AGENDA

REGULAR CITY COUNCIL MEETING
COUNCIL CHAMBERS
5000 CLARK AVENUE
LAKEWOOD, CALIFORNIA

February 10, 2026

In accordance and within the requirements of California Government Code Section 54950 et seq., Mayor Cassandra Chase will be attending this meeting via teleconference at Ojai Valley Inn, Business Center, 905 Country Club Road, Ojai, CA 93023.

CALL TO ORDER 7:30 p.m.

INVOCATION: Pastor Candace Kelly, Acts Community Bible Church

PLEDGE OF ALLEGIANCE: Scouting America Cub Scout Pack 88

ROLL CALL: Mayor Cassandra Chase
Vice Mayor Jeff Wood
Council Member David Arellano
Council Member Steve Croft
Council Member Todd Rogers

ANNOUNCEMENTS AND PRESENTATIONS:
Presentation by Andrew Hall, Los Angeles County Sanitation District, Regarding Sewer Rate Increases for 2026

Presentation by Captain Dan Holguin, Lakewood Sheriff's Station, Regarding Quarterly Public Safety Report

PUBLIC COMMENT ON ITEMS IN THE AGENDA

ROUTINE ITEMS:
All items listed within this section of the agenda are considered to be routine and will be enacted by one motion without separate discussion. Any Member of Council may request an item be removed for individual discussion or further explanation. All items removed shall be considered immediately following action on the remaining items.

RI-1 MEETING MINUTES - It is recommended City Council approve Minutes of the Meeting held January 13 and January 27, 2026.

RI-2 PERSONNEL TRANSACTIONS - It is recommended City Council approve report of personnel transactions.

RI-3 REGISTERS OF DEMANDS - It is recommended City Council approve registers of demands.

RI-4 MEETING REPORTS AND AUTHORIZATIONS PURSUANT TO AB1234 - It is recommended City Council receive and file the report.

ROUTINE ITEMS – Continued

RI-5 AGREEMENT FOR 2026 PAN AM FIESTA AMUSEMENT RIDES - It is recommended City Council authorize the Mayor and the City Clerk to execute the Agreement for the 2026 Pan Am Fiesta Amusement Rides subject to approval as to legal form by the City Attorney.

RI-6 WATER MAIN EASEMENT GRANT DEED FOR DUTCH BROS. COFFEE AT 5809 LAKEWOOD BOULEVARD - It is recommended City Council accept the attached Water Main Easement granted by Qing Kai Investment, LLC, as shown in Exhibits A and B, and authorize the Mayor to sign on behalf of the City and direct the City Clerk to record with the County as approved by the City Attorney.

RI-7 APPOINTMENT TO SOUTHEAST LOS ANGELES COUNTY WORKFORCE DEVELOPMENT BOARD (SELACO WDB) - It is recommended City Council approve the appointment of Eddie Witt Jr. to the Southeast Los Angeles County Workforce Development Board of Directors.

RI-8 RESOLUTION NO. 2026-7 - AMENDING AN EXISTING PAY RATE IN ATTACHMENT B OF RESOLUTION NO. 2024-25 - It is recommended City Council adopt the proposed Resolution.

REPORTS:

3.1 LAKEWOOD YOUTH HALL OF FAME PROGRAM - It is recommended City Council receive and file the report.

3.2 ADOPTION OF 2026 LEGISLATIVE PLATFORM - It is recommended City Council adopt the Legislative Platform for 2026.

3.3 SHOPPING CART RETENTION AND RETRIEVAL PROGRAM STATUS REPORT - It is recommended City Council receive and file this report and direct staff to modify the CRRP regulations and procedures to remove laundry carts from the CRPP regulations.

3.4 RESOLUTION NO. 2026-6 - ADOPTION OF THE UPDATED LOCAL HAZARD MITIGATION PLAN (LHMP) - It is recommended City Council adopt the proposed Resolution adopting the draft City of Lakewood Local Hazard Mitigation Plan and direct staff to submit the approved Resolution to CalOES and FEMA.

3.5 FISCAL YEAR (FY) 2025-26 MIDYEAR BUDGET REVIEW AND ADJUSTMENTS AND PRESENTATION OF THE FY 2026-28 TWO-YEAR BUDGET PREPARATION CALENDAR - It is recommended City Council adopt the noted changes for inclusion into the City's FY 2025-26 Revised Budget and direct staff to make all related adjustments to the City's budget appropriations; and review the FY 2026-28 Two-Year Budget Preparation Calendar and provide feedback to staff.

ORAL COMMUNICATIONS:

ADJOURNMENT

In compliance with the Americans with Disabilities Act, if you are a qualified individual with a disability and need an accommodation to participate in the City Council meeting, please contact the City Clerk's Office, 5050 Clark Avenue, Lakewood, CA, at 562/866-9771, ext. 2200; or at cityclerk@lakewoodca.gov at least 48 hours in advance to ensure that reasonable arrangements can be made to provide accessibility to the meeting.

Agenda items are on file in the Office of the City Clerk, 5050 Clark Avenue, Lakewood, and are available for public review during regular business hours. Any supplemental material distributed after the posting of the agenda will be made available for public inspection during normal business hours in the City Clerk's Office. For your convenience, the agenda and the supporting documents are available in an alternate format by request and are also posted on the City's website at www.lakewoodca.gov

Routine Items

Minutes

Lakewood City Council

Regular Meeting held
January 27, 2026

MEETING WAS CALLED TO ORDER at 7:32 p.m. by Mayor Chase in the Council Chambers at the Civic Center, 5000 Clark Avenue, Lakewood, California.

INVOCATION was offered by Reverend Petero Taufagu, Vai O Le Ola Church

PLEDGE OF ALLEGIANCE was led by Scouting America Cub Scout Pack 21

ROLL CALL: PRESENT: Mayor Cassandra Chase
Vice Mayor Jeff Wood
Council Member David Arellano
Council Member Steve Croft
Council Member Todd Rogers

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ANNOUNCEMENTS AND PRESENTATIONS:

Mayor Chase 1) announced that the meeting would be adjourned in memory of a) Jose Luis Torres, father of Human Resources Manager Brenda Torres; and b) the Alfaro family; 2) provided details relative to a) Care Solace, a firm that connects Lakewood community members with mental health professionals; and b) Pathways, a not-for-profit organization that provides care navigation, hospice, and bereavement services to the Greater Lakewood/Long Beach area; 3) expressed sadness for the immigration enforcement occurring around the country, specifically in Minneapolis; 4) explained that her and Deputy City Manager Beltran would be attending The United States Conference of Mayors winter meeting in Washington D.C. with the purpose of engaging with the White House, Administration, and Congress to discuss the priorities of America's mayors; and 5) introduced and welcomed City Clerk Wallace.

Vice Mayor Wood 1) reported on his attendance at various community events including a) the Rancho Southwest Annual Installation luncheon held at the Centre, further congratulating Lakewood resident Jennifer Beech on becoming President; b) the third annual Martin Luther King, Jr. event held by the Lakewood InterFaith Council; c) the Lakewood Leadership Academy Mixer; and d) the City Hall tour with students and parents of the Al Fresco Friends homeschool community; and 2) highlighted that the 2026 Lakewood Pan Am Ambassador Scholarship and Poetry Poster Contest applications are available on the Lakewood Pan American Association website.

ANNOUNCEMENTS AND PRESENTATIONS - Continued

Council Member Arellano 1) explained that he visited the Alfaro family home in the wake of the recent tragedy and witnessed the Lakewood Community coming together in times of hardship; 2) expressed understanding for the pain, violence, and hardship experienced by the immigrant community, further expressing the opinion that human dignity, compassion, and respect should not be up for debate; and 3) acknowledged the hard work being done by the City Council and City staff.

