.e., rainfall intensity, number of rainfall events). Other climatic factors such as thigh temperature, high wind, and low relative humidity are often associated with it in many regions of the world and can significantly aggravate its severity. Drought should not be viewed as merely a physical phenomenon or natural event. Its impacts on society result from the interplay between a natural event (less precipitation than expected resulting from natural climatic variability) and the demand people place on water supply. Human beings often exacerbate the impact of drought. Recent droughts in both developing and developed countries and the resulting economic and environmental impacts and personal hardships have underscored the vulnerability of all societies to this "natural" hazard.

A five-year drought has parched soils, lowered reservoirs and weakened forests. And if the past is any guide, the dry spell could go on for decades.

One dry year does not normally constitute a drought in California, but serves as a reminder of the need to plan for droughts. California's extensive system of water supply infrastructure -- its reservoirs, groundwater basins, and inter-regional conveyance facilities -- mitigates the effect of short-term dry periods for most water users. Defining when a drought begins is a function of drought impacts to water users. Hydrologic conditions constituting a drought for water users in one location may not constitute a drought for water users elsewhere, or for water users having a different water supply. Individual water suppliers may use criteria such as rainfall/runoff, amount of water in storage, or expected supply from a water wholesaler to define their water supply conditions.

The graphic below illustrates several indicators commonly used to evaluate California water conditions. The percent of average values are determined for measurement sites and reservoirs in each of the State's ten major hydrologic regions. Snow pack is an important indicator of runoff from Sierra Nevada watersheds, the source of much of California's developed water supply.



Drought is a gradual phenomenon. Although droughts are sometimes characterized as emergencies, they differ from typical emergency events. Most natural disasters, such as floods or forest fires, occur relatively rapidly and afford little time for preparing for disaster response. Droughts occur slowly, over a multiyear period. There is no universal definition of when a drought begins or ends. Impacts of drought are typically felt first by those most reliant on annual rainfall -- ranchers engaged in dry land grazing, rural residents relying on wells in low-yield rock formations, or small water systems lacking a reliable source. Criteria used to identify statewide drought conditions do not address these localized impacts. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.

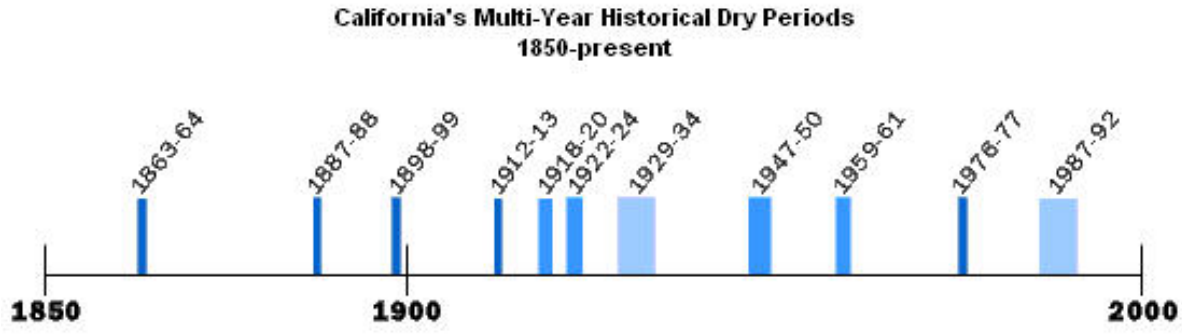
Past California Droughts

Droughts exceeding three years are relatively rare in Northern California, the source of much of the State's developed water supply. The 1929-34 drought established the criteria commonly used in designing storage capacity and yield of large Northern California reservoirs. The table below compares the 1929-34 drought in the Sacramento and San Joaquin Valleys to the 1976-77 and 1987-92 droughts. The driest single year of California's measured hydrologic record was 1977. California's most recent multi-year drought was 1987-92.

Severity of Extreme Droughts in the Sacramento and San Joaquin Valleys

Drought	Sacramento Valley Runoff		San Joaquin Valley Runoff	
Period	(maf/yr)	(% Average 1901-96)	(maf/yr)	(% Average 1906-96)
1929-34	9.8	55	3.3	57
1976-77	6.6	37	1.5	26
1987-92	10.0	56	2.8	47

Measured hydrologic data for droughts prior to 1900 are minimal. Multi-year dry periods in the second half of the 19th century can be qualitatively identified from the limited records available combined with historical accounts, as illustrated in the figure below, but the severity of the dry periods cannot be directly quantified.



1. Dry periods prior to 1900 estimated from limited data.
2. Covers dry periods of statewide or major regional extent.

One approach to supplementing California's limited period of measured data is to statistically reconstruct data through the study of tree rings (called dendrochronology). Information on the thickness of annual growth rings can be used to infer the wetness of the season. Site-specific approaches to supplementing the historical record can include age-dating dryland plant remains now submerged in place by rising water levels, or sediment and pollen studies. For

example, a 1994 study of relict tree stumps rooted in present-day lakes, rivers, and marshes suggested that California sustained two epic drought periods, extending over more than three centuries. The first epic drought lasted more than two centuries before the year 1112; the second drought lasted more than 140 years before 1350. In this study, the researcher used drowned tree stumps rooted in Mono Lake, Tenaya Lake, West Walker River, and Osgood Swamp in the central Sierra Nevada. These investigations indicate that California has been subject to droughts more severe and more prolonged than those witnessed in the brief historical record.

The Long-term Climatic Viewpoint

The historical record of California hydrology is brief in comparison to geologically modern climatic conditions. The following sampling of changes in climatic conditions over time helps put California's twentieth century droughts into perspective. Most of the dates shown below are necessarily approximations. Not only must the climatic conditions be inferred from indirect evidence, but the onset or extent of changed conditions may vary with geographic location. Readers interested in the subject of paleo-climatology are encouraged to seek out the extensive body of popular and scientific literature on this subject.

Past California Droughts

The historical record of California hydrology is brief in comparison to the time period of geologically modern climatic conditions. The following samplings of changes in climatic and hydrologic conditions help put California's twentieth century droughts into perspective, by illustrating the variability of possible conditions. Most of the dates shown below are necessarily approximations, since the dates must be inferred from indirect sources.

11,000 years before present

Beginning of Holocene Epoch- Recent time, the time since the end of the last major glacial epoch

6,000 years before present

Approximate time when trees were growing in areas now submerged by Lake Tahoe. Lake levels were lower then, suggesting a drier climate.

900-1300 A.D.(approximate)

The Medieval Warm Period, a time of warmer global average temperatures. The Arctic ice pack receded, allowing Norse settlement of Greenland and Iceland. The Anasazi civilization in the Southwest flourished, its irrigation systems supported by monsoonal rains.

1300-1800 A.D. (approximate)

The Little Ice Age, a time of colder average temperatures. Norse colonies in Greenland failed near the start of the time period, as conditions became too cold to support agriculture and livestock grazing. The Anasazi culture began to decline about 1300 and had vanished by 1600, attributed in part to drought conditions that made agriculture infeasible.

Mid - 1500s A.D.

Severe, sustained drought throughout much of the continental U.S., according to dendro-chronology. Drought suggested as a contributing factor in the failure of European colonies at Parris Island, South Carolina and Roanoke Island, North Carolina.

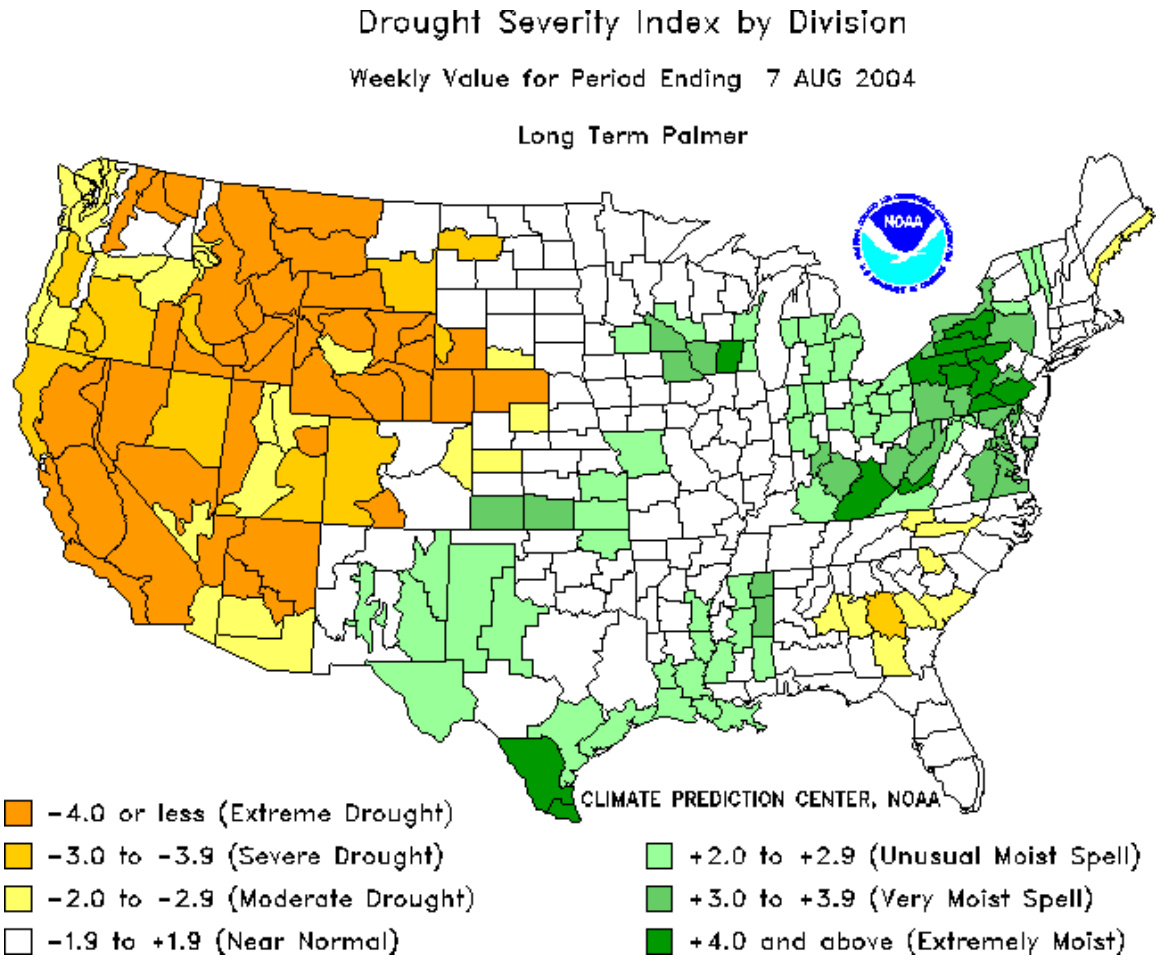
1850s A.D.

Sporadic measurements of California precipitation began.

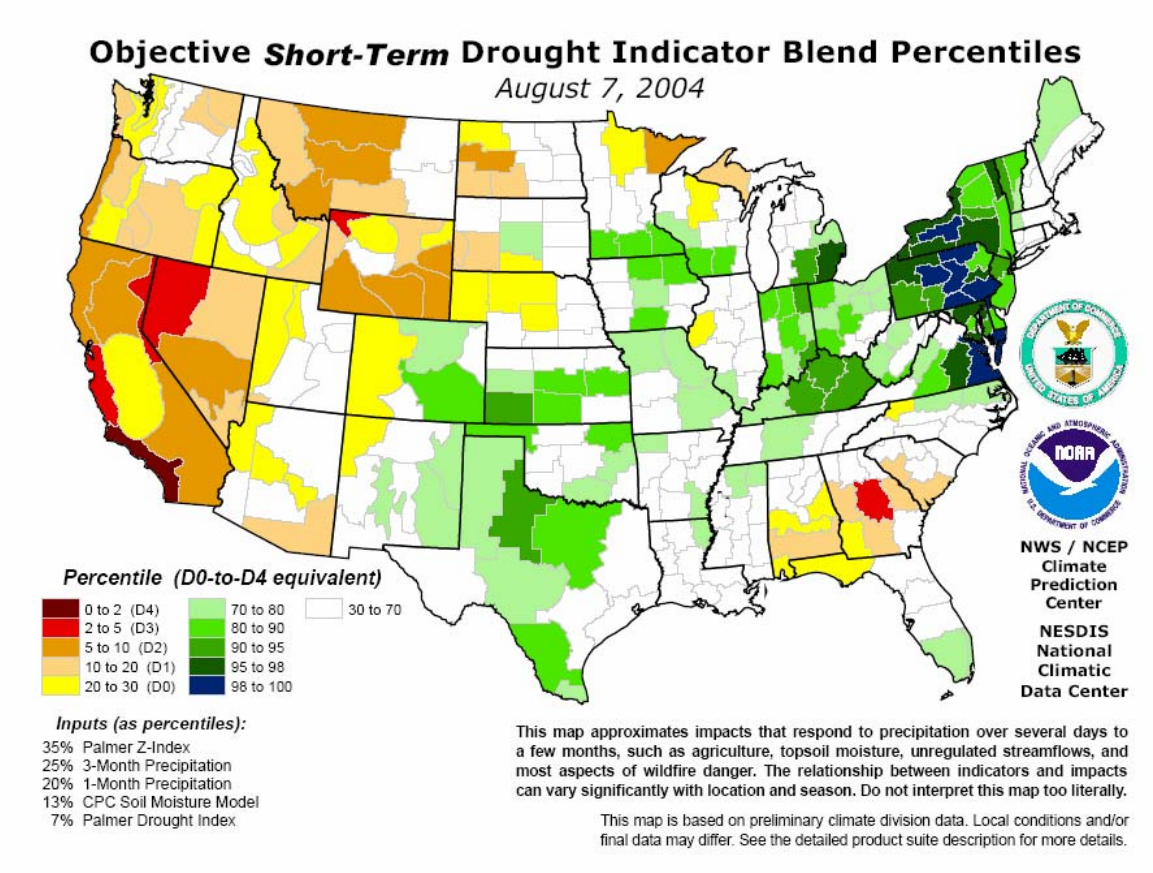
1890s A.D.

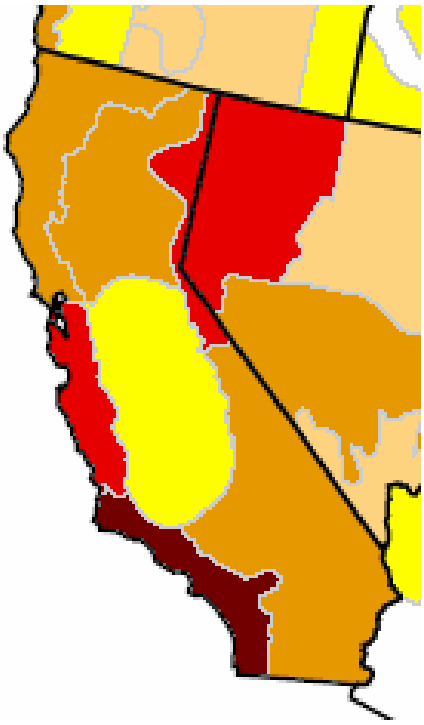
Long-term stream flow measurements began at a few California locations

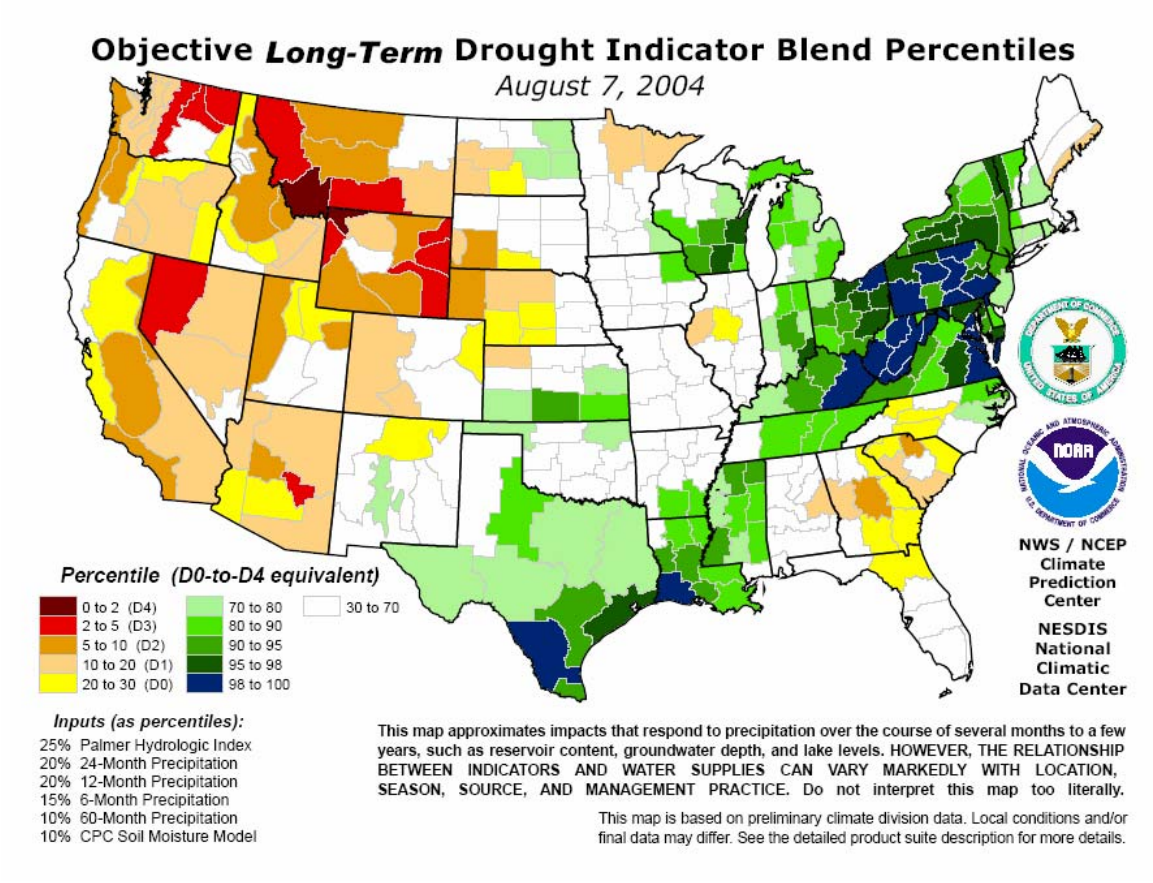
The image below is a the most current snapshot of drought conditions across the U.S. It is provided by NOAA's Climate Prediction Center.

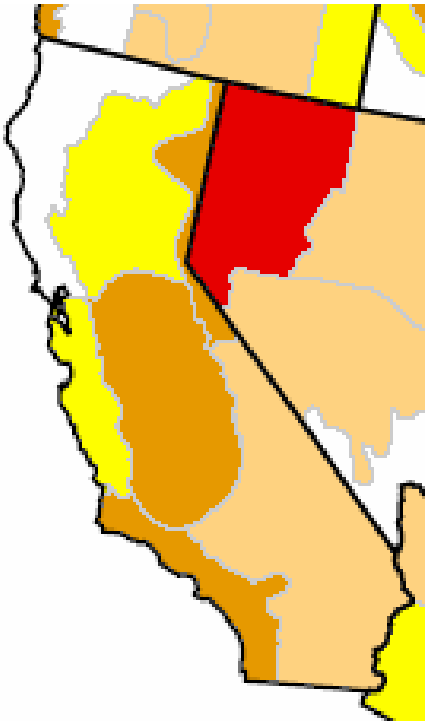


Drought Monitor






Objective Long-Term Drought Indicator Blend Percentiles
August 7, 2004
Percentile (D0-to-D4 equivalent)
0 to 2 (D4)
2 to 5 (D3)
5 to 10 (D2)
10 to 20 (D1)
20 to 30 (D0)
70 to 80
80 to 90
90 to 95
95 to 98
98 to 100
30 to 70
NWS / NCEP Climate Prediction Center
NESDIS National Climatic Data Center
Inputs (as percentiles):
25% Palmer Hydrologic Index
20% 24-Month Precipitation
20% 12-Month Precipitation
15% 6-Month Precipitation
10% 60-Month Precipitation
10% CPC Soil Moisture Model
This map approximates impacts that respond to precipitation over the course of several months to a few years, such as reservoir content, groundwater depth, and lake levels. HOWEVER, THE RELATIONSHIP BETWEEN INDICATORS AND WATER SUPPLIES CAN VARY MARKEDLY WITH LOCATION, SEASON, SOURCE, AND MANAGEMENT PRACTICE. Do not interpret this map too literally.
This map is based on preliminary climate division data. Local conditions and/or final data may differ. See the detailed product suite description for more details.



The Drought Monitor was introduced as an operational weekly product in 1999 to provide an overview of conditions averaged across a broad array of time scales and impact indicators, leaning toward those that seem most relevant to observed impacts. This approach has led to an unprecedented degree of cooperation and coordination among a variety of disparate Federal, state, and local government agencies, in addition to many interested members of the academic and private research communities. The result has boiled the complex issues of drought and drought-related impact assessment down to a single, simple, visually-intuitive summary of conditions which has replaced the uncoordinated, disparate, and often contradictory assortment of opinions and data that formerly characterized responses to requests for drought information.

While this approach has been successful and well-received overall, there are situations where it can be substantially misleading. Drought and its related impacts operate on a variety of time scales, and the Drought Monitor depiction (which usually portrays some semblance of an "average" condition across all time scales and impact types) cannot accurately confer information when conditions and impacts dependent on one time scale differ dramatically from those related to a much longer (or shorter) time scale. Hypothetically, a region which has received consistently and substantially inadequate precipitation over the course of several years might experience a day, or a few days, or even a few weeks of heavy rain. What is the overall drought status after this occurs? The Drought Monitor would likely depict a substantial improvement in conditions (in deference to major short-term relief) but maintain some indication of continuing drought (in deference to the multi-year dryness which likely changed only slightly in response to the heavy rains). This is all that a single-image depiction could possibly do. In reality, however, the degree to which drought-related impacts would continue to be a concern would depend on what time scale a given class of impacts responds to. Obviously, in this situation, wildfire danger would decline sharply, at least for the immediate future. Also, unregulated stream flows would swell from runoff and topsoil moisture would be substantially recharged if the precipitation lasted long enough, thereby providing at least a temporary respite for non-irrigated agriculture. On the other hand, reservoir stores might increase only slightly, having been depleted by a few years of precipitation failing to keep up with demand, and ground water levels and/or well water depth, if they were low, might be barely (or at best belatedly) affected by the heavy short-term rains, since much of the water was likely dispersed by swollen streams or absorbed by parched topsoil.

To confer information about drought status on different time scales to those users that need such information, two new experimental products are being made public which will serve as timescale-specific supplements to the Drought Monitor at a basic level. Both assess conditions based on a blend of several drought indicators, and are depicted relative to the local historic record.

The ***Short-Term Blend*** approximates drought-related impacts that respond to precipitation (and secondarily other factors) on time scales ranging from a few days to a few months, such as wildfire danger, non-irrigated agriculture, topsoil moisture, range and pasture conditions, and unregulated stream flows.

The ***Long-Term Blend*** approximates drought-related impacts that respond to precipitation on time scales ranging from several months to a few years, such as reservoir stores, irrigated agriculture, groundwater levels, and well water depth.

It should be noted that the relationship between indicators and impacts varies, sometimes markedly, with location and season. This is particularly true of water supplies, which are additionally dependent on the source (or sources) tapped, management practices, and legal mandates. Exercise caution when attempting to relate these maps to specific impact implications for a particular location and time of year. The blend-to-impact correlation is not always direct, and will vary spatially and temporally.

Transportation Loss

Transportation Loss was rated a MODERATE PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Transportation disruption and loss in Los Angeles County have the potential for catastrophic consequences on the populace. The area's heavy reliance on conveyances is a major factor in economic stability and survival during emergencies. Los Angeles County's transportation corridor interconnections link all parts of the county to neighboring jurisdictions and their stability and dependability is necessary to assure population health and welfare in an emergency. A catastrophic loss or extended disruption in any of the transportation forms listed below could have severe and long-lasting impacts on the area's economy and health.

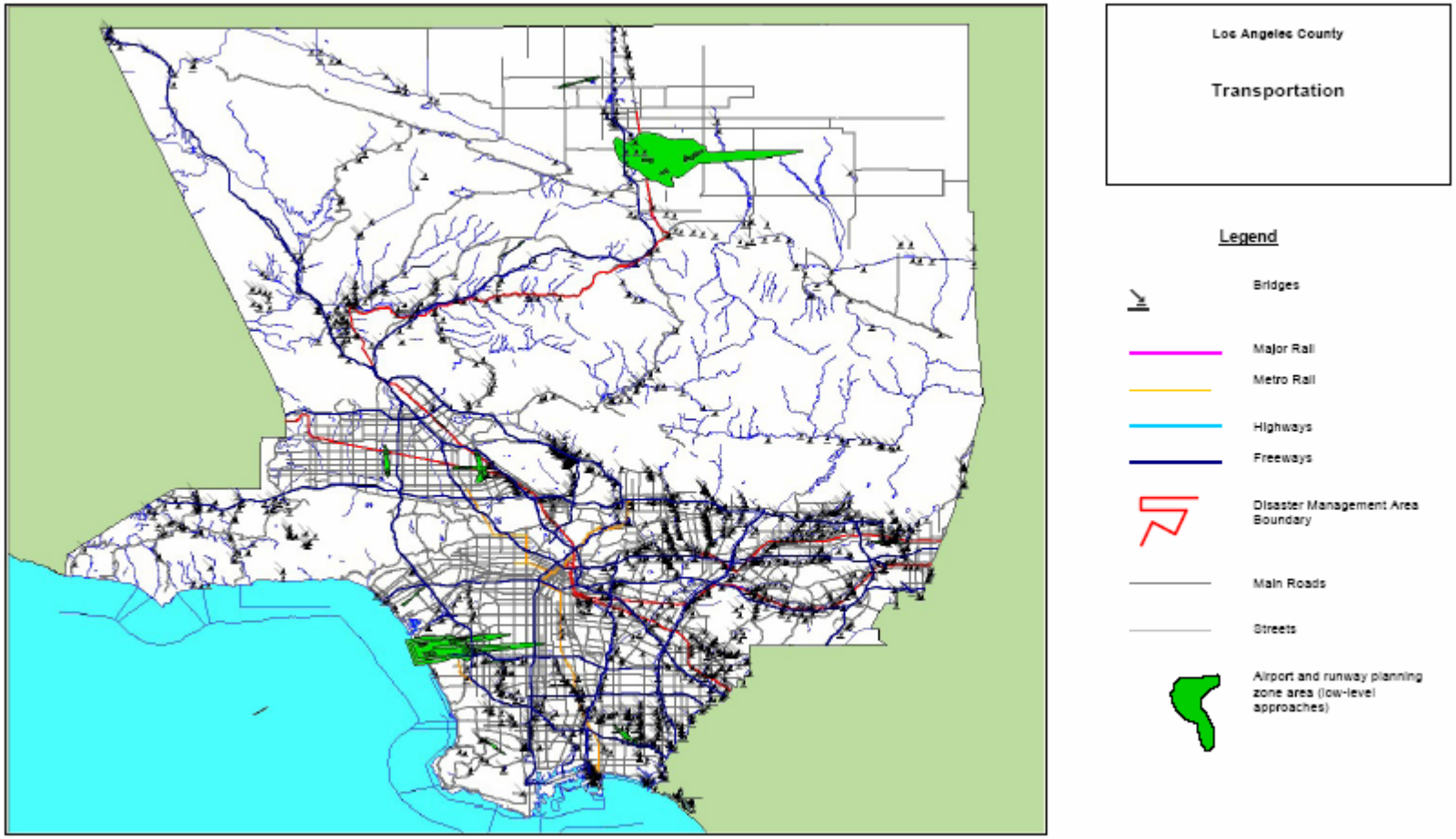
Roads, Road Miles, Motor Vehicles, & Drivers in L.A. County

- Los Angeles County has over 600 miles of freeway and 382 miles of conventional highway.
- On the average day, 92 million vehicle miles are driven in L.A. County.

Type of Vehicle Registrations	2000	1999	1998
Autos	5,134,168	4,935,605	4,825,512
Trucks	1,021,397	991,315	970,993
Trailers	283,402	283,402	262,506
Motorcycles	81,167	75,569	74,210
Total	6,520,134	6,290,976	6,133,221

Note: More than 600,000 cars are sold in Southern California every year, according to J.D. Powers & Associates of Agoura Hills and Calif. DMV

Los Angeles County Transportation Map Los Angeles County GIS Data



Public Transportation in Los Angeles County

System	Ridership	Vehicles in Operation at Peak Weekday Usage	Year Founded	Contact (Telephone)
MTA* - Motor Bus	347,451,286	1,888	1958	1-800-COMMUTE TTY 1-800-252-9040 213-922-6000 (main)
MTA* - Street Car	25,669,552	51	1990	same as above
MTA* - Rapid Rail	19,612,940	58	1993	same as above
Long Beach Transit	26,255,487	151	1963	562-591-2301
Santa Monica's Big Blue Bus	22,057,734	134	1928	310-451-5444
Foothill Transit	16,273,000	259	1988	1-800-RIDE-INFO TTY (626) 967-3147
Montebello Transit	7,356,606	46	1930	323-887-4600
Southern California Regional Rail Authority (MetroLink)	6,978,588	133	1992	1-800-371-LINK TTY 1-800-698-4TDD
Gardena Municipal Bus Lines	6,136,864	39	1940	(800) 266-6883 Maps & Schedules: (323) 321-0165
Culver City Transit	4,525,307	27	1928	310-253-6500 TTY 310-253-6548
System	**Ridership**	**Vehicles in Operation at Peak Weekday Usage**	**Year Founded**	**Contact (Telephone)**
Torrance Transit	4,509,300	43	1940	1-800-266-6883
Antelope Valley Transit Authority	2,216,090	36	1992	661-945-9445 ext. 200
Santa Clarita Transit	2,321,035	48	1991	661-294-1287
Norwalk Transit	1,434,335	15	1974	562-929-5550
Los Angeles Department of Transportation (LADOT) (Commuter Express; Community Connection; DASH)	3,356943	88	1976	(213, 310, 323 or 818) 808-2273 TTY 1-800-252-9040
Commerce Municipal Bus Lines	957,405	6	1960	323-887-4419
DowneyLINK Public Transit Service	306,308	6	1994	562-904-5465
Palos Verdes Transit Authority	123,322	13	1995	310-544-7108
Cerritos on Wheels (COW)	n/a	n/a	n/a	562-928-4COW

Los Angeles County Metropolitan Transportation Authority (MTA) uses its subway system and fleet of about 2,400 buses to move about 400 million passengers each year. It supports about 16 municipal bus operators. The MTA also operates a rail system that spans about 75 miles and incorporates more than 60 stations. It operates a light rail that runs between LA and Pasadena. Other MTA activities include funding community projects like bikeways, pedestrian facilities, and local road and highway improvements.

METRO BLUE LINE (Above ground)

22 miles and 22 stations
Downtown Los Angeles to Long Beach
Opened July 1990
Cost: $877 million
69 cars in fleet
74,406 average weekday boardings, 49,871 average weekend boardings (daily average, FY 2003)
22.16 million* total passenger boardings in FY 2003

METRO GREEN LINE (Above ground)

20 miles and 14 stations
El Segundo to Norwalk
Opened 1995
Cost: $714 million
34 cars in fleet
35,847 average weekday boardings, 17,655 average weekend boardings (daily average, FY 2003)
9.92 million* total passenger boardings in FY 2003

METRO RED LINE (Subway)

17.4 miles** and 16 stations
Union Station to the Wilshire corridor
Union Station through Hollywood to North Hollywood
Segment One opened 1993 (Wilshire/Western Segment Opened 1996; Hollywood Segment Opened 1999; North Hollywood Segment Opened 2000)
Cost: $4.5 billion
104 cars in fleet
112,021 average weekday boardings, 76,395 average weekend boardings (daily average, FY 2003)
31.46 million* total passenger boardings in FY 2003

** Includes yards and maintenance areas

METRO GOLD LINE (Above ground)

13.7 miles and 13 stations
Union Station to Sierra Madre Villa in East Pasadena
Opened July 2003
Cost: estimated at $859 million
26 Cars in fleet
14,573 average weekday boardings , 12,130 average weekend boardings

Rail

Rail Roads Operating in Los Angeles County In 1995, Burlington Northern merged with the Atchinson Topeka & Santa Fe Railway to form Burlington Northern & Santa Fe Railway. The following year, Southern Pacific Lines was acquired by Union Pacific Railroad.

Amtrak	Passengers	Union Station, 800 N Alameda St, LA 90012; (800) 872-7245
Metrolink **(*Southern California Regional Rail Authority*)**	Passengers	700 S Flower St, Ste 2600, Los Angeles 90017; (800) 371-LINK
Burlington Northern & Santa Fe Railway	Freight	3770 E 26th St, Los Angeles 90023 (323) 267-4140
Los Angeles Junction Railway **(*owned by Burlington Northern Santa Fe Railway*)**	Freight	4433 Exchange Ave, Los Angeles 90058 (323) 277-2001
Union Pacific Railroad Company	Freight	13181 Crossroads Parkway North #500, City of Industry 91746 (626) 935-7602

Daily Truck & Train Movements to/from Los Angeles/Long Beach Harbor
1990, 2000 & Projections

Year	Truck Movements	Train Movements
1990	20,000	30
2000	25,000	50
2010	33,000	70
2020	50,000	100

Alameda Corridor Project

It is estimated that Los Angeles and Long Beach harbors will have double the current volume of incoming ocean freight traffic by the year 2020. The Alameda Corridor Project, started in 1997, was planned to divert much of this traffic from local freeways and street-level railroad crossings and provide, by the year 2002, a 20-mile express rail link between the Los Angeles and Long Beach harbors and the rail yards in Vernon. The $2.4 billion project will consolidate the operations of the Union Pacific and Burlington Northern Santa Fe railroads. Street level railroad crossings along Alameda Street will be eliminated and half of the route will run below street level. The project is under the direction of the Alameda Corridor Transportation Authority.