Council Member Rogers 1) expressed that it is a difficult time in the country and community, noting that if he was in law enforcement at the federal level, he would do things differently; 2) stated that he believes in due process for all and investigations and transparency are key; 3) explained that the City Council asked staff to prepare a five signature letter at the January 13, 2026, City Council Meeting, asking federal, state, and local representatives to cease inflammatory rhetoric and find common ground and a rational way forward on immigration enforcement; and 4) noted that the safety and security of the citizens, residents, and business owners of the City of Lakewood are priority.

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PUBLIC COMMENT ON ITEMS IN THE AGENDA - None

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ROUTINE ITEMS:

It was moved by Vice Mayor Wood, seconded by Council Member Arellano, and unanimously carried by the following roll call vote, to approve the Routine Items:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

RI-1 Approval of Personnel Transactions

RI-2 Approval of Registers of Demands

RI-3 Approval of Monthly Report of Investment Transactions - December 2025

RI-4 Approval of Amendment to Agreement with Bakersfield Well & Pump

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1.1 • APPROVAL OF VESTING TENTATIVE TRACT MAP NO. 84811, 4152 PARAMOUNT BOULEVARD; RESOLUTION NO. 2026-1 *[Continued from December 9, 2025]*

Deputy City Attorney Skolnik introduced the item.

Community Development Director Cervantes 1) provided a PowerPoint presentation of the Agenda Report; and 2) along with Director of Public Works Pickler and City Manager McCormack, responded to Council Members' questions.

1.1 • VTTM NO. 84811, 4152 PARAMOUNT BOULEVARD - Continued

At the request of Vice Mayor Wood, Director Cervantes confirmed that the Applicant has addressed concerns detailed at the December 9, 2025, Regular City Council Meeting, such as

the installation of frosted glass on the upper floors of the proposed project for privacy and the implementation of mitigation measures to alleviate vehicles entering and exiting the alleyway at high speeds, further noting that the Applicant and Community Development Department met with the residents and business owners of the surrounding area to address additional concerns; however, the owner of the restaurant adjacent to the subject property was not in attendance to discuss the matters relative to parking and special events.

For the record, **Matt Ashton, Project Manager, Ashton3**, 1) provided an overview of the proposed project, noting that the project has received approvals from the Los Angeles County Fire Department, City staff, and the Planning Commission, further expressing the opinion that the project fits well in the area and does not require a zone change or requests for concessions; 2) highlighted that he has worked directly with Bert Johnson, resident, on community outreach to better address the concerns of the residents and business owners in the surrounding area; 3) confirmed that a stop sign, bollards, and lighting will be added to enhance the safety of pedestrians in the alleyway of the proposed project; 4) noted that he was working with the business owners of the surrounding area to assist with the existing overflow parking concerns, further stating that they have identified the retail shopping centers in the surrounding area as an area for overflow parking, if needed; and 5) expressed the opinion that the proposed Home Owners Association (HOA) will assist with keeping the area clean and preventing homeless encampments.

At the request of Council Member Arellano, **Project Manager Ashton** 1) confirmed that he met with residents and business owners prior to and after the December 9, 2025, Regular City Council Meeting; and 2) stated that Ashton3 does not have off-site parking agreements with the nearby retail shopping centers, such as Kohl's and Walmart, but they could be considered in the future.

For the record, 1) Council Member Arellano recommended Project Manager Ashton speak with the owners of the adjacent businesses in addition to City staff relative to parking agreements, expressing the opinion that the City of Lakewood is a business-friendly City and he does not want parking to become a concern in the future; 2) Council Member Rogers a) expressed concern relative to the proposed breezeway being utilized by the homeless for encampments and requested mitigation measures be implemented to prevent that from occurring; b) recommended that the mitigation measures for the residents of Brock Avenue and Greenmeadow Road be clear prior to the commencement of the project; and 3) Vice Mayor Wood expressed concern relative to the a) proposed trash enclosure, stating the opinion that one trash enclosure for twenty units may not be sufficient; and b) overflow parking of the businesses in the subject area, further inquiring if the businesses have adequate parking.

1.1 • VTTM NO. 84811, 4152 PARAMOUNT BOULEVARD - Continued

In response to questions and comments provided by Council Member Arellano and Vice Mayor Wood, 1) City Manager McCormack confirmed that staff will work with the applicant and surrounding businesses on creating reciprocal parking agreements; and 2) Director Cervantes stated that the businesses in the surrounding area are in compliance with the parking requirements set forth by the parking code.

Following brief discussion, Mayor Chase opened the public hearing at 8:16 p.m. and called for anyone in the audience wishing to address the City Council on the matter.

Ernesto Benitez, resident, 1) submitted written materials for the record; and 2) expressed public safety concerns, including speeding and the high flow of vehicles in the subject area, further expressing the opinion that the safety of pedestrians and residents is at risk due to the lack of visibility in the area.

In response to comments provided by Ernesto Benitez, Mayor Chase suggested he speak with Community Development Director Cervantes regarding his concerns.

Rene Miller, resident, expressed public safety concerns, including speeding and the high flow of vehicles in the subject area, further expressing the opinion that the safety of pedestrians is at risk.

Bert Johnson, Jr., resident, 1) stated that he supports the proposed project and has met with the Applicant to assist with addressing the concerns of the nearby residents and business owners; 2) expressed the opinion that the concerns previously mentioned at the December 9, 2025, Regular City Council Meeting have been remedied; and 3) explained that he has organized an "Advisory Council" for nearby residents to work closely with the Applicant throughout the duration of the project.

Following discussion, Mayor Chase closed the public hearing.

For the record, at the request of Council Member Rogers relative to the addition of traffic control measures as a condition of approval, 1) Director Cervantes stated that the Resolution could be amended to add a condition that requires the implementation of traffic control measures with City Council direction; 2) Deputy City Attorney Skolnik clarified that the Resolution did not need to be amended to add the proposed condition but instead could be included in the motion as directive to staff; and 3) Director Pickler a) confirmed that the addition of the proposed stop sign is acceptable to the Public Works Department; and b) clarified that the bollards will be on private property, not City owned property.

Following discussion, it was moved by Council Member Rogers, seconded by Council Member Arellano, and unanimously carried by the following roll call vote, to adopt Resolution No. 2026-1 approving the Vesting Tentative Tract Map No. 84811 and the Environmental Determination (Categorically Exempt) with conditions that the project include the installation of a stop sign, bollards, and pedestrian safety measures, as deemed appropriate by City staff and in accordance with the State Traffic Manual:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

2.1 • APPOINTMENT TO RECREATION AND COMMUNITY SERVICES COMMISSION; RESOLUTION NO. 2026-2

Council Member Rogers 1) introduced the item; 2) thanked former Commissioner Ted Spaseff for his service to the Recreation and Community Services Commission; and 3) nominated Bert Johnson to fill the vacancy.

Alan Gafford, stated that he knew former Commissioner Ted Spaseff while he was serving on the Design and Development Review Board, further expressing gratitude for his commitment and contributions.

Following discussion, it was moved by Council Member Rogers, seconded by Vice Mayor Wood, and unanimously carried by the following roll call vote, to adopt Resolution No. 2026-2 appointing Bert Johnson to the Recreation and Community Services Commission:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

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2.2 • SECOND READING AND ADOPTION OF ORDINANCE NO. 2026-1; AMENDING THE LAKEWOOD MUNICIPAL CODE PERTAINING TO REQUIRED PARKING STANDARDS FOR REGIONAL SHOPPING CENTERS AND NEIGHBORHOOD SHOPPING CENTERS THAT ARE WITHIN 100 FEET OF A REGIONAL SHOPPING CENTER

For the record, 1) Deputy City Attorney Skolnik introduced the item; and 2) City Manager McCormack explained that this item is not related to the Lakewood Center Mall development but is a pre-cursor to the revisioning process of the mall, expressing the opinion that it creates the needed partnership between the City and the Applicant, Pacific Retail Capitol Partners (PRCP) to development a project the community deserves.

Jonathan Rood, Executive Vice President, Pacific Retail Capitol Partners, stated that PRCP has conducted community research for the future of the Lakewood Center Mall, further explaining that the goal of PRCP is to transform the mall to better serve the residents of the City.

For the record, 1) Council Member Arellano reiterated that there was a large discussion relative to the parking requirements at the January 13, 2026, Regular City Council Meeting, and though he is skeptic, he trusts the proposed recommendation and is looking forward to the future development; and 2) Council Member Rogers expressed support for the future development, noting that he trusts staff's recommendation and is excited for the possibilities to come.

Following discussion, it was moved by Council Member Croft, seconded by Council Member Arellano, and unanimously carried by the following roll call vote, to adopt Ordinance No. 2026-1:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

2.3 • RESOLUTIONS FOR THE 2026 GENERAL MUNICIPAL ELECTION: RESOLUTION NO. 2026-3 - CALLING THE ELECTION; RESOLUTION NO. 2026-4 - REQUESTING THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES TO CONSOLIDATE ELECTION; AND RESOLUTION NO. 2026-5 - ADOPTING REGULATIONS FOR CANDIDATES FOR ELECTIVE OFFICE

Deputy City Attorney Skolnik introduced the item and provided a verbal report of the Agenda report.

Alan Gafford, relative to Section 3 of Resolution No. 2026-5, questioned which languages are required to be on the ballot per the County of Los Angeles.

In response to questions and comments provided by Alan Gafford, Deputy City Attorney Skolnik explained that the City Clerk researches the legal requirements regarding the languages that are required to be included and utilizes data provided to the City by the governing authorities.

It was moved by Council Member Rogers, seconded by Council Member Croft, and unanimously carried by the following roll call vote, to adopt Resolution Nos. 2026-3, 2026-4, and 2026-5:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

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3.1 • ANNUAL CITY INVESTMENT POLICY AND QUARTERLY SCHEDULE OF INVESTMENTS AS OF DECEMBER 31, 2025

Mayor Chase introduced the item.

Director of Finance and Administrative Services Gomez 1) provided a verbal report of the Agenda report; and 2) introduced Tiffany Tint, Institutional Sales and Relationship Manager of PFM Asset Management, who provided a PowerPoint presentation of the market update and portfolio report.

At the request of Council Member Arellano, City Manager McCormack confirmed that there is one substantive change to the proposed Investment Policy and the remaining changes are clerical only.

Following discussion, it was moved by Vice Mayor Wood, seconded by Council Member Arellano, and carried unanimously by the following roll call vote, to 1) adopt the attached Investment Policy; and 2) receive and file the Quarterly Schedule of Investments for December 31, 2025:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

3.2 • AWARD OF BID FOR PUBLIC WORKS CONTRACT 22-07, WEINGART SENIOR CENTER IMPROVEMENTS PROJECT

Mayor Chase introduced the item.

Director of Public Works Pickler 1) provided a PowerPoint presentation of the Agenda Report; and 2) responded to Council Members' questions.

For the record, Council Member Croft 1) stated that he is a member of the Capital Improvement Plan Committee; 2) thanked Congresswoman Barragan for the support and funding of the proposed project; and 3) stated he is excited for the proposed project.

At the request of Vice Mayor Wood, without objection, Director Pickler confirmed that staff will keep the public updated on the timeframe of the proposed project.

Following discussion, it was moved by Council Member Croft, seconded by Vice Mayor Wood, and unanimously carried by the following roll call vote, to 1) adopt the plans, specifications, and working details for the subject project; 2) award the contract for the "Weingart Sr. Center Improvements Project," Public Works Contract 22-07, in the amount of $4,050,388 to the low bidder New Dynasty Construction Co. (inclusive of the base bid amount of $3,364,601, Bid Alternate No. 1 in the amount of $272,681, and Bid Alternate No. 2 in the amount of $413,106) and authorize the Mayor to sign the contract in a form approved by the City Attorney; 3) authorize staff to approve a cumulative total of change orders, as necessary not to exceed $1,390,339.68; and 4) accept staff's determination that the project is Categorically Exempt from the California Environmental Quality Act (CEQA), National Environmental Protection Agency (NEPA), and HUD Online Environmental Review Online System (HEROS):

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

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LAKEWOOD HOUSING SUCCESSOR AGENCY

1 • REGISTER OF DEMANDS

It was moved by Council Member Croft, seconded by Vice Mayor Wood, and unanimously carried by the following roll call vote, to approve the registers of demands:

AYES: COUNCIL MEMBERS – Wood, Croft, Arellano, Rogers, and Mayor Chase

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For the record and without objection, Mayor Chase recessed the meeting at 9:06 p.m. for a brief break.

For the record, Vice Mayor Wood reconvened the meeting at 9:13 p.m. with all members present except Mayor Chase.

ORAL COMMUNICATIONS:

Joy Janes, resident, provided details relative to the Lakewood Run community event to be held on Saturday, March 7, 2026.

Philip Norris, resident, 1) expressed concerns relative to parking ordinances, expressing the opinion that though ordinances are in place, they are not being enforced; and 2) stated he supports the use of license plate readers and requested additional cameras on Harvey Way and Los Coyotes Diagonal.

For the record, the following individuals addressed the City Council relative to their concerns regarding the use of Flock cameras and the presence and actions of U.S. Immigration and Customs Enforcement (ICE) agents in the City and throughout the Country: 1) Gisela Nily; 2) Tania Whiteleather; 3) Tyler Lewis; 4) Simone Venhardt; 5) Robin Greatrex; 6) Susan Singer; 7) Kimberly Esslinger; 8) Kathy Davis; 9) Kay Ewing Donato; 10) Lauren Z.; 11) Kelly D.; 12) Stephanie Terronez; 13) Parvesh Cheena; and 14) Court Campion.

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ADJOURNMENT

There being no further business to be brought before the City Council, Vice Mayor Wood adjourned the meeting at 10:02 p.m. to Saturday, February 7, 2026, at 9:00 a.m. in the Executive Board Room. A moment of silence was observed in memory of Jose Luis Torres and the Alfaro Family.

Respectfully submitted,

Dakota Wallace, CMC
City Clerk

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: The Honorable Mayor and City Council

SUBJECT: Report of Personnel Transactions

Name	Title	Schedule	Effective Date
1. FULL-TIME EMPLOYEES			
A. Appointments			
None			
B. Changes			
None			
C. Separations			
None			
PART-TIME EMPLOYEES			
A. Appointments			
None			
B. Changes			
Jessica Rivers	Administrative Intern I Support Services Clerk I	B to B	01/18/2026
C. Separations			
Jahret Hood	Maintenance Trainee I	B	02/06/2026

Thaddeus McCormack
City Manager

DIVIDER SHEET

CITY OF LAKEWOOD
FUND SUMMARY 1/29/2026

In accordance with section 2521 of the Lakewood Municipal Code, presented herewith is a summary of obligations to be paid by the City of Lakewood. Each of the following demands has been audited by the Director of Finance and Administrative Services and approved by the City Manager.