Route	Major Stops
Coast Starlight	Los Angeles-San Jose-Oakland-Sacramento-Portland-Seattle
Pacific Surfliner	San Diego-Anaheim-Los Angeles-Ventura-Santa Barbara-San Luis Obispo
Southwest Chief	Los Angeles-Flagstaff-Albuquerque-Topeka-Kansas City-Chicago
Sunset Limited	Los Angeles-Tucson-El Paso-San Antonio-Houston-New Orleans-Mobile-Jacksonville-Orlando, Florida

Air Transportation

Airport/Airfield	Location
Agua Dulce Airpark	Agua Dulce Canyon Rd, Saugus
Brackett Field (POC)	1615 McKinley Av, La Verne 91750 (909) 593-1395
Brian Ranch	Palmdale
Burbank-Glendale-Pasadena (Bob Hope) (BUR)	2627 N Hollywood Way, Burbank
Catalina (AVX)	Avalon
Catalina Air & Sea Terminal	Berth 95, San Pedro
Compton (CPM)	901 W Alondra Blvd, Compton 90220 (310) 631-8140
El Monte Airport (EMT)	4233 Santa Anita Av, El Monte 91731 (626) 448-6129
General William J. Fox Airfield (WJF)	4555 W Avenue G, Lancaster 93536 (661) 940-1709
Goodyear Blimp Base	19200 S Main St, Carson
Hawthorne Municipal (Jack Northrop Field) (HHR)	12101 Crenshaw Av, Hawthorne
Long Beach Airport (Daugherty Field) (LGB)	4100 Donald Douglas Dr, Long Beach
Los Angeles International Airport (LAX)	World Way, Los Angeles
Palmdale Regional Airport	39516 N 20th St E, Palmdale 93550 (661) 266-7602
Palmdale Production Flight/Test Installation Plant 42	Palmdale
Santa Monica Municipal (SMO)	3200 Airport Dr, Santa Monica
Torrance Municipal (Zamperini Field) (TOA)	3115 Airport Dr, Torrance
Van Nuys (VNY)	16461 Sherman Way, Van Nuys
Whiteman Airport (WHP)	12653 Osborn St, Pacoima 91331 (818) 896-5271

Passenger Traffic Totals - Arriving & Departing, 1991-2000

Year	Total	Departing	Arriving
2000	67,303,182	33,836,077	33,467,105
1999	64,279,571	32,298,944	31,980,627
1998	61,215,712	30,826,859	30,388,853
1997	60,142,588	30,313,688	29,828,900
1996	57,974,559	29,162,942	28,811,617
1995	53,909,223	27,234,353	26,674,870
1994	51,050,275	25,812,087	25,238,188
1993	47,844,794	24,141,068	23,703,726
1992	46,964,555	23,732,371	23,232,184
1991	45,668,204	22,954,976	22,713,228

Maritime Transportation

Major Ports

Port of Los Angeles
425 S Palos Verdes St
San Pedro 90733

Port of Long Beach
925 Harbor Plaza
Long Beach 90801

State and Local Stakeholders

Ports and waterways stimulate economic development, which in turn benefits state and local economies. In 1994, U.S. port activities contributed more than $780 billion to the gross domestic product. Port activities also resulted in tax payments of $56 billion to state and local governments (Maritime Administration, 1994). Successful ports attract a wide variety of support businesses, such as container manufacturers, stevedore companies, ship chandlers, customhouse brokers, and freight forwarders. These support groups, in turn, become stakeholders in the continued success of the port.

States also have an interest in effective port administration and operation. In addition to collecting taxes from businesses that depend on port activity, states have a political interest in promoting safety and sound environmental practices.

Public and Community Stakeholders

Throughout U.S. history, efficient water transportation has stimulated economic growth. It is no accident that the top ports in terms of tonnage are located in densely populated areas. New York, Los Angeles, Houston, and Philadelphia are cases in point. History has proven that population density and economic prosperity are often brought about by the presence of a port.

One of the most important public benefits generated by ports is job creation. In 1992, more than 1.5 million people were employed directly by the port industry; another 14 million were employed by port users and suppliers. That same year, port activities generated $523 billion in personal income (Maritime Administration, 1994). These workers have a significant stake in the port industry.

Ports and waterways also provide significant aesthetic and recreational opportunities, which are highly valued by the public today. These activities are fostered by environmental protection, one of the most significant public issues shaping the economic and political landscape today. In response to public demands, federal and state governments have imposed numerous environmental laws and regulations in recent years. Logistics and transportation professionals, as well as architects and operators of ports and waterways, must comply with a growing catalog of environmental restrictions in order to survive. Technological advances that reduce the incidence of oil spills are in keeping with the public interest in protecting the environment.

LOW RISK Priority Hazards

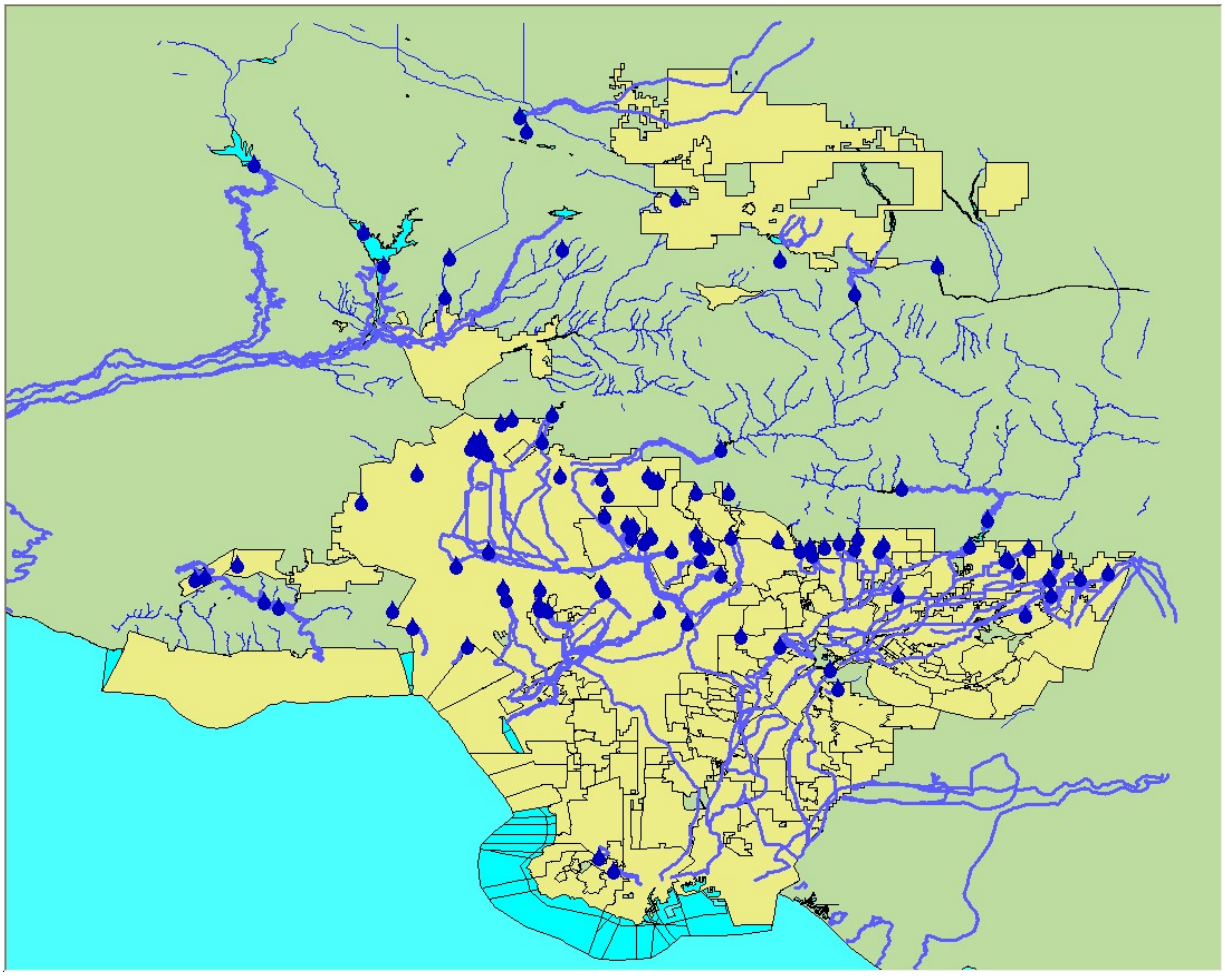
Dam Failure

Dam Failure was rated a LOW PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

There are a total of 103 dams in Los Angeles County, owned by 23 agencies or organizations, ranging from the Federal government to Home Owner Associations. These dams hold billions of gallons of water in reservoirs. Releases of water from the major reservoirs are designed to protect Southern California from flood waters and to store domestic water. Seismic activity can compromise the dam structures, and the resultant flooding could cause catastrophic flooding. Following the 1971 Sylmar earthquake the Lower Van Norman Dam showed signs of structural compromise, and tens of thousands of persons had to be evacuated until the dam could be drained. The dam has never been refilled.

LAUSD facilities are located in such a way that damage from a catastrophic dam failure would be negligible. Dam Failure is therefore deemed to be a low risk for LAUSD.

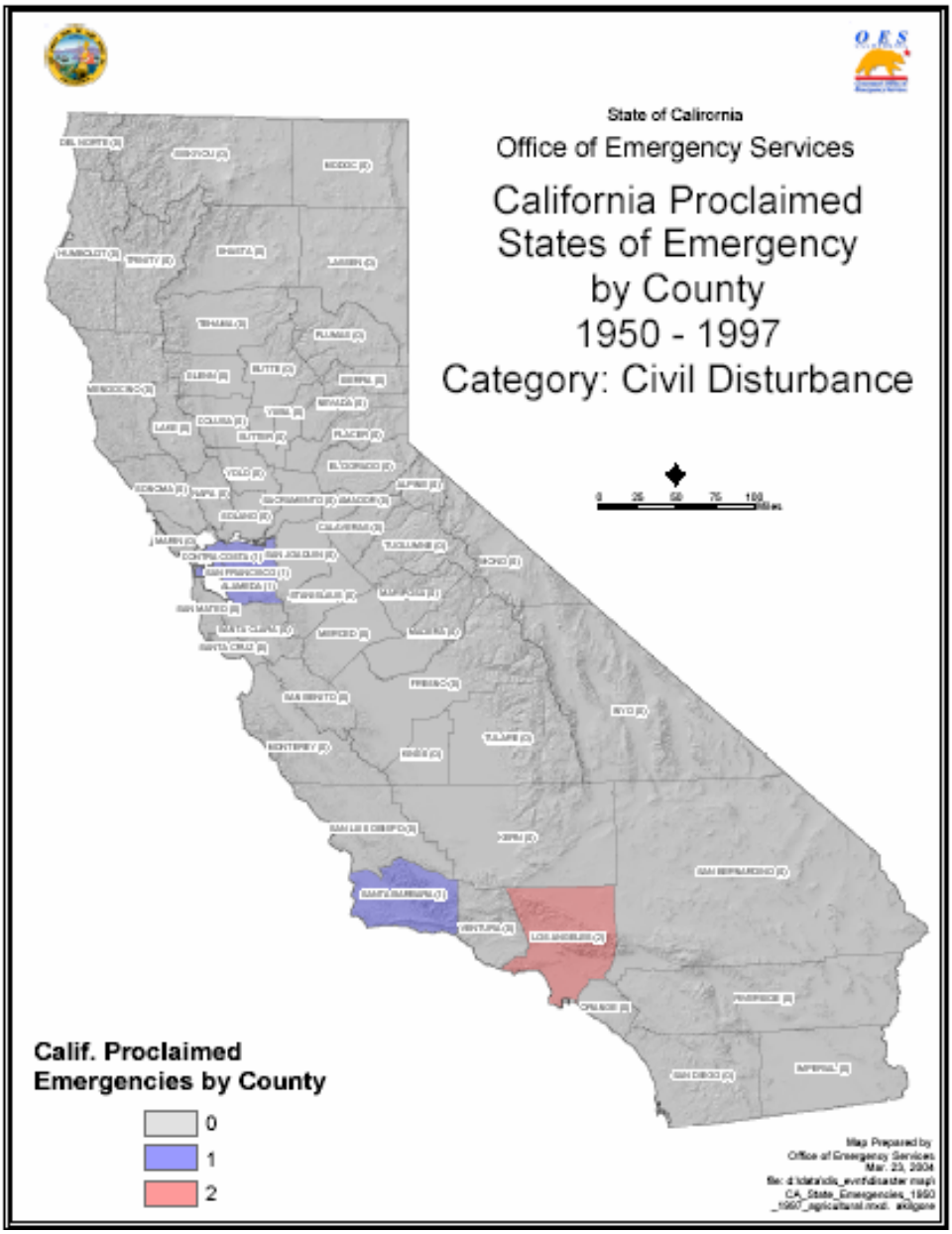
Location of Dams and Reservoir Inundation Routes



Civil Unrest

Civil Unrest was rated a LOW PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Civil disturbances can occur almost anywhere. However, the most significant ones in California have historically taken place in large urban centers. Deaths and injuries occurred to individuals who were in or around the disturbances while they were happening. Damage was caused by thrown objects, fires, and looting.



Chronology of the 1992 Los Angeles Riots		
29 April	1515	Acquittal verdicts announced in the trial of police officers accused of beating Rodney King.
	1850	Rioters beat and nearly kill truck driver Reginald Denny as a television crew captures both the horror of the incident and the absence of Los Angeles Police Department (LAPD) officers. Hundreds of arson and looting incidents begin.
	2100	The California governor's office informs the adjutant general that the governor has decided to mobilize (call to state active duty) 2000 California National Guard (CANG) troops at the request of the LA mayor.
30 April	-	A dusk-to-dawn curfew is imposed in large portions of the city of LA and the surrounding county.
	0400	Approximately 2000 CANG soldiers have reported to armories.
	1100	Los Angeles County requests 2000 more CANG personnel; the governor approves the request.
	1350	Ammunition from Camp Roberts (in central California) arrives in LA area via CH-47 helicopter.
	1435	The first CANG elements (two military police companies) deploy in support of the LAPD and the LA Sheriff's Department (LASD).
	2000	About 1000 CANG troops are currently deployed "on the street," with more than 1000 more prepared to deploy and awaiting mission requests from law enforcement agencies.
	2356	LAPD and LASD request 2000 additional CANG troops, for a total of 6000.
1 May	0100	Perceiving the CANG deployment to be too slow, the governor requests federal troops.
	0515	The President agrees to deploy 4000 federal troops to LA.
	0630	Approximately 1220 CANG soldiers are deployed in support of LAPD; 1600 are deployed in support of LASD; and 2700 are in reserve awaiting missions.
	1430	Active component Marines from Camp Pendleton, California, begin arriving in the LA area via convoy.
	1630	Commander, Joint Task Force-Los Angeles (JTF-LA) arrives in LA area.
	1730	Active component soldiers from Ft. Ord, California, begin arriving in the LA area via C-141 aircraft.
	1800	The President announces that the CANG will be federalized.
2 May	0400	Final plane with active component soldiers arrives.
	1100	Approximately 6150 CANG troops are deployed on the street, with 1000 more in reserve; 1850 soldiers from the 7th Infantry Division are in staging areas; Marines prepare for deployment.
	1900	First active component troops deploy on the street; a battalion of Marines replaces 600 CANG soldiers.
	2359	More than 6900 CANG soldiers are deployed, with 2700 more in reserve. Approximately 600 Marines are deployed, but most active component Army and Marine Corps personnel remain in staging areas.
9 May	1200	CANG reverts to state status, ending federalization; active component forces begin redeploying home.
13-27 May	-	CANG releases troops from state active duty, returning them to "part-time" status.
Source: Compiled from Harrison (1992), Delk (1995), and various CANG after-action reports.		

Gangs in Los Angeles County

There are **88 incorporated cities** and dozens of other unincorporated places in Los Angeles County (LAC). In doing this research on the proliferation of gangs within Los Angeles, each of these places were visited in an attempt to not just identify gangs active in Los Angeles, but to determine their territories too.

Through several weeks of field work and research there were a total of 274 Black gangs in 17 cities and five unincorporated areas in Los Angeles County. In this research, both the cities and unincorporated areas are identified as "places," a term that the U.S. Census uses.

Gang Legislation

Since the 1980s many states have adopted legislation and laws specifically drafted to combat street gangs and to make it easier to prosecute their offenses. California has led the nation in laws written to prosecute gangs, but many US states have their own laws. This section will focus on California, City of Los Angeles, and the County of Los Angeles' laws related to gang activity.

CALIFORNIA

California 186.20, also known as the "California Street Terrorism Enforcement and Prevention Act" or STEP Act.

California 186.22(a)

California 186.22(b)(c)(d) , gang participation

California 186.22(e)(f), gang definitions

California 186.22(b)(4) , gang enhancement

California 189, Drive-by Shootings; Murder; Carjacking

California 190.2(a)(22), Shooting from a Motor Vehicle

California 213, Robbery

California 246, discharging a weapon from a car.

California Code 666.7, sentence enhancement

California 12022.55, Shooting from a Motor Vehicle

California 12034, Driver's responsibilities

City of Los Angeles Municipal Code

Graffiti

City of Los Angeles Municipal Code - 03/31/99 CHAPTER IX - Building Regulations

ARTICLE 1 - Buildings [Building Code] (Article I, Chapter IX, Amended by Ordinance No. 170,953, Eff. 3/17/96, Oper. 1/1/96, incorporating by reference portions of the 1994 Edition of the Uniform Building Code and the 1995 Edition of the California Building Code).

SEC. 91.8904. SPECIAL PROVISIONS FOR VACANT PROPERTY GRAFFITI REMOVAL.
91.8904.1. Duties of the Owner of Vacant Property. (Title and Section Amended by Ord. No. 171,175, Eff. 7/25/96.)

91.8904.1.1. Procedure for Securing Vacant Property and Removing Graffiti - Notification. (Amended by Ord. No. 171,175, Eff. 7/25/96.)

91.8904.1.2 Abatement by the City., (Amended by Ord. No. 171,400, Eff. 12/20/96.)

County of Los Angeles

Title 13 PUBLIC PEACE, MORALS AND WELFARE Chapter 13.12 GRAFFITI PREVENTION, PROHIBITION AND REMOVAL 13.12.020. Definitions.

13.12.030. Unlawful to apply graffiti -- Prohibition of defacement

13.12.040. Possession of graffiti implements by minors prohibited

13.12.050. Possession of graffiti implements prohibited in designated public places

13.12.060. Limiting access to graffiti implements -- Furnishing to minors prohibited

13.12.060. Limiting access to graffiti implements -- Furnishing to minors prohibited

13.12.070. Display for sale -- Requirements

13.12.090. Graffiti declared public nuisance

13.12.100. Removal of graffiti by perpetrator

13.12.110. Removal provisions

13.12.120. Rewards for information

13.12.130. Penalties and civil liability of parents

13.12.140. Violations--Civil remedies available

13.12.150. Severability

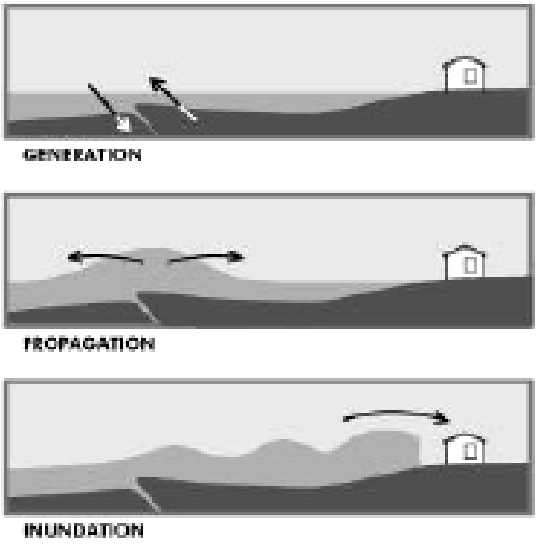
A. Alonso, PO Box 18238, Los Angeles, California 90018, 1-800-249-1324, mraaalonso @ yahoo . com]

Tsunami

Tsunami (Seismic Sea Wave) was rated a LOW PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

Tsunami Definition

A tsunami is a series of long waves generated by any sudden displacement of a large volume of water. Tsunamis are triggered by submarine earthquakes, submarine volcanic eruptions, underwater landslides or slumps of large volumes of earth, meteor impacts, and even onshore slope failures that fall into the ocean or a bay. Tsunami waves can propagate as a series of long waves across entire ocean basins. The hazard can last for many hours as the tsunami passes, and waves may resonate in some harbors and bays for days after the initial attack. For example, tsunamis from the 1960 offshore Chile event were recorded for more than one week in some locations.

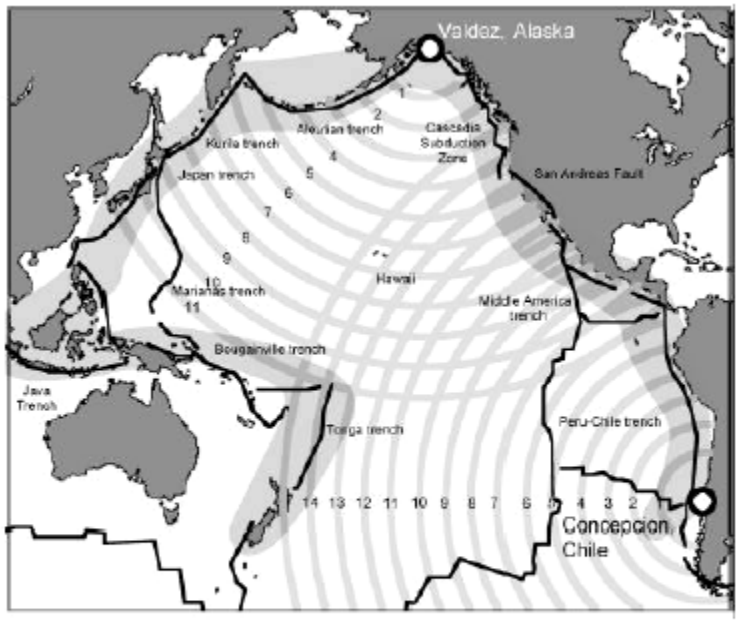


A tsunami is a series of deep, long waves
Generated by a sudden displacement of a large volume of water.

Seiches (or harbor oscillations) are a related hazard for enclosed bays, inlets, and lakes. Alaska and parts of Washington and British Columbia, in particular, have numerous communities vulnerable to such events. These destructive tsunami-like waves can be generated by earthquake motions, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures, and volcanic eruptions. Large tidal bores, strong currents, and the interaction of ocean swells and surf outside of bays and inlets may amplify the waves. The strong currents associated with these events may be more damaging than inundation by waves.

Source Zones

Tsunamis are associated primarily with seismic activity. The Pacific "Ring of Fire," one of the most active seismic features on earth, circles the Pacific Ocean from the southern tip of Chile, north along the west coasts of both South and North America, turning west along the Aleutian Islands arc of Alaska, and south through Japan, the Philippines, and the eastern Indo-Pacific region. Occasionally, tsunamis generated within this region threaten almost every island and coastal settlement in the Pacific Rim, including those in the five Pacific states: Alaska, California, Hawaii, Oregon, and Washington.



The Pacific "Ring of Fire" is the most active seismic feature on earth. Tsunami waves triggered by seismic activity can travel across the Pacific Ocean at up to 500 miles per hour, striking distant coastal areas in a matter of hours. The figure shows the estimated number of hours for tsunami-generated waves to travel across the Pacific Ocean from Alaska and Chile, respectively.

While not on the Ring of Fire, Hawaii sits in the center of a tectonic hot spot. Earthquakes and large landslides along the flanks of Hawaii, associated with the injection of magma into volcanoes' "plumbing systems," have generated tsunamis. In some areas, the risk of tsunamis from landslides may be greater than that posed by offshore earthquakes. Some locations, like parts of Alaska and Hawaii, may be stricken by multiple tsunamis from different sources such as volcanic eruptions, submarine earthquakes, and landslides, which may occur at the same time, greatly compounding the hazard.

Local and Distant Sources of Tsunamis

Tsunamis are typically classified as either local or distant. These two types of tsunamis have different implications for comprehensive planning; zoning; building siting, design, and construction activities; and evacuation warning. For example, local tsunamis likely will follow associated earthquake ground shaking and possibly ground failures that may produce additional damage. Evacuation will have to be nearly instantaneous when responding to local tsunamis, but assuming effective warning systems exist, many hours may be available to evacuate people from exposed areas before distantly-generated tsunami waves arrive.

Tsunamis from Local Sources

Tsunamis from local sources usually result from earthquakes occurring off nearby coasts. In the Pacific Northwest, including Alaska, these typically involve large subduction earthquakes in the Cascadia Subduction Zone or the Alaskan-Aleutian Subduction Zone. The Cascadia zone, where the Farallon (or Gorda or Juan de Fuca) Plate is sliding beneath the North American Plate, lies approximately 60 miles (100 kilometers) seaward of Cape Mendocino, California, and extends north along the coasts of Oregon, Washington, and British Columbia to the Queen Charlotte Islands. The Alaskan-Aleutian zone, where the Pacific Plate is sliding beneath the North American Plate, extends from southeastern Alaska to the westernmost tip of the Aleutian Islands.

Along active subduction coasts, tsunamis may also be generated by large landslides, both submarine and above water, into coastal waters (e.g., Lituya Bay, Alaska), and by volcanic activity (e.g., Krakatoa, Indonesia), especially along the Aleutian volcanic island chain.

In Hawaii, two of the largest tsunamis in the historic record (1868 and 1975) were caused by normal-fault earthquakes on the flank of the island. A few other much smaller Hawaii tsunamis may have been caused by onshore or submarine landslides. Volcanic activity is associated with these events such as the eruptions of Kilauea in 1975. Although explosive volcanic eruptions are uncommon in Hawaii, such activity does occur and may trigger local tsunamis.

In California south of the Cascadia Subduction Zone, local tsunamis may be generated by large offshore or coastal fault movements. Some parts of the coast are cut by active reverse and thrust faults, which push up the coast or offshore ridges during large earthquakes. Other parts are dominated by strike-slip faulting, where large areas of seafloor uplift or subsidence occurs due to local irregularity in the fault trends. In southern California, large submarine landslides along the steep and unstable slopes of the continental shelf edge and offshore borderland ridges can generate locally-destructive tsunamis for the adjacent coastal areas.

The travel time for a locally-generated tsunami, from initiation at the source to arrival at coastal communities may be within five to 30 minutes. For example, a series of destructive tsunamis began striking coastal communities on Okushiri Island, Japan, about eight minutes after the July 12, 1993, Hokkaido-Nansei-Oki earthquake main shock. At least one village was hit by tsunami waves estimated to be 12 meters high (39.5 feet) while waves at other locations were between five and ten meters high (about 16.5 to 33 feet). Located almost directly above the epicentral area, the island received tsunami warnings about five minutes after the earthquake, about the best warning time possible with present technology. Fortunately, casualties were limited because people fled to evacuation sites on higher ground immediately after feeling the earthquake without waiting for an official warning. Public information and training programs were effective in reducing losses from this event.

Tsunamis from Distant Sources

Tsunamis from distant sources are the most common type observed along the Pacific Coast of the United States. Large tsunamis generated anywhere around the Pacific “Ring of Fire” propagate across the ocean with little energy loss before striking populated U.S. coastlines. The Pacific states may suffer both regional and Pacific-wide tsunamis. By definition, regional tsunamis affect smaller areas than Pacific-wide tsunamis, either because the energy released is of insufficient magnitude for Pacific-wide propagation or because the geographical configuration of the source area restricts the tsunami’s spread. The combined impacts of the earthquake and regional tsunami that originated off the Philippine Islands on August 16, 1976, killed approximately 8,000 people in the affected area. Regional destructive tsunamis within

the Sea of Japan in 1983 and 1993 were unable to propagate out into the larger Pacific Ocean basin.

Pacific-wide tsunamis, although less frequent than regional tsunamis, have greater destructive potential because the waves are larger, travel farther, and affect broader coastal areas. The time required for a distant tsunami to reach the Hawaiian and mainland coasts will vary between approximately 5½ to 18 hours, depending upon the tsunami's place of origin. The effects of a distant tsunami on a coastal area may be negligible or severe depending upon the magnitude of the tsunami, its source distance, and its direction of approach. For example, the tsunami generated by the May 22, 1960, Chile earthquake spread death and destruction across the Pacific Ocean from Chile to Hawaii, Japan, and the Philippines.

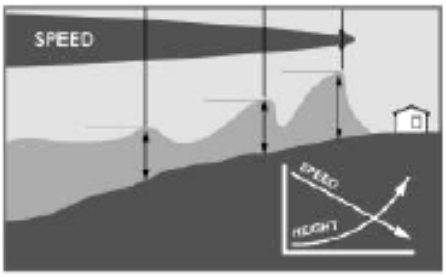
The coastal and offshore source zone measured about 135,000 square miles (approximately 218 miles by 622 miles), nearly the same area as the state of California. The length of the fault rupture may have reached 750 miles. As a result, over 2,000 fatalities occurred in Chile, due mostly to the tsunami. Losses also were severe in Hilo, Hawaii (61 fatalities and 282 serious injuries), and in Japan (122 fatalities). In contrast, Kodiak Island, Alaska, noted less than one meter rise in the water level, and losses in California were mainly in harbors where strong currents smashed, sank, or grounded small craft, and damaged dock facilities.

Tsunamis generated by the March 28, 1964, Alaskan earthquake caused both distant and local impacts, including losses in all five Pacific states, as well as other Pacific Rim countries. Alaska suffered 106 fatalities and over $84 million in damage, but in Hawaii, compared to the 1960 Chilean event, damage was minimal. In contrast, Crescent City, California, suffered ten fatalities and over $7 million in damage, and Kodiak Island, Alaska—one of several Alaskan cities and communities to suffer losses—experienced land subsidence of about 6.5 feet followed by ten waves that contributed to the destruction of about 80 percent of the industrial and commercial areas and killed 15 people. Kodiak's bedrock location limited earthquake shaking damage to only minor losses. Valdez, Alaska, experienced submarine landslides and local tsunamis where the highest wave reached 23 feet, destroying much of the town. Consequently, Valdez was rebuilt at a higher elevation to minimize future tsunami damage. Seward, Alaska, experienced tsunamis 30 to 40 feet high due to both fault rupture and local submarine landslides, causing extensive damage to the docking areas and fires in petroleum storage facilities.

Tsunami Characteristics

Tsunamis travel outward from the source area and may be highly directional. For example, for an earthquake-generated tsunami, most of the energy propagates at right angles away from the long axis of the source fault rupture. The wave speed depends on the water depth, undergoing accelerations and decelerations as the ocean bottom depth varies. Such wave speed changes cause the wave fronts to bend (refract), creating area where the energy is focused (wave height increases) and defocused (wave height decreases). In the open ocean, wave speeds may reach 500 miles per hour (800 kilometers per hour)—as fast as a jet airplane—with the distance between successive crests (wavelength) often exceeding 100 miles. Wave heights in deep water may be only a few feet high, and due to their long wavelength, produce only a gentle rise and fall of the sea surface that is usually unnoticed.

As a tsunami enters the shoaling waters near the coast, its wave speed diminishes, its wavelength decreases, and its height increases, often greatly. The first wave may not be the largest, with the initial wave typically being followed by several larger and more destructive waves. Even though the waves slow upon reaching the coastline, they still travel faster than Olympic long-distance runners—faster than 15 miles per hour.



As a tsunami approaches shore, it slows down and dramatically increases in height.

The configuration of the coastline, the shape of the ocean floor, and the characteristics of the advancing waves play important roles in the potential for destruction. For islands, no matter from which direction the tsunami arrives, all sides usually will be affected. As the wave wraps around the island, the height or run-up may be small at many points along the coast, but increases greatly where the two opposing wave fronts meet on the backside of the island. Focusing effects due to the wave front bending on irregular coasts may also result in locally high wave amplification. Bays, sounds, inlets, rivers, streams, offshore canyons, islands, and flood control channels may cause various effects and result in greater damage than many people would expect.

It has been estimated, for example, that a tsunami wave entering a Southern California flood control channel could reach a mile or more inland, especially if it enters at high tide. Offshore canyons can focus tsunami wave energy and islands can filter the energy. The orientation of the coastline determines if the waves strike head-on or are refracted from other parts of the coastline.

Unlike earthquake shaking where damage may occur over large areas in the source region—hundreds of square miles in many cases—tsunamis impact long, low-lying stretches of linear coastline, extending inland for relatively short distances. After striking a coast, the wave reflects back to sea, but may also be reflected back to the coast again and again from offshore islands or submerged ridges, banks, and shelves, as a series of waves.

Rather than rising water, the first visible indication of an approaching tsunami could be receding water (drawdown) caused by the wave trough preceding a large inbound wave crest. Rapid drawdown creates strong currents in harbor inlets and channels that can damage coastal structures due to erosive scour, such as around piers and pilings. As the water's surface drops, piers can be damaged by boats or ships straining at or breaking their mooring lines. The vessels can overturn or sink due to strong currents, collision with other objects, or impact with the harbor bottom.

Conversely, a rise in water level may be the first indication of a tsunami. The advancing tsunami may initially resemble a strong surge increasing the sea level like the rising tide, but the tsunami surge rises faster and does not stop at the shoreline. Even if the wave height appears to be small, for example, three to six feet, the strength of the accompanying surge can be deadly. Waist-high surges can cause strong currents that float cars, small structures, and other debris. Boats and debris are often carried inland by the surge and left stranded when the water recedes. Outflow following inundation also creates strong currents, which rip at structures and pound them with debris, and erode beaches and coastal structures.

Moreover, under certain conditions the crest of an advancing wave may overtake the preceding trough while some distance offshore, causing the wave to proceed shoreward as a

"bore" with a churning front. The bore phenomenon resembles a step-like rise in the sea level that advances rapidly (from 10 to 60 miles per hour). Normal tidal bores at the Bay of Fundy, Canada, or the Yellow River, China, provide examples of this phenomenon.

The force and destructive effects of tsunamis should not be underestimated. At some locations the advancing turbulent wave front will be the most destructive part of the wave. In other situations, the greatest damage may be caused by the outflow of water back to the sea between crests, sweeping all before it and undermining roads, buildings, bulkheads, and other structures.

This outflow action can carry enormous amounts of highly damaging debris with it, resulting in further destruction. Ships and boats, unless moved away from shore, may be dashed against breakwaters, wharves, and other craft, or be washed ashore and left grounded after the seawater recedes.

Factors Unique to Tsunami Risk Management

Coastlines have always been a favored location for human settlements. Attractive coastal locations and a growing affluent population have combined to increase development of housing, maritime facilities, and resorts in coastal communities in recent times. Long gaps between devastating tsunami events (and apparent disregard of more frequent hazards such as strong storms, sea level changes, and coastal erosion) have produced a coastal population that seems to ignore the destructive tsunami threat. According to one recent estimate, 489 cities in Alaska, California, Hawaii, Oregon, and Washington are susceptible to tsunami inundation, with an estimated 900,000 people living or working within areas that could be inundated by a 50-foot tsunami.

The State of California has 152 cities in locations susceptible to damage from a tsunami affecting a population of 589.500 (2001 figures).[2]

Mainland coastal states and Hawaii have several unique factors that affect the siting of development and design of buildings. Recently prepared maps for several locations show potential tsunami inundation areas along different types of coastlines. Important factors affecting tsunami exposure include:

- All or parts of the mainland states are located near active subduction zones (Cascadia and Alaska-Aleutian) or other well-defined tsunami-producing zones. Local tsunamis generated by these zones will reach the coasts extremely quickly (within 5-30 minutes, depending on the distance to the zones).

- Strong earthquakes, whether accompanied by tsunamis or not, are rare events in most low lying coastal communities. With little strong ground shaking experience, these communities have little awareness of earthquake hazards. Yet even with minimal earthquake activity, the risk of damage from a major tsunami is considered high for these communities.

- Except in Hawaii and a few mainland coastal communities, tsunami awareness is not currently embedded in coastal community "culture."