1010	GENERAL FUND	427,732.60
1035	CASP CERTIFICATION & TRNG FUND	84.00
1500	MISC-SPECIAL REVENUE FUND	315.00
3070	PROPOSITION "C"	1,038.71
4011	CIP CITY MEASURE L	1,506.68
4015	CIP CITY ARPA EXCHANGE	1,688.79
4201	CIP FED CDBG	2,700.00
4401	CIP STATE-RMRA SB1	118,833.50
4603	CIP COUNTY MEASURE R	64,468.89
5020	CENTRAL STORES	3,830.35
5030	FLEET MAINTENANCE	3,540.27
7500	WATER UTILITY FUND	58,485.10
8020	LOCAL REHAB LOAN	27,800.00
8030	TRUST DEPOSIT	6,100.00
		718,123.89

Council Approval

Date

City Manager

Attest

City Clerk

Director of Finance and Administrative Services

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
01/29/2026	PERRIS FENCE & SUPPLY	16,497.45
01/29/2026	ABRUSCATO, DIANA	852.15
01/29/2026	AMAZON CAPITAL SERVICES INC	2,748.01
01/29/2026	APPLEONE INC	2,186.24
01/29/2026	AQUATIC DESIGN GROUP	126.70
01/29/2026	ARC DOCUMENT SOLUTIONS LLC	463.65
01/29/2026	B & H FOTO & ELECTRONICS CORP	1,042.90
01/29/2026	B&M LAWN AND GARDEN INC	67.82
01/29/2026	BEGINNERS EDGE SPORTS TRAINING LLC	2,839.20
01/29/2026	BLUEALLY TECHNOLOGY SOLUTIONS	975.88
01/29/2026	BRIZUELA XOCHITL	1,365.00
01/29/2026	CALIF. STATE DISBURSEMENT UNIT	659.95
01/29/2026	CALIF STATE FRANCHISE TAX BOARD	158.65
01/29/2026	CENTRAL BASIN MUNICIPAL WATER	3,636.00
01/29/2026	CERRITOS, CITY OF	4,982.93
01/29/2026	CHICAGO TITLE CO	100.00
01/29/2026	CINTAS CORPORATION	373.86
01/29/2026	CAMERON WELDING SUPPLY	202.69
01/29/2026	CORODATA SHREDDING INC	41.95
01/29/2026	DAHLIN GROUP INC	2,700.00
01/29/2026	DANIEL'S TIRE SERVICE INC	885.66
01/29/2026	DIRECTV INC	1,129.88
01/29/2026	FLUE STEAM INC	241.00
01/29/2026	GANAHL LUMBER COMPANY	290.14
01/29/2026	GOLDEN STATE WATER COMPANY	9,082.06
01/29/2026	H & H NURSERY	37.29
01/29/2026	HARRINGTON INDUSTRIAL PLASTICS LLC	850.37
01/29/2026	HDR CONSTRUCTION	27,800.00
01/29/2026	HOME DEPOT	219.01
01/29/2026	JONES RICHARD D. A PROF LAW CORP	2,027.69
01/29/2026	LAKEWOOD, CITY OF	500.00
01/29/2026	LONG BEACH CITY	2,456.31
01/29/2026	LOS ANGELES CO CLERK	25.00
01/29/2026	LA COUNTY DEPT OF PUBLIC WORKS	106,795.16
01/29/2026	MAINTEX INC	811.62
01/29/2026	MANERI TRAFFIC CONTROL INC	1,768.00
01/29/2026	LEON MANUEL	1,370.00
01/29/2026	MATHESON TRI-GAS INC	180.67
01/29/2026	MC ENROE, BARBARA	304.20
01/29/2026	MC MASTER-CARR SUPPLY CO	598.12
01/29/2026	MILLER DON & SONS	2,129.30
01/29/2026	OC VACUUM INC	1,224.00
01/29/2026	ODP BUSINESS SOLUTIONS LLC	438.91
01/29/2026	ORKIN SERVICES OF CALIFORNIA INC	125.66

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
01/29/2026	PERMITECH SOLUTIONS CORPORATION	1,073.00
01/29/2026	LONG BEACH PUBLISHING CO	1,688.79
01/29/2026	R AND S OVERHEAD DOORS OF SOUTH BAY INC	1,506.68
01/29/2026	SAFETY-KLEEN CORP	403.72
01/29/2026	DK - SANDLER BROTHERS	120.00
01/29/2026	SERVICEWEAR APPAREL INC	1,027.15
01/29/2026	SITEONE LANDSCAPE SUPPLY LLC	1,238.80
01/29/2026	MWB COPY PRODUCTS INC	116.03
01/29/2026	SOUTH COAST AOMD	175.84
01/29/2026	SOUTHERN CALIFORNIA EDISON CO	5,198.66
01/29/2026	TGIS CATERING SVCS INC	1,015.88
01/29/2026	TRAFFIC MANAGEMENT INC	437.58
01/29/2026	TRB AND ASSOCIATES INC	74,774.10
01/29/2026	TURF STAR	1,342.23
01/29/2026	TW ASSOCIATES	2,212.12
01/29/2026	GOMEZ GROWERS INC	83.98
01/29/2026	UNITED RENTALS (NORTH AMERICA) INC	4,425.53
01/29/2026	WALTERS WHOLESALE ELECTRIC CO	4,737.33
01/29/2026	WATANABE, BRYCE	1,786.26
01/29/2026	WATER SYSTEM SERVICES LLC	195.00
01/29/2026	WAXIE ENTERPRISES INC	1,501.07
01/29/2026	WESTERN EXTERMINATOR CO	614.12
01/29/2026	WILLDAN ASSOCIATES	3,464.89
01/29/2026	WOOD RODGERS INC	33,575.00
01/29/2026	YOUNG CHAMPIONS RECREATION PROGRAMS INC	766.48
01/29/2026	HANNAH, DANIEL	84.00
01/29/2026	INGRAM, BEVERLY	250.00
01/29/2026	OMENWU, FATIMA	0.56
01/29/2026	RAMOS, ALMA	250.00
01/29/2026	RODRIGUEZ, RACHEL	1,998.13
01/29/2026	AIRBORNE PUBLIC SAFETY ASSOCIATION	63.00
01/29/2026	SYKAHUA TEMUJIN	483.60
01/29/2026	S & J SUPPLY CO	1,441.85
01/29/2026	SAL'S PLUMBING INC	765.00
01/29/2026	SO CALIF SECURITY CENTERS INC	69.45
01/29/2026	THE HITT COMPANIES	75.08
01/29/2026	TUMBLE-N-KIDS INC	14,684.58
01/29/2026	U S BANK PARS ACCT #6746022500	7,360.88
01/29/2026	U S BANK PARS ACCT #6746022500	3,321.99
01/29/2026	VOYA	60,700.21
01/29/2026	WAMBA, DIANE B	320.45
01/29/2026	WATERLINE TECHNOLOGIES INC	7,353.79
01/29/2026	WYNN, LAKYN	136.50
01/29/2026	ZONES IT SOLUTIONS INC	2,704.20

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
01/29/2026	ADVANTAGE MAILING LLC	15,762.64
01/29/2026	BUCKNAM PETER JOSEPH	10,111.00
01/29/2026	COVENANT SALES GROUP	850.00
01/29/2026	DR OFFICE WORKS INC	2,670.55
01/29/2026	EDCO TRANSPORT SERVICES LLC	20,842.80
01/29/2026	FONTELA, THAO	1,977.30
01/29/2026	PLAYCORE WISCONSIN INC	5,079.91
01/29/2026	GLASBY MAINTENANCE SUPPLY CO	254.72
01/29/2026	LAKEWOOD CITY EMPLOYEE ASSOCIATION	2,600.00
01/29/2026	MIDAMERICA ADMIN & RETIREMENT	3,040.15
01/29/2026	MNS ENGINEERS INC	35,087.45
01/29/2026	MOSES-CALDERA, ISABEL	117.00
01/29/2026	NICHOLLS CONSULTING INC	315.00
01/29/2026	SOUTHERN CALIF PRECISION CONCRETE	108,722.50
01/29/2026	RAYVERN LIGHTING SUPPLY CO INC	834.28
01/29/2026	RUIZ CONCRETE & PAVING INC	61,004.00
	Total:	**718,123.89**

CITY OF LAKEWOOD
SUMMARY ACH/WIRE REGISTER JANUARY 2026

ACH date	Amount	Recipient	Purpose	Period
1/6/26	$149,990.72	CalPERS	Employee Medical Premiums	January 2026
1/6/26	$145,936.15	CalPERS	Payroll - Retirement Plan	Dec 7-20, 2025
1/7/26	$687,741.64	Various Bank Accounts	Employee Payroll	Dec 21-Jan 3, 2026
1/7/26	$122,254.23	IRS via F&M Bank	Payroll - Federal Taxes	Dec 21-Jan 3, 2026
1/8/26	$35,824.08	EDD	Payroll - State Taxes	Dec 21-Jan 3, 2026
1/20/26	$6,500,000.00	CAMP	City Investment Deposit	January 2026
1/21/26	$142,294.71	CalPERS	Payroll - Retirement Plan	Dec 21-Jan 3, 2026
1/21/26	$716,638.19	Various Bank Accounts	Employee Payroll	Jan 4-17, 2026
1/21/26	$121,721.68	IRS via F&M Bank	Payroll - Federal Taxes	Jan 4-17, 2026
1/22/26	$35,499.92	EDD	Payroll - State Taxes	Jan 4-17, 2026
1/26/26	$2,000,000.00	LAIF	City Investment Deposit	January 2026
1/27/26	$253,333.00	CalPERS	Payroll-UAL	January 2026

RECIPIENT DESCRIPTION

CalPERS	CA Public Employee Retirement System
CAMP	CA Asset Management Program
EDD	State of CA Employee Development Department
IRS	Internal Revenue Service

Council Approval _____ Date _____ City Manager

Attest: _____ City Clerk _____ Director of Finance & Administrative Services

CITY OF LAKEWOOD
FUND SUMMARY 2/5/2026

In accordance with section 2521 of the Lakewood Municipal Code, presented herewith is a summary of obligations to be paid by the City of Lakewood. Each of the following demands has been audited by the Director of Finance and Administrative Services and approved by the City Manager.

1010	GENERAL FUND	266,782.76
1500	MISC-SPECIAL REVENUE FUND	11,453.38
1624	LA CNTY MEASURE W-LOCAL	323.00
3070	PROPOSITION "C"	1,511.68
4011	CIP CITY MEASURE L	26,794.10
4401	CIP STATE-RMRA SB1	113,432.50
4602	CIP COUNTY MEASURE M	7,897.25
5020	CENTRAL STORES	4,755.65
5030	FLEET MAINTENANCE	26,806.27
7500	WATER UTILITY FUND	23,100.81
8030	TRUST DEPOSIT	1,714.45
8070	JPA STATION CITIES	72,176.02
		556,747.87

Council Approval

Date

City Manager

Attest

City Clerk

Director of Finance and Administrative Services

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
02/05/2026	AAA FLAG & BANNER MFG. CO INC	1,597.60
02/05/2026	AGRI-TURF DISTRIBUTING	1,242.02
02/05/2026	ALL CITY MANAGEMENT SERVICES INC	17,061.85
02/05/2026	ALLIED REFRIGERATION INC	119.68
02/05/2026	AMAZON CAPITAL SERVICES INC	570.18
02/05/2026	AMERICAN INTERNATIONAL GROUP INC	350.05
02/05/2026	ANGELS BASEBALL LP -GROUP SALES	2,885.00
02/05/2026	AT&T ENTERPRISES LLC	306.66
02/05/2026	B & H FOTO & ELECTRONICS CORP	134.25
02/05/2026	B&M LAWN AND GARDEN INC	841.57
02/05/2026	BIOMETRICS4ALL INC	972.00
02/05/2026	BLUETRITON BRANDS INC	202.03
02/05/2026	LUCKY STRIKE ENTERTAINMENT CORPORATION	1,527.61
02/05/2026	CAL STATE AUTO PARTS INC	887.76
02/05/2026	LONG BEACH LINCOLN MERCURY INC	939.26
02/05/2026	CINTAS CORPORATION	160.33
02/05/2026	CORELOGIC INC	44.25
02/05/2026	COUCH, RON JR	240.00
02/05/2026	DELTA DENTAL INSURANCE COMPANY	712.11
02/05/2026	DELTA DENTAL OF CALIFORNIA	9,360.04
02/05/2026	DISNEYLAND RESORT TICKET	16,485.00
02/05/2026	EWING IRRIGATION PRODUCTS INC	1,072.58
02/05/2026	FERGUSON ENTERPRISES INC	15,132.13
02/05/2026	FIREWORKS & STAGE FX AMERICA	9,500.00
02/05/2026	HARA M LAWNMOWER CENTER	572.32
02/05/2026	HDL COREN & CONE	5,528.74
02/05/2026	HOME DEPOT	2,863.28
02/05/2026	HUGHES NETWORK SYSTEMS LLC	79.99
02/05/2026	HUNTER, JOHN L & ASSOCIATES	323.00
02/05/2026	ICC CODIFICATION INC	1,545.00
02/05/2026	KENNEDY JENKS CONSULTANTS INC	1,195.00
02/05/2026	LAKEWOOD ROTARY CLUB	385.00
02/05/2026	LANDCARE HOLDINGS INC	9,313.00
02/05/2026	LANGUAGE NETWORK INC	924.00
02/05/2026	LONG BEACH, CITY OF	845.87
02/05/2026	LOS ANGELES CO SHERIFFS DEPT	1,414.45
02/05/2026	LA COUNTY DEPT OF PUBLIC WORKS	13,956.88
02/05/2026	LEON MANUEL	705.00
02/05/2026	MILLIKEN & COMPANY	16,164.81
02/05/2026	MJ BUSINESS INC	2,185.00
02/05/2026	NORWALK, CITY OF	5,500.00
02/05/2026	ODP BUSINESS SOLUTIONS LLC	422.76
02/05/2026	JOYCE LOU INC	533.57
02/05/2026	R AND S OVERHEAD DOORS OF SOUTH BAY INC	10,629.29

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
02/05/2026	REGIONAL GOVERNMENT SERVICES AUTHORITY	18,392.20
02/05/2026	SCMAF OFFICE	531.60
02/05/2026	DFC COMPANY	919.45
02/05/2026	SITEONE LANDSCAPE SUPPLY LLC	2,756.20
02/05/2026	SOUTHERN CALIFORNIA EDISON CO	52,430.01
02/05/2026	SOUTHWEST PATROL INC	72,176.02
02/05/2026	STANDARD INSURANCE CO UNIT 22	2,142.45
02/05/2026	STANDARD INSURANCE CO UNIT 22	11,929.74
02/05/2026	MANCE, MIKE J	14.73
02/05/2026	ARIZONA MACHINERY LLC	978.86
02/05/2026	T-MOBILE USA INC	491.96
02/05/2026	THURSTON ELEVATOR CONCEPTS INC	155.00
02/05/2026	TRANSAMERICA LIFE INSURANCE COMPANY	1,075.83
02/05/2026	UNIVERSAL STUDIOS LLP	16,541.00
02/05/2026	VERITIV OPERATING COMPANY	195.49
02/05/2026	CELLCO PARTNERSHIP	1,243.00
02/05/2026	VISION SERVICE PLAN	4,651.46
02/05/2026	VORTEX INDUSTRIES LLC	6,095.38
02/05/2026	WAXIE ENTERPRISES INC	762.23
02/05/2026	WILD RIVERS WATERPARK IRVINE SPE LLC	4,950.00
02/05/2026	WILLDAN ASSOCIATES	12,827.25
02/05/2026	BRINKER, AUBREYANNA	100.00
02/05/2026	PABLO, ANGELA	100.00
02/05/2026	TEAFATILLER, LORI	100.00
02/05/2026	TIGNER, CARRIE	250.00
02/05/2026	GOLD COAST AWARDS INC	113.69
02/05/2026	KICK IT UP KIDZ LLC	468.00
02/05/2026	LOS ANGELES REGIONAL INTEROPERABLE	240.00
02/05/2026	ALATORRE LORINE	10,740.00
02/05/2026	MERRIMAC PETROLEUM INC	20,387.85
02/05/2026	O'REILLY AUTOMOTIVE STORES INC	1,385.80
02/05/2026	SOUTHERN CALIF PRECISION CONCRETE	113,432.50
02/05/2026	RAYVERN LIGHTING SUPPLY CO INC	1,339.36
02/05/2026	READWRITE EDUCATIONAL SOLUTIONS INC	295.75
02/05/2026	TOYER ROBERT JR	9,600.00
02/05/2026	SIEGEL, THEODORE	300.00
02/05/2026	SPASEFF TED C	240.00
02/05/2026	SYKAHUA TEMUJIN	780.00
02/05/2026	THE TECHNOLOGY DEPOT	1,178.29
02/05/2026	TUMBLE-N-KIDS INC	6,051.50
02/05/2026	UNIVERSITY TROPHIES & AWARDS INC	3,203.12
02/05/2026	HD SUPPLY INC	68.22
02/05/2026	WATERLINE TECHNOLOGIES INC	362.00
02/05/2026	WILBER, BILL	25.00