[2] Source: TsuInfo Alert, v.2, no. 2, March-April 2000. Terry Wallace, University of Arizona, Department of Geosciences.

- Coastal communities vary in size, but with some notable exceptions, such as Los Angeles, Honolulu, Santa Barbara, San Francisco, and San Diego, most communities are relatively small.

- Many coastal communities are largely recreational, having many short-term and seasonal visitors. This presents a special problem as losses could be very high if a destructive tsunami occurred at a seasonal peak population time.

While the concept of mitigation is simple, there are many complex issues involved in achieving effective mitigation. Mitigation actions involve public policy, intergovernmental relations, public-private partnerships, economics, acceptable risk, and a wide range of specialized activities and programs. In all cases, mitigation programs and procedures are based on understanding the nature and probable severity of the hazard and the vulnerability of the area. Vulnerability assessments describe the weaknesses of buildings, systems and communities that make them susceptible to damage from the hazards.

Not all areas share the same hazard, vulnerability, and exposure. In general, a greater hazard justifies more rigorous mitigation measures. The key question becomes "How severe a problem are we dealing with in each community?" The answers to this question provide the basis for making public safety policy choices.

As with many natural hazards, exact probabilities or return intervals are extremely difficult to define, but two comparisons are instructive. First, California's building designs have been based on earthquakes expected to occur once every 475 years with the intent that collapse will not occur. In the Midwest, designs are based on avoiding collapse in earthquakes occurring once in 2,500 years. Second, flood loss prevention policies deal with events expected to occur every 100 to 500 years. While Hilo, Hawaii, has experienced numerous tsunamis, and Crescent City, California, experienced two damaging tsunamis in four years (1960 and 1964), many communities at risk have little or no recent history with tsunami damage. Where development has not yet occurred, one mitigation action is to avoid the hazard. This takes a combination of knowledge and willingness by decision makers to set aside such areas and define them as unacceptable risks. Where development already exists or is virtually certain to occur, two fundamental strategies are available to help ensure that the potential effects of natural hazards are considered during the planning process. Although oversimplified, these two approaches are: 1) managing the hazard; and 2) managing the development. For example, managing the hazard by improving drainage can help control small-scale flooding and keep developed areas dry. Managing the development, for example, by avoiding constructing improvements in high-velocity floodplains and landslide-prone hillsides may be more effective and less environmentally disruptive than building expensive structures to control flooding or landslides.

Although probabilities of occurrence may be extremely difficult to establish for tsunamis, using an approach similar to the application of probabilities to other hazards may be helpful. For example, a possible approach for tsunami mitigation is to prevent development or limit it to coastal-dependent facilities designed to the expected tsunami forces where tsunamis are expected once in every 100 years. Near-shore rapid-onset events (locally-generated tsunamis) could be subject to similar controls where tsunamis are expected once in every 500 years. In areas likely to experience tsunamis once in every 2,500 years, at least adequate evacuation precautions should exist, such as designing for vertical evacuation, designating "safe buildings," and maintaining effective plans for horizontal evacuation from low-lying to higher ground areas.

This is especially true for areas with large resident or visitor coastal populations "at risk," such as beach communities. Land use and mitigation actions taken for other reasons may also help

limit tsunami damage. For example, preventing construction in floodplains, because of their highly saturated soils and low elevations, could reduce losses from tsunami inundation and earthquake ground shaking. Low density uses, such as parkways or protected habitat areas, could also help mitigate tsunami losses.

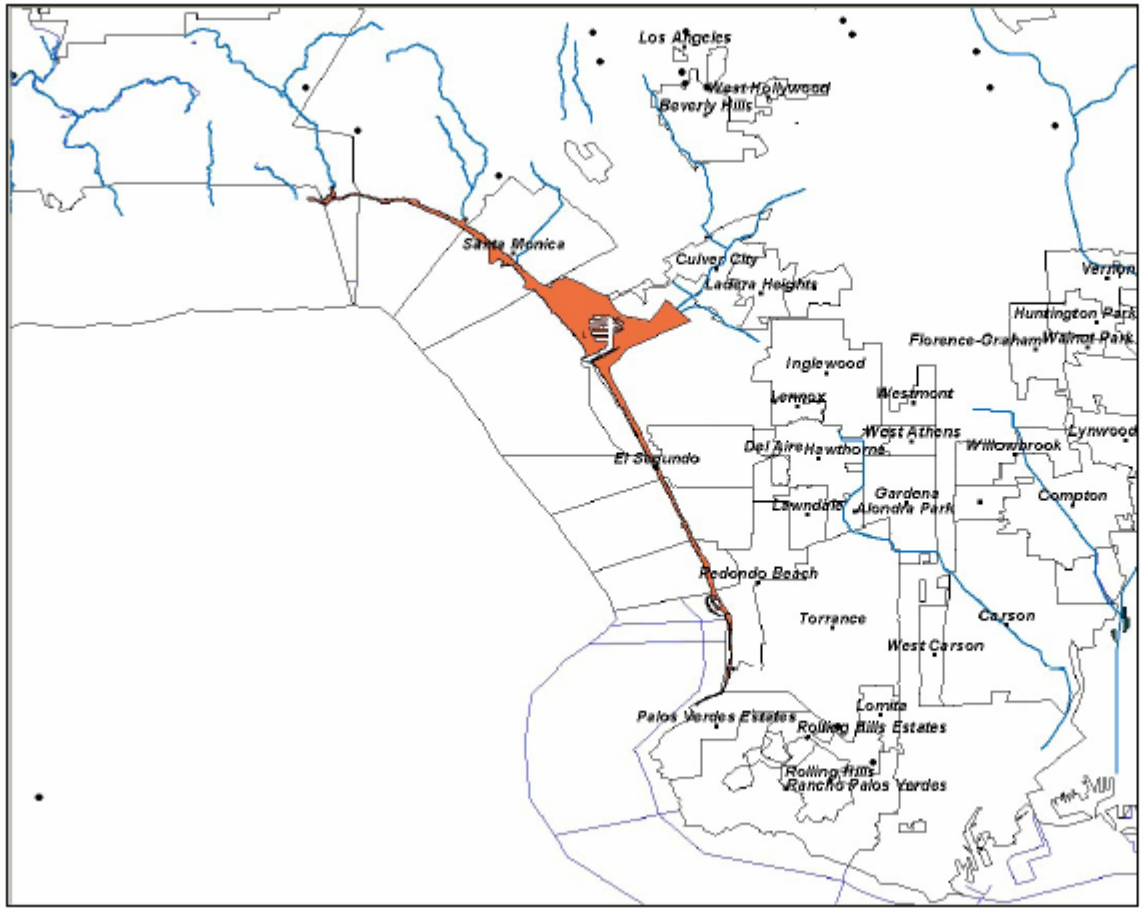
Vulnerability

Los Angeles Unified School District facilities are well clear of any projected damage zone caused by a catastrophic tsunami. Therefore, the risk has been deemed low to negligible.

Impact

Because of the negligible vulnerability of LAUSD facilities to the effects of a tsunami, impact is estimated to be zero.

Los Angeles County Tsunami Hazard Area Los Angeles County GIS Data



Los Angeles County

Tsunami Hazard Areas

Legend

Tsunami High Water Mark and Danger Area

Explosion

Explosion was rated a LOW PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

An explosion is a rapid release of stored energy characterized by a bright flash and an audible blast. Part of the energy is released as thermal radiation (flash); and part is coupled into the air as airblast and into the soil (ground) as ground shock, both as radially expanding shock waves.

To be explosive, the material:

1. Must contain a substance or mixture of substances that remains unchanged under ordinary conditions, but undergoes a fast chemical change upon stimulation.

2. This reaction must yield gases whose volume—under normal pressure, but at the high temperature resulting from an explosion—is much greater than that of the original substance.

3. The change must be exothermic in order to heat the products of the reaction and thus to increase their pressure.

Common types of explosions include construction blasting to break up rock or to demolish buildings and their foundations, and accidental explosions resulting from natural gas leaks or other chemical/explosive materials.

The rapid expansion of hot gases resulting from the detonation of an explosive charge gives rise to a compression wave called a **shock wave,** which propagates through the air. The front of the shock wave can be considered infinitely steep, for all practical purposes. That is, the time required for compression of the undisturbed air just ahead of the wave to full pressure just behind the wave is essentially zero.

If the explosive source is spherical, the resulting shock wave will be spherical. Since its surface is continually increasing, the energy per unit area continually decreases. Consequently, as the shock wave travels outward from the charge, the pressure in the front of the wave, called the **peak pressure**, steadily decreases. At great distances from the charge, the peak pressure is infinitesimal, and the wave can be treated as a sound wave.

Behind the shock wave front, the pressure in the wave decreases from its initial peak value. At some distance from the charge, the pressure behind the shock front falls to a value below that of the atmosphere and then rises again to a steady value equal to that of the atmosphere. The part of the shock wave in which the pressure is greater than that of the atmosphere is called the **positive phase**, and, immediately following it, the part in which the pressure is less than that of the atmosphere is called the **negative or suction phase**.

Conventional structures, in particular those above grade, are susceptible to damage from explosions, because the magnitudes of design loads are significantly lower than those produced by most explosions. The peak pressure in the blast pulse produced by 10 lb of TNT at a range of about 50' is approximately 2.4 psi (which is 348 psf!) with a duration of the positive phase of 7.7 ms. Conventional structures are not normally designed to resist blast loads.

Recent terrorist attacks demonstrate the types of damage that can be produced. The 1993 terrorist attack on the World Trade Center in New York City removed several thousand square feet of concrete floor slabs in the general area of the explosion and severely damaged several buildings'

communication, transportation and utility systems. Due to the inherent redundancy of the steel frames, the structures did not collapse.

The 1995 attack on the Alfred P. Murrah Federal Building in Oklahoma City revealed the vulnerability of conventional structural designs when subjected to blast loads. When a source is located at street level, the blast shock wave acts up against the underside of the floor slabs at upper stories. Floor slabs are not designed for this magnitude and direction of load—for this direction of load, the reinforcement is in the wrong place.

Explosion Hazards

There are many potential explosion hazards in Los Angeles County. Catastrophic explosions could be caused by:

- Exotic Chemicals and Substances
- Natural Gas and Propane
- Methane Gas
- Gasoline and other liquid fuels
- Manufactured and Military Explosives

The origin of a catastrophic explosion may be:

- Stationary pressure vessels and tanks
- Rail tank cars
- Truck tanks
- Pipelines
- Cargo ships carrying explosive materials

Explosions can be triggered by:

- Manual of Accidental Detonation of Explosives
- Fire/Open Flame
- Electrical Discharge
- Chemical Interaction
- Radiological Reaction
- Faulty Containment
- Equipment Malfunctions

Explosion Consequences

A catastrophic explosion could challenge responders to deal with:

- Mass casualties
- Fires
- Building and property destruction
- Infrastructure failure (telecommunications, transportation, etc.)
- Lifeline interruption
- Chemical or radiation contamination
- Debris removal

Special Events

Special Events were rated LOW PRIORITY HAZARDS by the LAUSD Hazard Mitigation Planning Task Force..

Large crowds, gathered for special events, represent disaster hazards in the following ways:

- Viable targets for a terrorists
- Concentration of people in a relatively small, enclosed area during earthquakes
- Site for mass casualties in the event of an aviation disaster
- Challenge to egress in the event of a large fire elevating the risk of mass casualties
- Depending on the event, could be prone to civil disobedience or riots

Los Angeles County Events

Public Holidays include: **New Year's Day** (1 January), **Robert E. Lee's Birthday** (19 January), **Martin Luther King Jr. Day** (third Monday in January), **Presidents' Day** (third Monday in February), **Eastern**, **Confederate Memorial Day** (26 April), **Memorial Day** (last Monday in May), I**ndependence Day** (4 July), Colorado Day (first Monday in August), **Labor Day** (first Monday in September), **Columbus Day** (second Monday in October), **Veterans' Day** (11 November), **Thanksgiving** (fourth Thursday in November) and **Christmas Day**.

Every New Year's Day the **Tournament of Roses Parade** - marching bands, celebrities and flower-coated floats - makes its way down Pasadena's Colorado Blvd. The **Rose Bowl** college football championship is played later the same day. A parody of the Tournament of Roses - the **Doo Dah Parad**e - makes its way down Colorado Blvd in November, on the Saturday after Thanksgiving.

February is **African American History Month**, with films, lectures, exhibits and performances across the county. LA's night of nights, the **Academy Awards**, is held in March. **Cinco de Mayo**, marking Mexico's victory over the French army at the Battle of Puebla (1862), is celebrated on May 5 with plenty of south-of-the-border style festivities.

In June, the **Gay & Lesbian** Pride Celebration is marked with a flamboyant parade down Santa Monica Blvd. The **Summer Pops Festival** runs from July through September at the Hollywood Bowl, and the **International Surf Festival** hits the waves of Manhattan, Hermosa and Redondo Beaches in August.

Los Angeles County Fair, held in Pomona in September, is the largest county fair in the world, with music, sideshows, rides and other country-style delights. For those who prefer not to get their glad rags grubby, October's **AFI-LA International Film Festival** is one of the country's biggest, with more than 75 features from around the world.

Other events include the **Hollywood Christmas Parade**, where movie and TV stars join Santa in a typically flashy parade and the **Las Posadas**, candle-lit processions that relive Mary and Joseph's journey to Bethlehem and honor the Christ child.

Other Event Venues

Downtown Los Angeles

Downtown LA is a microcosm of the city's past, present, and future and one of its most intriguing neighborhoods. El Pueblo commemorates the city's Spanish origins, while Chinatown to the north and Little Tokyo to the south are the vibrant centers of immigrant communities. The city's financial pulse beats in glass high-rises along flower and Figueroa Streets in sharp contrast to the eclectic early 20th-century architecture in the area around Pershing Square. Culture is king in downtown, from the renowned Museum of Contemporary Art and the spectacular new Walt Disney Concert Hall to the experimental galleries and studios of the Arts District east of Alameda Avenue. The Fashion and Jewelry Districts also add their own flair to the urban tapestry. Downtown is eminently walkable, but DASH buses also whisk you around between the diverse worlds that make up LA.

Theme Parks

Six Flags Magic Mountain

Magic Mountain Pkwy, Interstate 5

Valencia

Universal Studios Hollywood

Hollywood Fwy. at Lankershim Bl.

Hollywood

Local Events

Because of the generally temperate and pleasant weather conditions, on any given day, it's possible to find a local special event that involves a gathering of people and/or some kind of venue. Local parks, community centers and theaters all harbor local celebrations.

Volcano

Volcano was rater a LOW PRIORITY HAZARD by the LAUSD Hazard Mitigation Planning Task Force.

A volcano is a mountain that is built up by an accumulation of lava, ash flows, and airborne ash and dust. When pressure from gases and the molten rock within the volcano becomes strong enough to cause an explosion, volcanic eruptions occur.

"The molten rock (magma) that feeds volcanoes comes from much closer to the surface than the core, which is about 2,900 kilometers (about 1,750 miles) deep. Volcanoes are located where there is a source of magma. Lots of times this is at plate boundaries and that's also where there are lots of faults and earthquakes. The San Andreas Fault is a place where two plates are sliding PAST one another, so there are lots of faults and earthquakes. One of the main places where rock is melted is where one plate slides UNDER another. That happens further north in the Cascades of Washington, Oregon, and northern California and that's why they have some active volcanoes (like Mount St. Helens) there. Los Angeles and southern California may have a lot of potential for earthquakes, but are probably safe from volcanoes for a while." Ronald R. Charpentier, Geologist, U.S. Geological Service

Vulnerability and Impact

No active volcanoes are in Los Angeles County. No historical record of this hazard is available for the region.

Estimated Potential Losses for High & Moderate Natural Hazards

(In K for thousands, M for millions, B for Billions.)

Hazard	Estimated Daily Population at risk	Potential $ losses to Critical Facilities or Infrastructure	Potential $ losses to New Construction (by 2010)	Potential Other $ losses (Environmental, Historical, Economic, Human)	Total Potential $ losses for this hazard
Totals	906,789 Enrollment 80,325 Employees	$6.8B	$5.9B	$3.2B[2]	$15.9B
Earthquake*	172K 15.3K	$6.8B	$1.1B	$6.1M	$8.51B
Wild Fire**	1.1K >100	$81.6M	$7.1M	$38.4M	$127.2M
Severe Weather , Destructive Winds***	91K 8K	$680M	$59M	$320M	$1.06B
Flood***	91K 8K	$680M	$6M	$320M	$1.01B
Drought****	14.6K 1.3K	$108.8M	$9.4M	$51.2M	$169.4M
Tsunami	Low Risk Priority Hazard				
Volcanic Activity	Los Risk Priority Hazard				
Not pertain to	Avalanche, Coastal Erosion, Hailstorm, Hurricane, Land Subsidence, Landslide, Tornado.				

* 19% population estimate based on LA County HAZUS Studies ** .12% estimate based on past losses and proximity to VHFD areas ***10% estimated based on past losses ****1.6% based on ratio of landscaping/playground cost to assets
[2]This figure is based on the monthly salaries and school district business transactions LAUSD processes.

Section 5 – Hazard Mitigation Strategies

Mitigation Goals and Objectives

The information in the hazard vulnerability analysis and loss estimation information was used as a basis for developing mitigation goals and objectives. Mitigation goals are defined as general guidelines explaining what LAUSD wants to achieve in terms of hazard and loss prevention. Goal statements are typically long-range, policy-oriented statements representing District-wide visions. Objectives are statements that detail how each goal will be achieved, and typically define strategies or implementation steps to attain identified goals. Other important inputs to the development of District-level goals and objectives include performing reviews of existing local plans, policy documents, and regulations for consistency and complementary goals, as well as soliciting input from the public.

Mitigation through Drills & Training

Schools are required to participate in several emergency drills and exercises throughout the year. LAUSD Reference Guides are prepared by the Office of Environmental Health and Safety and distributed to Local District Superintendents, Local District School Support Directors, Local District Operations Coordinators, Principals and Non-School Site Administrators carrying detailed instructions for different types of emergencies. Reference Guide Number REF-1314 (9-24-2004) Describes Emergency Drills and Procedures and District Emergency Policies. Reference Guide Number REF-1300 (9-14-2004) describes the Fall Alternate Emergency Exercise (the scenario is changed each year in order to exercise a different emergency aspect).

Identification and Prioritization of Mitigation Actions

Mitigation actions that address the goals and objectives developed in the previous step were identified, evaluated, and prioritized. These actions form the core of the mitigation plan. LAUSD conducted a capabilities assessment, reviewing existing local plans, policies, and regulations for any other capabilities relevant to hazard mitigation planning. An analysis of their capability to carry out these implementation measures with an eye toward hazard and loss prevention was conducted. The capabilities assessment required an inventory of each jurisdiction's legal, administrative, fiscal and technical capacities to support hazard mitigation planning. After completion of the capabilities assessment, LAUSD evaluated and prioritized their proposed mitigations. Social, technical, administrative, political, legal, economic, and environmental opportunities as well as constraints of implementing a particular mitigation action were considered. This step resulted in a list of acceptable and realistic actions that address the hazards identified.

A full suite of goals, objectives and action items for the District is presented in this Plan. The Task Force then identified and prioritized actions with the highest short to medium term priorities. An implementation, schedule, funding source and coordinating individual or agency is identified for each prioritized action item.

LAUSD Identified Mitigation Constraints

The task force identified a list of issues that exist that can be considered constraints to mitigation planning implementation: (perspective of the participating task force members)

- Legal
- Economic Constraints
- Budgetary Constraints
- Land Ownership Constraints
- State and Federal Influences
- Enormity of Population and Area Served
- Sensitivity of Information Needed to Complete the Plan.

Any data that is brought before the task force that is sensitive must be presented as sensitive data and marked not to be shared outside of the task force. (It is the responsibility the task force to be sure the data is identified as sensitive.)

- Building and Code restrictions
- Cultural Demands and Barriers
- Interpretation of Law

Benefit-cost Review

Benefit-cost review (BCR) is an abbreviated quantitative method of comparing the projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness. A modified process called "STAPLEE" was used to methodically review the benefit as opposed to the cost of each strategy and action listed where that information was attainable. The STAPLEE process considers the following:

SOCIAL	Community Acceptance	Effect on Segment of Population			
TECHNICAL	Technical Feasibility	Long-term Solution	Secondary Impacts		
ADMINISTRATIVE	Staffing	Funding Allocated	Maintenance/Operations		
POLITICAL	Political Support	Local Champion	Public Support		
LEGAL	State Authority	Existing Local Authority	Potential Legal Challenge		
ECONOMIC	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	
ENVIRONMENTAL	Effects on Land/Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent with Federal Laws

The result of this review is documented in each strategy matrix.

Projects (Current/Past)

FEMA-Funded Northridge Earthquake Damage Repair

LAUSD HAZARD MITIGATION PROJECTS
FEMA FUNDED-NORTHRIDGE EARTHQUAKE

PENDANT LIGHTING

The District has replaced virtually all pendant lighting District-wide.

SUSPENDED CEILINGS AND ASSOCIATED RECESSED LIGHTING

The District is in the process of finishing the District-wide replacement or retrofit of all suspended ceiling and associated recessed lighting.

CONTENTS BRACING

The District undertook the bracing of contents, per FEMA guidelines, on items such as water heaters, cabinets, computer equipment, etc.

STRUCTURAL RETROFITS

AUDITORIUM CEILINGS

The District has identified 27 heavy plaster Auditorium ceilings that require retrofit. During the Northridge Earthquake, several of these ceilings fell (ex., Reseda HS). We are currently in the process of gaining approval from FEMA for this group of projects.

93rd St. ELEMENTARY SCHOOL – PEDESTRIAN ARCADES

BACKGROUND

In the wake of the Northridge Earthquake the two non-ductile concrete two-story pedestrian arcades connecting each end of the 1962 vintage A and B buildings at 93rd St. Elementary School were identified as possible collapse hazards. One of the main considerations in the decision to replace the arcades was the school's proximity to the Newport-Inglewood Fault.

ACCOMPLISHMENTS

The arcades were replaced with structures designed to today's seismic standards. As such, they should be able to withstand the shaking associated with the expected maximum events along any number of faults in Southern California. This will not only prevent any direct injuries or deaths caused by collapse, but should keep the school operational sooner than if the old arcades ever were to be severely damaged or collapse.

99th St. ELEMENTARY SCHOOL – WEST BUILDING

BACKGROUND

The West Classroom Building at 99th St. Elementary School, a partially reinforced masonry building, sustained damage as a result of the Northridge Earthquake. The original two-story building, constructed in 1926, consisted of a combination of unreinforced masonry walls with wood floors and roofs. A major seismic upgrade, designed in 1959 and constructed in 1961, added partial concrete gunite piers to the wall, added drag struts and ties, and added diaphragms.

Because of the damage sustained to the building as a result of the Northridge earthquake, the FEMA/OES inspection team prepared DSR 12975 for architectural services to assess the extent of the damage and outline the scope of repair work. In addition, the report was to address structural concerns by presenting conceptual mitigation schemes to reduce the possibility of life threatening damage in future earthquakes.

The report, prepared by the architectural firm of Anastacio Martinez Associates and Anderson Structural Engineering, identified serious deficiencies in the building's seismically induced lateral load resisting systems as described below.

NATURE OF THE PROBLEM

The masonry/concrete walls were in general compliance with current codes; however the following structural elements were of serious seismic concern:

- Wood Roof Diaphragm
- Diaphragm Shear Bolting
- Wall to Roof Anchorage
- Diaphragm Cross Ties

ACCOMPLISHMENTS

After review and acceptance of the proposed structural retrofit, the District subsequently applied for and received funding for this project under FEMA's Hazard Mitigation Grant Program. The building has now been brought up to current code for seismically induced lateral load resistance by performing the following work:

- Adding additional drilled wall anchors at the roof and second floor perimeters at 48" or center.
- Extending straps into diaphragms to provide diaphragm cross ties.
- Adding shear bolts and blocking at masonry walls around the entire perimeter at the roof and second level between each joist.
- Adding nailed ¾" plywood under existing 2x ceiling joists at first and second floors.
- Removing and replacing ceiling tiles.

BUSINESS SERVICES CENTER

BACKGROUND

The District's former Business Services Center was located in the vicinity of the Interstate 10 freeway and San Pedro Ave. in downtown Los Angeles.

The three distinct attached buildings which comprised this structure were built between 1915 and 1927. In 1965, a two story room addition and a five story extension were added. A total of over 226,000 s.f. of floor space were contained within the five story L-shaped structure.

In the wake of the Northridge Earthquake, FEMA funded a structural evaluation of the structure. The evaluation documented the structural vulnerabilities when subjected to earthquake forces as being:

1) Soft story conditions
2) Weak story conditions
3) Non-ductile behavior
4) Excessive building torsion
5) Vertical discontinuities
6) Pounding of adjacent buildings
7) Material overstress
8) Floor vibrations

Because of the high cost to upgrade the Center to current building standards, FEMA agreed to fund only the $7.4 million that was cost beneficial. The District requested, and received approval, to apply this $7.4 million towards the demolition of the Center, with the remaining balance being applied towards the purchase of a replacement facility. FEMA subsequently denied approval to use the balance of the funding for a replacement facility, but the demolition of the Center itself remained an eligible project.

ACCOMPLISHMENTS

With the demolition of this complex of buildings, all earthquake-related hazards have been eliminated. District personnel formerly housed in this building have been relocated to a building that was retrofit to current codes and standards.

CARPENTER ELEMENTARY SCHOOL
STRUCTURAL RETROFIT OF MAIN BUILDING

BACKGROUND

The Main Building at Carpenter Elementary School was built in the late 1930's. It is a one-story reinforced concrete structure. Although damage from the Northridge Earthquake was relatively light, the building was found to have inadequate capacity to resist transverse seismic forces (across the building's width). The building seems to have adequate ability to resist seismic forces in the longitudinal direction.

The original plans indicated that there was no effective connection between the roof sheathing and the interior concrete shear walls. The structural engineer felt that the generally adequate behavior of the structure during the Northridge Earthquake is attributed only to the fact that the direction of the strongest ground motion coincided with the building's longitudinal resistance capacity.

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ACCOMPLISHMENTS

The building has been brought into compliance with current code requirements with the addition of cross bracing between the roof and ceiling joists and the addition of steel strap ties and anchors to the ceiling slab.

CARPENTER ELEMENTARY SCHOOL
STRUCTURAL RETROFIT OF CLASSROOM BUILDING 2
ADDITION OF SHEAR WALLS

BACKGROUND

Classroom Building 2 at Carpenter Elementary School was built in the 1960'S. It is a two-story wood framed structure. Seismic loads are resisted in this building by plywood sheathed stud walls in the exterior and interior of building acting in shear. Loads are distributed to the shearwalls by the plywood roof and second floor sheathing. Calculations demonstrated that the shearwall system was significantly overstressed with respect to current code requirements.

The structural engineer felt that the generally adequate performance of the structure was due to the gypboard sheathed partitions that are not normally considered as part of the seismic load resisting system.

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ACCOMPLISHMENTS

The building has been brought into compliance with current code requirements with the addition of 10,000 square feet of new plywood sheathing of the shearwalls and in stairwells.

CARSON HIGH SCHOOL – STRUCTURAL RETROFIT OF GYM BUILDING & 4 OTHER BUILDINGS

BACKGROUND

Carson High School is located approximately 30 miles south of the epicenter of the Northridge Earthquake. Even so, the pattern of damages documented in A&E DSR 04238 and repair DSR 01175 prompted a structural analysis. The analysis concluded that the lateral load resisting capability of the 1962 vintage tilt-up concrete building was inadequate. Tilt-up construction has long been known to susceptible to damage from earthquake shaking.

ACCOMPLISHMENTS

In order to bring the Gymnasium into compliance with current code requirements the structural analysis recommended adding a new plywood roof diaphragm nailed to the bottom faces of existing 6" X 12" beams. As a change order, the low roofs on each longitudinal side of the building that house the boy's and girl's locker rooms were properly attached to the main Gym structure after being found in the field to not be effectively attached by original construction.

THE 4 OTHER BUILDINGS

Depending on the building, either 2 or 3 shear walls were installed into both stories of four non-ductile concrete buildings. In some cases, new footings were installed in order to meet current code requirements.

HALE MIDDLE SCHOOL – RETROFIT OF 8 PEDESTRIAN BRIDGES

BACKGROUND

Hale Middle School, located in the Western portion of the San Fernando Valley, suffered significant damage as a result of the Northridge Earthquake. Damage survey reports at the site totaled over $1.35 Million. DSR 53411 was written to provide A&E services in response to the observed damage to the arcades caused by the Northridge Earthquake. DSR 48055 was subsequently written to supply funding to repair the damage to the arcades campus-wide. These repairs consisted of repairing expansion joints, repairing some columns and the repair of cracks in concrete slabs.

Building codes up to 1972 allowed structures that behave in a non-ductile fashion to be built. Structural calculations were run to determine if the 1961 vintage structures were up to current (1996) seismic code. The concrete frame arcades were found to be non-ductile in nature and therefore susceptible to possible failure if subjected to sufficient earthquake shaking.

The District decided to pursue the replacement of the arcades under the Hazard Mitigation Grant Program, thus bringing the pedestrian bridges up to current seismic code. FEMA granted the approval of this project on January 31, 1997.

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ACCOMPLISHMENTS

By replacing the two pedestrian bridges between Buildings E and F and between buildings F and G, the hazard of possible structural failure associated with pre-1972 non-ductile structures has been eliminated. The California building code prior to 1972 did not contain sufficient detail to allow ductile behavior of concrete structures, enabling them to withstand the levels of earthquake shaking that can be expected in this particular area of California.

HOLMES MIDDLE SCHOOL
STRUCTURAL RETROFIT OF BUILDING A
ADDITION OF SHEAR WALLS

BACKGROUND

Building A at Holmes Middle School was constructed in 1964. It is a U-shaped (three wings) , two-story classroom building. The structure consists of a cast-in-place reinforced concrete frame with reinforced clay brick masonry infill wall panels. The roof and second floor are reinforced concrete, but the slab-on-grade is unreinforced concrete.

The Northridge Earthquake caused damage to the slab-on-grade and many of the column - beam connections were damaged, some exposing reinforcing steel. The brick infill panels were cracked in many cases. In the wake of the Northridge Earthquake, DSR 04195 was written to fund an A & E study to determine the full extent of damage and the appropriate scope of work to bring Building A up to current code requirements. The A& E report recommended the installation of several new shear walls and the replacement of shear walls that were not damaged directly by the Earthquake and therefore not eligible under the Public Assistance program.

Following the Northridge Earthquake there was an opportunity for the District to apply, through OES and FEMA, to the Hazard Mitigation Grant Program to mitigate this known hazard. FEMA granted the approval of this project on November 13, 1998.

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ACCOMPLISHMENTS

The addition of the new shear walls brings Building A up to current code requirements. Not only will this work prevent a possible collapse of the structure, but reduce any downtime caused by significant future earthquake events.

LOS ANGELES CENTER FOR ENRICHED STUDIES REPLACEMENT OF PEDESTRIAN WALKWAY

BACKGROUND

The two-story Pedestrian Walkway between the Science Building (the subject of HMGP 1008-1348) and the Main building at the Los Angeles Center for Enriched Studies (LACES) was a non-ductile concrete structure built in 1961. Structures of this sort, with poorly detailed reinforcing, have been widely recognized as being particularly prone to severe damage from earthquake shaking. The structure was two stories high, 109' 4" long by 13' 10" wide.

The 1500 students walked several times daily between the two buildings under and on top of the walkway. In addition to injuries and possible loss of life, if the structure were to collapse it would block egress routes from both buildings until the debris could be removed. This could cause additional injuries due to panic attempts to escape.,

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ACCOMPLISHMENTS

The replacement of the non-ductile structure with one that complies with current building codes eliminates the threat of the structure collapsing under moderate earthquake shaking. Additionally, egress routes from the two buildings will remain open.

LOS ANGELES CENTER FOR ENRICHED STUDIES STRUCTURAL RETROFIT OF SCIENCE BUILDING ADDITION OF SHEAR WALLS

BACKGROUND

The Science Building at LACES is a two-story reinforced concrete building built in 1961 with a total square footage of 38, 922 s.f. The building was damaged in the Northridge Earthquake with DSR 87632 being prepared to address such damages. In general, there were cracks in shear walls and floor slabs. This triggered the preparation of an Architectural & Engineering report to further analyze the structural capability of the building and to provide repair and hazard mitigation schemes to bring the structure up to current code.

The engineering analysis discovered that the major deficiency of the building was that the heavy 3" thick concrete roof diaphragm overstressed the ability of the walls to handle large earthquake loads.

Following the Northridge Earthquake there was an opportunity for the District to apply, through OES and FEMA, to the Hazard Mitigation Grant Program to mitigate this known hazard. FEMA granted the approval of this project on November 13, 1998.

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ACCOMPLISHMENTS

The installation of internal transverse shear walls brings the Science Building up to current code requirements. Not only will this work prevent a possible collapse of the structure, with resultant injuries and potential loss of life, but it will also reduce the downtime facility use caused by significant future earthquake events.

OLIVE VISTA MIDDLE SCHOOL – GYMNASIUM & MULTI-PURPOSE BUILDINGS RETROFIT OF 4 PRE-CAST CONCRETE TILT-UP BUILDINGS

BACKGROUND

Buildings J and N are pre-cast tilt-up concrete slab buildings. This type of construction has proven to be susceptible to severe damage, even collapse, when subjected to sufficient earthquake shaking. The Gym and Multi-purpose buildings at Olive Vista Middle School were designed to the 1955 California Building Codes.

In the wake of the Northridge Earthquake, structures that appeared to have structural damage were funded for engineering studies. Structural engineers then provided repair and mitigation schemes to bring structures into compliance with the latest building codes.

Through OES and FEMA the District subsequently applied to the Hazard Mitigation Grant Program to fund the mitigation of this known hazard. FEMA granted the approval of this project on January 14, 1997.

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ACCOMPLISHMENTS

The engineering study of the buildings revealed that the anchorage of concrete or masonry walls to the plywood roof diaphragm was inadequate, as is typical for this type of construction. Adding steel wall anchor straps and blocking to the roof diaphragm rafters brought the structures into compliance with current code. Calculations show that the shear capacity of the buildings was increased by 58%.

BUILDINGS D & E

1. **EXTERIOR COLUMN & BEAM REPAIR:**

   Earthquake damage and repairs to buildings 'D & E' (classrooms buildings), work will include the repairs to several deficiencies on diaphragms, shear walls, hold-down anchors, drag and chord splices and sill bolts were found and reported in detail. The purpose of the strengthening work is to reduce the potential seismic hazard and upgrade the building according to the California Building Code.

PALISADES HIGH SCHOOL – RETROFIT OF 8 PEDESTRIAN BRIDGES

BACKGROUND

In the wake of the Northridge Earthquake, the District undertook the task of identifying any structures that did not meet current code required seismic load handling capability. While the pedestrian bridge structures were not heavily damaged in the Northridge Earthquake, there are a number of faults in Southern California capable of producing sufficient shaking to severely damage these structures.

It is widely understood that non-ductile concrete structures built prior to 1972 are susceptible to possible failure if subjected to sufficient earthquake shaking. The Pedestrian stair and bridge structures between the 2nd stories of 4 buildings at Palisades High School are such structures.

Following the Northridge Earthquake there was an opportunity for the District to apply, through OES and FEMA, to the Hazard Mitigation Grant Program to mitigate this known hazard. FEMA granted the approval of this project on November 13, 1998.

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ACCOMPLISHMENTS

By adding external steel frames to both ends of the 4 existing pedestrian bridges between buildings, the non-ductile behavior of the concrete stair and bridge structures has been corrected. In some cases new footings and grade beams were installed to bring the structures up to current California building code seismic load handling capability. The stairways leading up from the ground to the 2nd story pedestrian bridges also were retrofitted or replaced to bring them up to code.

SAN FERNANDO MIDDLE SCHOOL

Scope: Addition of four (4) new columns to help support and strengthen second floor deck.

Addition of four (4) new grade beams tying the footings of four existing columns to the footings of four new columns above.

Provision of structural steel V-braces between the affected columns above.

Replacement of ceiling-high demountable partitions with slab-to-deck structural shear walls throughout second floor.

Provision of structural steel angles under deck of second floor to secure the base of new shear walls to the existing concrete deck.

Provision of continuous structural connections between new shear walls and existing roof deck and between new shear walls and existing perimeter walls.

Provision of new acoustical ceilings and light fixtures throughout second floor classrooms and corridor.

VINTAGE MAGNET ELEMENTARY SCHOOL

The arcades at Vintage Magnet Elementary School were damaged by the Northridge Earthquake along with the buildings that they were attached to. In addition, the columns were found to be insufficient in strength to meet current code requirements. New columns and footings are being installed to bring these structures up to current code.

WILSON HIGH SCHOOL – STRUCTURAL RETROFIT OF VARIOUS STRUCTURES

BACKGROUND

Wilson High School is a 1970 vintage multi-story steel moment frame campus located on a hilltop in the Boyle Heights area of Los Angeles. Even though it was some distance from the epicenter of the Northridge Earthquake, the pattern of damages documented in A&E DSR's 42208 and 42209 (for the Main Administration/Classroom and Multi-Purpose buildings respectively), triggered structural analyses. These analyses revealed the vulnerability of the two folded canopy plates above entrances, arcades, lunch shelter and the pedestrian bridges between the two main buildings to earthquake shaking. All of these structures are non-ductile concrete structures that were not in compliance with current seismic building standards.

ACCOMPLISHMENTS

In order to bring these structures into compliance with current code requirements the structural analysis recommended the replacement of the Main and Multi-purpose Building entrance canopies with a lighter weight steel structure on the existing columns. The lunch shelter and arcades were replaced with more ductile concrete structures. The pedestrian bridge was retrofit by strengthening the connections to the adjacent buildings and installing expansion joints, installing steel jacket at columns, chipping in transverse ties to slabs, and installing new guard rails.

WRIGHT MIDDLE SCHOOL – STRUCTURAL RETROFIT OF THE GYMNASIUM

BACKGROUND

The Gymnasium at Wright Middle School is a 10,888 s.f. one-story concrete/concrete shear wall building built in 1951. In the U. S., prior to about 1970, most concrete buildings were not designed to be ductile, or capable of absorbing significant energy from major earthquakes. Non-ductile concrete frame buildings have been proven to sustain considerable structural damage when subjected to sufficient seismic forces. As a result of the pattern of damages from the Northridge Earthquake FEMA prepared Damage Survey Report #52385 to fund an A & E report about the Gym. Subsequently DSR 48011 was prepared to establish the scope of repairs for the Gym. A Hazard Mitigation Proposal for the scope of work recommended to retrofit the structural deficiencies of the Gym was also prepared. This HMP was not eligible under the Public Assistance program because the particular elements addressed in the HMP were not damaged by the Northridge Earthquake.

ACCOMPLISHMENTS

In order to bring these structures into compliance with current code requirements the structural analysis recommended the following:

- The installation of exterior steel braced frames on the North and South sides of the building with associated foundations and grade beams
- Installation of additional roof anchorage to concrete shear walls
- Infill of six window openings with brick
- Additional plywood sheathing to roof diaphragm

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SUMMARY OF COSTS FOR DSRS
BY CATEGORY BY BUILDING

LOCATION: HOLLENBECK MS -- 8179

DSR CGY SIZE	CGY	DSR NO.	LABOR-REG	LABOR-OT	MATERIAL	MILEAGE	VEND TRANS	ADJUST	SUB-TOTAL	FB-REG	FB-OT	TOTAL EXP.	PAPED-AMT
> BUILDING: SITE													
LL	C	98507	1,329.31	0.00	0.00	38.48	69,924.90	243.22	71,535.91	384.29	0.00	71,920.20	419,840.00
> BUILDING: 004BCJ													
LL	E	02011	4,360.18	260.13	0.00	30.56	44,761.07	39.82	49,451.76	1,260.51	25.87	50,738.14	62,574.00
> BUILDING: 006BDJ													
LL	E	02010	6,086.10	365.33	0.00	56.98	49,742.11	69.66	56,320.18	1,759.48	36.33	58,115.99	107,114.00
> BUILDING: 009CBJ													
LL	E	02032	772.15	23.90	0.00	5.51	35,622.77	36.73	36,461.06	223.22	2.37	36,686.65	58,152.00
> BUILDING: 012DCT													
LL	E	02026	2,583.14	222.55	0.00	26.48	24,116.55	40.83	26,989.55	746.76	22.13	27,758.44	63,054.00
SL	E	13357	0.00	0.00	0.00	0.00	1,100.00	0.00	1,100.00	0.00	0.00	1,100.00	1,186.00
			2,583.14	222.55	0.00	26.48	25,216.55	40.83	28,089.55	746.76	22.13	28,858.44	64,240.00
> BUILDING: 001CAN													
SS	E	02027	2,193.80	215.08	0.00	14.49	19,624.99	16.69	22,065.05	634.21	21.38	22,720.64	26,430.00
> BUILDING: 002BCJ													
SS	E	02012	1,125.00	181.76	0.00	9.38	6,079.13	8.20	7,403.47	325.22	18.06	7,746.75	12,986.00
> BUILDING: 005BCJ													
SS	E	02009	3,342.45	235.74	0.00	25.25	31,474.73	13.27	35,091.44	966.29	23.44	36,081.17	21,004.00
> BUILDING: 008CAF													
SS	E	02018	1,352.03	310.09	0.00	11.44	2,077.57	9.43	3,760.56	390.85	30.84	4,182.25	2,830.00
> BUILDING: 010DAN													
SS	E	20464	4,807.02	565.34	32.91	78.57	16,092.73	129.44	21,706.01	1,389.69	56.24	23,151.94	21,744.00

1

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SUMMARY OF COSTS FOR DSRS
BY CATEGORY BY BUILDING

LOCATION: HOLLENBECK MS -- 8179

DSR CGY SIZE	CGY	DSR NO.	LABOR-REG	LABOR-OT	MATERIAL	MILEAGE	VEND TRANS	ADJUST	SUB-TOTAL	FB-REG	FB-OT	TOTAL EXP.	PAPED-AMT
> BUILDING: 013DCR													
SS	E	47914	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,048.00
> BUILDING: 206													
SS	E	97378	2,502.37	946.28	276.10	60.62	0.00	0.00	3,785.37	723.43	94.15	4,602.95	4,303.00
> BUILDING: X0440L													
SS	E	02031	90.56	149.87	0.00	4.48	5,000.00	0.00	5,244.91	26.18	14.91	5,286.00	5,392.00
> BUILDING: X1011M													
SS	E	02030	111.39	184.34	0.00	5.52	6,600.00	0.00	6,901.25	32.20	18.34	6,951.79	6,632.00
> BUILDING: P0179P													
SS	G	02019	729.41	90.43	0.00	3.02	4,192.58	4.40	5,019.84	210.86	8.99	5,239.69	6,963.00
> BUILDING: SITE													
SS	G	02020	452.78	14.04	0.00	3.23	6,336.49	5.27	6,811.81	130.89	1.39	6,944.09	8,348.00
SS	G	02028	283.56	8.78	0.00	2.02	4,216.34	2.45	4,513.15	81.97	0.86	4,595.98	3,869.00
			736.34	22.82	0.00	5.25	10,552.83	7.72	11,324.96	212.86	2.25	11,540.07	12,217.00
			32,121.25	3,773.66	309.01	376.03	326,961.96	619.41	364,161.32	9,286.05	375.30	373,822.67	836,469.00
Grand Total													
			32,121.25	3,773.66	309.01	376.03	326,961.96	619.41	364,161.32	9,286.05	375.30	373,822.67	836,469.00

2

DRVR-RPT2V2

Previous Non-structural Seismic Retrofit Project 1 (Tie Down, Latch & Brace)

This program was done is 2003 as a mitigation measure to secure non-structural components in classrooms and offices. The cost of the project was $13,245.543. This is anticipated to be an ongoing mitigation strategy (See Strategy # EQ-1).

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
1	107TH ST EL	0	7	5	6	162	33	8	118	516	7	35	1,355	423
2	109TH ST EL	1	0	4	1	68	12	0	49	172	88	179	1,707	546
3	10TH ST EL	1	4	5	3	174	127	4	87	616	60	38	1,190	312
4	112TH ST EL	0	3	5	5	217	53	0	79	599	49	22	295	55
5	116TH ST EL	0	4	4	0	84	50	3	24	270	23	20	938	73
6	118TH ST EL	0	5	5	3	66	47	3	73	269	18	26	1,475	149
7	122ND ST EL	0	7	5	7	25	22	4	127	201	91	0	1,627	22
8	135TH ST EL	0	3	5	9	115	1	6	26	296	34	64	1,021	66
9	153RD ST EL	0	14	5	9	109	37	4	60	515	76	40	1,041	280
10	156TH ST EL	0	5	4	11	46	28	2	24	190	37	63	983	125
11	15TH ST EL	0	6	2	4	141	126	3	62	365	47	100	577	115
12	186TH ST E	0	17	3	21	109	82	6	105	619	65	80	1,982	387
13	20TH ST EL	0	4	3	7	75	40	1	123	122	339	37	885	18
14	232ND PL EL	0	2	6	6	61	7	3	32	415	40	16	478	103
15	24TH ST EL	16	11	8	9	328	88	4	196	948	126	136	3,795	523
16	28TH ST EL	0	1	4	2	143	0	4	55	704	75	116	1,092	273
17	2ND ST EL	1	9	2	6	91	146	6	497	211	83	246	3,133	280
18	32ND/USC PERF ART MAG	2	2	0	22	243	229	17	191	195	155	214	2,432	191
19	3RD ST EL	0	7	4	23	68	32	5	117	142	113	7	594	19
20	42ND ST EL	0	4	3	5	108	4	3	172	310	20	11	992	137
21	49TH ST EL	6	1	2	2	89	131	9	659	335	107	244	5,266	319

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22	4TH ST EL	0	3	4	16	50	43	3	137	205	68	12	2,594	25
23	52ND ST EL	0	10	7	54	111	38	2	138	395	89	42	2,186	178
24	54TH ST EL	0	10	3	23	15	37	2	83	134	82	6	1,622	34
25	59TH ST EL	0	3	4	8	82	38	7	49	202	36	20	1,021	77
26	61ST ST EL	3	0	3	13	121	68	4	76	196	104	273	1,721	926
27	66TH ST EL	0	6	5	8	148	14	6	64	506	82	27	224	101
28	68TH ST EL	1	4	8	6	175	67	7	108	227	98	239	1,405	888
29	6TH AVE EL	0	5	6	6	119	22	2	67	620	48	27	1,263	143
30	74TH ST EL	1	5	4	10	94	86	283	152	336	1,035	370	0	0
31	75TH ST EL	0	10	7	5	60	39	6	68	833	50	26	1,902	127
32	7TH ST EL	0	4	2	12	87	33	4	46	334	23	30	913	105
33	92ND ST EL	0	7	4	2	111	71	4	93	206	59	226	1,609	727
34	93RD ST EL	0	3	6	7	142	110	9	102	730	10	49	1,558	226
35	95TH ST EL	0	11	5	6	160	17	6	101	442	69	21	1,938	229
36	96TH ST EL	3	1	2	10	245	232	7	166	269	114	344	1,025	1,062
37	98TH ST EL	0	6	4	2	73	0	4	36	179	25	15	795	55
38	99TH ST EL	4	2	0	3	147	52	3	113	237	89	267	987	791
39	ADAMS MS	9	11	1	11	239	306	6	105	365	235	404	4,469	358
40	AGGELER HS	0	8	0	10	39	60	5	34	68	74	66	497	157
41	ALBION EL	0	6	4	0	62	12	1	113	150	27	28	634	80
42	ALDAMA EL	0	1	3	2	72	0	1	26	255	7	10	690	32
43	ALEXANDRIA EL	0	7	9	3	161	43	8	240	502	84	48	1,613	146
44	ALLESANDRO EL	0	3	5	23	240	0	10	135	286	17	6	24	32
45	ALTA LOMA EL	0	1	3	0	77	0	0	38	296	20	31	1,244	36
46	AMBLER EL	0	11	5	14	28	21	3	57	153	59	4	1,699	17

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47	AMESTOY EL	2	1	3	13	167	54	3	94	201	106	280	1,064	1,012
48	ANATOLA EL	0	8	4	11	171	1	5	70	149	54	14	799	135
49	ANDASOL EL													
50	ANGELES MESA EL	0	3	4	3	94	16	2	54	292	24	4	874	78
51	ANN EL	0	3	1	5	29	0	2	19	115	38	5	978	67
52	ANNALEE EL	6	1	0	3	113	57	6	66	171	64	166	1,343	881
53	ANNANDALE EL	0	2	4	11	73	0	2	46	241	17	13	535	31
54	APPERSON EL	0	3	2	23	74	2	0	85	55	62	15	1,287	34
55	ARAGON EL	0	0	4	0	126	0	0	36	246	8	1	65	17
56	ARMINTA EL	0	5	7	6	33	11	6	29	324	54	15	1,528	235
57	ARROYO SECO ALTERN	3	3	4	8	127	82	4	42	144	62	120	485	472
58	ASCOT EL	0	7	3	43	165	156	5	414	294	176	285	4,849	433
59	ATWATER EL	0	5	2	0	107	0	0	62	177	19	7	485	39
60	AUDUBON MS	7	27	6	29	296	331	20	130	636	249	310	6,944	386
61	AVALON GARDENS EL	11	8	1	9	196	116	0	109	413	157	276	3,792	1,017
62	BALBOA G/HA MAG	0	18	0	3	164	143	20	34	168	118	119	1,191	572
63	BALDWIN HILLS EL	0	9	6	46	88	78	4	145	106	78	4	1,184	30
64	BANCROFT MS	5	2	0	35	309	204	10	186	403	190	133	2,608	408
65	BANDINI EL	1	2	1	2	97	50	5	70	78	51	119	1,365	461
66	BANNING SH	22	18	2	11	463	404	10	233	1,472	577	373	5,978	854
67	BARTON HILL EL	4	2	2	0	95	63	4	74	228	40	103	623	344
68	BASSETT EL	0	4	0	14	268	8	3	83	455	52	14	1,360	104
69	BEACHY EL	0	5	5	0	102	25	5	52	282	43	8	524	96
70	BECKFORD EL	0	6	0	17	111	0	10	90	56	53	14	913	35
71	BELL SH	22	12	2	23	918	342	19	505	656	539	392	4,346	1,049

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72	BELLEVUE AVE PR	0	2	0	1	14	11	3	3	0	30	18	142	19
73	BELMONT SH	20	26	4	114	1,498	775	24	569	669	702	302	6,209	1,148
74	BELVEDERE EL	0	12	6	1	203	0	6	226	295	67	102	1,554	158
75	BELVEDERE MS	9	14	7	28	335	247	8	158	824	327	485	6,841	709
76	BERENDO MS	9	4	10	50	462	120	14	263	483	202	159	2,686	550
77	BERKELEY AVE EEC	0	1	1	1	5	4	1	4	26	2	4	68	17
78	BERTRAND EL	0	10	4	0	62	0	3	50	224	42	7	1,043	140
79	BETHUNE MS	14	5	4	21	306	244	8	160	537	223	277	4,472	414
80	BIRDIELEE V. BRIGHT EL	0	4	4	3	104	5	4	98	479	27	36	2,185	140
81	BIRMINGHAM SH	39	77	17	114	1,044	1,072	37	694	1,544	972	1,130	17,922	1,770
82	BLYTHE EL	2	6	2	9	128	27	7	64	262	58	40	660	77
83	BONITA EL	4	1	6	1	49	45	6	50	189	54	62	745	233
84	BOYLE HEIGHTS HS	0	1	0	7	18	20	1	14	15	18	37	139	38
85	BRADDOCK DRIVE EL	0	12	7	8	111	0	8	57	343	56	34	857	140
86	BRAINARD EL	0	11	4	27	49	44	5	97	113	87	2	1,492	21
87	BRAVO MEDICAL MAG	13	7	0	5	339	305	10	212	225	214	119	4,022	420
88	BREED EL	1	7	2	5	25	43	3	494	191	106	222	3,580	203
89	BRENTWOOD SCI MAG	13	5	0	25	258	40	2	204	222	143	377	1,492	1,260
90	BRIDGE EL	0	1	2	1	36	0	1	27	181	32	55	879	83
91	BROAD AVE EL	0	4	5	10	66	21	3	160	256	113	3	1,195	27
92	BROADACRES EL	1	2	4	2	80	19	2	71	166	54	161	1,608	506
93	BROADOUS EL	0	5	7	2	136	24	3	110	493	50	6	618	70
94	BROADWAY EL	0	8	0	5	79	0	4	51	140	38	8	1,983	109
95	BROCKTON EL	0	4	3	4	37	0	0	39	179	18	19	523	50

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96	BROOKLYN AVE EL	0	4	4	4	79	0	2	66	427	54	79	1,400	230
97	BRYSON EL	0	6	6	2	110	6	6	56	276	79	12	1,146	118
98	BUCHANAN EL	0	0	3	0	100	28	1	42	321	27	10	384	78
99	BURBANK EL	0	6	0	19	63	3	3	97	123	65	12	749	35
100	BURBANK MS	7	6	8	16	228	31	4	128	424	188	139	3,680	394
101	BURROUGHS MS	12	15	7	13	345	300	8	176	471	252	250	2,999	464
102	BURTON EL	0	9	5	2	36	3	4	25	334	36	23	1,145	122
103	BUSHNELL WAY EL	0	3	4	0	100	8	0	30	212	10	2	153	24
104	BYRD MS	9	11	10	20	309	280	9	163	553	203	196	5,231	421
105	CABRILLO EL	5	8	1	42	66	9	7	91	243	73	22	1,248	121
106	CAHUENGA EL	0	3	2	2	156	90	3	97	251	91	304	1,754	793
107	CALABASH EL	0	3	6	13	34	34	0	17	46	24	4	524	8
108	CALAHAN EL	0	3	5	2	74	33	4	29	280	26	13	1,062	77
109	CALVERT EL	0	11	5	6	127	0	4	69	299	57	25	599	118
110	CAMELLIA EL	0	6	6	3	93	51	1	105	193	35	12	426	117
111	CANFIELD EL	0	4	3	1	67	0	3	44	218	38	23	777	92
112	CANOGA PARK EL	0	4	8	3	187	0	4	72	507	29	12	670	120
113	CANOGA PARK SH	13	28	3	28	370	428	8	252	648	508	474	5,095	620
114	CANTARA EL	0	6	5	2	22	12	3	15	374	13	14	1,343	83
115	CANTERBURY EL	0	7	0	32	153	69	0	130	211	85	41	1,335	41
116	CANYON EL	2	1	2	5	78	67	6	226	98	42	83	2,353	100
117	CAPISTRANO EL	0	3	8	0	135	0	1	56	259	39	1	526	21
118	CARNEGIE MS	13	8	4	1	104	95	6	104	833	204	188	2,740	541
119	CAROLDALE LEARNING COMMUNITY	5	2	1	1	119	98	7	152	303	90	140	711	761

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120	CARPENTER EL	0	5	7	16	126	28	4	79	273	37	23	1,311	155
121	CARSON EL	1	2	2	3	65	42	4	88	189	53	121	1,632	798
122	CARSON SH	15	18	25	19	745	299	8	273	433	361	273	3,562	659
123	CARTHAY CENTER EL	0	5	2	3	51	0	2	66	210	34	26	480	87
124	CARVER MS	7	11	0	27	156	185	9	99	485	393	201	6,292	460
125	CASTELAR EL	0	7	0	16	137	126	9	101	0	306	67	3,806	284
126	CASTLE HTS EL	3	7	5	3	102	0	4	57	305	20	30	407	153
127	CASTLEBAY LN EL	0	8	3	12	143	122	4	106	167	97	10	964	62
128	CATSKILL EL	0	8	5	28	48	17	3	197	34	99	7	1,438	22
129	CENTURY PK EL	0	3	5	6	19	1	3	33	340	32	5	1,161	82
130	CHANDLER EL	0	7	4	2	35	14	3	45	362	34	8	1,048	105
131	CHAPMAN EL	0	2	4	5	68	50	2	78	129	54	123	1,323	580
132	CHARLES W. BARRETT EL	0	16	1	32	189	84	5	158	287	118	339	1,961	1,354
133	CHARNOCK ROAD EL	0	6	4	6	122	0	2	68	321	53	9	767	123
134	CHASE EL	0	14	5	13	23	0	1	29	298	34	19	522	55
135	CHATSWORTH EL	1	4	7	9	86	80	3	145	39	71	27	1,393	19
136	CHATSWORTH SH	11	50	21	47	1,117	842	17	213	856	559	519	6,152	1,159
137	CHEREMOYA EL	0	5	4	10	36	47	2	89	67	92	7	1,639	11
138	CHRISTOPHER DENA ELEMENTARY	4	4	6	7	121	136	5	518	409	134	311	4,135	412
139	CIENEGA EL													
140	CIMARRON EL	0	6	5	1	84	16	5	37	246	28	10	1,030	73
141	CITY OF ANGELS SCHOOL	5	9	3	4	45	44	14	157	99	178	90	2,181	229
142	CITY TERRACE EL	0	3	0	20	82	0	3	74	31	43	15	455	26
143	CLAY JH	11	8	2	12	226	266	9	159	535	269	354	5,789	287

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
144	CLEAR CREEK EDUCATION CTR	0	3	6	3	2	0	1	3	56	3	4	54	78
145	CLEVELAND SH	20	61	14	42	462	506	19	475	909	536	612	9,986	1,145
146	CLIFFORD EL	0	0	4	2	30	1	0	7	102	2	4	0	35
147	CLOVER EL	0	3	4	6	89	0	3	54	258	24	25	423	97
148	COEUR D ALENE EL	1	1	2	11	108	154	12	94	139	55	194	2,204	244
149	COHASSET EL	0	6	4	1	135	1	7	103	326	17	7	1,017	99
150	COLDWATER CYN EL	4	2	2	14	123	223	8	452	235	109	227	3,574	341
151	COLFAX EL	0	19	5	31	21	2	3	52	79	75	9	823	32
152	COLISEUM EL	0	4	3	1	24	4	5	13	200	24	19	860	87
153	COLUMBUS AVENUE ELEMENTARY	0	2	2	25	99	98	2	240	0	32	81	876	143
154	COLUMBUS MS	19	8	0	6	170	282	9	210	542	194	164	1,802	354
155	COMMONWEALTH EL	2	0	2	2	175	45	4	127	170	81	203	1,562	758
156	COMPTON EL	0	6	5	10	137	67	3	67	426	44	44	717	82
157	COOPER HS	5	0	3	4	54	24	3	31	84	60	72	921	139
158	CORONA EL	0	3	1	3	268	169	0	147	657	67	35	953	138
159	COWAN EL	1	10	5	6	71	82	2	311	172	63	138	2,800	125
160	CRENSHAW SH	11	30	4	32	745	515	31	208	695	550	557	9,389	792
161	CRESCENT HTS EL	6	6	5	18	92	12	7	76	349	77	223	1,849	383
162	CRESTWOOD ST EL	0	9	5	2	93	8	4	51	266	19	41	544	84
163	CURTISS MS	7	7	0	6	188	96	9	118	353	173	169	2,370	279
164	DAHLIA HTS EL	0	1	4	1	50	4	0	11	168	8	6	574	22
165	DANUBE EL	0	5	5	8	103	0	2	48	306	40	4	485	80
166	DARBY EL	0	2	6	5	18	0	2	31	218	56	4	100	17
167	DAYTON HEIGHTS EEC	0	1	1	2	8	0	1	11	58	3	6	40	18

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168	DEARBORN EL	0	2	4	0	52	0	3	36	278	42	5	500	38
169	DEL AMO EL	0	10	5	34	107	62	4	118	144	49	3	1,546	17
170	DELEVAN DRIVE EL	0	1	4	5	65	3	0	36	232	29	16	956	117
171	DENKER EL	1	2	1	7	152	31	5	99	305	48	130	2,063	859
172	DEVONSHIRE EL													
173	DIXIE CANYON EL	0	10	6	16	107	7	4	63	270	32	52	1,653	156
174	DODSON MS	26	9	9	36	258	209	13	241	948	232	330	3,415	1,042
175	DOLORES EL	0	14	5	6	164	60	4	68	578	55	62	403	291
176	DOMINGUEZ EL	0	4	2	2	91	55	3	59	148	39	72	826	165
177	DORRIS PLACE EL	0	0	3	0	88	0	1	41	326	2	18	570	16
178	DORSEY SH	4	16	10	39	515	540	19	257	682	360	436	5,922	796
179	DOWNTWN BUSINESS MG	2	5	0	13	364	290	1	187	116	104	99	2,273	278
180	DREW MS	11	15	12	16	343	159	8	191	627	358	472	5,384	1,383
181	DYER EL	0	8	7	19	157	90	4	73	225	64	17	709	172
182	EAGLE ROCK EL	0	3	2	1	168	10	0	53	267	19	27	108	32
183	EAGLE ROCK HS	18	4	4	43	494	179	12	210	576	345	318	5,139	685
184	EASTMAN EL	0	13	6	1	268	0	3	83	612	128	211	718	364
185	EDISON MS	12	11	7	16	308	46	13	163	411	220	189	2,709	415
186	EL CAMINO REAL SH	18	34	2	30	672	512	48	396	683	502	507	4,450	1,127
187	EL DORADO EL	0	8	6	38	105	23	4	59	294	40	15	896	91
188	EL ORO EL	0	3	5	0	67	0	6	28	208	32	1	300	12
189	EL SERENO EL	0	5	6	46	54	45	4	119	201	67	25	2,067	66
190	EL SERENO MS	13	11	8	29	604	333	10	345	943	335	311	4,481	738
191	ELA OCC CTR	8	10	5	36	660	544	13	304	347	220	176	3,167	612
192	ELIZABETH LEARNING CTR	0	14	5	20	412	308	2	142	816	126	140	987	282

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193	ELLINGTON HS	0	1	1	2	21	19	0	4	27	11	23	56	23
194	ELYSIAN HEIGHTS EL	5	4	4	0	90	33	1	74	120	36	146	836	489
195	EMELITA EL	0	11	0	12	43	36	0	76	39	78	10	702	35
196	EMERSON ADULT SCHOOL/WWCAS	3	2	3	8	103	124	5	50	123	108	105	1,284	173
197	EMERSON MS	6	11	0	30	328	225	6	172	326	170	153	3,120	417
198	EMP PREP CTR-WATERS	1	16	2	12	348	291	33	247	224	254	258	1,220	551
199	ENADIA EL													
200	ENCINO EL	0	3	6	16	160	0	6	69	269	38	19	1,107	109
201	ERWIN EL	0	6	6	4	74	33	5	64	357	40	33	1,027	102
202	ESHELMAN EL	0	14	5	9	112	35	4	37	278	60	52	810	143
203	ESPERANZA EL	0	4	4	4	110	22	2	40	296	26	32	451	190
204	EUCLID EL	0	6	6	50	95	13	5	211	141	132	23	2,606	39
205	EVANS ADULT SCHOOL	6	1	4	11	190	109	7	121	187	170	58	1,676	296
206	EVERGREEN EL	0	4	6	12	128	0	5	105	575	113	107	1,148	278
207	FAIR EL	0	12	7	3	29	10	8	59	624	59	31	1,730	268
208	FAIRBURN EL	0	1	3	6	37	47	2	276	156	68	64	3,324	247
209	FAIRFAX SH	10	21	6	41	209	412	9	203	668	532	521	8,322	589
210	FENTON EL	0	11	0	91	504	486	6	174	21	119	4	850	61
211	FERNANGELES EL	9	8	3	7	155	228	4	368	212	56	244	2,527	466
212	FIGUEROA EL	0	2	3	6	131	56	5	59	334	24	16	997	126
213	FIRST ST EL	0	3	2	8	127	119	7	327	206	121	282	3,687	335
214	FISHBURN EL	0	3	6	25	99	96	4	101	167	132	2	950	13
215	FLEMING MS	20	4	5	23	179	43	12	166	565	220	186	2,520	408
216	FLETCHER DR EL	0	0	4	8	121	0	0	47	318	5	15	601	43

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217	FLORENCE EL	0	2	5	4	222	46	3	73	484	37	29	459	86
218	FLORENCE G JOYNER EL SC	6	4	3	2	283	216	5	229	455	99	371	2,300	1,325
219	FLOURNOY EL	1	5	0	1	93	62	3	114	308	83	362	1,782	1,007
220	FORD BLVD EL	0	12	0	33	120	72	0	244	246	151	47	1,978	59
221	FOSHAY LEARNING CENTER	14	16	6	58	620	550	14	204	449	395	501	5,613	723
222	FRANCIS POLY SH	14	37	10	48	639	545	25	296	676	623	356	5,209	1,003
223	FRANKLIN EL	0	0	5	2	67	2	1	10	192	41	25	415	79
224	FRANKLIN SH	21	14	9	22	728	566	16	345	777	526	426	5,563	893
225	FREMONT SH	18	11	5	22	571	414	15	253	606	411	305	2,754	496
226	FRIEDMAN OCC CTR	18	15	0	37	674	544	35	441	451	452	250	3,871	946
227	FRIES EL	5	1	4	2	229	61	4	98	171	104	268	1,508	898
228	FROST MS	12	8	0	46	73	260	12	14	333	269	181	2,449	366
229	FT MCARTHUR	5	4	11	20	204	179	9	91	125	89	129	572	192
230	FULLBRIGHT EL	0	3	4	0	60	43	4	54	290	24	11	904	86
231	FULTON MS	13	18	1	17	386	326	12	148	988	397	405	6,634	639
232	GAGE MS	1	20	7	16	540	116	13	236	494	388	315	2,350	515
233	GARDEN GROVE EL	0	4	3	0	101	89	0	39	180	3	1	1,253	63
234	GARDENA EL	1	0	3	0	173	60	3	72	159	82	187	612	774
235	GARDENA SH	21	6	7	31	604	418	16	260	798	417	259	5,737	638
236	GARDNER EL	0	1	3	0	89	18	1	25	111	18	17	325	81
237	GARFIELD SH	3	23	8	45	661	718	28	201	716	751	754	11,598	846
238	GARVANZA EL	7	1	2	0	97	86	3	86	163	69	201	1,785	574
239	GATES EL	0	6	7	1	120	42	6	76	564	55	29	655	216
240	GAULT EL	0	0	0	0	0	0	0	0	0	0	0	0	0
241	GERMAIN EL	0	1	5	6	142	0	2	65	356	49	0	0	28

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242	GLASSELL PARK EL	0	7	0	13	52	0	3	157	54	62	20	1,236	25
243	GLEDHILL EL	0	2	6	1	64	0	10	27	386	23	11	332	51
244	GLEN ALTA EL	0	3	4	16	35	31	2	82	50	136	8	1,261	6
245	GLENFELIZ BLVD EL	0	2	5	3	46	0	5	43	340	29	40	694	37
246	GLENWOOD EL	1	4	0	5	88	105	9	411	247	67	134	1,317	423
247	GOMPERS INT	4	17	1	18	275	69	10	122	462	214	139	2,662	361
248	GRAHAM EL	0	4	6	20	59	11	1	126	159	125	34	2,743	82
249	GRANADA EL	0	1	4	0	92	0	4	51	211	40	0	150	44
250	GRANADA HILLS SH	14	26	3	22	501	833	15	227	673	603	491	7,983	991
251	GRAND VIEW EL	14	13	8	16	112	166	9	394	454	159	426	4,975	489
252	GRANT EL	0	1	5	3	98	0	1	76	482	16	16	3	57
253	GRANT HS	18	37	6	46	749	672	12	476	718	537	406	7,482	1,036
254	GRAPE EL	0	7	0	2	114	77	2	78	207	68	194	1,659	721
255	GRATTS EL	2	4	1	1	187	76	3	103	281	55	119	937	673
256	GRIDLEY EL	0	7	5	7	131	80	1	47	391	51	22	568	143
257	GRIFFIN EL	0	3	2	1	22	28	3	55	330	37	35	496	128
258	GRIFFITH MS	10	17	8	39	100	271	6	81	517	378	377	6,334	309
259	GULF EL	0	5	4	0	105	65	7	65	418	74	60	1,910	161
260	HADDON EL	0	9	6	5	74	28	3	70	463	50	37	1,175	151
261	HALE MS	12	18	0	3	240	131	3	10	492	251	204	1,458	237
262	HALLDALE EL	1	2	3	1	63	20	0	49	142	80	227	905	739
263	HAMASAKI EL	3	8	4	1	58	119	2	379	223	77	269	3,678	329
264	HAMILTON SH	10	15	11	58	576	527	14	317	749	470	642	8,309	766
265	HAMLIN EL	1	2	0	3	42	31	4	14	115	64	111	723	454
266	HAMMEL EL	0	6	5	1	119	0	1	86	500	81	65	1,697	254

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267	HANCOCK PARK EL	0	8	3	26	69	59	3	105	66	87	12	585	38
268	HARBOR CAS													
269	HARBOR CITY EL	2	2	5	7	97	78	1	70	231	55	148	857	561
270	HARBOR OCC CTR	10	5	0	25	340	262	9	125	227	166	137	859	190
271	HARDING EL	0	9	8	2	11	4	3	10	357	30	5	1,476	120
272	HARRISON EL	0	8	5	5	226	140	6	87	383	52	25	906	416
273	HART ST EL	5	4	0	2	135	70	2	0	219	71	63	1,030	170
274	HARTE PREP INT	4	9	1	10	196	207	13	150	505	227	308	7,548	509
275	HASKELL EL	0	1	4	0	154	0	0	61	28	46	4	375	48
276	HAWAIIAN EL	0	6	5	2	188	60	6	61	495	97	75	1,860	127
277	HAYNES EL	0	2	7	5	62	0	4	32	220	29	0	240	10
278	HAZELTINE EL	0	11	5	20	79	5	0	153	168	141	15	1,534	65
279	HELIOTROPE EL	0	3	3	3	160	28	0	71	462	93	41	396	81
280	HENRY MS	5	22	0	13	112	218	11	113	469	214	112	2,565	393
281	HERRICK EL	0	8	7	17	92	90	0	88	150	31	4	1,078	17
282	HILLCREST DR EL	0	3	7	1	55	19	3	41	319	36	28	1,453	145
283	HILLSIDE EL	4	3	2	2	130	44	3	85	183	67	178	1,202	602
284	HOBART BLVD EL	2	7	10	6	202	7	2	100	667	41	62	639	126
285	HOLLENBECK MS	4	20	3	20	252	555	13	153	724	301	512	6,986	686
286	HOLLYWOOD SH	19	15	0	34	991	467	21	372	630	438	208	4,564	834
287	HOLMES EL	0	7	2	3	58	22	2	36	424	36	25	785	70
288	HOLMES MS	6	10	0	4	130	175	12	178	420	220	183	1,737	400
289	HOOPER EL	0	10	0	1	244	244	0	94	0	628	98	2,143	332
290	HOOVER EL	0	5	4	29	37	149	9	374	90	217	1	2,974	34
291	HUBBARD EL	0	9	9	3	103	62	4	82	347	48	10	718	172