CITY OF LAKEWOOD
SUMMARY CHECK/EFT REGISTER

CHECK/EFT DATE	VENDOR NAME	CHECK/EFT AMOUNT
02/05/2026	SHAKER NERMINE	1,925.00
02/05/2026	ADVANTAGE MAILING LLC	1,895.08
02/05/2026	BROWN, BONNIE	320.45
02/05/2026	CAMACHO, ANDREW	240.43
02/05/2026	CAMERON WELDING SUPPLY	83.69
02/05/2026	COVENANT SALES GROUP	658.00
02/05/2026	D&J INTERNATIONAL INC	798.36
02/05/2026	ADRIANA Y LOPEZ	11,375.00
	Total:	**556,747.87**

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: The Honorable Mayor and City Council

SUBJECT: AB 1234 Meeting Report

INTRODUCTION
Assembly Bill 1234 became effective January 1, 2006. The legislation requires members of a legislative body to provide brief reports on the meetings they attended at the expense of the local agency at the next regular meeting of the legislative body.

STATEMENT OF FACT
Mayor Cassandra Chase attended the 94th Annual Winter Meeting of the United States Conference of Mayors in Washington, D.C. Between educational sessions on housing, homelessness, climate change, and other key issues, Mayor Chase met at the U.S. Capitol with the City's federal representatives—including Senators Schiff and Padilla, as well as staff from the offices of Representatives Garcia, Barragán, and Tran—to discuss the City's federal priorities and funding requests.

RECOMMENDATION
Staff recommends the City Council receive and file this report.

Paolo Beltran PB
Deputy City Manager

Thaddeus McCormack
City Manager

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: The Honorable Mayor and City Council

SUBJECT: Agreement for 2026 Pan Am Fiesta Amusement Rides

INTRODUCTION:

The City of Lakewood will host the annual Pan Am Fiesta at Mayfair Park beginning Friday, May 8 and concluding on Sunday, May 10, 2026. Amusement rides and carnival attractions will be open on Friday, May 8 from 5 to 10 p.m., Saturday, May 9 from 12 p.m. to 10 p.m.; and Sunday, May 10 from 12 p.m. to 9 p.m.

STATEMENT OF FACT

Lakewood's oldest community special event dates back to 1945, continuing this year with special event elements, including amusement rides, food booths, live entertainment, the Children's Cultural Booth, a shoppers circle, and a display of Lakewood's Pan Am history.

Guadagno & Sons Amusements anticipates providing 19 mechanical amusement rides, as space permits. Ride credits will be sold in advance at Lakewood City Hall and throughout the weekend at the event. Pre-sale promotional wristbands are $35 for unlimited rides on either Friday, Saturday or Sunday from opening until 30 minutes before closing each night. Single ride tickets are also available in advance of the carnival and at a discounted rate. Ten rides can be purchased for $40 and is good for any one ride on Friday, Saturday or Sunday. This presale option is an excellent value for families with multiple children so that each child may enjoy a sampling of rides. Event day prices for unlimited ride wristbands are $40. Additionally, credits for rides, food and games can be purchased at the event.

- 40 credits for $20
- 60 credits plus one free ride is $30
- 100 credits plus 3 free rides is $50
- 160 credits plus 5 free rides is $80

The number of credits required vary for each ride, food item and/or game booth. There is a $3 surcharge to purchase a wristband from the ticket kiosk. There is not a surcharge for pre-sale tickets and promotional wristbands.

Staff have worked closely with Guadagno & Sons Amusements since 2004. The contractor has proven to be trusted, reliable, and provides safe attractions for this and other events throughout the area.

RECOMMENDATION

Staff recommends that the City Council authorize the Mayor and the City Clerk to execute the Agreement for the 2026 Pan Am Fiesta Amusement Rides subject to approval as to legal form by the City Attorney.

Valarie Frost, Director VF
Recreation and Community Services

Thaddeus McCormack
City Manager

AGREEMENT
WITH GUADAGNO & SONS AMUSEMENTS FOR AMUSEMENT RIDES, GAME BOOTHS AND FOOD BOOTH AT THE PAN AM FIESTA

- - - - - - - -

THIS AGREEMENT made and entered into this 10th day of February 2026 by and between the CITY OF LAKEWOOD, a municipal corporation ("City"), and GUADAGNO & SONS AMUSEMENTS, a corporation ("Contractor").

W I T N E S S E T H

WHEREAS, City has approved and scheduled the Pan Am Fiesta community event at Mayfair Park from Friday, May 8, through Sunday, May 10, 2026; and

WHEREAS, City desires to provide amusement rides as part of the Pan Am Fiesta; and

WHEREAS, Contractor represents that it has the equipment, supplies and technical personnel to provide said amusement rides; and

WHEREAS, Contractor is desirous of providing said amusement rides;

NOW, THEREFORE, in consideration of the foregoing recitals and the covenants and agreements of each of the parties as hereinafter set forth, the parties hereto do mutually agree as follows:

1. **SCOPE OF SERVICES.** Contractor agrees to provide at its own cost and expense:

   A. A minimum of ten (10) adult rides and nine (9) children rides (as space permits) as noted in Exhibit A with the understanding that the Contractor may at its request substitute or add rides not listed, provided City approval in writing is received for said substitution or addition.

   B. All necessary personnel, equipment and supplies for this event including, but not limited to game concessions, generating plants, necessary electrical junction boxes, and cleanup crews.

   C. An adequate supply of numbered tickets purchased from a bonded ticket company

   D. To pay City One Thousand Eight Hundred and Fifty dollars ($1,850) for the purpose of marketing and promotion of the Pan Am Fiesta, on the execution of this Agreement.

   E. To pay City Seventy-Five dollars ($75) per game or food booth.

   F. To provide a list of carnival ride, game booth and food booth operators who will be working anytime during the said carnival. Contractor further agrees to provide list to City on or before Monday, April 6, 2026.

G. To apply for and obtain building and safety permit(s) as determined by the City's Building and Safety division by Monday, April 6, 2026.

H. Obtain a business license to conduct business within the City of Lakewood.

I. To ensure appropriate and clean uniforms for all carnival employees, including carnival ride, game booth and food booth operators.