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292	HUGHES EL	0	3	1	0	70	144	0	144	694	39	7	201	129
293	HUMPHREYS EL	0	11	6	37	144	118	3	165	144	102	72	1,917	66
294	HUNTINGTON DR EL	0	2	3	3	121	43	8	48	444	27	21	1,342	156
295	HUNTINGTON PK SH	26	15	17	17	863	513	13	363	799	466	334	3,352	1,012
296	HYDE PARK EL	0	6	4	23	90	21	10	118	246	99	28	1,492	61
297	INDEPENDENCE EL	0	3	1	12	82	46	0	66	572	9	59	341	122
298	IRVING MS	7	22	2	43	309	230	15	329	525	279	376	5,053	643
299	IVANHOE EL	0	0	2	3	82	0	2	29	50	24	23	355	16
300	JEFFERSON SH	1	21	2	41	651	465	40	289	784	574	486	6,691	850
301	JOHNSON HS	1	3	4	6	35	51	2	57	107	66	66	1,053	108
302	JORDAN SH	19	10	17	16	527	209	19	126	485	334	235	3,904	629
303	JUSTICE EL	0	2	0	5	75	71	9	9	164	79	163	936	464
304	KENNEDY EL	0	3	5	40	80	11	93	102	181	40	372	1,121	12
305	KENNEDY SH	22	25	4	25	515	432	28	357	824	753	528	3,164	1,002
306	KENTER CANYON EL	0	8	4	38	89	72	5	127	131	46	35	1,200	55
307	KENTWOOD EL	0	6	5	31	74	41	1	89	133	54	43	1,404	89
308	KESTER EL	0	12	1	1	96	7	1	93	408	64	31	1,987	200
309	KING JR EL	9	3	5	13	40	132	8	565	300	120	312	3,476	273
310	KING MS	6	14	2	12	105	331	7	88	498	472	292	4,394	314
311	KING/DREW MED MAG	0	10	3	19	318	245	8	141	1,145	118	33	2,164	216
312	KITTRIDGE EL	0	14	5	9	260	48	1	125	475	51	18	1,934	130
313	KNOLLWOOD EL	0	5	7	13	52	54	0	78	150	63	5	1,103	14
314	LA SALLE EL	0	4	5	8	167	15	5	49	522	33	10	1,784	84
315	LACES MAG	6	14	8	23	333	295	6	283	442	277	307	4,448	513
316	LANAI EL	0	1	4	18	36	34	1	69	148	93	2	1,225	17

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317	LANE EL	0	19	6	11	56	34	0	71	51	94	47	688	116
318	LANGDON EL	0	1	6	0	165	0	2	91	425	67	0	600	37
319	LANKERSHIM EL	0	7	3	3	136	82	4	59	219	63	14	1,515	114
320	LANTERMAN HS	0	10	4	7	99	0	3	25	273	31	34	973	73
321	LASSEN EL	2	6	0	24	88	123	4	3	166	63	58	1,263	119
322	LATONA EL	0	0	2	2	56	23	2	60	108	39	101	702	423
323	LAUREL EL	0	1	2	13	42	44	1	68	288	23	28	1,475	166
324	LAWRENCE MS	8	19	3	13	175	183	10	222	479	268	288	1,424	537
325	LE CONTE MS	12	12	6	25	391	326	12	226	513	221	144	3,841	389
326	LEAPWOOD EL	5	4	3	9	94	59	4	45	173	58	202	1,865	691
327	LEICHMAN SP ED CTR	14	11	0	9	82	76	4	191	222	87	118	1,688	309
328	LELAND EL	5	0	3	0	131	62	4	94	122	41	84	1,050	350
329	LEMAY EL	0	8	2	2	88	12	8	51	352	22	13	1,311	110
330	LIBERTY EL	0	4	2	4	155	116	0	128	520	43	46	1,047	154
331	LIGGETT EL	19	1	1	0	120	71	5	0	223	112	96	1,689	150
332	LILLIAN EL	0	4	5	1	56	36	2	14	344	38	18	1,554	139
333	LIMERICK EL	0	1	6	0	234	8	3	101	108	91	0	328	64
334	LINCOLN HS	16	28	4	27	702	310	19	328	666	413	267	4,969	698
335	LOCKE SH	4	15	4	25	274	185	16	138	567	324	240	4,994	394
336	LOCKHURST EL	0	8	9	38	93	90	1	115	192	65	10	853	33
337	LOCKWOOD EL	7	0	4	2	100	74	4	116	203	118	246	2,808	714
338	LOGAN EL	0	5	8	3	93	69	3	92	396	46	47	1,060	255
339	LOKRANTZ SP ED CTR	0	19	8	5	47	18	9	44	450	64	13	1,399	165
340	LOMA VISTA EL	0	4	1	1	98	25	2	112	495	48	90	570	277
341	LOMITA MATH/SCI	1	8	5	3	108	25	4	111	177	85	264	1,611	965

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
	MAG													
342	LORENA EL	0	4	1	0	137	0	3	74	278	124	124	899	265
343	LORETO EL	0	4	4	2	101	64	1	56	286	49	47	1,177	141
344	LORNE EL	0	8	4	3	130	0	4	79	274	37	17	1,440	139
345	LOS ANGELES EL	2	3	1	4	141	49	2	196	230	81	130	1,958	1,004
346	LOS ANGELES SH	18	7	4	46	980	646	8	389	549	454	238	4,351	884
347	LOS ANGELITOS EEC	0	2	0	0	5	5	0	4	0	6	40	0	7
348	LOS FELIZ EL	2	0	1	3	68	42	3	131	130	64	182	1,363	752
349	LOWMAN SP ED CTR	17	16	0	13	48	52	2	55	228	78	129	535	237
350	LOYOLA VILLAGE EL	0	5	4	6	103	0	6	39	258	49	10	1,013	90
351	LULL SP ED CTR	5	14	3	11	65	58	1	94	142	58	186	1,562	221
352	MACLAY MS	4	29	8	51	288	244	12	264	734	263	312	5,217	573
353	MADISON MS	5	31	7	42	231	267	12	378	589	312	389	5,397	591
354	MAGNOLIA EL	0	14	2	10	283	32	3	127	643	46	18	1,600	142
355	MAIN ST EL	3	3	3	4	86	201	7	464	285	116	257	3,155	230
356	MALABAR EL	2	8	3	2	72	203	5	549	272	126	432	5,929	288
357	MANCHESTER EL	3	0	6	2	235	51	3	116	228	119	319	1,866	1,124
358	MANHATTAN EL	0	4	6	8	124	110	10	418	229	65	281	3,882	216
359	MANN MS	3	14	0	12	117	144	3	259	514	247	300	4,677	574
360	MANUAL ARTS SH	8	15	4	51	909	725	76	430	940	709	637	8,987	1,019
361	MAR VISTA EL	8	5	3	2	59	194	19	292	264	65	226	3,759	483
362	MARIANNA EL	0	6	7	9	99	85	3	68	169	59	14	1,116	20
363	MARINA DEL REY MS	16	8	9	11	208	98	7	199	459	165	154	3,612	441
364	MARINA EEC	0	1	1	4	9	0	1	12	81	4	2	70	45
365	MARINE AVE BR-BANNING													

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366	MARK TWAIN MS	9	10	6	19	267	153	9	152	624	204	202	3,611	315
367	MARKHAM INT	9	7	0	13	223	63	10	153	472	208	194	4,326	358
368	MARLTON SCH	0	23	2	7	83	37	2	59	225	149	42	1,797	213
369	MARQUEZ EL	0	16	1	9	215	0	4	54	297	30	35	705	114
370	MARSHALL SH	35	17	3	30	874	498	18	534	703	477	448	6,000	1,276
371	MARVIN EL	0	1	8	12	200	0	3	67	576	33	18	1,039	134
372	MAYALL EL	0	0	6	10	80	0	0	41	326	39	0	420	43
373	MAYBERRY EL	0	4	5	0	46	43	2	59	174	42	174	992	458
374	MC/ALISTER HS-CYESIS	0	3	3	6	21	2	8	24	172	58	19	299	45
375	MCKINLEY EL	0	7	3	8	88	0	7	134	156	95	29	2,187	40
376	MELROSE EL	0	4	6	17	24	6	5	82	95	63	9	1,135	13
377	MELVIN EL	0	4	4	3	80	0	9	88	356	52	31	954	140
378	MENLO EL	0	6	4	12	84	7	2	128	183	107	30	2,125	43
379	MERIDIAN EEC	0	1	1	0	10	0	3	5	48	5	12	55	14
380	METROPOLITAN HS	1	2	1	4	29	48	2	34	50	52	25	1,069	59
381	MEYLER AVE	4	1	6	13	105	65	6	118	230	127	375	1,633	1,113
382	MICHELTORENA EL	3	0	0	20	115	33	2	93	149	107	197	1,496	664
383	MID-CITY MAGNET	1	3	3	8	57	84	4	23	74	56	84	1,006	92
384	MIDDLETON EL	0	3	5	11	229	18	0	138	670	56	44	920	122
385	MILES EL	0	5	3	17	423	5	0	165	805	105	20	422	232
386	MILLER EL	3	7	9	5	246	93	2	174	470	209	431	3,286	1,586
387	MILLIKAN MS	8	16	6	25	213	208	12	63	564	306	283	6,203	417
388	MIRAMONTE EL	0	6	9	7	216	134	9	104	834	87	27	1,936	174
389	MONLUX EL	5	8	0	6	97	97	5	433	209	95	153	1,390	413
390	MONROE SH	11	32	0	31	672	732	24	390	697	631	362	4,383	1,119

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391	MONTAGUE EL	6	6	1	4	69	137	10	235	228	115	261	1,629	466
392	MONTARA AVE EL	0	5	5	2	164	42	0	56	401	31	18	867	212
393	MONTE VISTA EL	0	5	6	1	109	0	0	32	288	18	10	305	40
394	MORNINGSIDE EL	2	5	0	12	124	111	6	443	247	121	119	1,049	565
395	MOUNT VERNON MS	7	5	9	15	529	239	10	242	758	257	176	2,352	388
396	MOUNTAIN VIEW EL	0	2	0	30	40	25	4	71	175	45	4	947	18
397	MT GLEASON MS	4	14	0	8	189	241	13	2	416	223	105	1,949	400
398	MT WASHINGTON EL	1	1	0	3	71	22	2	38	116	38	112	973	381
399	MUIR MS	8	21	12	35	292	399	12	265	1,132	356	303	7,439	603
400	MULTNOMAH EL	4	6	5	6	101	32	3	137	179	93	262	943	730
401	MURCHISON EL	0	7	4	4	44	47	6	35	602	55	60	1,948	114
402	NAPA EL	3	7	0	4	127	121	14	460	239	74	118	885	427
403	NARBONNE SH	16	9	18	17	507	389	11	264	584	365	247	5,022	541
404	NESTLE EL	0	13	5	35	50	28	2	97	37	118	14	1,130	29
405	NEVADA EL	0	5	0	9	80	57	4	2	182	56	72	744	185
406	NEVIN EL	0	5	0	47	40	29	4	107	75	59	21	1,094	22
407	NEWCOMR CTR-BELLAGIO	0	5	4	2	25	24	7	152	159	56	150	2,461	184
408	NIGHTINGALE MS	9	7	2	57	351	72	18	226	493	216	253	2,732	536
409	NIMITZ MS	0	17	0	10	339	259	14	208	609	337	322	3,456	594
410	NINTH ST SCHOOL	0	3	5	0	91	11	4	32	248	18	65	806	96
411	NO HOLLYWOOD SH	29	37	7	25	597	829	18	651	804	625	462	6,556	1,134
412	NO VALLEY OCC CTR	1	18	1	10	439	294	60	99	258	368	224	1,579	393
413	NOBEL MS	7	13	6	14	119	166	19	301	475	340	364	5,069	604
414	NOBLE EL	0	4	6	0	119	0	0	99	491	74	15	667	390
415	NORMANDIE EL	0	18	9	73	209	184	6	194	417	126	7	1,833	67

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416	NORMONT EL	0	10	5	13	106	39	3	15	320	47	59	770	94
417	NORTHRIDGE MS	6	14	6	9	176	230	14	225	509	249	190	4,789	571
418	NORWOOD EL	0	4	5	38	149	139	4	173	265	95	6	719	92
419	NUEVA VISTA EL	0	3	6	0	35	14	1	64	455	93	10	1,026	158
420	NVOC AVIATION CTR(BR OF NVOC)													
421	O MELVENY EL	2	8	0	9	59	93	7	354	275	101	110	855	482
422	OLIVE VISTA MS	6	18	4	12	452	376	4	86	494	287	337	7,595	459
423	OSCEOLA EL	5	3	2	5	31	88	3	374	130	51	84	552	159
424	OVERLAND EL	0	1	4	2	30	52	0	385	163	39	92	2,813	303
425	OXNARD EL	0	8	0	21	101	32	0	235	146	77	62	888	114
426	PACIFIC BL SP ED CTR	20	3	0	11	59	27	2	46	318	74	144	585	270
427	PACIFIC PALISADES EL	1	11	2	20	124	99	4	285	163	69	137	3,482	168
428	PACOIMA EL	0	6	8	4	228	167	4	83	607	86	19	1,186	157
429	PACOIMA MS	3	18	10	13	205	244	11	263	658	408	379	6,161	759
430	PALISADES CH HS	20	17	0	36	743	195	18	364	585	332	242	5,444	904
431	PALMS EL	2	2	3	0	24	40	0	265	118	66	187	2,822	117
432	PALMS MS	8	5	6	16	300	126	2	126	413	99	129	2,720	307
433	PARK AVE EL	0	4	4	11	170	12	1	67	432	34	8	601	73
434	PARK WESTERN EL	0	3	6	0	159	28	4	83	419	36	48	1,231	204
435	PARKMAN MS	5	21	5	44	197	209	3	147	537	248	200	4,860	538
436	PARMELEE EL	0	5	6	24	79	91	10	94	533	71	17	1,146	155
437	PARTHENIA EL	0	7	0	6	56	98	11	412	187	78	185	2,363	308
438	PASEO DEL REY NAT SC MG	2	1	1	5	79	74	2	65	170	57	146	1,162	571
439	PEARY MS	18	13	9	26	308	89	12	182	531	276	235	3,574	544

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440	PEREZ SP ED CTR	18	16	6	9	117	154	3	209	356	137	315	6,209	216
441	PINEWOOD EL	0	9	8	18	101	76	3	96	432	64	27	1,524	114
442	PIO PICO EL	1	4	8	8	204	60	6	245	300	122	400	2,046	1,056
443	PLAINVIEW EL	0	7	5	17	50	42	3	107	163	34	15	1,014	43
444	PLASENCIA EL	0	7	10	5	249	70	5	90	630	47	73	1,353	279
445	PLAYA DEL REY EL	1	3	5	1	57	55	6	135	118	37	144	2,126	169
446	PLUMMER EL	0	1	5	0	85	0	2	76	326	69	6	105	55
447	POINT FERMIN EL	0	2	3	4	33	5	2	17	96	14	43	792	50
448	POLITI EL	7	4	3	5	89	52	6	108	219	72	207	1,146	740
449	POMELO EL	2	4	0	7	95	67	4	73	0	29	21	935	314
450	PORTER MS	4	19	7	10	172	174	11	138	410	261	180	3,219	584
451	PORTOLA MS	14	14	2	27	322	348	18	106	561	317	438	6,152	350
452	PRESIDENT EL	0	9	6	3	51	15	3	44	323	34	44	1,046	104
453	PROF DEV - SB-1882	0	0	0	1	0	0	0	1	8	1	0	0	2
454	PURCHE EL	0	3	6	45	43	63	6	112	43	63	5	803	25
455	QUEEN ANNE EL	0	3	1	3	155	0	2	19	514	22	40	16	4
456	RAMONA EL	2	0	2	5	66	32	5	143	226	93	240	1,040	961
457	RAMONA HS	0	5	0	5	87	71	6	38	129	79	105	1,391	165
458	RANCHITO EL	0	2	4	0	71	0	2	27	354	22	1	368	33
459	RAYMOND AVE	1	5	4	11	102	88	3	471	137	96	174	3,745	381
460	REED MS	8	18	7	15	107	278	5	71	452	403	334	5,265	392
461	RESEDA EL	0	4	5	0	90	0	3	52	122	23	9	633	85
462	RESEDA SH	3	50	1	80	504	575	14	475	817	461	498	9,028	963
463	REVERE MS	10	17	7	15	366	317	5	251	459	72	100	4,017	450
464	RICHLAND EL	0	6	5	28	104	64	3	158	85	58	5	918	65

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465	RILEY HS-CYESIS	5	0	4	7	78	49	7	65	122	71	56	673	168
466	RIO VISTA EL	1	8	4	5	50	74	5	260	146	82	94	1,252	226
467	RITTER EL	3	1	3	6	107	49	3	69	118	69	156	611	410
468	RIVERSIDE EL	0	13	4	13	159	32	3	48	388	54	52	1,164	147
469	ROCKDALE EL	0	3	2	3	69	68	2	50	109	33	138	511	377
470	ROGERS HS	0	1	0	2	20	22	0	12	21	31	36	373	23
471	ROSCOE EL	5	3	0	5	77	121	6	396	234	77	156	742	523
472	ROSCOMARE EL	0	7	4	26	83	83	3	73	89	63	2	891	20
473	ROSEMONT EL	0	9	8	2	161	47	5	102	552	34	52	1,941	256
474	ROSEWOOD EL	0	8	3	4	129	0	4	42	298	32	35	784	135
475	ROWAN EL	2	4	8	8	132	213	9	505	377	134	387	5,258	675
476	S SHORES PER ARTS MAG	8	2	3	2	105	22	1	56	130	37	73	696	410
477	SALVIN SP ED CTR	0	26	5	0	20	3	3	12	449	41	15	513	133
478	SAN ANTONIO EL	0	4	1	10	269	98	1	76	410	31	63	383	129
479	SAN ANTONIO HS	1	0	2	2	25	6	0	17	25	16	9	150	29
480	SAN FERNANDO EL	0	6	6	6	148	57	6	96	351	45	45	1,550	213
481	SAN FERNANDO MS	7	11	9	24	203	280	14	207	661	400	495	7,263	649
482	SAN FERNANDO SH	10	39	6	58	396	667	30	507	1,135	702	529	5,548	1,224
483	SAN GABRIEL EL	0	3	4	12	117	39	5	74	296	89	206	953	709
484	SAN JOSE ST	3	5	0	5	69	94	0	281	188	57	108	855	214
485	SAN MIGUEL EL	3	0	5	14	320	62	4	152	285	82	327	1,251	1,163
486	SAN PASCUAL EL	0	1	2	7	14	6	2	52	69	18	0	581	7
487	SAN PEDRO EL	0	5	0	39	103	33	3	106	150	126	51	1,256	40
488	SAN PEDRO SH	27	20	5	72	482	433	26	355	1,279	673	462	4,693	1,494
489	SANTA MONICA COM CHARTER SCH	4	1	2	3	83	55	2	154	198	104	287	830	957

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490	SATICOY EL	0	16	0	2	54	117	43	299	274	94	168	935	420
491	SATURN EL	1	11	2	19	71	88	1	439	164	70	227	4,420	220
492	SELLERY SP ED CTR	14	9	0	15	65	45	4	51	185	73	94	921	359
493	SELMA EL	0	9	7	10	58	0	3	138	126	90	39	1,267	47
494	SEPULVEDA MS	8	39	4	25	311	257	5	276	635	390	329	2,842	656
495	SERRANIA EL	0	6	0	28	131	115	5	129	146	73	14	706	64
496	SHARP EL	5	5	0	6	66	151	6	382	312	126	195	1,216	485
497	SHENANDOAH EL	0	4	5	8	90	0	3	57	538	44	22	1,560	183
498	SHERIDAN ST	0	8	2	0	135	0	3	128	618	180	143	2,102	456
499	SHERMAN OAKS EL	0	7	4	4	44	40	0	17	156	17	18	854	69
500	SHIRLEY EL	0	7	0	1	48	5	2	21	350	60	53	1,203	94
501	SHORT EL	0	5	3	0	43	0	3	23	224	30	12	650	67
502	SIERRA PARK EL	0	8	2	18	85	4	5	200	83	85	15	2,629	64
503	SIERRA VISTA	0	0	0	2	57	25	2	59	85	39	101	661	354
504	SKL CTR-ELA	7	0	1	20	327	278	10	167	129	183	64	482	482
505	SKL CTR-METRO	2	1	0	15	302	282	9	112	81	103	95	541	294
506	SKL CTR-PACOIMA	0	1	0	29	231	148	3	49	78	196	40	367	178
507	SKL CTR-VENICE	2	0	3	8	234	199	12	28	61	87	88	423	118
508	SOCES MAG	14	7	0	13	325	231	21	61	487	237	290	9,747	509
509	SOLANO EL	0	0	2	1	66	29	6	14	64	25	23	270	62
510	SOTO EL	0	5	2	1	57	0	1	27	164	61	59	750	166
511	SOUTH GATE MS	5	24	1	19	684	59	9	274	600	354	351	4,415	664
512	SOUTH GATE SH	25	28	1	40	812	605	18	508	857	510	264	4,328	966
513	SOUTH PARK EL	0	12	9	5	150	38	20	80	450	37	42	1,242	183
514	STAGG EL	0	7	6	4	36	4	2	55	289	21	37	1,072	85

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515	STANFORD EL	0	1	4	9	199	64	0	99	615	99	54	1,503	135
516	STATE EL	0	6	8	9	92	67	5	60	562	59	30	1,429	173
517	STERRY EL	0	12	8	9	45	1	6	112	208	60	29	1,272	79
518	STEVENSON MS	5	18	2	75	235	476	18	288	724	351	594	7,481	688
519	STONEHURST EL	3	1	0	7	69	78	11	278	179	77	79	1,059	251
520	STONER EL	0	3	5	17	33	2	4	123	21	49	8	1,423	49
521	STONEY POINT HS	0	3	0	3	29	19	2	31	25	26	11	131	39
522	STRATHERN EL	0	5	5	42	104	102	4	180	59	93	24	1,224	36
523	SUN VALLEY MS	10	31	10	41	65	145	16	154	668	717	626	6,710	706
524	SUNLAND EL	0	5	0	0	24	35	4	1	205	18	71	714	184
525	SUNNY BRAE EL	0	2	5	1	35	8	5	24	350	23	15	1,225	122
526	SUNRISE EL	0	9	12	4	118	0	1	29	343	55	65	1,367	173
527	SUPERIOR EL	0	1	5	0	218	0	3	57	231	43	7	210	38
528	SUTTER MS	10	18	4	28	284	263	12	264	438	293	302	4,296	619
529	SYLMAR EL	4	5	5	2	86	153	6	396	160	83	147	2,390	459
530	SYLMAR SH	5	19	8	57	750	721	18	328	734	453	365	7,104	1,003
531	SYLVAN PARK EL	0	7	1	52	94	79	6	143	75	102	39	2,066	70
532	T BRADLEY ENVI SC & H CMS	4	0	8	3	80	128	14	360	110	96	277	2,507	151
533	TAFT SH	15	30	7	42	591	725	14	675	843	431	451	8,783	1,162
534	TAPER EL	0	6	0	3	67	60	3	56	334	92	283	1,116	419
535	TARZANA EL	2	8	2	1	100	100	5	437	171	80	109	1,822	278
536	TELFAIR EL	0	8	9	4	41	17	9	80	622	63	39	2,405	241
537	TOLAND WAY EL	0	4	4	24	57	41	3	120	200	87	6	985	25
538	TOLUCA LAKE EL	0	6	7	16	95	58	7	67	280	38	26	1,127	133
539	TOPANGA EL	0	3	6	6	38	45	0	48	96	33	4	398	17

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
540	TOPEKA DR EL	14	13	0	7	130	118	8	31	180	135	197	1,065	690
541	TOWNE EL	4	2	3	3	50	34	3	57	135	50	39	793	193
542	TRINITY EL	0	5	2	3	188	0	4	155	616	119	59	1,052	393
543	TULSA EL	0	2	5	4	163	0	2	44	260	36	1	203	12
544	TWEEDY EL	0	3	1	4	82	42	7	89	81	62	203	399	509
545	UNION EL	0	5	3	48	171	12	19	170	270	162	32	1,395	36
546	UNIVERSITY SH	21	9	9	46	702	419	28	517	732	432	364	3,722	1,076
547	UTAH EL	0	8	3	5	165	0	1	43	405	86	68	1,219	237
548	VALLEY VIEW EL	1	2	3	2	35	21	3	43	119	46	86	741	302
549	VAN DEENE EL	0	6	5	14	21	5	3	77	89	55	12	1,562	21
550	VAN GOGH EL	0	1	0	9	39	19	2	71	126	36	1	1,022	12
551	VAN NESS EL	0	13	7	2	57	106	3	244	360	81	174	2,774	395
552	VAN NUYS EL	0	6	5	18	38	29	0	71	61	116	51	1,038	49
553	VAN NUYS MS	1	23	3	23	95	225	16	192	384	216	303	3,566	468
554	VAN NUYS SH	17	21	2	37	435	726	25	584	922	868	552	6,295	1,002
555	VANALDEN EL	0	6	6	0	95	56	5	46	307	28	17	1,342	91
556	VAUGHN EL	0	15	5	23	272	140	4	96	439	93	46	1,726	191
557	VENA EL	9	5	0	2	112	137	3	316	223	58	143	850	636
558	VENICE SH	24	11	7	68	858	489	25	519	649	486	307	5,282	824
559	VERDUGO HILLS SH	10	20	1	14	326	324	16	55	461	315	152	1,795	787
560	VERMONT EL	0	9	2	35	108	105	3	291	192	161	11	2,312	41
561	VERNON CITY EL	0	2	1	2	39	24	2	49	194	18	9	264	77
562	VICTORIA EL	0	2	1	1	183	1	0	94	514	115	23	490	39
563	VICTORY EL	4	1	1	1	104	128	2	469	252	126	132	1,161	481
564	VINE EL	0	6	3	4	236	0	3	86	341	64	36	568	194

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
565	VINEDALE EL	0	4	5	30	31	21	2	62	77	52	7	1,135	40
566	VINTAGE MATH/SCI MAG	6	8	1	6	68	56	3	431	249	89	149	1,439	356
567	VIRGIL MS	15	5	1	26	310	275	13	192	525	299	225	2,755	419
568	VIRGINIA EL	0	1	3	26	88	74	5	84	79	36	40	1,559	18
569	W HOLLYWOOD OPPT CTR	1	0	5	5	66	29	1	35	60	36	32	477	66
570	WADSWORTH EL	0	7	6	2	154	0	1	85	635	102	68	1,144	357
571	WALGROVE EL	4	3	2	2	31	30	8	410	173	66	223	3,518	208
572	WALNUT PARK	3	3	1	19	204	73	2	199	332	144	255	1,718	1,063
573	WARNER EL	0	8	3	5	63	0	3	49	208	54	19	749	88
574	WASHINGTON PREP HS	26	58	13	80	1,766	2,292	63	593	1,530	1,294	1,251	14,323	2,008
575	WEBSTER MS	15	10	14	27	252	193	12	236	421	210	159	4,250	449
576	WEEMES EL	0	5	5	6	254	34	6	140	575	51	24	1,986	139
577	WEIGAND EL	0	4	0	0	109	65	3	55	150	43	139	687	333
578	WELBY EL	0	1	3	0	109	0	2	72	272	47	2	410	12
579	WEST ATHENS EL	0	2	5	4	137	97	8	51	436	30	15	1,699	72
580	WEST HOLLYWOOD EL	2	2	2	3	56	58	1	204	92	54	164	1,892	247
581	WEST VAL OCC CTR	4	24	0	58	709	643	25	4	381	491	114	2,063	663
582	WEST VERNON EL	3	4	5	10	58	158	0	529	292	131	188	2,422	396
583	WESTCHESTER SH	13	10	20	39	602	323	8	403	696	338	228	5,821	802
584	WESTERN EL	2	3	6	5	48	105	0	437	198	53	301	3,088	275
585	WESTMINSTER EL	0	4	3	11	119	0	0	58	478	35	19	1,574	122
586	WESTPORT HTS EL	1	1	3	4	40	21	5	67	137	90	221	1,245	600
587	WESTSIDE LEADERSHIP MAGNET	5	2	2	5	120	105	2	86	119	49	92	616	188

	LOC. DESCRIPTION	WALL REFRIGERATOR $60/ea.	FREE STANDING REFRIGERATOR $60/ea.	WATER HEATER $120/ea.	TV MONITOR $20/ea.	COMPUTER MONITOR $15/ea.	CPU $15/ea.	COPIER $15/ea.	OFFICE EQUIPMENT $15/ea.	CABINET LATCH $5/ea.	FILE CABINET $20/ea.	BOOK CASE $20/ea.	SHELVING RESTRAINT $1.5/lf	MISC. EQT $15/ea.
588	WESTWOOD EL	4	12	5	31	153	163	7	427	241	102	361	4,836	189
589	WHITE HSE PL PRIMARY	0	2	2	1	56	24	2	19	84	7	12	158	44
590	WHITE MS	8	8	5	27	199	34	9	111	411	220	142	3,529	358
591	WHITE POINT EL	0	2	2	0	81	33	4	25	228	22	23	501	64
592	WILBUR EL	0	13	7	4	89	38	1	34	384	18	7	1,600	57
593	WILLENBERG SP ED CTR	15	9	4	6	93	57	1	68	257	100	126	1,889	403
594	WILMINGTON MS	8	12	3	13	305	99	12	231	555	249	179	3,910	535
595	WILMINGTON PK EL	0	6	4	8	105	25	8	90	656	73	147	3,308	488
596	WILSHIRE CREST EL	7	6	3	9	120	27	3	159	216	79	222	851	779
597	WILSON SH	14	6	4	32	576	415	9	290	476	281	221	3,739	643
598	WILTON PL EL	4	7	5	15	236	17	4	163	226	116	247	2,263	925
599	WINDSOR M/S AERO MAG	4	3	2	1	179	41	4	123	167	85	188	1,057	824
600	WINNETKA EL	6	3	0	1	70	93	10	35	129	79	141	1,296	565
601	WONDERLAND EL	1	2	4	12	67	79	3	150	112	33	178	2,728	220
602	WOODCREST EL	2	12	0	17	125	224	28	588	302	137	358	3,723	279
603	WOODLAKE EL	0	1	4	0	96	0	2	50	173	43	0	0	9
604	WOODLAND HILLS EL	0	17	5	36	98	72	0	133	36	107	6	752	36
605	WOODLAWN EL	0	1	2	0	224	16	0	69	463	42	13	731	113
606	WRIGHT MS	12	3	5	6	192	99	12	167	374	189	116	1,888	323
607	YORKDALE EL	1	4	2	4	64	58	1	75	127	61	179	761	628
TOTAL Jobs		**2,092**	**4,708**	**2,392**	**8,108**	**105,528**	**70,278**	**4,194**	**86,353**	**201,649**	**79,963**	**80,372**	**1,233,003**	**196,338**
TOTAL COST ($)		**125,520**	**282,480**	**287,040**	**162,160**	**1,582,920**	**1,054,170**	**62,910**	**1,295,295**	**1,008,245**	**1,599,260**	**1,607,440**	**1,233,033**	**2,945,070**

Previous Non-structural Seismic Retrofit Project 2 (Ceiling & Fixture Retrofit)

The project was a one-time project and was completed 2004 and was done as a mitigation project to seismically retrofit ceilings and light fixtures to facilities throughout the district.

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
1	109th St. ES		ONN	23,382	0	397	92	0
2	10th St. ES	7082	TEN	3,984	304	54	4	4
3	112th St. ES		OTW	1,650	0	0	0	0
4	116th St. ES		OSX	0	1,920	0	0	10
5	118th St. ES		OET	1,660	0	24	0	0
6	122nd St ES		OTS	3,441	0	0	92	151
7	153rd Street ES	5822	OFT	0	0	0	0	36
8	156TH ST EL		OFS	0	0	0	0	6
9	15th Street ES	3767	FIF	13,971	0	260	0	43
10	186TH ST EL	5753	OES	0	1,440	0	0	0
11	186TH ST SCI CNTR	1219	71H	0	1,440	2	0	16
12	1st St. ES	3836	FIR	13,985	0	15	294	294
13	20th St ES		TWT	0	11,120	0	178	0
14	232nd Place ES	7329	TTS	0	0	0	0	18
15	24TH ST EL	7301	TWF	6,728	0	120	0	30
16	28th St EEC	9595	TEC	4,947	0	62	0	0
17	28th St ES	7288	TTE	8,784	0	0	264	0
18	2nd St. ES		SEC	32,978	0	108	409	0
19	32nd St USC PA	7137	THM	13,628	896	267	0	0
20	37th St CC	9593	TCC	4,676	0	98	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
21	3rd Street ES	7110	THI	250	1,600	4	24	0
22	42ND ST EL		FSC	0	3,584	60	0	218
23	49th St. ES		FRN	0	0	0	0	266
24	52ND ST EL		FIS	0	0	0	0	105
25	54TH ST EL		FFO	9,812	0	182	0	0
26	61st ES	6808	SFR	3,768	0	0	0	0
27	66th St EEC		SSC	4,405	0	81	0	0
28	66th St ES		SSI	0	2,333	0	0	0
29	68th St. ES	6795	SEI	1,800	3,584	0	24	58
30	6th Ave. CC (9560)	6781	SIC	0	0	0	0	14
31	74th Street ES	6644	SFO	31,863	0	569	0	33
32	75th St ES		SFI	9,514	0	0	142	0
33	7TH ST EL		SEV	0	5,526	0	72	0
34	92nd St. ES	5548	NSE	3,164	1,728	42	24	24
35	95th St ES	5521	NFI	0	960	0	0	0
36	96th St. ES		NSI	13,200	0	0	290	0
37	97TH STREET EEC		NSC	4,433	0	69	0	0
38	99th St ES	5534	NNI	16,763	0	211	14	0
39	ADAMS MS		ADJ	0	15,413	0	220	0
40	Aggeler SH	8507	AGG	1,800	0	0	18	0
41	Albion ES	2014	ALB	7,795	0	38	17	21
42	ALBION ST EEC		ACC	4,472	0	69	0	0
43	Aldama ES	2027	ALD	4,774	2,920	70	46	2
44	Alexandria ES		ALX	7,192	10,123	42	271	12
45	Allesandro ES	2068	ALE	9,813	2,880	161	0	26

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
46	Alta Loma ES	2082	ALT	3,400	0	48	0	0
47	Ambler ES	2089	AMB	19,712	5,442	32	388	0
48	Amestoy ES	2096	AME	8,037	6,459	106	78	0
49	Anatola ES		ANA	2,880	1,920	18	0	0
50	Andasol ES		AND	0	6,798	7	72	0
51	Angeles Mesa ES	2123	ANM	3,544	0	48	0	84
52	Ann Street ES		ANN	0	0	0	0	173
53	Annalee ES	2146	ANL	3,400	893	60	8	14
54	Apperson ES	2164	APP	0	3,624	0	48	48
55	Aragon ES	2178	ARA	16,114	8,640	229	92	0
56	ARLINGTON HTS EL	2192	ARL	1,384	0	34	0	0
57	Arroyo Seco Alt School	4322	ARR	0	0	0	0	76
58	Ascot Ave. ES	2219	ASC	19,784	0	294	0	0
59	Atwater ES	2233	ATW	20,473	2,700	328	0	18
60	Audubon MS (8028)	8029	AUD	73,121	0	1,274	0	14
61	Avalon Gardens ES	2247	AVG	0	6,426	0	24	8
62	Balboa Mag. ES	2269	BAM	0	3,840	0	48	0
63	Baldwin Hills ES	2274	BHE	1,796	2,304	46	0	0
64	Bancroft MS	8038	BNC	47,826	0	552	14	45
65	Bandini ES	2288	BAN	5,289	0	90	0	0
66	Banneker Spe. Ed.	1941	BNK	51,739	0	715	4	0
67	Banning HS (8529)	8539	BNH	146,396	3,456	2,086	48	4
68	Barrett ES		NSV	0	6,048	0	18	132
69	Beckford ES		BEC	0	19,070	318	0	0
70	Bell SH		BEL	61,291	0	453	24	341

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
71	Belmont SH	8543	BLM	23,729	0	0	494	494
72	Belvedere ES	2397	BVD	4,336	0	48	0	8
73	Belvedere MS		BVJ	37,718	0	608	113	0
74	Berendo MS		BER	31,235	13,883	354	85	276
75	Bertrand ES		BRT	0	0	0	0	2
76	Bethune MS	8060	BET	16,724	0	0	389	0
77	Birmingham SH		BIR	22,062	0	16	301	0
78	BLEND EL	1943	BLE	629	0	14	0	0
79	Blythe ES		BLY	1,728	0	0	0	18
80	Bonita ES	2473	BON	0	0	0	0	88
81	Brainard ES	2486	BRN	0	1,440	0	18	18
82	Bravo Medical Magnet	8754	BRV	96,585	0	48	1,017	0
83	Breed Street School	2493	BRE	23,298	0	97	187	187
84	Brentwood Sci. Mag.	2507	BRS	3,298	0	30	0	0
85	BRIDGE STREET EEC		BGC	0	1,565	0	44	0
86	Bridge Street School	2521	BRG	10,954	0	0	142	142
87	Bright ES	7164	THS	35,257	4,023	457	50	26
88	Broad Ave. ES	2527	BRD	36,993	0	476	0	0
89	Broadous EEC	9587	BDC	3,988	0	60	0	0
90	Broadous ES	3829	BDE	2,118	4,044	0	70	70
91	BROADWAY EL		BDW	0	0	0	0	75
92	BROCKTON EL	2548	BRK	13,121	0	136	0	0
93	Brooklyn Avenue School	2562	BKY	8,689	0	106	22	22
94	Brooklyn EEC	9579	BKC	4,374	0	43	0	0
95	Bryson Avenue School	2589	BRY	0	468	0	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
96	Buchanan ES	2603	BUC	0	13,474	1	259	0
97	BUDLONG EL		BUD	0	0	0	0	201
98	Burbank MS	8066	BBJ	71,867	0	163	883	1
99	Burroughs MS	8075	BUR	16,962	0	244	0	2
100	Burton ES	2658	BTN	0	1,920	0	24	24
101	Bushnell ES		BSH	7,121	0	8	63	0
102	Cahuenga ES		CAH	33,329	122	297	37	0
103	Calabash ES	2704	CAL	1,440	0	0	12	0
104	Calahan ES		CLH	960	0	0	0	0
105	Canfield ES	2740	CAN	17,333	936	235	0	0
106	Canoga Park EEC	9592	CGC	4,384	0	60	0	0
107	Canoga Park SH	8571	CPH	39,507	0	109	878	0
108	Cantara ES		CTR	1,728	960	0	0	0
109	Canterbury ES	2781	CTB	2,402	4,035	0	78	78
110	Canyon ES	2795	CYN	224	0	3	0	0
111	Capistrano ES		CAP	2,688	6,255	0	112	112
112	Carlson Hospital Sch		CRL	0	0	0	0	8
113	Carnegie MS	8090	CNG	47,812	1,372	609	23	139
114	CAROLDALE LRNG COMM		CDL	0	4,320	0	0	25
115	Carson ES	2836	CRS	5,113	0	48	36	22
116	Carson HS	8575	CAR	0	4,102	0	85	192
117	Carver MS		CRV	0	0	0	0	314
118	Castelar CC	9510	CSC	6,684	0	86	0	0
119	Castelar ES	2863	CST	25,361	6,098	354	88	0
120	CASTLE HTS EL	2877	CSH	0	3,440	0	24	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
121	Castlebay Lane		CSB	5,773	7,776	114	40	0
122	Catskill ES	2890	CSK	0	0	0	0	77
123	CDS TRI C		CTC	0	0	0	0	12
124	Century Park ES	2945	CTP	300	0	2	0	267
125	Chandler ES	2959	CHA	0	3,568	0	0	0
126	Chapman ES	2986	CHP	14,953	1,695	264	0	24
127	CHARNOCK ROAD EL	3002	CHR	200	1,804	0	24	5
128	Chatsworth ES		CWE	0	9,600	0	0	1
129	Chatsworth HS	8583	CWH	8,512	0	0	117	0
130	Cheremoya ES	3041	CHE	0	712	0	0	17
131	CHEVIOT HILLS HS		CHV	0	0	0	0	18
132	CIENEGA EL		CIE	0	0	0	0	110
133	Cimarron ES	3082	CIM	0	0	0	0	47
134	CITY TERRACE EL		CTT	0	0	0	0	8
135	Clay MS	8099	CLY	3,584	432	60	0	179
136	Clear Creek Ed Cnt		35D	0	0	0	0	21
137	Cleveland SH		CVH	5,184	0	72	0	0
138	Clifford Street ES	3110	CLF	0	1,440	0	16	31
139	COEUR D ALENE EL	6342	CDA	0	0	0	0	38
140	Cohasset ES	3137	COH	4,488	8,488	0	154	154
141	Colfax ES	3164	CFX	891	5,367	0	76	76
142	Coliseum ES	3178	CLS	0	1,824	0	0	0
143	Collins ES (now Kadima)	3189	CLN	0	0	0	0	6
144	Commonwealth ES		CMW	19,441	0	17	120	0
145	Compton EEC		COC	0	0	0	0	22

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
146	Compton ES	3205	CMP	0	960	0	8	24
147	Corona ES	3219	COR	0	19,231	12	0	0
148	Cowan Ave. ES	3260	COW	4,588	0	48	12	0
149	Crenshaw HS	8596	CRH	131,488	0	2,054	5	99
150	Crescent ES		CRC	14,385	0	14	249	0
151	CRESCENT HEIGHTS BLVD EEC	9597	CCC	4,409	0	84	0	0
152	Crestwood ES	3302	CSW	0	4,286	0	100	0
153	Curtiss MS	8103	CUR	3,052	101,228	456	2	9
154	Dahlia Heights ES	3329	DAH	2,400	0	32	0	0
155	Dana MS	8104	DAN	0	49,468	2	1,033	54
156	Darby ES	3340	DRB	0	4,485	0	60	60
157	DAYTON HEIGHTS EEC		DYC	4,465	0	69	0	0
158	Dayton Heights ES	3356	DAY	11,878	0	199	0	12
159	Dearborn ES	3377	DEA	0	4,608	0	56	0
160	DEL AMO EL		DLA	0	0	0	0	26
161	Delevan Drive ES	3397	DLD	18,154	960	295	12	36
162	Denker ES	3425	DNK	13,501	2,680	188	24	8
163	Dixie Canyon ES		DXC	3,744	0	19	0	0
164	Dodson MS	8110	DDJ	0	0	0	0	100
165	Dominguez ES	3466	DMG	5,508	0	84	0	0
166	Dorris ES	3479	DOR	3,364	1,616	48	30	0
167	Dorsey HS	8600	DRH	1,863	10,966	39	111	1
168	Downtown Bus. Mag.		DWB	71,902	0	586	71	0
169	Drew MS		DRW	6,912	0	0	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
170	Dyer ES	3493	DYE	2,161	0	0	34	34
171	Eagle Rock ES	3507	ERH	9,607	8,697	87	217	79
172	Eagle Rock SH	8614	ERH	75,251	2,484	963	182	182
173	Earthart Cont. HS		EAR	3,492	0	75	0	0
174	Eastman CC		EAC	4,276	0	0	108	0
175	Eastman ES		EAS	4,250	0	75	0	0
176	Eastside EEC		ETC	3,550	0	0	55	0
177	Edison MS	8113	EDI	30,928	913	18	440	443
178	El Camino Real SH	8617	ECR	4,465	125,978	0	2,158	2,148
179	El Dorado ES	3541	ELD	0	6,400	0	80	80
180	EL SERENO EEC		ELC	4,467	0	69	0	0
181	EL SERENO EL		ESE	0	1,440	0	12	23
182	El Sereno MS		ESJ	36,011	136	387	37	171
183	Elizabeth LC	3548	ELZ	200	7,188	17	0	59
184	Ellington HS	8930	ELL	887	0	0	17	0
185	Elysian Hts. ES		ELY	7,096	0	45	108	0
186	Emelita ES		EME	2,820	0	10	0	0
187	Emerson Adult Ctr.	1389	EMA	1,364	0	20	0	0
188	ENADIA EL		ENA	0	0	0	0	152
189	Encino ES		ENC	960	13,081	126	5	0
190	Eshelman ES	3640	ESH	9,991	1,344	143	42	89
191	Esperzanza ES		ESP	30,402	6,794	12	0	0
192	Euclid ES	3671	EUC	1,925	0	0	12	12
193	EVANS COMMUNITY ADULT SCHOOL		EVN	0	0	372	0	46

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
194	Evergreen EEC	9586	EVC	4,975	0	67	0	0
195	Fair Ave. EEC	9582	FAC	4,358	0	75	0	0
196	Fair ES	3712	FAI	3,476	0	16	14	14
197	Farmdale ES		FMD	1,728	844	0	24	0
198	Fenton ES		FEN	14,038	0	0	164	0
199	Fernangeles ES	3753	FER	1,316	0	0	18	18
200	Figueroa St ES		FIG	10,769	0	139	16	188
201	Fishburn ES	3849	FSB	836	3,428	6	14	0
202	FLEMING MS		FLM	0	0	0	0	13
203	Fletcher ES	3877	FLE	12,208	809	172	107	0
204	Florence ES		FLO	17,281	5,078	187	60	0
205	Flournoy ES		FLR	38,341	1,440	0	782	0
206	Ford ES	3918	FRD	15,813	0	227	12	12
207	FOSHAY LEARNING CENTER		FOS	9,408	14,644	170	96	9
208	Franklin Ave ES	3986	FKE	3,000	0	41	0	1
209	Franklin HS	8643	FKH	71,020	678	905	880	233
210	Fremont SH & CO 2		FRE	10,840	15,075	32	300	3
211	Friedman Occ. Ctr.	9058	FOC	55,209	1,105	781	55	22
212	Fries ES	4014	FRI	4,837	0	28	75	0
213	Frost MS	8137	FRO	6,048	0	0	70	0
214	Fullbright ES		FLB	2,880	0	0	24	0
215	Gage MS		GAG	22,727	18,144	72	382	0
216	GARDENA SH		GDH	0	0	206	0	0
217	Gardner Street ES	4068	GRD	12,168	0	172	0	2

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
218	Garfield SH	8679	GFH	38,603	0	179	563	563
219	Garvanza ES	4082	GVZ	18,840	0	211	0	143
220	Gates EEC	9589	GEC	4,275	0	92	71	71
221	Gates ES	4096	GAT	6,800	7,695	48	72	196
222	Germain ES	4117	GER	2,880	1,920	0	60	0
223	GLASSELL PARK EL		GLS	13,807	0	186	0	0
224	Gledhill EEC		GHC	4,426	0	0	96	0
225	Gledhill ES	4130	GLD	5,123	2,880	0	236	0
226	Glen Alta ES	4137	GLA	26,941	0	62	298	298
227	GLENFELIZ BLVD EEC	9517	GLC	4,756	0	84	0	0
228	GLENFELIZ BLVD EL	4164	GFZ	8,194	0	0	106	3
229	Glenwood ES		GLW	0	0	0	30	0
230	Gluck CC @ NVOC		GKC	3,296	0	0	43	43
231	Gluck CC @ NVOC	9594	GLK	2,880	960	0	46	0
232	Gompers MS		GMP	0	0	0	0	48
233	Graham EEC	9518	GMC	4,500	0	66	0	0
234	Graham ES	4219	GRM	1,846	0	0	25	25
235	Granada ES		GRN	0	11,413	0	146	146
236	Granada Hills SH	8681	GHS	8,280	2,400	0	135	100
237	GRAND VIEW EL	4247	GRV	0	0	0	0	20
238	Grant CC	9519	GTC	4,260	0	62	0	0
239	GRANT EL		GRE	2,612	14,000	0	28	0
240	Grant SH		GRH	500	5,376	0	6	10
241	Gratts ES		BM5	0	36,775	0	0	0
242	Gridley ES	4295	GRL	1,602	5,398	0	92	92

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
243	Griffin ES	4301	GRF	8,617	2,192	12	170	0
244	Griffith Joyner ES		ONS	1,728	0	0	0	51
245	Griffith MS		GFJ	0	0	0	0	29
246	Guardian Angel (Title I) Sch	9620	GUA	917	0	0	24	24
247	Haddon EEC		HDC	4,109	0	75	0	0
248	Haddon ES	4329	HAD	17,565	0	241	0	0
249	Hale MS		HAL	6,424	1,728	0	123	123
250	Hamasaki ES		HMS	5,360	0	71	0	0
251	Hamasaki Pre Sch		HAK	1,390	0	36	0	0
252	Hamilton HS	8686	HAM	138,614	0	1,582	0	6
253	Hamlin ES		HMN	0	2,592	0	0	0
254	Hammel EEC	9521	HMC	4,578	0	59	0	0
255	Hammel ES	4356	HML	0	1,902	57	0	30
256	Harbor City ES	4425	HBC	4,294	2,688	60	24	60
257	Harbor Occ. Ctr.	9180	HOC	56,463	1,602	903	35	2
258	HARBOR TEACHER PREP ACADEMY	8518	HTP	0	4,320	0	50	0
259	Harding ES		HRD	0	7,536	0	96	0
260	Harrison ES	4438	HRR	16,732	0	0	397	397
261	Harte Prep. MS	8170	HRP	34,008	0	513	0	95
262	Haskell ES		HSK	1,784	8,959	0	134	134
263	Hawaiian EEC	9522	HWC	4,299	0	73	0	0
264	Hawaiian ES	4466	HAW	0	0	0	0	182
265	Heliotrope ES	4507	HEL	0	1,664	0	0	0
266	Herrick ES		HER	1,424	7,388	0	0	12

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
267	Hillcrest ES	4528	HCL	0	5,376	0	0	209
268	Hillside ES		HLL	18,865	0	222	108	36
269	HOBART BLVD EEC		HTC	4,632	0	78	0	0
270	Hobart Blvd. ES	4548	HOB	24,191	5,419	354	4	38
271	Hollenbeck MS	8179	HOL	18,193	35,690	0	844	844
272	Hollywood HS	8693	HWH	0	7,402	0	98	0
273	HOLMES AVENUE EEC		HLC	0	0	0	0	33
274	Holmes ES	4562	HLE	0	8,376	0	0	110
275	Holmes MS	8182	HLJ	4,672	0	0	91	0
276	Hooper ES	4575	HPR	33,939	0	52	683	683
277	Hoover ES	4589	HOV	0	42,467	9	0	505
278	Hubbard ES	4603	HUB	906	816	0	35	35
279	Hughes ES	2375	HUE	0	39,634	0	0	812
280	Humphreys ES	4616	HMP	5,855	0	5	45	45
281	Huntington Adult		HPA	960	0	0	12	12
282	Huntington ES		HUN	19,100	3,072	0	0	154
283	Huntington Park SH		HPH	7,200	61,859	413	117	92
284	Hyde Park CC	9527	HYC	5,296	0	79	0	0
285	INDIAN SPRINGS HS		IDS	0	0	0	0	12
286	Irving MS	8189	IRV	19,851	17,010	205	300	38
287	Ivanhoe ES	4671	IVA	2,340	1,440	20	10	0
288	Jefferson HS	8714	JEF	36,902	15,077	427	240	12
289	JOHNSON HS		JHN	1,876	2,896	0	0	0
290	Jordan SH		JRD	3,488	6,912	14	0	118
291	Jordan-Locke Community		JLA	2,768	4,320	51	50	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
	Adult							
292	KENNEDY EL		KNE	26,754	0	547	92	0
293	Kennedy SH	8725	KNH	1,588	9,894	0	155	155
294	King ES	6534	KGE	3,584	1,440	0	0	144
295	King MS	8208	KNG	20,671	0	321	38	0
296	Kittridge ES	4760	KTT	8,350	0	0	106	106
297	Knollwood ES		KNO	16,213	0	195	0	0
298	La Salle ES		LAS	20,604	0	177	244	4
299	Lanai ES		LNI	0	0	0	0	9
300	Lane ES		LAN	2,592	3,456	30	0	0
301	Langdon	4775	LNG	2,880	0	52	112	0
302	Lankershim ES	4781	LKR	963	0	0	10	10
303	Lanterman HS	1919	LTR	25,104	5,795	325	119	6
304	Latona ES		LAT	12,463	0	126	92	6
305	LAUREL EEC	9529	LRC	4,409	0	88	0	0
306	LAUREL EL	4808	LAU	22,736	1,604	471	20	0
307	LEAPWOOD EL		LPW	0	0	0	0	73
308	LeConte MS (8226)	8225	LCM	46,583	0	64	774	0
309	Leichman Sp Ed	1908	LEI	42,810	0	7	704	0
310	Leland ES	4836	LEL	2,599	5,617	35	72	0
311	Lemay ES		LEM	0	960	0	0	110
312	Liberty ES		LIB	23,211	0	6	390	18
313	Liggett ES		LGG	6,684	9,326	0	180	180
314	Lillian ES	4877	LLL	3,584	20,396	48	0	0
315	Limerick ES	4881	LIM	0	960	0	12	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
316	Locke SH		LCK	0	0	0	0	1,340
317	Logan ES	4904	LOG	20,459	16,897	98	251	531
318	Lokrantz Sp Ed Ctr	1947	LOK	520	0	6	0	1
319	Loma Vista ES		LMV	26,985	0	208	336	0
320	Loreto ES	4959	LRT	6,176	0	0	45	123
321	Lorne ES		LRN	5,456	0	0	0	213
322	Los Angeles HS	8736	LOS	66,634	3,248	853	48	6
323	Los Angeles Tech Ctr	9289	LTC	23,806	0	340	0	0
324	Los Feliz ES	4986	LFZ	1,501	0	10	24	7
325	Lowman Special Ed	1948	LOW	6,368	0	96	0	0
326	Loyola Village ES	5014	LOY	1,920	9,120	24	0	1
327	Maclay MS		MAC	0	0	0	0	323
328	MACLAY PRIMARY CTR		MPC	0	1,602	0	24	0
329	Magnolia ES	5055	MAG	0	0	0	0	123
330	Main ES		MAI	6,947	0	12	52	0
331	Malabar ES		MAL	3,591	0	0	0	94
332	Manchester ES	5096	MCH	600	0	0	0	19
333	Manhattan Place ES	5110	MHT	15,246	0	277	0	40
334	Mann MS	8236	MNN	23,065	2,432	352	68	27
335	MANUAL ARTS SH		MAH	0	3,206	17	43	0
336	MARINA DEL REY MS		MDR	0	0	0	0	2
337	MARK TWAIN MS		MKT	0	0	0	0	8
338	MARKHAM INT		MKH	0	2,700	0	30	0
339	MARLTON SCHOOL		MRL	2,496	0	48	60	479
340	Marquez ES	5164	MQZ	0	3,840	0	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
341	Marshall HS	8750	MRS	103,188	28,108	1,226	723	4
342	Marvin CC	9584	MVC	4,498	2,160	62	0	0
343	MAXINE WATERS EMPLOY PREP CTR		WEP	0	0	0	1	0
344	Mayall ES		MAY	5,330	2,414	0	100	100
345	Mayberry ES	5205	MYB	3,811	14,988	6	332	1
346	MC/ALISTER HS-CYESIS		CYE	0	0	0	0	27
347	MCBRIDE SP ED CTR		MCB	3,163	1,992	44	0	6
348	McKinley ES		MCK	22,832	0	0	80	0
349	Melrose ES	5219	MLR	3,340	884	44	0	0
350	Melvin ES		MLV	7,680	0	0	96	0
351	MENLO EL		MLO	0	0	0	0	3
352	MERIDIAN EEC		MEC	4,492	0	68	0	0
353	Micheltorena ES	5288	MIC	19,648	0	0	302	0
354	Mid City Magnet	3500	MID	3,396	1,372	48	24	0
355	MID-CITY ADULT BASIC ED CTR		BLC	2,304	864	38	0	26
356	Middleton ES (5301)	5302	MDT	14,652	11,200	204	0	189
357	Mikes EEC	9591	MSC	4,500	0	108	0	0
358	Miles EEC		MCC	4,644	0	60	0	0
359	Miles ES		MIL	40,560	8,640	665	193	0
360	Miller ES		MLL	29,125	1,000	529	0	0
361	Miller SH		MLH	3,453	0	0	84	0
362	Monlux ES		MLX	865	6,055	0	12	96
363	Monroe SH		MNR	25,167	0	0	280	4
364	Montague ES		MTG	3,584	0	129	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
365	MONTARA AVE EL		MTR	0	0	0	711	12
366	Monterey Cont HS		MTY	0	0	0	0	9
367	Montevista EEC	9590	MVI	4,432	0	60	0	0
368	Montevista ES	5384	MTV	3,597	8,370	65	180	0
369	Morningside ES	5397	MRN	7,990	2,688	0	207	207
370	Mount Gleason MS		MGL	10,884	0	162	0	0
371	MOUNT VERNON MS		MVJ	69,399	0	352	1,009	0
372	Mount Washington ES	5411	MWA	840	0	10	0	157
373	MOUNTAIN VIEW EL		MNV	0	363	0	0	0
374	Muir, John MS	8255	MUI	3,598	0	55	0	294
375	Mulholland MS	8259	MUL	0	5,640	0	0	0
376	Multnomah ES		MLT	0	1,920	0	0	0
377	MURCHISON ST EEC		MHC	0	0	0	0	11
378	N HOLLYWOOD SH		NHY	0	0	6	0	412
379	Narbonne HS	8779	NAR	861	0	14	0	43
380	Nevada ES	5459	NEV	0	3,840	0	48	0
381	Nevin ES		NVN	725	0	0	0	0
382	Newcastle ES		NEW	22,112	0	0	0	0
383	Newman Ntr Ctr	1472	36S	18,639	0	0	250	0
384	Newmark HS	8545	NWM	390	0	3	0	0
385	Nightingale MS		NGH	47,507	2,279	159	638	3
386	Nimitz MS		NMZ	3,834	0	110	4	42
387	NINETY-FIFTH ST EEC		NFC	4,660	0	107	107	0
388	Nobel MS	8272	NOJ	2,592	0	0	36	0
389	NOBLE AVENUE EEC		NBC	4,588	0	69	0	86

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
390	Noble ES		NOB	0	3,456	0	0	81
391	Normandie ES	5630	NMD	20,600	0	330	10	0
392	Normont CC	9543	NMC	4,412	0	67	0	0
393	Northridge MS		NRR	0	0	0	0	12
394	Norwood Street School	5699	NOR	19,635	0	295	0	213
395	NVOC 1-404 (9332 FOR 9329 NVOC)	9332	NVA	23,259	0	315	0	46
396	NVOC 1-404 (THIS FOR 9329 NVOC)	9329	NVO	353	0	0	0	33
397	O'Melveny ES	5726	OMV	2,700	4,536	0	117	0
398	OPEN CHARTER SCHOOL		OPM	0	0	0	0	44
399	Osceola ES		OSC	853	1,748	0	25	25
400	Overland ES	5904	OVR	0	0	0	0	45
401	Oxnard ES		OXN	611	0	0	6	200
402	Pacific Blvd Sp Ede		PAC	587	3,639	0	0	1
403	Pacific Palisades ES	5959	PPD	13,527	0	181	0	0
404	Pacoima ES	5973	PCE	1,490	0	0	13	13
405	Pacoima MS	8321	PCJ	9,125	0	0	106	10
406	Palisades Char. HS (8798)	8797	PAL	0	4,032	0	0	0
407	Park Western CC	9548	PWC	4,563	0	66	0	0
408	Park Western ES	6013	PKW	1,978	3,600	56	0	0
409	Parthenia ES	6027	PTH	900	1,800	12	120	0
410	Peary MS	8352	PEA	2,534	2,165	35	31	5
411	Perez Spe. Ed. Ctr.		PER	48,180	0	35	41	0
412	Phoenix HS	8909	PHX	4,025	0	57	0	0
413	Pinewood ES		PNW	31,013	0	400	80	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
414	Pio Pico ES	4980	PPC	41,151	36,262	448	576	0
415	Plasencia ES		PLS	14,053	3,084	0	216	0
416	PLATT RANCH EL		PLT	0	0	0	0	186
417	Plummer ES	6123	PLU	0	1,920	0	168	0
418	Point Fermin ES	6137	PTF	0	313	0	4	2
419	Politi ES		POL	28,752	925	584	0	0
420	POLYTECHNIC SH		FCP	0	2,282	0	61	0
421	Pomelo ES		POM	27,352	1,226	367	18	0
422	Porter MS	8354	PRJ	880	1,760	0	34	34
423	Portola MS		PTJ	10,366	36	0	86	0
424	PRIMARY ACADEMY FOR SUCCESS SC		LNP	0	13,814	0	60	0
425	Purche ES	6158	PCH	0	9,417	0	120	68
426	Ramona ES	6178	RME	36,681	0	592	0	0
427	Ramona Oppt SH		RMH	0	0	0	0	14
428	Ranchito ES	6192	RAN	0	0	0	32	0
429	Raymond ES	6219	RAY	1,603	0	20	0	97
430	Reed MS	8355	REE	1,278	7,279	0	75	75
431	RESEDA EL		RSE	2,281	0	24	0	0
432	Reseda SH		RSH	9,186	0	0	48	46
433	RILEY HS-CYESIS		RIL	0	0	0	0	26
434	Rio Vista ES		RVS	7,913	0	108	0	0
435	RITTER EL		RTT	0	0	0	0	176
436	Riverside Drive ES	6315	RVR	8,338	0	0	97	96
437	Rockdale ES	6329	RCK	1,602	0	24	0	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
438	Roosevelt HS	8829	RSV	103,209	21,665	1,390	338	389
439	Roscoe ES		RSC	900	0	0	13	8
440	Roscomare ES	6363	RCM	0	2,592	0	0	0
441	Rosemont ES	6370	RSM	4,894	3,185	32	41	10
442	ROSEWOOD AVE EEC	9554	RWC	3,388	0	67	0	0
443	ROSEWOOD EL	6384	RSW	1,830	0	21	0	0
444	Rowan ES	6425	ROW	19,334	7,188	263	28	28
445	SALVIN SP ED CTR	1955	SAL	10,800	6,968	182	0	84
446	San Antonio SH		SAN	0	0	0	0	24
447	San Fernando EEC		SFC	4,369	0	62	0	0
448	San Fernando MS		SFJ	8,730	24,623	123	371	209
449	San Fernando SH	8843	SFH	8,756	16,840	0	90	332
450	San Gabriel ES	6466	SGB	3,594	802	49	0	11
451	San Jose ES	6479	SJE	1,570	2,676	0	48	12
452	San Miguel ES		SME	194	38,630	0	0	0
453	SAN PASCUAL EL		SPS	0	1,186	0	23	68
454	San Pdro/Wilm Skl CC	9886	SPC	0	1,798	0	24	0
455	San Pedro ES	6507	SPE	2,528	1,688	39	0	138
456	San Pedro Narbonne CAS	9385	SPA	2,360	0	41	1	1
457	San Pedro/Wilmington Skill Center	1687	WSK	3,886	0	42	12	0
458	San Pedro/Wilmington Skill Center (AREA BAB)	1682	WTS	0	0	0	15	0
459	Santa Monica Blvd ES	6548	SMC	25,049	3,516	27	413	0
460	SATURN EL	2644	SAT	3,400	0	0	36	0
461	Selma ES	6589	SEL	30,222	1,348	48	645	645

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
462	Sepulveda MS	8363	SVJ	4,320	0	0	58	0
463	Serrania ES		SRR	5,760	0	0	0	0
464	Sheridan ES		SHR	33,430	0	474	62	62
465	Sherman Oaks ES	6699	SOE	0	20,196	16	418	48
466	Sierra Park ES		SRP	3,457	0	0	92	0
467	Solano ES		SOL	0	1,399	0	0	41
468	Soto ES		SOT	4,344	0	0	0	5
469	South Gate Adult		SGA	864	0	0	0	0
470	South Gate MS		SGJ	11,138	0	8	324	14
471	South Gate SH		SGH	17,102	46,089	763	76	133
472	South Shores Per Arts Mg	6870	SSM	0	0	0	24	22
473	STANFORD EL		STA	0	22,425	44	247	8
474	State EEC		SAC	0	0	0	0	26
475	State ES	6918	STT	3,584	552	48	0	0
476	Sterry ES	6932	STE	15,731	0	205	0	0
477	STERRY, NORA EEC		SNC	0	0	0	0	3
478	Stevenson MS		STV	32,676	0	410	0	0
479	Stonehurst ES	6945	STN	3,596	2,697	0	84	0
480	Stoney Point HS		STP	0	0	0	0	2
481	Strathern ES		STR	951	0	0	12	0
482	Sun Valley MS	8396	SNV	0	9,720	0	144	144
483	Sunland ES		SUN	6,924	9,060	17	144	2
484	Sunny Brae ES	6986	SNB	0	4,530	0	60	0
485	Sunrise ES	6988	SNR	4,289	0	0	84	84
486	Superior ES	7007	SUP	0	7,680	0	96	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
487	Sutter MS		SUT	1,423	0	0	0	19
488	Sylmar ES	7014	SYE	6,440	0	0	88	88
489	Sylmar SH	8878	SYH	3,388	0	48	0	0
490	Sylvan Park EEC		SKC	4,460	0	103	0	0
491	Sylvan Park ES		SYP	3,240	0	1	43	0
492	Taper ES	7035	TAP	2,159	1,331	3	56	233
493	Tarzana ES		TRZ	19,881	2,880	0	0	0
494	Telfair EEC	9580	TIC	4,439	0	61	0	0
495	Telfair ES		TLF	0	0	0	0	408
496	Trinity ES		TRN	14,040	0	244	0	0
497	Union ES	7356	UNN	43,221	11,028	575	232	0
498	University HS	8886	UNV	28,442	0	0	370	0
499	Utah ES	7370	UTH	31,368	0	117	273	0
500	VAN DEENE EL	7419	VND	0	0	1	0	14
501	VAN GOGH EL		VNG	0	1,440	0	0	0
502	Van Ness ES	7425	VNN	0	20,816	0	0	0
503	Van Nuys MS	8434	VYJ	720	1,012	0	17	17
504	Van Nuys SH		VYH	29,518	0	0	315	352
505	Vanalden CC.		VDC	4,438	0	107	0	0
506	Vaughn EEC		VGC	4,240	0	60	0	0
507	Vaughn ES		VAU	7,680	1,920	0	132	132
508	Vena ES	7466	VNA	905	0	0	12	12
509	VENICE CAS-SC-UNIVERSITY CAS		VEA	0	760	0	12	0
510	VENICE SH		VEN	2,827	29,236	51	485	0

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
511	VENICE SKILLS CENTER		VSK	0	864	0	10	0
512	Verdugo SH		VDH	2,592	0	0	30	110
513	VERMONT EL		VRM	1,920	2,936	31	0	0
514	Vernon City ES		VRN	0	0	0	0	12
515	Victoria ES		VCT	26,102	2,000	508	22	17
516	Victory ES		VCY	0	4,320	0	48	16
517	Vine Street CC	9574	VIC	6,012	0	68	0	0
518	Vine Street ES	7534	VIN	0	8,159	29	0	0
519	Vinedale ES	7548	VDL	0	1,605	0	20	20
520	Virgil MS		VRG	54,861	96	361	62	147
521	Virginia ES	7575	VGN	0	960	0	0	0
522	W. Hollywood Opp. Ctr.	8728	WHY	617	0	6	0	0
523	Wadsworth ES	7589	WDW	27,490	0	334	0	0
524	Walnut ES		WPK	28,179	6,804	23	348	0
525	Warner ES	7616	WAR	7,826	896	106	0	0
526	Washington EEC	9896	NIC	0	4,500	36	0	0
527	Washington Prep HS	8928	WAS	40,542	0	716	0	38
528	Weemes ES	7151	WEE	17,752	0	331	0	0
529	Welby ES	7637	WEL	0	5,760	0	72	0
530	West Athens ES	7644	WAT	0	4,220	0	51	96
531	West Vernon ES		WVR	16,970	2,240	205	96	96
532	Western ES	7671	WES	4,284	4,200	0	40	336
533	Westminster ES	7699	WSM	36,911	0	434	0	0
534	Westport Hts. ES	7712	WSP	0	0	0	0	115
535	Westside Alt. School	3311	WSA	0	0	0	0	67

	SCHOOL NAME	ORGN	AREA	New Ceiling Sq Ft	Retrofit Ceiling Sq Ft	New Recessed Troffer Fixtures Qty	Retrofit recessed Fixtures Qty	Replace Pendant Fixtures Qty
536	White House Pl. Pri. Ctr.		WHH	8,712	0	0	83	0
537	WHITE MS		WHT	0	0	0	0	56
538	White Point ES	7767	WHP	0	3,626	0	48	0
539	Wilbur ES		WLB	2,880	0	0	0	0
540	Willenberg Spec Ed	1957	WIL	26,479	0	420	0	0
541	Wilmington MS	8490	WLM	3,396	0	56	0	1
542	WILMINGTON PARK EEC	9585	WPC	4,788	0	70	0	0
543	Wilmington Park ES	7781	WLP	0	11,348	85	156	2
544	Wilshire Crest ES	7795	WLC	18,433	6,536	336	8	0
545	Wilton Place ES	7808	WLT	2,037	31,597	29	390	0
546	Winnetka ES	7836	WNN	1,855	17,811	14	359	13
547	Wonderland ES	7849	WND	8,437	0	127	0	0
548	Woodcrest ES	7863	WDC	16,392	0	257	0	136
549	Woodlake ES	7877	WLK	0	2,880	0	152	0
550	Woodland Hills ES		WDH	0	4,416	0	0	0
551	Woodlawn ES	7904	WLW	4,729	0	69	0	0
552	Wright MS	8493	WRI	2,696	0	24	0	75
553	Yorkdale ES	7959	YRK	4,124	6,722	43	115	13
TOTALS				**5,404,485**	**1,860,432**	**55,239**	**43,388**	**29,786**

Deferred Maintenance

The Los Angeles Unified School District Deferred Maintenance Plan (2004-2008) was prepared by the Facilities Services Division, Facilities Support Services and Maintenance and Operations on May 13, 2004. LAUSD's deferred maintenance program for the 5 year period totals over $1.2 billion. The plan generally **does not** include projects that would be classified as Hazard Mitigation; with the exception of over $44 million in Asbestos Removal & Abatement and several electrical projects which include upgrading or repairing fire and emergency alarm systems in their facilities.