J. To have amusement rides set-up and ready for inspection by 2:00 p.m. on Friday, May 8, 2026.

2. **TIME OF PERFORMANCE.** Contractor agrees to provide said amusement rides on the following days and times:

Friday, May 8	5:00 p.m. to 10:00 p.m.
Saturday, May 9	12:00 p.m. to 10:00 p.m.
Sunday, May 10	12:00 p.m. to 9:00 p.m.

City reserves the right to change the time, place and manner of said amusement rides in any respect at any time prior to thirty (30) days before Friday, May 8, 2026.

3. **COMPENSATION FOR SERVICES.** As compensation for being allowed to operate said amusement rides, Contractor shall pay to City a percentage of all gross receipts as follows:

25% of revenue from $1-$49,999 gross revenue collected.
30% of revenue from $50,000 and over.
30% of revenue from sale of pre-sale tickets.

Payment is due by 2:00 p.m. on Monday, May 11, 2026.

4. **NON-DISCRIMINATION IN EMPLOYMENT PRACTICES.** Contractor shall not discriminate in the employment of persons in connection with the performance of services as provided for in this agreement on the basis of race, color, creed, national origin, sex, ancestry, religion, age or handicaps.

5. **WORKER'S COMPENSATION INSURANCE**. Contractor agrees to maintain, where necessary and required by law, Worker's Compensation Insurance. It is further agreed that Contractor and all members, officers, and employees, subcontractors, their agents, officers, and employees engaged in the performance of any services in connection with this Contract, shall not be deemed officers, agents, or employees of City, and City shall not be liable or responsible to them for anything whatsoever, other than the payment of consideration herein set forth.

6. **INDEPENDENT CONTRACTOR.** It is expressly understood and agreed that Contractor has been retained as an independent contractor, as distinguished from an employee or agent of City to perform the aforementioned services. Contractor acknowledges the independent contractual relationship, and releases City from any liability or obligation to make deductions or withholding for the compensation of any officer, agent or employee thereof, in respect to unemployment, income tax, disability, social security, health, pension or retirement benefits. It is expressly understood no officer, agent or employee of Contractor shall have any City status or benefit, including health, retirement, and worker's compensation benefits.

Contractor acknowledges its independent contractor status in performing said services, and assumes the risk to itself, all agents, employees and subcontractors, and their agents or employees, of personal injury or death, and all risk of property damage or loss of any property arising out of the performance of said services by or on behalf of City, the work site, the place to work, or the duties bestowed upon Contractor pursuant to this agreement, and does hereby release City, its officers and personnel from any liability to Contractor, or its officers, agents, employees, subcontractors, or agents or employees thereof, for any loss or damage thereby incurred, or for contributions as a joint tort feasor therefor.

7. **LIABILITIES AND INDEMNIFICATION.** Contractor shall indemnify, defend, and hold harmless City, and its officers employees, and agents *("City* indemnitees"), from and against any and all causes of action, claims, liabilities, obligations, judgments, or damages, including reasonable attorneys' fees and costs of litigation ("claims"), arising from Contractor's activities in the performance of the services under this Agreement, excepting only those actions, claims, liabilities, obligations, judgments, or damages arising out of the sole negligence of City indemnitees. In the event City indemnitees are made a party to any action, lawsuit, or other adversarial proceeding alleging negligent or wrongful conduct on the part of Contractor:

   a. Contractor shall provide a defense to City indemnitees or at City's option reimburse City indemnitees their costs of defense, including reasonable attorneys' fees, incurred in defense of such claims; and

   b. Contractor shall promptly pay any final judgment or portion thereof rendered against City indemnitees.

8. **INSURANCE.** Prior to the beginning of and throughout the duration of work done pursuant to this Agreement, Contractor will maintain insurance in conformance with the requirements set forth below and name City as additional insured on all certificates and policies. Contractor will use existing coverage to comply with these requirements. If that existing coverage does not meet the requirements set forth here, it will be amended to do so. Contractor acknowledges that the insurance coverage and policy limits set forth in this section constitute the minimum amount of coverage required. Any insurance proceeds available to City in excess of the limits and coverage required in this Agreement and which is applicable to a given loss, will be available to City.

Contractor shall provide the following types and amounts of insurance:

A. **Commercial General Liability Insurance** using Insurance Services Office "Commercial General Liability" policy form CG 00 01 or the exact equivalent. Defense costs must be paid in addition to limits. There shall be no cross liability exclusion for claims or suits by one insured against another. Limits shall be no less than $5,000,000 per occurrence for all covered losses and no less than $10,000,000 general aggregate.

B. **Worker's Compensation** on a state-approved policy form providing statutory benefits as required by law with employer's liability limits no less than $1,000,000 per accident for all covered losses.

C. **Business Auto Coverage** on ISO Business Auto Coverage form CA 00 01 including symbol 1 (Any Auto) or the exact equivalent. Limits shall be no less than $1,000,000 per accident, combined single limit. If Contractor owns no vehicles, this requirement may be satisfied by a non-owned auto endorsement to the general liability policy described above. If Contractor or Contractor's employees will use personal autos in any way on this project, Contractor shall provide evidence of personal auto liability coverage for each such person.

D. **Excess or Umbrella Liability Insurance** (Over Primary) if used to meet limit requirements, shall provide coverage at least as broad as specified for the underlying coverages. Any such coverage provided under an umbrella liability policy shall include a "drop down" provision with a maximum $25,000 self-insured retention for liability not covered by primary but covered by the umbrella. Coverage shall be "pay on behalf", with defense costs payable in addition to policy limits. There shall be no cross liability exclusion precluding coverage for claims or suits by one insured against another. Coverage shall be applicable to City for injury to employees of Contractor, subcontractors or others involved in the Work. The scope of coverage provided is subject to approval of City following receipt of proof of insurance as required herein.

E. Contractor agrees to endorse third party liability coverage required herein to include as additional insured City, its officials, employees and agents, using ISO endorsement CG 20 10 11 85. Contractor also agrees to require all contractors, subcontractors, and anyone else involved in this agreement on behalf of the contractor (hereinafter "indemnifying parties") to comply with these provisions.

F. Contractor agrees to waive subrogation rights against City regardless of the applicability of any insurance proceeds, and to require all indemnifying parties to do likewise.

G. All insurance coverage maintained or procured by Contractor or required of others by Contractor pursuant to this agreement shall be endorsed to delete the subrogation condition as to City, or must specifically allow the named insured to waive subrogation prior to a loss.

H. All coverage types and limits required are subject to approval, modification and additional requirements by City. Contractor shall not make any reductions in scope or limits of coverage that may affect City's protection without City's prior written consent.

I. Proof of compliance with these insurance requirements, consisting of endorsements and certificates of insurance shall be delivered to City prior to the execution of this Agreement. If such proof of insurance is not delivered as required, or if such insurance is canceled at any time and not replacement coverage is provided, City has the right, but not the duty, to obtain any insurance it deems necessary to protect its interests. Any premium so paid by City shall be charged to and promptly paid by Contractor or deducted from sums due Contractor.

J. Contractor agrees to endorse the insurance provided pursuant to these requirements, to require 30 days notice to City prior to cancellation of such liability coverage or any material alteration of non-renewal of any such coverage, and to require indemnifying parties to do likewise.

K. It is acknowledged by the parties of this agreement that all insurance coverage required to be provided by Contractor indemnifying party, is intended to apply first and on a primary non-contributing basis in relation to any other insurance or self insurance available to City.

L. Contractor agrees not to self-insure or to use any self-insured retentions or deductibles on any portion of the insurance required herein and further agrees that it will not allow any indemnifying party to self-insure its obligations to City. If contractor's existing coverage includes a deductible or self-insured retention, the deductible or self-insured retention must be declared to City. City may review options with the contractor, which may include reduction or elimination of the deductible or self-insured retention, substitution of other coverage, or other solutions.