LAUSD has taken an aggressive approach to avoid deferring maintenance projects that would increase risk during disasters. The information on the next pages summarizes the 5-year Deferred Maintenance Plan for LAUSD.

The listing of sites and specific project information required in item 10 of the plan summary is not included in this document and is available from the Facilities Services Division of the Los Angeles Unified School District.

STATE OF CALIFORNIA
FIVE YEAR PLAN
DEFERRED MAINTENANCE PROGRAM
SAB 40-20 (New 04/02)

STATE ALLOCATION BOARD
OFFICE OF PUBLIC SCHOOL CONSTRUCTION
Page 1 of 3

General Information

This Form is a summary of proposed deferred maintenance projects the applicant district plans on completing annually over the next five fiscal years using the Basic Grant, pursuant to Education Code Section 17591. The fiscal year the plan commences is determined by the fiscal year in which it was filed. New and revised plans are accepted on a continuous basis for the current fiscal year up to the last working day in June. Revisions are not accepted for prior fiscal years.

Specific Instructions

Part I - Complete to designate or change the authorized district representative. Enter the name of the district employee that can act on behalf of the district. A consultant who is on contract with the district to communicate with the OPSC on behalf of the district's board may be listed.

Part II - Estimated Fiscal Year Data

Column	Description	Instructions
1	Number of projects	List the number of eligible projects in each of the project categories shown (refer to Regulation Section 1866.4.1).
2-6	Current and subsequent fiscal years	Enter the total estimated costs in each project category for each fiscal year identified for the projects reported in column 1.
7	Total estimated cost	For each project category enter the totals of columns 2-6.
8	Grand total	Total all columns.
9	Remarks	Include any additional information for each category. If the district is applying for extreme hardship grants for any of the projects listed on the plan, identify those projects in this space. If additional space is needed, you may attach a separate sheet with your remarks to this form.
10	School information	List the facilities where deferred maintenance projects are planned as reported in column 1 on this Five Year Plan (refer to Regulation Section 1866.4.1). If additional space is needed, you may attach a separate sheet.
11	Certification	Review and complete (refer to Regulation Section 1866.4.and EC Section 17584.1).

When completed mail this form to:

Office of Public School Construction
Attn.: Deferred Maintenance Program
1130 K Street, Suite 400
Sacramento, CA 95814

NOTE: Any Five Year Plan, SAB 40-20 not conforming to State Allocation Board (SAB) guidelines will be returned to the district. If you need assistance in completing this form, please contact the Office of Public School Construction, at (916) 445-3160.

STATE OF CALIFORNIA
FIVE YEAR PLAN
DEFERRED MAINTENANCE PROGRAM
SAB 40-20 (New 04/02)

STATE ALLOCATION BOARD
OFFICE OF PUBLIC SCHOOL CONSTRUCTION
Page 2 of 3

SCHOOL DISTRICT	COUNTY	FIVE DIGIT DISTRICT CODE NUMBER (See California Public School Directory)	CURRENT FISCAL YEAR
Los Angeles Unified	Los Angeles	40/07200	2003 / 2004

The District: ☐ has not previously submitted a Five Year Plan. ☒ is submitting this updated/revised Five Year Plan which supersedes the plan currently on file with the SAB.

Part I - The following individual has been designated as a district representative by school board minutes:

TELEPHONE NUMBER	FAX NUMBER
(231)633-7587	(213)633-7238

DISTRICT REPRESENTATIVE	TITLE	BUSINESS ADDRESS	E-MAIL ADDRESS
Bruce Kendall,	Director of Maintenance & Operations	355 S.Grand Ave.,#484, LA, CA 9007	bruce.kendall@lausd.net

Part II - Estimated Fiscal Year Data

	1. NUMBER OF PROJECTS	2. CURRENT F.Y.	3. SECOND F.Y.	4. THIRD F.Y.	5. FOURTH F.Y.	6. FIFTH F.Y.	7. TOTAL ESTIMATED COST
Asbestos	942	$ 3,923,127	$ 2,822,247	$ 1,790,792	$ 2,580,297	$ 33,049,191	$ 44,165,654
Classroom Lighting	16	$ 189,000	$ 934,320	$ 177,000	$ 258,978	$ 0	$ 1,559,298
Electrical	161	$ 460,689	$ 6,231,550	$ 8,542,300	$ 6,555,400	$ 5,976,000	$ 27,765,939
Floor Covering	46	$ 726,900	$ 562,372	$ 467,200	$ 812,700	$ 594,559	$ 3,163,731
HVAC	837	$ 7,949,470	$ 5,221,364	$ 3,562,500	$ 2,694,100	$ 991,134,322	$1,010,561,756
Painting	108	$ 2,557,347	$ 3,094,149	$ 792,200	$ 2,715,300	$ 629,400	$ 9,788,396
Paving	247	$ 557,057	$10,466,600	$13,927,300	$ 9,597,700	$ 90,592,400	$ 125,141,057
Plumbing	86	$ 1,110,200	$ 2,370,600	$ 1,130,700	$ 3,167,713	$ 1,599,700	$ 9,378,913
Roofing	787	$ 2,476,500	$12,720,350	$11,131,900	$ 8,168,100	$ 14,533,682	$ 49,030,532
Wall Systems	234	$ 3,789,131	$ 3,101,700	$ 617,500	$ 2,382,710	$ 344,918	$ 10,235,959
8. Grand Total	3,464	$23,739,421	$47,525,252	$42,139,392	$38,932,998	$1,138,454,172	$1,290,791,235

9. Remarks

STATE OF CALIFORNIA
FIVE YEAR PLAN
DEFERRED MAINTENANCE PROGRAM
SAB 40-20 (New 04/02)

STATE ALLOCATION BOARD
OFFICE OF PUBLIC SCHOOL CONSTRUCTION
Page 3 of 3

10. List the school names where deferred maintenance projects are planned in this Five Year Plan:

See Attached

11. Certifications:

I certify as District Representative that:

- this work does not include ineligible items and that all work will be completed in accordance with program requirements, applicable laws and regulations. The district shall maintain proper documentation in the event of an audit; and,
- the district understands that should an audit reveal that these funds were expended for other than eligible deferred maintenance costs, the SAB will require the district to return all inappropriately expended funds; and,
- the plans and proposals for expenditures of funds as outlined in this report were discussed in a public hearing at a regularly scheduled school board meeting on 5/25 & 6/8, 2004; and the district has complied with all the other requirements of Education Code Section 17584.1; and,
- This Form is an exact duplicate (verbatim) of the form provided by the OPSC. In the event a conflict should exist, then the language in the OPSC form will prevail.
- I certify under penalty of perjury under the laws of the State of California that the statements in this application and supporting documents are true and correct.

SIGNATURE OF DISTRICT REPRESENTATIVE DATE

Measure R

In October 2003, the Los Angeles Unified School District Board of Education ordered an election and established specifications of the election order for the purpose of placing a bond measure on the March 2, 2004 election ballot to provide funds for the renovation, modernization, construction and expansion of school facilities. The Bond Measure passed.

The Board proposed further that they approve allocation of funds from the $3.87 billion March 2004 Local Bond measure.

In addition to the need for new schools, the District urgently needed funds to repair, upgrade, and modernize its existing facilities. Approximately 70% of the District's existing school buildings are more than 40 years old and are in need of major repairs and upgrades. Thanks to strong community support and substantial state-bond matching funds, the District has completed 18 new schools and campus additions and has 67 more under construction, and almost 10,000 repair projects are either complete or underway. In addition, the District has wired over 27,000 classrooms (more than 80% of all schools) for computers and installed 9-1-1 communications facilities at 61 schools, with another 133 currently underway. However, additional funds are required to extend these urgently needed health, safety, and educational improvements to as many additional schools and classrooms as possible.

The complete document is available from the Facilities Services Division. The Bond Project List, which is an integral part of Measure R, lists the specific projects the District proposed to finance with proceeds from the Bonds. The list was developed by the Board upon evaluation of, among other factors, safety, class size reduction, and information technology needs. Each project includes a share of costs of the election and bond issuance, program planning and analysis, architectural, engineering, and similar planning costs, construction management, relocation costs, legal costs and other costs ordinarily chargeable to capital accounts or otherwise permitted by law, the costs of furnishing and equipping new classrooms and libraries, and a customary contingency for unforeseen site acquisition, design, construction, and other unforeseen costs. No bond money will be used for teacher or administrator salaries or for any other school operating expenses.

Many of the projects are classified as hazard mitigation such as:

- $15 million to improve storm water runoff
- $45 million to continue asbestos removal
- $25 million for seismic upgrades
- $140 million to upgrade data/telecommunications
- $2 million for a new Los Angeles Unified School District Police Dispatch Center

ITEM	DESCRIPTION	TARGET
School Construction	Build Neighborhood Schools Seats by Equal Proportion & Seats for Most Impacted Campuses	$1.675 Billion
	Full Day Kindergarten - funds for campuses that require additions or other new seats in order to begin to provide full-day kindergarten at schools Districtwide	$100 Million
	Equipping Classrooms and Schools (Furniture, Fixtures & Equipment)	$47 Million
	Joint & Community Use	$20 Million
	Environmental Safety (Storm Water Runoff)	$15 Million
	Total New Construction	**$1.857 Billion**
Repair	General repair	$1.055 Billion
	Previously Planned Projects - $400 M Sample Repairs: Fire alarms, Classroom painting, etc.	
	New Major Repair Projects - $315 M Plumbing, roofing, etc.	
	Basic Repairs (Protects Against State Budget Cuts) - $200 M	
	Safety & Technology/Electrical Upgrades - $140 M	
	Provide Missing (& Upgrade Existing) School Buildings (Libraries, Gyms, Science Labs, etc.)	$300 Million
	Upgrade and Redesign Campuses to Create Small Schools	$88 Million
	Provide Air Conditioning & Heating to all Campuses	$50 Million
	Continue Asbestos Hazard Removal Program	$45 Million
	Repair and Seismically Upgrade Portable Classrooms	$25 Million
	Total Repair	**$1.563 Billion**
Refinancing	*Refinance Past Certificates of Participation* ***Total Applied to General Fund Savings - Approx. $38M***	**$150 Million**
Technology	Upgrade Telephone Systems, Computer Networks, PA Systems, Safety Alarms	**$140 Million**
Library Books	Open new schools with sufficient amount of library books	**$53 Million**
Early Education	Building and Repairing Pre-School Buildings	**$50 Million**
Adult Education	Upgrade adult education centers	**$25 Million**
Charters	Build and Equip Charter Schools	**$20 Million**
Audit Process	Conduct Ongoing Independent Audits of Bond Projects	**$10 Million**
Safety	New Dispatch System for School Police	**$2 Million**
TOTAL BOND		**$3.87 Billion**

Strategy Synopsis

The matrix below shows the HIGH and MODERATE RISKS as identified by the Hazard Mitigation Planning Task Force. Each of the future strategies specified address one or more of the risks. 'X" shows the hazard(s) that the strategy addresses.

STRATEGY #	Earthquake	Bio/Health	Wild Fire	WMD / Terrorism	Severe Wx	Data/Telecom	Flood	Economic Disruption	Utility Loss	Transportation Accident	Drought	Transportation Loss
	HIGH RISK HAZARDS							MODERATE RISK HAZARDS				
All Hazards												
AH-1	X	X	X	X	X	X	X	X	X	X	X	X
AH-2	X	X	X	X	X	X	X	X	X	X	X	X
AH-3	X	X	X	X	X	X	X	X	X	X	X	X
AH-4	X	X	X	X	X	X	X	X	X	X	X	X
AH-5	X	X	X	X	X	X	X	X	X	X	X	X
AH-6	X	X	X	X	X	X	X	X	X	X	X	X
AH-7	X	X	X	X	X	X	X	X	X	X	X	X
Earthquake												
EQ-1	X											
EQ-2	X											
EQ-3	X											
Wild Land/Urban Interface Fire												
WF-1		X										
WF2	X		X				X					
WMD/Terrorism												
WT-1				X								
WT-2				X								
Utility Loss												
UL-1	X								X			
Transportation Accident/Incident												
TA-1										X		
TA-2										X		

Future Strategy Recommendations

All Hazards (AH)

STRATEGY NUMBER: AH-1

Hazard Mitigation Strategy Description: Develop a mobilization program for the Police Department (tactical mobilization plan for disasters) This would be a 24 hour warning and call back system for police and support personnel in the event of a disaster. Consideration to be added to the Emergency Operations Plan Update that is scheduled to begin in November.	
Implementation Time Frame:	**24 months**
Responsible Department:	Police Services Emergency Operations
Cost of Strategy:	$15,000.00
Source of Funding:	General Budget
Benefit Cost Review	Quantifiably Unattainable until program is studied
Hazard Addressed	All Hazards

STRATEGY NUMBER: AH-2

Hazard Mitigation Strategy Description: Update the LAUSD Emergency Operations Plan	
Implementation Time Frame	12 Months
Responsible Department:	Emergency Operations
Cost of Strategy	$60,000.00
Source of Funding:	Federal Department of Education Grant
Benefit Cost Review	Modified STAPLEE
Hazard Addressed	All Hazard

STRATEGY NUMBER: AH-3

Hazard Mitigation Strategy Description: Upgrade Personal Protective Equipment for all police officers to include SCBA, Secure Communications, Protective Gear, Search and Rescue Equipment	
Implementation Time Frame	1-3 years
Responsible Department	Police Services, Emergency Operations
Cost of Strategy to Equip Officers	$250,000.00
Source of Funding	Federal Grants and LAUSD Budget
Benefit Cost Review	2 to 1 (Modified STAPLEE)
Hazard Addressed	All Hazard

STRATEGY NUMBER: AH-4

Hazard Mitigation Strategy Description: Conduct a feasibility Study to identify the equipment and costs for the implementation of a web-based video surveillance system for existing camera systems and procure more systems for other identified vulnerable areas. This study would also identify the vulnerable areas for placement of the surveillance equipment.	
Implementation Time Frame	1 to 2 years
Responsible Department	Police Services
Cost of Strategy	Study Costs $38,000.00
Source of Funding	Federal Grants and LAUSD Budget
Benefit Cost Review	Quantifiably Unattainable
Hazard Addressed	All hazards

STRATEGY NUMBER: AH-5

Hazard Mitigation Strategy Description: Disabled persons

In any disaster from earthquake to power outages numerous severely disabled students at LAUSD facilities require one on one care.

LAUSD currently provides students on respirators with back up generators. These generators stay with the students throughout their time in school.

In the event some students they were held at the site during an emergency, they would require a stockpile of medications. Developing a "pharmacy strategy" was considered for the plan.

Implementation Time Frame	1-3 years
Responsible Department	Emergency Operations
Cost of Strategy:	$50,000.00 for study and plans
Source of Funding	Federal Grants and LAUSD Budget
Benefit Cost Review	Modified STAPLEE
Hazard Addressed	All Hazard

STRATEGY NUMBER: AH-6

Hazard Mitigation Strategy Description: Install a new police dispatch System. In 2002 the LAUSD Police handled over 85,000 calls of which 65,000 resulted in the response of a Los Angeles School Police Department (LASPD) unit in a District related incident. The Dispatch Division originally had 14 work stations to address the dispatch/communication needs. Because the equipment is dated, LAUSD has had to dismantle six of the stations to acquire the spare parts needed to keep the other eight operational. The LASPD current CAD system cannot be updated for optimizing deployment, prioritization of service calls or recognition of high call load location times.

This strategy includes the purchase and implementation of a new CAD system, additional communication workstations. The updated, State-of the Art communications system will enable the LASPD to maximizing its resources and deliver timely and appropriate police services. The Modern CAD system will permit communication capabilities with other law enforcement and emergency services agencies. This will facilitate the coordination of emergency service resources during a disaster or other crisis.

Priority Rate: #1

Implementation Time Frame	1-4 years
Responsible Department	Design and A/E Technical Division
Cost of Strategy	$2,000,000.00
Source of Funding	Measure R Bond, LAUSD, State of California
Benefit Cost Review:	Modified STAPLEE
Hazard Addressed:	All Hazards

STRATEGY NUMBER: AH-7

Hazard Mitigation Strategy Description: Upgrade safety alarms, communications systems, computer networks, PA system: This strategy will include equipment and cabling replacement and upgrades for local area networks. The Federal Government funded the replacement of this equipment in 400 eligible schools, leaving the district to replace the remaining systems in 700 schools. There are a number of phone switches that need to be upgraded and replaced and cabling for telephones has deteriorated within schools and from the school to the street is deteriorated and in most cases is 25 to 50 years old. This system would be replaced to maintain basic and emergency response needs at the schools and to comply with State Codes and Statutes. Public address systems are being installed without replacing the deteriorating cable. Broken cabling is causing these needed emergency response and day to day operational systems to fail. Safety is an issue if communication and alarm system fail. **Priority Rate:**	
Implementation Time Frame 1-4 years	
Responsible Department:	
Cost of Strategy	$140,000,000.00
Source of Funding	Measure R
Benefit Cost Review	Modified STAPLEE
Hazard Addressed	All Hazards

Earthquake (EQ)

STRATEGY NUMBER: EQ-1

Hazard Mitigation Strategy Description: Non-Structural LAUSD has identified a need to update and re-initiate the District's non-structural seismic retrofitting of existing facilities and to insure the program is incorporated into future design and construction. LAUSD and FEMA combined have spent $15,000,000 on classroom tie-down development in the past, but, because schools, equipment and needs are constantly changing, furniture and equipment is moved and not always replaced. The project would require a thorough examination of all of the buildings owned and utilized by LAUSD identifying gaps in non-structural seismic safety measures. The project will also develop non-structural seismic safety measures. A training program for local school staff on how to maintain the integrity of seismic safety measures.	
Implementation Time Frame	1-7 years
Responsible Department	Operations & Maintenance
Cost of Strategy	~$5,000,000 for tie-down, latch and brace
Source of Funding	Federal Grants, maintenance and operations funds, and new school construction funds
Benefit Cost Review	Over 1 to 1 as per FEMA STAPLEE
Hazard Addressed	Earthquake

Tie down, latch and brace is proposed to be an ongoing mitigation measure as classroom and office configurations change and new people enter the picture. The first tie-down project took place previously at an initial cost of **$13,245,543**.

STRATEGY NUMBER: EQ-2

Assembly Bill, AB 300, requires the California Department of General Services (DGS) to conduct an inventory of the public school buildings that are of concrete tilt-up construction and those with non-wood frame walls that do not meet the minimum requirements of the 1976 Uniform Building Code (UBC). As a result, DGS identified **451** buildings within LAUSD that do not meet the above requirements. DGS further divided these buildings into two categories as follows:

Building types that are likely to perform well, based on their performance in prior earthquakes, and are expected to achieve life-safety performance in future earthquakes; and

Building types that are not expected to perform as well as Category 1 building types in future earthquakes and that require detailed seismic evaluation to determine if they can be expected to achieve life-safety performance when subjected to earthquake ground motions equivalent to those specified for new design in the 1997 UBC.

Among these **451** buildings identified within LAUSD, **182** of them belong to Category 1 and **269** belong to Category 2. Since the buildings in Category 1 are likely to perform well, DGS recommends that only the nonstructural components (veneer, cladding, ceiling, duct support, lighting fixture, and etc.) need to be evaluated to determine if they will achieve life-safety performance in future earthquakes. However, the buildings in Category 2 require detailed seismic evaluation to determine if they can meet the requirements in the 1997 UBC.

Hazard Mitigation Strategy Description: LAUSD Proposes to use the FEMA 310 Handbook to conduct a study and perform the evaluations f the buildings owned by LAUSD

Evaluation Criteria

DGS adapted FEMA 310 *Handbook* (superseded by *Handbook for Seismic Evaluation of Buildings* published by ASCE) for the building classification types as described above. FEMA 310 also describes three tiers of seismic evaluation, namely Tier 1, Tier 2 and Tier 3.

Tier 1
The goal of this evaluation is to screen out buildings that comply with FEMA 310 and do not have the seismic deficiencies. This study is carried out on a rapid basis by using the checklists in FEMA 310. The several possible outcomes of this investigation are:

The building is acceptable and no further review is necessary;
The building needs minor seismic rehabilitation work;
The building has marginal capacity and a Tier 2 seismic evaluation is warranted; or
The building requires major seismic rehabilitation work.

Tier 2
This evaluation requires a complete analysis of the building and addresses all of the seismic deficiencies identified in Tier 1. The goal is to identify buildings not requiring seismic rehabilitation. There are several possible outcomes from this study:

The building is acceptable and no further review is necessary;
The building needs minor seismic rehabilitation work;
The building has marginal capacity and a Tier 3 detailed seismic evaluation using nonlinear analysis procedures is warranted; or
The building requires major seismic rehabilitation work.

Tier 3

This evaluation is recommended for certain types and configurations that research has indicated can be shown to be seismically adequate using non-linear analysis procedures.

Implementation Time Frame 1 to 3 years

Responsible Department: Design and A/E Technical Department LAUSD

Cost of Strategy Cost Estimates for Tier 1 & Tier 2 Seismic Evaluations

FEMA 310 describes a methodology for cost estimates to do Tier 1 and Tier 2 evaluations. It is based on information developed by Applied Technology Counsel (ATC) for the U.S. Postal Service in 1990 (ATC, 1990).

In general, Tier 1 evaluations that include structural, non-structural, and geologic hazard evaluations are less time intensive than Tier 2 evaluations, which requires less time than Tier 3 evaluations. Below is a table summarizing the cost of evaluation per building for Category 1 and Category 2 buildings:

Category 1 Buildings
Nonstructural Evaluation Engineering

Cost Bldg.	***Admin. Cost per**			
Tier 1 Engineering Services	$100/hr x 8 hours	$ 800	$160	$ 960
Tier 2 Engineering Services	$100/hr x 20 hours	$2,000	$400	$2,400
Category 2 Buildings				
Structural, Nonstructural, Geologic-Hazards Evaluation				
Tier 1 Engineering Services	$100/hr x 28 hours	$ 2,800	$ 560	$ 3,360
Tier 2 Engineering Services	$115/hr x 96 hours	$11,040	$2,208	$13,248

*20% of Engineering Cost.

The twenty percent of the engineering cost as the administrative cost, according to FEMA 310, is based on the insight provided by other organizations that have conducted a similar building seismic evaluation program. The costs include: 1) program planning; 2) assignment of building evaluations to commissioned engineers; 3) supervision and follow-up of personnel; 4) administrative review of the evaluation reports; 5) supporting staff such as accounting and clerical; 5) miscellaneous expenses such as reproduction, communications, transportation, and etc.

FEMA 310, however, does not give the cost estimate information for the Tier 3 evaluations as they involve a much more complicated non-linear analysis and the cost needs to be evaluated on an individual basis.

Based on the above methodology, a cost estimate can be done for the aforementioned 451 school buildings. In this cost estimate, it is assumed that about **50%** of the buildings in each category, namely 91 buildings in Category 1 and 135 buildings in Category 2, require the Tier 2 evaluations.

Building Types	Tier 1			Tier 2			Total Cost Tier 1 & Tier 2
	Cost per Bldg.	no. of Bldg.	Total Cost	Cost per Bldg.	no. of Bldg.	Total Cost	
Category 1	$ 960	182	$ 174,720	$ 2,400	91	$ 218,400	$ 393,120
Category 2	$3,360	269	$ 903,840	$13,248	135	$1,788,480	$2,692,320
		451	**$1,078,560**		226	**$2,006,880**	**$3,085,440**

For cost comparison purposes, if only thirty-three percent or twenty-five of the 451 buildings require Tier 2 evaluations, the total costs would be as follows:

33% of the Buildings Requiring Tier 2 Evaluations
Total Costs=$1,078,560(Tier 1)+$2,400x61(Cat. 1)+$13,248x90(Cat.2)= **$2,417,280**

25% of the Buildings Requiring Tier 2 Evaluations

Total Costs=$1,078,560(Tier 1)+$2,400x46(Cat.1)+$13,248x68(Cat.2)= **$2,089,824**

Source of Funding LAUSD, State of California, Federal Grants

Benefit Cost Review Modified STAPLEE

Hazard Addressed Earthquakes

STRATEGY NUMBER: EQ-3

Hazard Mitigation Strategy Description: Repair and Seismically Upgrade Portable Classrooms. Structurally reinforce (by securing to the ground) certain portable classrooms for seismic conditions and support additional portable classroom requirements. **Priority Rate:**	
Implementation Time Frame	1-4 years
Responsible Department	
Cost of Strategy	$25,000,000.00
Source of Funding	Measure R
Benefit Cost Review	Modified STAPLEE
Hazard Addressed	Earthquake

Wild Land/Urban Interface Fire (WF)

STRATEGY NUMBER: WF-1

Hazard Mitigation Strategy Description: Conduct comprehensive study of the Urban Interface Wildfire risk in geographical relationship to LAUSD property. Serious fire risks have already been identified in the Topanga Canyon area that threaten the school as school facility and as a community emergency shelter and evacuation site. This study would utilize the historic and projected Wildland Urban Fire GIS risk maps to identify facilities at risk, The study would provide a complete risk analysis of the fire threats to LAUSD facilities and/or would determine if site could be safely evacuated, safely utilized as a shelter in place and community shelter during a fire incident. The study would recommend collaborative actions by the property owners, response agencies and the LAUSD for a plan to ensure maximum safety.	
Implementation Time Frame	1-3 years
Responsible Department	Risk Management Emergency Operations
Cost of Strategy	$75,000.00
Source of Funding	Federal Grants, LAUSD Budget,
Benefit Cost Review	Quantifiably Unattainable
Hazard Addressed	Wildland Urban Interface Fires

STRATEGY NUMBER: WF-2

Hazard Mitigation Strategy Description: This Plan identifies schools with needed maintenance that, when completed, will reduce the risk from flood, earthquake, and fire.					
Implementation Time Frame 1 to 4 years					
Responsible Department					
Cost of Strategy					
Year 2004	Year 2005	Year 2006	Year 2007	Year 2008	
$23,739,421	$47,525,252	$42,139,392	$38,932,998	$1,138,454,172	
				Total Cost $1,290,791,235	
Source of Funding LAUSD, State of California, Federal Funds as Available					
Benefit Cost Review Quantifiably Unattainable					
Hazard Addressed: Fire, Flood, Earthquake					

WMD/Terrorism (WT)

STRATEGY NUMBER: WT-1

Hazard Mitigation Strategy Description: Upgrade Special Response Team (SRT) equipment and training. Batons, Bullet Proof Vests, Shields, Special Weapons, Night Vision and other equipment as identified	
Implementation Time Frame	1 to 5 years
Responsible Department	Police Services
Cost of Strategy	To be determined
Source of Funding	Homeland Security Grants and LAUSD Budget
Benefit Cost Review	Yet to be completed
Hazard Addressed	Terrorism/Civil Unrest

STRATEGY NUMBER: WT-2

Hazard Mitigation Strategy Description: Enhance involvement with the LACO Terrorism Early Warning Group: Hold joint training sessions, and attend exercises and training sponsored.	
Implementation Time Frame:	Current and future
Responsible Department:	Police Services
Cost of Strategy:	1 Full Time Employee $140,000.00
Source of Funding	Federal Grants and LAUSD Budget
Benefit Cost Review:	Based on Homeland Security data and modified STAPLEE 3 to 1 minimum
Hazard Addressed:	Terrorism

Utility Loss

STRATEGY NUMBER: UL-1

Program/Project Description	Provide and install Site Backup Generation at the Business Division, Gardena, and Sun Valley bus garages to provide ability to fuel vehicles during power outages. Peak demand at facilities is 150 KW (3 phase, 480 volt, 4 wire) Provide generator system with 60% of peak demand which will provide fuel and minimal lighting and related capabilities.
Estimated Cost	Generator set, setup less connections: $36,000 for 100KW Building connection and electrical components / wiring $30,000 Total estimated cost: $66,000 per site or $198,000.
Timeline/Schedule	4 – 8 months per site depending on scheduling / design work provided by the Maintenance & Operations Branch
Responsible Agency/Dept.	Maintenance and Operations
Financing	TBD
Benefit Cost Review	Modified STAPLEE
Goal(s) Addressed	Provide backup support capability, primarily fueling of District vehicles and minimal vehicle maintenance support.
Related Hazard(s)	Utility Loss, Earthquake
Constraints	Capability limited to generator output.

Transportation Accident/Incident (TA)

STRATEGY NUMBER: TA-1

Hazard Mitigation Strategy Description: Conduct a Study: A unknown number of LAUSD schools are threatened by underground hazardous materials pipeline problems. Several facilities have done a phase 1 study (SQUA) and in addition to those studies there are also vicinity maps identifying easements. The Strategy is to conduct a study to define the full risk analysis for the pipeline threat and related issues as well as identify all affected facilities, and to map and digitize the results for web access by OEHS. This strategy would involve looking into oil and gas leases (220-250) that can have an result in a threat to the schools	
Implementation Time Frame	1-3 years
Responsible Department	Facilities
Cost of Strategy	$150,000.00
Source of Funding	Federal Grant and LAUSD Budget
Benefit Cost Review	Quantifiably Unattainable
Hazard Addressed	Hazardous Materials

STRATEGY NUMBER: TA-2

Hazard Mitigation Strategy Description: Underground Tanks The LAUSD has an ongoing issue of underground storage tanks, their environmental threat and the removal of these tanks. The District has removed approximately 850 tanks to this date and the search for and remediation of these tanks is ongoing; when they are discovered, they are removed. This project would be to study a way to identify the remaining tanks as a 2 year project Removal of all identified tanks	
Implementation Time Frame	1- 2 years
Responsible Department	Emergency Operations
Cost of Strategy	$1,200,000.00
Source of Funding	Federal Grants and LAUSD Budget
Benefit Cost Review	Modified STAPLEE
Hazard Addressed	Hazardous Materials

Section 6 – Future Actions & Goals

Preliminary Specific Goals & Actions

Listed below are LAUSD's specific hazard mitigation goals and related potential actions. For each goal, one or more action items have been identified that provide strategies to attain the goal. Where appropriate, the District has identified a range of specific actions to achieve the long term objective and goal.

The goals and actions were developed by considering the risk assessment findings, localized hazard identification and loss/exposure estimates, and an analysis of the jurisdiction's current Capabilities Assessment. These preliminary goals and actions were developed to represent a vision of long-term hazard reduction or enhancement of capabilities.

Los Angeles Unified School District has developed the following Long Term Goals for their Hazard Mitigation Plan Program.

Development of Specific Goals

Goal 1. Continue to promote disaster-resistant schools

Goal 2. Increase public understanding and support for effective hazard mitigation.

Goal 3. Continue to build and maintain schools making a concerted commitment to become less vulnerable to hazards.

Goal 4. Enhance hazard mitigation coordination and communication with federal, state, and local governments. Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and District-owned facilities, due to:

- Earthquake.
- Biological & Health Emergencies
- Wildland Urban Interface Fires.
- Weapons of Mass Destruction and Terrorism.
- Severe Weather
- Floods
- Drought
- Other Human-Caused Hazards.

Prioritization and Implementation of Action Items

Once the specific list of LAUSD goals listed above was developed, the proposed mitigation actions items were prioritized by the Planning Executive Committee. This step resulted in a list of acceptable and realistic specific actions that address the hazards identified in the LAUSD Service Area.

The Disaster Mitigation Action of 2000 (at 44 CFR Parts 201 and 206) requires the development of an action plan that not only includes prioritized actions but one that includes information on how the prioritized actions will be implemented.

Implementation consists of identifying who is responsible for which action, what kind of funding mechanisms and other resources are available or will be pursued, and when the action will be completed.

The top 9 prioritized mitigation action items as well as an implementation strategy for each are:

Action Item #1: Continue development and maintenance of the Multi-Hazard DMA 2000 plan by coordinating all LAUSD Offices, Divisions and Departments as well as all other Stakeholders.

- Potential Funding Source: FEMA Grants / General Funds.
- Implementation Timeline: Ongoing

Action Item #2: .Review and update plans that would include coordination with cities, special districts and the County.

- Potential Funding Source: LAUSD General Fund/ State and Federal Grants

Action Item #3: Update the LAUSD Safety Plan every three years.

- Implementation Timeline: 1 - 3 years
- Potential Funding Source: State Grants

Action Item #4: Publicize and encourage the adoption of appropriate hazard mitigation actions.

- Potential Funding Source: General Fund/Federal or State grants.
- Implementation Timeline: 1 - 3 years

Action Item #5: Continue to implement all new facility specifications and inspection guidelines to reflect current earthquake standards.

- Implementation Timeline: 2 - 5 years

Action Item #6: Review and compare existing flood control standards, zoning and building requirements with existing and planned facilities.

- Coordinating Individual school sites and school departments
- Potential Funding Source: General Fund/Federal or State Grants
- Implementation Timeline: 1 - 3 years

Action Item #7: Develop a Business Continuity Plan for each LAUSD Office, Division, and Department.

- Potential Funding Source: General Fund/Federal or State Grants.
- Implementation Timeline: 1 - 3 years

Action Item #8: Develop partnerships for a District wide fire prevention program around facilities.

- Coordinating Individual/Organization: County / City Fire,
- Potential Funding Source: General Fund/Federal or State grants.
- Implementation Timeline: 1 - 3 years

Action Item #9: Encourage every school to prepare and maintain a 3-day preparedness kit for the classroom and personal kits for home and work.

- Coordinating Individual/Organization: OEM / Media & Public Relations / IT
- Potential Funding Source: General Fund/Federal or State grants
- Implementation Timeline: 1 - 3 years

Note: General Funds are all restricted and if they were used for action items above, other programs or projects would have to be sacrificed or cut.

Long-term Goals, Objectives Actions

The Los Angeles Unified School District (LAUSD) developed the following broad list of objectives and actions to assist in the implementation of each of their identified long term goals. The Task Force developed objectives to assist in achieving their hazard mitigation goals. For some of these objectives, specific actions were developed that would assist in their implementation.

Goal 1: Promote disaster-resistant future construction.

Objective 1.: Facilitate the development or updating of disaster related plans which relate to hazard mitigation.

Action 1. Update

Action.2 Attract and retain qualified, professional and experienced staff.

Action 3 Identify high hazard areas and facilities.

Objective 1.A: *Facilitate the implementation inspection standards and practices that protect existing assets and restrict placing new facilities in hazard areas.*

Action 4 Review hazard mitigation strategies every 3 years.

Objective 2: Facilitate consistent implementation of plans,, safe school guidelines, and inspection standards.

Objective 3: Limit facility placement in hazardous areas

Action 1 Placement should be in harmony with existing topography.

Action 2 Placement patterns should respect environmental characteristics.

Action 3 Placement should be limited in areas of known geologic hazards.

Action 4 Ensure that jurisdictions in high fire hazard areas provide adequate access for emergency vehicles and the evacuation of students and staff

Objective 4: Address identified data limitations regarding the lack of information about facility placement and build-out potential in hazard areas.

Action 1 Coordinate existing Geographic Information Systems (GIS) capabilities to identify hazards throughout the LAUSD.

Action 2 Develop the data sets that are necessary to test hazard scenarios and Mitigation tools including HAZUS MH

Action 3 Utilize the Internet as a communication tool, as well as an educational tool.

Objective 5: Increase public understanding, support and demand for hazard mitigation for placement of new facilities.

Action 1 Gain public acceptance for avoidance policies in high hazard areas.

Goal 2: Increase public understanding and support for effective hazard mitigation.

Objective 1: Educate the public to increase awareness of hazards and opportunities for mitigation actions.

Action 1 Publicize and encourage the adoption of appropriate hazard mitigation actions.

Action 2 Provide information to the public on the LAUSD website.

Action 3 Heighten public awareness of hazards by using the LAUSD Communications Office.

Action 4 Gain public acceptance for avoidance policies in high hazard areas.

Objective 2: Gain public interest by supporting already existing public programs.

Action 1. Identify hazard specific issues and needs.

Action 2 Help create demand for hazard resistant construction and site planning.

Objective 3: Promote partnerships between the LAUSD, County Office of Education, Federal, state, county, cities and local governments to identify, prioritize, and implement mitigation actions.

Action 1 Develop, maintain and improve lasting partnerships.

Action 2 Support the jurisdictional Fire Safe Councils.

Objective 5 Monitor and publicize the effectiveness of mitigation actions Implemented district-wide.

Action 1 Use the LAUSD website to publicize mitigation actions.

Action 2 Utilize existing risk data.

Action 3 Establish budgets and identify funding sources for mitigation outreach.

Action 4 Develop and distribute brochures, CDs and other publications promoting safe schools and mitigation actions.

Objective 6: Provide education on hazardous conditions.

Action 1 Support public and private sector symposiums.

Action 2 Coordinate production of brochures, informational packets and other handouts.

Goal 3: Enhance hazard mitigation coordination and communication with federal, state, local and tribal governments.

Objective 1 Establish and maintain closer working relationships with state agencies, ,county and local governments.

Action 1 Develop multi-functional training and exercises to enhance hazard mitigation.

Goal 4: Enhance hazard mitigation coordination and communication with federal, state, and local governments.

Objective 1 Encourage other organizations to incorporate hazard mitigation activities.

Action 1 Leverage resources and expertise that will further hazard mitigation efforts.

Action 2 Update the LAUSD multi-hazard mitigation plan on a regular basis

Action 3 Encourage all school sites to implement Multi-Hazard Mitigation Plan Strategies

Action 4 Streamline policies to eliminate conflicts and duplication of effort where feasible

Objective 2: Improve LAUSD's capability and efficiency at administering pre- and post-disaster mitigation.

Action 1 Maintain coordination, communication and cooperation with the Local Operational Area. in. administering recovery programs.

Action 2 Continue to exchange resources and work with local and regional partners.

Objective 3. Coordinate with the County Operational Area to enhance recovery activities while restoring and maintaining school services.

Objective 4. Utilize the Los Angeles Unified School District Business Continuity Plan to prioritize the restoration and maintenance of LAUSD services.

Goal 5: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to Drought.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to long term drought conditions

Action 1 Encourage and require water conservation where ever feasible

Action 2 Explore the development of new water resources

Action 3 Encourage the Federal Government to complete the decontamination of all underground water resources currently identified as Superfund sites

Objective 2: Encourage district-wide participation in drought mitigation strategies

Action 1 Implement public information programs on water conservation and drought resistant living.

Goal 6: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to earthquakes.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to earthquakes.

Action 1 Maintain Inspection Standards to reflect current earthquake standards.

Action 2 Encourage and participate in community awareness meetings.

Action 3 Distribute printed publications to the schools concerning hazards.

Objective 2: Protect existing assets with the highest relative vulnerability to the effects of earthquakes.

Action 1 Identify hazard-prone structures through GIS modeling.

Action 2 Design critical facilities to ensure that they function after a major earthquake.

Action 3. Encourage and continue the study of ground motion, landslide, and liquefaction relative to existing and new facilities.

Objective3: Coordinate with and support existing efforts to mitigate earthquake hazards

Action 1 Identify projects for pre-disaster mitigation funding.

Action 2 Design and implement an ongoing district-wide seismic risk assessment program.

Action 3 Collaborate with Federal, State, universities and local agencies' mapping efforts.

Objective 4: Address identified data limitations regarding the lack of information about the relative vulnerability of assets from earthquakes.

Action 1 Assess utility infrastructure with regard to facilities and earthquake risk, including public and private utilities.

Action 2 Encourage district-wide preparation and maintenance of a 3-day preparedness kit for home and classroom for all hazards

Goal 7: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to floods.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to floods.

Action 1 Review and compare existing flood control standards, zoning and building requirements with existing and new facilities.

Action 2 Identify and update flood-prone areas by using GIS.

Objective 2: Protect existing assets with the highest relative vulnerability to the effects of floods within the 100-year floodplain.

Action 1 Assure adequate funding where feasible to restore damaged facilities to 100-year flood design.

Action 2 Update storm water system plans and improve storm water facilities that affect high-risk assets.

Action 3 Ensure adequate evacuation time in case of major hazard event.

Objective 3: Minimize repetitive losses caused by flooding.

Action 1 Identify those facilities that have recurring losses.

Action 2 Develop project proposals to reduce flood damage and improve control of facilities in flood prone areas.

Action 3 Seek pre-disaster mitigation funding.

Objective 4: Address identified data limitations regarding the lack of information about the relative vulnerability of assets from flooding.

Action 1 Encourage district-wide preparation and maintenance of a 3-day preparedness kit for home and classroom.

Action 2 Maintain, develop and implement hazard awareness programs.

Goal 8: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to flooding including coastal storms/erosion/tsunami.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to coastal storms /erosion.

Action 1 Coordinate with coastal cities to have schools participate in a comprehensive plan.

Action.2 Participate in community awareness meetings as feasible.

Action 3 Distribute printed publications to the schools concerning hazards.

Objective 2: Protect existing assets with the highest relative vulnerability to the effects of coastal storms /erosion.

Action 1 Seek pre-disaster mitigation funding for coastal erosion projects for vulnerable LAUSD facilities.

Objective 3: Coordinate with and support existing efforts to mitigate severe coastal storms /erosion.

Action 1 Review and update plans that would include school and district coordination with cities, special districts and the county.

Action 2 Streamline policies to eliminate conflicts and duplication of effort.

Action 3 Develop and publish evacuation procedures to schools and other district facilities.

Objective 4: Address identified data limitations regarding the lack of information about the relative vulnerability of assets from coastal storms /erosion.

Action 1 Identify hazard-prone structures through GIS modeling.

Action 2 Incorporate information and recommendations from coastal cities into the hazard mitigation plan.

Goal 9: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to structural fire/wildfire.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to structural fire/wildfire.

Action 1 Meet the Fire Code .

Action 2 Utilize GIS and the Internet as information tools.

Objective 2: Protect existing assets with the highest relative vulnerability to the effects of structural fire/wildfire.

Action 1 Maintain Standardized Defensible Space Clearance distances.

Objective 3: Coordinate with and support existing efforts to mitigate structural fire/wildfire.

Objective 4: Address identified data limitations regarding the lack of information about the relative vulnerability of assets from structural fire/wildfire.

Action 1 Continue to identify and update facilities within Urban/wildland fire interface areas.

Action 2 Use GIS to map facilities in fire risk areas.

Action 3 Implement district-wide education programs to address fire dangers and corrective measures.

Goal 10: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, due to Terrorist or Weapons of Mass Destruction Attacks.

Objective 1: Develop a comprehensive approach to reducing the possibility of damage and losses due to terrorist or weapons of mass destruction attacks.

Action 1 Work with local law enforcement terrorist early warning networks to enhance preventative measures for terrorist or weapons of mass destruction attacks on or near schools.

Action 2 Utilize GIS and the Internet as information tools.

Objective 2: Protect existing assets with the highest relative vulnerability to the effects of terrorist or weapons of mass destruction attacks.

Action 3 Maintain Standardized Security Procedures at all sites.

Objective 3: Coordinate with and support existing efforts to mitigate vulnerability of sites to terrorist or weapons of mass destruction attacks.

Objective 4: Address identified limitations regarding the ability to respond to terrorist or weapons of mass destruction attacks..

Action 1 Continue to identify and update vulnerable facilities.

Action 2 Use GIS to map vulnerable facilities.

Action 3 Implement district-wide education programs to address observed suspicious activities or facility vulnerabilities.

Capabilities Assessment

The LAUSD Hazard Mitigation Task Force identified current capabilities available for implementing hazard mitigation activities. The Capability Assessment portion of the LAUSD mitigation plan identifies administrative, technical, legal and fiscal capabilities. This includes a summary of offices, divisions and departments and their responsibilities associated to hazard mitigation planning as well as codes, ordinances, and plans already in place associated to hazard mitigation planning. The second part of the Assessment provides LAUSD's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items.

Existing Institutions, Plans, Policies and Ordinances

The following is (1) a summary of existing positions their responsibilities related to hazard mitigation planning and implementation; and (2) a list of existing planning documents and regulations related to mitigation efforts within LAUSD. The administrative and technical capabilities of LAUSD, as shown in the table below, provides an identification of the staff, personnel, and District resources available to implement the actions identified in the mitigation section of the Plan. Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land management practices, engineers trained in construction practices related to building and infrastructure, planners and engineers with an understanding of natural or human-caused hazards, floodplain managers, surveyors, personnel with GIS skills and scientists familiar with hazards in the community.

Administrative & Technical Capacity

Position	Office/Division/Department
Emergency Response Technicians	OEHS Team that respond to district sites to abate hazards and ensure compliance with environmental/safety regulations
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	District Building Inspection Division that inspects construction & repairs. Engineering Division of construction specialists to support school construction projects
Planners with an understanding of natural and/or human-caused hazards	OEHS Safety Inspectors.
Staff with education or expertise to assess the schools' vulnerability to hazards	District specialists in environmental and workplace safety
Personnel skilled in GIS and/or HAZUS	Facilities Information Service that provides information to the District EOC which has a special GIS computer and plotter
Transportation	District dispatchers for bus dispatch
Emergency Manager	District Director of Emergency Operations and a standing committee of SEMS-trained managers (The Emergency Management Committee)
Grant writers	District Grant Writing Department in Facilities

Regulatory Tools

The legal and regulatory capabilities of LAUSD are shown in the table below, which presents the existing regulations and guidelines that affect the physical or built environment of LAUSD.

LAUSD Compliance to Required Codes and Standards	Type	Yes	No
California Code Section 17210 – 17224, Title 5 section 21151.2	New Construction	Y	
California DSA School Site Approval Guide	School Site Checklist	Y	
Safe Schools Inspection Guide Implemented by the LAUSD Office of Environmental Health and Safety	Safe School Checklist	Y	
California School Facilities Planning Division (SFPD)4.01, 4.02, 4.03, 4.07 A&B	Required for approval of new sites	Y	
SFPD Form 575 Master Plan	Needs assessment	Y	
PRC Section 21151.8	Hazardous Materials, Air emissions	Y	
ECS 17212.5	Geo-hazards Report	Y	
SB 50 Regulation 1859.75	Unused School Report	Y	
Title 5, CCR, Division 1, Chapter 13, subchapter 1	School facilities construction	Y	
Education Code 17591	5 year deferred maintenance Plan	Y	
California Constitution Article XIIIA, Section 1B	Tax Rate and Debt Service not to exceed $60. per $100,000 per value	Y	
CEC, Section 5320 et. Seq. and Section 15264	Bond Measure Issues	Y	
California Environmental Quality Act (CEQA)	Environmental Protection	Y	
U.S. Historic Preservation Act	Preservation of Historic Structures	Y	
California Education Code Katz Act Section 35295-35297	School Safety	Y	
California Government Code Petris Bill Section 35294	SEMS Mandate		
California Alquist-Priolo Earthquake Fault Zoning Act PRC 2621 et sec	Earthquake Seismic Safety	Y	
California Education Code The Huges Bill Sec. 35942	School Safety	Y	
Field Act/ Garrison Riley Act	Building Codes	Y	

Fiscal Resources

LAUSD has very few sources of funds that could be applied to hazard mitigation activities. Essentially, any remediation would need to come from insurance coverage and the Reserve for Economic Uncertainty. Generally, Unrestricted General Funds are available, but in order to use them, LAUSD would need to lay off staff to do so. Nearly all other sources of revenue are restricted and cannot be applied to this activity. In particular, all of LAUSD's capital funds are dedicated in their purpose.

Reference Materials

Item	Document	Type
1	LAUSD Earthquake Emergency Action Plan – 2001	Electronic (.doc)
2	Safe Schools Planning Presentation by Lainey Rogers	Electronic (.ppt)
3	LAUSD Property Schedule	Electronic (.pdf, .xls)
4	LAUSD Leased Property Listing	Electronic (.xls)
5	Natural Hazard GIS Maps for LAUSD	Electronic (.pdf)
6	LAUSD Local District Maps	Electronic (.pdf)
7	LAUSD Guide to Schools & Offices	Electronic (.pdf)
8	LAUSD Strategic Execution Plan for New Facilities (Jan 2004)	Electronic (.pdf)
9	LAUSD Strategic Execution Plan for Existing Facilities	Electronic (.pdf)
10	California Seismic Safety Commission Legislative Report 6/2003	Electronic (.pdf)
11	Seismic Safety Inventory of California Public Schools (A Report to the Governor of California and California State Legislature) 11/15/2002	Electronic (.pdf)
12	LAUSD Ethnic Breakdown	Electronic (.xls)
13	LAUSD Owned-vehicle Schedule	Electronic (.xls)
14	LAUSD 5-year Ethnic Review	Electronic (.jpg)
15	Bulletin 698 – Transportation Branch – Earthquake Emergency Plans 12-22-2003	Electronic (.pdf)
16	Bulletin BJ-2 – Emergency Broadcasts on School Police Frequency	Electronic (.pdf)
17	Bulletin C-32 (rev) Emergency Procedures Possible Food Borne Illness or Contamination 2-14-2001	Electronic (.pdf)
18	Bulletin C-41 (rev) Responsibilities of Cafeteria Employees During Periods of Emergency	Electronic (.pdf)
19	Bulletin N-25 Emergency Drills & Procedures 12-16-2002	Electronic (.pdf)
20	Bulletin Q-16 Emergency Response Fiscal Recovery Procedures	Electronic (.pdf)
21	Bulletin Z-72 Bioterrorism Preparedness Response: Health Perspective	Electronic (.pdf)
22	Memorandum !-22 Request/Reunion Gate Signs 5-3-1999	Electronic (.pdf)
23	Organization of Central Support System Chart	Electronic (.pdf)
24	Reference Guide 1242 Updates to Safe Schools Plans 8-16-2004	Electronic (.pdf)
25	Reference Guide 801 Storage of Emergency Water	Electronic (.pdf)
26	Reference Guide 802 School Site Emergency/Disaster Supplies	Electronic (.pdf)
27	Reference Guide 869 Shake 2004 – Districtwide Earthquake Exercise	Electronic (.pdf)
28	Reference Guide 871 School Procedures During Heavy Rain or Flood Conditions	Electronic (.pdf)
29	LAUSD Structural and Operational Review Sept 2002	Electronic (.pdf)
30	All School & Facility Site Plan Drawings	Software (CD-ROM)
31	All School & Facility Overhead Photographs	Software (CD-ROM)
32	OEHS Organization Chart	Electronic (.pdf)

Item	Document	Type
33	Facilities Services Division Internal Organization Charts	Electronic (.pdf)
34	Western Electricity Coordination Council Report 10-8-2003	Hard Copy
35	LAUSD Deferred Maintenance Plan (2004-2008)	Hard Copy
37	Measure R School Repair & Overcrowding Measure	Hard Copy
38	LAUSD & Red Cross Shelter Agreement (Jul 1996)	Hard Copy
39	State Dept of General Services Division of State Architect AB300 Seismic Inventory of California Public Schools Information for School Districts (1/8/2003)	Hard Copy
40	LAUSD OEHS School Health & Safety Inspection Packet (3/2/2004)	Hard Copy
41	School Site Selection & Approval Guide	Hard Copy
42	Title 5, California Code of Regulations, Division 1, Chapter 13, Subchapter 1 – School Facilities Construction	Hard Copy
43	School Facilities Planning Division (State) 4.01 School Site Approval Procedures (Oct 2001)	Hard Copy
44	California Education Code Section 17210-17224	Hard Copy
45	Estimating Unit Construction Bid Data Sheet for 4-21-2004	Hard Copy
46	LAUSD Content Bracing Listing	Software (Floppy)
47	LAUSD Ceilings and Fixtures Seismic Bracing Listing	Software (Floppy)
48	LAUSD Hazard Mitigation Projects FEMA Funded Northridge Earthquake	Hard Copy
49	KLCS Television Coverage Map (Sep 18, 2002)	Hard Copy
50	School Site Emergency Plan	Hard Copy
51	LAUSD Hazard Mitigation Planning Task Force Meeting Notes and Minutes for the following dates: • 8-26-2002 • 11-14-2002 • 1-14-2004 • 2-3-2004 • 3-3-2004 • 3-24-2004 • 4-14-2004 • 5-4-2004 • 5-26-2004 • 6-16-2004 • 7-28-2004 • 8-18-2004	Electronic and Hard Copy

Section 7 – Plan Maintenance

This section of the Plan describes the formal process that will ensure that the Plan remains an active and relevant document. The plan maintenance process includes a schedule for monitoring and evaluating the Plan annually and producing a plan revision every five years. This section describes how LAUSD will integrate public participation throughout the plan maintenance process. Finally, this section includes an explanation of how LAUSD intends to incorporate the mitigation strategies outlined in this plan into existing planning mechanisms such as the Strategic Execution Plans for New and Existing Construction.

Monitoring, Evaluating & Updating

The Hazard Mitigation Task Force participants will be responsible for monitoring the plan annually for updates to goals, objectives, and action items. If needed, these participants will coordinate through the Office of Risk Management to integrate these updates into the Plan. Risk Management will be responsible for monitoring the overall Plan for updates on an annual basis.

Plan Evaluation

1. The Plan will be evaluated by Facilities and OEHS at least every two years to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities.

2. The Plan will also be re-evaluated by the Hazard Mitigation Task Force leads (or their select representatives) based upon the initial criteria used to draft goals, objectives, and action items.

3. Designated LAUSD representatives will also review the goals and action items to determine their relevance to changing situations in the District, as well as changes in State or Federal regulations and policy.

4. Designated LAUSD representatives will also review the risk assessment portion of the Plan to determine if this information should be updated or modified, given any new available data.

5. The coordinating organizations responsible for the various action items will report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised.

6. Any updates or changes necessary will be forwarded to Risk Management for inclusion in further updates to the Plan. It is envisioned that the Hazard Mitigation Task Force will meet annually to discus the status of the Plan.

Plan Updates

The Office of Risk Management is the responsible agency for updates to the Plan. All Hazard Mitigation Task Force participants will be responsible to provide Office of Risk Management with office, division and departmental-level updates to the Plan when/if necessary as described above. Every five years the updated plan will be submitted to State OES and FEMA for review.

Implementing Through Existing Programs

LAUSD will have the opportunity to implement recommended action items through existing programs and procedures that are deemed appropriate. Upon adoption of the Plan, LAUSD can use the Plan as a baseline of information on the hazards that impact the District.

Strategies, goals and actions documented in this plan will be considered in the development of future strategic execution plans for existing and new facilities.

Continued Public Involvement

LAUSD is dedicated to involving the public directly in review and updates of the Plan. The Office of Risk Management and a representative from OEHS will be responsible for monitoring, evaluating, and updating the Plan as described above. During all phases of plan maintenance the public will have the opportunity to provide feedback.

A copy of the Plan will be publicized and available for review on the LAUSD website. In addition, copies of the plan will be catalogued and kept at all of the appropriate locations in the District. The existence and location of these copies will also be posted on the LAUSD website. The site will contain contact information for members of the Hazard Mitigation Task Force to which people can direct their comments and concerns.

All public feedback will be forwarded to the Hazard Mitigation Task Force for review and incorporation (if deemed appropriate). This information will also be forwarded to the Office of Risk Management personnel responsible for keeping track of public comments on the plan.

A press release requesting public comments will also be issued after each evaluation or when deemed necessary by the Hazard Mitigation Task Force. The press release will direct people to the website or appropriate local agency location where the public can review proposed updated versions of the Plan. This will provide the public an outlet for which they can express their concerns, opinions, or ideas about any updates/changes that are proposed to the Plan. The Office of Risk Management will be responsible for using LAUSD resources to publicize the press releases and maintain public involvement through the District access television channel, web page, and newspapers as deemed appropriate.

Glossary

Terms

Aerial Reconnaissance: An aerial assessment of the damaged area that includes gathering information on the level and extent of damage and identifying potential hazardous areas for on-site inspections.

Aerosol: Fine liquid or solid particles suspended in a gas, for example, fog or smoke.

All Hazards: Refers to a policy or program that is designed to deal with a variety of natural and technological hazards.

Annex: A document that supplements the Emergency Operations Plan, which provides further planning information for a specific aspect of emergency management.

Appendix: A separate portion of the Emergency Operations Plan that contains guidance and information specific to actions required in emergency management.

Biological Agents: Living organisms or the materials derived from them that cause disease in or harm to humans, animals, or plants or cause deterioration of material. Biological agents may be used as liquid droplets, aerosols, or dry powders.

Chemical Agent: A chemical substance that is intended to kill, seriously injure, or incapacitate people through physiological effects. Generally separated by severity of effect: lethal, blister, and incapacitating.

Comprehensive Emergency Management Plan: A document required by state regulation that consists of a Basic Plan, Appendices, Supplemental Annexes, and Standard Operating Procedures for the purpose of providing effective mitigation, response to and recovery from disasters.

Consequence Management: Measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. State and local governments exercise primary authority to respond to the consequences of terrorism. (Source: FRP Terrorism Incident Annex, page TI-2, April 1999). The Federal Emergency Management Agency (FEMA) has been designated the Lead Federal Agency (LFA) for consequence management to ensure that the Federal Response Plan is adequate to respond to terrorism. Additionally, FEMA supports the Federal Bureau of Investigation (FBI) in crisis management.

Continuity of Government: Includes measures to – ensure continued leadership and preservation of vital records, thereby maintaining a viable system of government supported by law; establish emergency authorities legally vested in government leaders so that they have prescribed powers to act; ensure survivability of mechanisms and systems for direction and control so that actions directed by leaders can be communicated and coordinated; sustain essential emergency services and resources so that critical response and recovery actions can achieve widest possible implementation.

Crisis Management: This is the law enforcement aspect of an incident that involves measures to identify, acquire, and plan the resources needed to anticipate, prevent,

and/or resolve a threat of terrorism. The FBI is the LFA for crisis management for such an incident. (Source: FBI) During crisis management, the FBI coordinates closely with local law enforcement authorities to provide successful law enforcement resolution to the incident. The FBI also coordinates with other Federal authorities, including FEMA. (Source: FRP Terrorism Incident Annex, April 1999)

Damage Assessment: The appraisal or determination of the actual damage resulting from a disaster.

Decontamination: The process of making people, objects, or areas safe by absorbing, destroying, neutralizing, making harmless, or removing the HazMat.

Disaster: The occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from any natural or manmade cause including fire, flood, earthquake, air contamination, blight, drought, infestation, explosion, riot, hostile military or paramilitary action, other public calamity requiring emergency action.

Disaster Assistance Center: A location established in a disaster area that houses all federal, state, and local agencies that deal directly with the needs of the individual victim. DACs are established only after a Presidential Declaration.

Disaster Declaration: A document executed by an elected government for the purpose of obtaining assistance from a higher level of government.

Disaster Service Workers: All public employees in California are subject to such emergency or disaster activities as may be assigned by their supervisors or by law.

Drill: A supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation. A drill is often a component of an exercise.

Drop Cover, and Hold: Shelter position under tables or desks or other protected places away from overhead fixtures, windows, high cabinets, and bookcases, for immediate individual protection during an emergency.

Emergency: An event, the effects of which cause loss of life, human suffering, property damage (both public and private), and severe economic and social disruption.

Emergency Alert System: A program of the Federal Communications Commission (FCC) to coordinate the dissemination of emergency information via commercial broadcasters.

Emergency Coordinator: A position called for in the Emergency Organization to carry out emergency management functions on a day-to-day basis at the local level.

Emergency Manager: A position called for in the Emergency Organization to oversee the implementation of the City of Dublin Comprehensive Emergency Management Plan at the local level.

Emergency Operations Center: A centralized location where individuals responsible for responding to a large scale emergency can have immediate communication with each other and with City management for the purpose of enhancing coordination in exercising direction and control of emergency response and recovery efforts.

Emergency Organization: Organization to direct and control operations of the City during a period of emergency with assigned responsibilities and tasks for planning, response, and recovery in emergency situations.

Emergency Powers: Special authority granted to a chief local official during times of emergency. The State delegates emergency powers to designated local officials through an executive order.

Federal Response Plan (FRP): The FRP establishes a process and structure for the systematic, coordinated, and effective delivery of Federal assistance to address the consequences of any major disaster or emergency declared under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (42 U.S. Code [USC], et seq.). The FRP Terrorism Incident Annex defines the organizational structures used to coordinate crisis management with consequence management. (Source: FRP Terrorism Incident Annex, April 1999)

Lead Agency: The Federal department or agency assigned lead responsibility under U.S. law to manage and coordinate the Federal response in a specific functional area. The FBI is the lead agency for crisis management and FEMA is the lead agency for consequence management. Lead agencies support the overall Lead Federal Agency (LFA) during all phases of the response.

Lead Federal Agency (LFA): The agency designated by the President to lead and coordinate the overall Federal response is referred to as the LFA and is determined by the type of emergency. In general, an LFA establishes operational structures and procedures to assemble and work with agencies providing direct support to the LFA in order to provide an initial assessment of the situation, develop an action plan, monitor and update operational priorities, and ensure each agency exercises its concurrent and distinct authorities under U.S. law and supports the LFA in carrying out the President's relevant policy. Specific responsibilities of an LFA vary according to the agency's unique statutory authorities.

Level I Emergency: Minor to moderate emergency, such as major power outage, bomb threat, air pollution alert, isolated fire, or minor earthquake (no injuries or significant damage).

Level II Emergency: Moderate to severe emergency, such as major fire, moderate earthquake, bomb explosion (with injuries and/or structural damage).

Level III Emergency: Major emergency or disaster, such as a major earthquake or nuclear explosion.

Local Emergency Responder: Safety services provided by outside agencies, such as police, fire, medical or rescue services.

Mitigation: Those actions (including threat and vulnerability assessments) taken to reduce the exposure to and detrimental effects of a WMD incident.

Mitigation Phase: Phase of emergency management for site-specific action to minimize hazards and reduce the potential for injury or damage in an emergency.

Non-persistent Agent: An agent that, upon release, loses its ability to cause casualties after 10 to 15 minutes. It has a high evaporation rate, is lighter than air, and will disperse rapidly. It is considered to be a short-term hazard; however, in small, unventilated areas, the agent will be more persistent.

Persistent Agent: An agent that, upon release, retains its casualty-producing effects for an extended period of time, usually anywhere from 30 minutes to several days. A persistent agent usually has a low evaporation rate and its vapor is heavier than air; therefore, its

vapor cloud tends to hug the ground. It is considered to be a long-term hazard. Although inhalation hazards are still a concern, extreme caution should be taken to avoid skin contact as well.

Plume: Airborne material spreading from a particular source; the dispersal of particles, gases, vapors, and aerosols into the atmosphere.

Preparation (Preparedness) Phase: Phase of emergency management for employee in-service training in emergency responsibilities, such as prevention of injuries and property damage, first-aid and other response and rescue operations, and for acquisition of adequate supplies and equipment required to respond to an emergency.

Radiation: High-energy particles or gamma rays that are emitted by an atom as the substance undergoes radioactive decay. Particles can be either charged alpha or beta particles or neutral neutron or gamma rays.

Recovery Phase: Phase of emergency management for the initiation of short-range and long-range recovery plans at each effected site to return to normal operations following an emergency.

Response Phase: Phase of emergency management in which all employees take appropriate steps in an emergency situation to put the emergency plan into action.

Terrorism: The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. Domestic terrorism involves groups or individuals who are based and operate entirely within the United States and U.S. territories without foreign direction and whose acts are directed at elements of the U.S. government or population.

Toxicity: A measure of the harmful effects produced by a given amount of a toxin on a living organism.

Weapons-Grade Material: Nuclear material considered most suitable for a nuclear weapon. It usually connotes uranium enriched to above 90 percent uranium-235 or plutonium with greater than about 90 percent plutonium-239.

Weapons of Mass Destruction: Any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than 4 ounces, or a missile having an explosive incendiary charge of more than 0.25 ounce, or mine or device similar to the above; poison gas; weapon involving a disease organism; or weapon that is designed to release radiation or radioactivity at a level dangerous to human life. (Source: 18 USC 2332a as referenced in 18 USC 921)

Acronyms

AFB Air Force Base

AMS Aerial Measuring System

ANSIR Awareness of National Security Issues and Response Program

ARAC Atmospheric Release Advisory Capability

ARG Accident Response Group

ARS Agriculture/Research Service

ATC Air Traffic Control

ATSD(CS) Assistant to the Secretary of Defense for Civil Support

BDC Bomb Data Center

CBIAC Chemical and Biological Defense Information and Analysis Center

CBRNE Chemical, Biological, Radiological, Nuclear Material, or High-Yield Explosive

CDC Centers for Disease Control and Prevention

CDRG Catastrophic Disaster Response Group

CEPPO Chemical Emergency Preparedness and Prevention Office

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CHEMTREC Chemical Transportation Emergency Center

CHPPM Center for Health Promotion and Preventive Medicine

CIRG Crisis Incident Response Group

CJCS Chairman of the Joint Chiefs of Staff

CM Consequence Management

CMU Crisis Management Unit (CIRG)

CRU Crisis Response Unit

CSREES Cooperative State Research, Education and Extension Service

CST	Civil Support Teams
CW/CBD	Chemical Warfare/Contraband Detection
DAC	Disaster Assistance Center
DEST	Domestic Emergency Support Team
DFO	Disaster Field Office
DMAT	Disaster Medical Assistance Team
DMCR	Disaster Management Central Resource
DMORT	Disaster Mortuary Operational Response Team
DOC	Departmental Operations Center
DoD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
DPP	Domestic Preparedness Program
DPW	Department of Public Works
DSR	Damage Survey Report
DTCTPS	Domestic Terrorism/Counter Terrorism Planning Section (FBI HQ)
DTIC	Defense Technical Information Center
EAS	Emergency Alert System
EM	Emergency Management
EMI	Emergency Management Institute
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to Know Act

ERT	Emergency Response Team (FBI)
ERT-A	Emergency Response Team – Advance Element
ERTU	Evidence Response Team Unit
ESF	Emergency Support Function
EST	Emergency Support Team
EU	Explosives Unit
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FEST	Foreign Emergency Support Team
FNS	Food and Nutrition Service
FOC	Field Operations Center
FRERP	Federal Radiological Emergency Response Plan
FRMAC	Federal Radiological Monitoring and Assessment Center
FRP	Federal Response Plan
FS	Forest Service
HazMat	Hazardous Materials
HHS	Department of Health and Human Services
HMRU	Hazardous Materials Response Unit
HQ	Headquarters
HRT	Hostage Rescue Team (CIRG)
HTIS	Hazardous Technical Information Services (DoD)
IC	Incident Commander
ICS	Incident Command System
IND	Improvised Nuclear Device

JIC	Joint Information Center
JOC	Joint Operations Center
JTF-CS	Joint Task Force for Civil Support
LEPC	Local Emergency Planning Committee
LFA	Lead Federal Agency
LLNL	Lawrence Livermore National Laboratory
MEDCOM	Medical Command
MMRS	Metropolitan Medical Response System
MOA	Memorandum of Agreement
MSCA	Military Support to Civil Authorities
NAP	Nuclear Assessment Program
NBC	Nuclear, Biological, and Chemical
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDMS	National Disaster Medical System
NDPO	National Domestic Preparedness Office
NEST	Nuclear Emergency Search Team
NETC	National Emergency Training Center
NFA	National Fire Academy
NMRT	National Medical Response Team
NRC	Nuclear Regulatory Commission
NRT	National Response Team
NSC	National Security Council
NTIS	National Technical Information Service

OES	Office of Emergency Services
OFCM	Office of the Federal Coordinator for Meteorology
OIG	Office of the Inspector General (USDA)
OP AREA	Operational Area
OSC	On-Scene Commander
OSLDPS	Office for State and Local Domestic Preparedness Support
PDD	Presidential Decision Directive
PHS	Public Health Service
POC	Point of Contact
PT	Preparedness, Training, and Exercises Directorate (FEMA)
R&D	Research and Development
R.A.C.E.S.	Radio Amateur Community Emergency Service
RAP	Radiological Assistance Program
RCRA	Research Conservation and Recovery Act
RDD	Radiological Dispersal Device
REAC/TS	Radiation Emergency Assistance Center/Training Site
ROC	Regional Operations Center
RRIS	Rapid Response Information System (FEMA)
RRT	Regional Response Team
SAC	Special Agent in Charge (FBI)
SARA	Superfund Amendments and Reauthorization Act
SBCCOM	Soldier and Biological Chemical Command (U.S. Army)
SCBA	Self-Contained Breathing Apparatus

SEB	State Emergency Board
SERC	State Emergency Response Commission
SIOC	Strategic Information and Operations Center (FBI HQ)
SLG	State and Local Guide
TERC	Tribal Emergency Response Commission
TIP	Terrorist Incident Plan
TRIS	Toxic Release Inventory System
UC	Unified Command
UCS	Unified Command System
USC	U.S. Code
USDA	U.S. Department of Agriculture
USFA	U.S. Fire Administration
VA	Department of Veterans Affairs
WMD	Weapons of Mass Destruction
WMD-CST	WMD Civil Support Team