M. Contractor will renew the required coverage annually as long as City, or its employees or agents face an exposure from operations of any type pursuant to this Agreement. This obligation applies whether or not this Agreement is canceled or terminated for any reason. Termination of this obligation is not effective until City executes a written statement to that effect.

9. **SUBCONTRACTING.** Contractor shall not assign, sublet, or transfer any part or portion of this agreement, or any responsibility hereunder without the prior approval of City.

10. **GENERAL RESPONSIBILITIES.** Contractor agrees that the development, presentation and maintenance of the The Fiesta Amusement Rides shall be its sole responsibility. It is further agreed and understood, however, that the time, place and manner of said presentation, any fees or charges for said presentation, and the overall format of said presentation shall be subject to the approval of City, and City reserves the right to terminate said presentation at any time, or to change the time, place and manner of said presentation in any respect at any time, without further notice in the reasonable discretion of the responsible City officer serving as representative of the City when that officer has determined such termination is necessary for the public health, safety, convenience or welfare.

Elimination, closures, or mechanical failures that leave the Pan Am Fiesta under the minimum number of rides in any category will result in a penalty of $1,000 per ride, per day. The parties agree that such amount represents a reasonable determination of the value of the loss of each ride.

Initials: _____ _____
City Contractor

11. **SET-UP/BREAKDOWN TIME.** City agrees to allow Contractor a period of four days prior to the event for set-up and two days at the conclusion of the event for breakdown. Set-up and breakdown of Contractor can take place between sunrise and 11:00 p.m. only. Arrival and departure of Contractor may only take place between sunrise and 11:00 p.m.

12. **EQUIPMENT STORAGE.** Contractor agrees to provide storage and security of equipment in the areas of Mayfair Park designated by City. Notwithstanding the foregoing, Contractor agrees to assume all risk of loss of any of its equipment or property during the term of this agreement, except where said property is lost or damaged due to the misfeasance or nonfeasance of City.

13. **UNDUE INFLUENCE.** Contractor declares and warrants that no undue influence or pressure is used against or in concert with any officer or employee of City in connection with the award, terms or implantation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. Noe officer or employee of City will receive compensation, directly or indirectly, from Contractor, or from any officer, employee or agent of Contractor, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violations of this Section shall be a material breach of this Agreement entitling City to any and all remedies at law or in equity.

ASSUMPTION OF RISK. Contractor does hereby assume all risk to itself, its personnel, subcontractors, and agents and employees thereof, of personal injury or death, and all risk of property damage or loss to any property, wares, or materials of the foregoing from whatever source, and said Contractor further releases City, and its officers, employees and agents, the City Council, and the Pan American Festival Association, Inc., and all officers and employees thereof, from any liability therefor, or for contribution as a joint tort feasor therefor.

14. **WASTE.** Contractor shall not utilize any of the grounds, buildings or premises of City so as to commit waste, and where damaged by it shall restore the same to the same condition it was in prior to the commencement of this agreement, reasonable wear and tear excepted.

15. **LEGAL RESPONSIBLITIES.** Contractor shall keep itself informed of State and Federal laws and regulations, which in any manner affect those employed by it or in any way, affect the performance of its service pursuant to the Agreement. Contractor shall at all times observe and comply with all such laws and regulations. City, and its officers and employees, shall not be liable at law or in equity occasioned by failure of Contractor to comply with this section.

16. **LAWS, ORDINANCE, LICENSES AND PERMITS.** Contractor shall comply with all applicable laws, ordinances and codes of the State, County, and City (See Exhibit B for applicable City Ordinances), and Contractor shall obtain, at Contractor's cost, all necessary license, permits and approvals for said amusement rides including a license to do business within the City of Lakewood. At all times during the term of this Agreement, Contractor shall have in full force and effect, all licenses required of it by law for performances of the services described in this Agreement.

17. **GOVERNING LAW.** City and Contractor understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior or federal district court with jurisdiction over City.

18. **ENTIRE AGREEMENT.** This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations, and statements, oral or written, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

19. **AUTHORITY TO EXECUTE THIS AGREEMENT.** The person or persons executing this Agreement on behalf of Contractor warrants and represents that he/she has the authority to execute this Agreement on behalf of Contractor and has the authority to bind Contractor to the performance of its obligations hereunder.

20. **NOTICES.** Any written notice to the parties hereto shall be deposited in the United States mail, postage prepaid, addressed as follows:

CITY: Director of Recreation and Community Services
5050 Clark Avenue
Lakewood, CA 90712

CONTRACTOR: Tony Guadagno Sr.
GUADAGNO & SONS AMUSEMENTS
5550 Cerritos Avenue Suite E
Cypress, CA 90630
(714) 893-1336

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed the day and year first above written.

CITY OF LAKEWOOD

By_____
Mayor

ATTEST:

By_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

CONTRACTOR

By_____
Title

EXHIBIT "A"

2026 LIST OF AMUSEMENT RIDES FOR THE PAN AM FIESTA

1. Century Wheel
2. Kamikaze
3. Star Dancer
4. Scooters
5. Zipper
6. Twister
7. Star Flyer
8. Sea Ray
9. Funnel Force
10. Tilt A Whirl
11. Flying Dragoon
12. Orient Express
13. Happy Pond
14. Beary Go Round
15. Super slide
16. Crystal Lil's
17. Jungle of Fun
18. Carousel
19. Looney Airport

Contractor may at its request substitute or add rides not listed, provided City approval in writing is received for said substitution or addition.

EXHIBIT "B"

PERTINENT CITY OF LAKEWOOD MUNICIPAL CODES

1. It shall be unlawful for any person or organization conducting a carnival to employ any person to work at such carnival who has been convicted of any felony, or any misdemeanor which constitutes a violent crime, or who is required to register as a sex offender pursuant to Section 290 of the California Penal Code. Persons working at carnival shall be subject to spot checks by law enforcement personnel, and shall provide identification promptly when asked to do so by law enforcement personnel. (LMC 6404.H)

2. Unlawful to use or possess any portable barbecue, grill, smoker, cooking equipment, apparatus, fire pit or hibachi. (LMC 4220.H)

3. Dogs prohibited. (LMC 4222)

4. Alcohol prohibited. (LMC 4500)

5. Operation of vehicles, motorcycles, motor driven bicycles, bicycles or skateboard prohibited. (LMC 4220.1)

6. Unlawful to remain in any park or recreational area when ordered to leave. (LMC 4220.2)

7. Unlawful for any person to fire, set off, discharge or use any fireworks. (LMC 4220. J)

8. Roller-skating on sidewalks and pedestrian paths prohibited. (LMC 4220.J)

9. Golf prohibited. (LMC 4220.J)

10. Tackle football prohibited. (LMC 4220. J)

11. Operation of powered model airplanes, model helicopters, model rockets or any power-driven aircraft prohibited. (LMC 4220.J)

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2025

TO: The Honorable Mayor and City Council

SUBJECT: Water Main Easement Grant Deed, 5809 Lakewood Blvd.

INTRODUCTION

A developer, Qing Kai Investment, LLC, is constructing a commercial building on a parcel located at 5809 Lakewood Blvd. City staff had required the Developer to construct a new waterline, which is fronting their future development on private property. Since the new water main is on private property, staff have required the developer to provide the City with a Water Main Easement Grant Deed, for future access and maintenance.

STATEMENT OF FACT

Qing Kai, LLC, is in the process of constructing a retail building, known as Dutch Bros. Coffee, located at 5809 Lakewood Blvd., south of Walgreens. This future development does not have a watermain or fire hydrant fronting the future building. Consequently, staff required the Developer to extend a new waterline along the south side of the future coffee shop. Because the new waterline is within private property, a Water Main Easement Grant Deed is required to allow City staff access for future maintenance or replacement of appurtenances. The City Attorney has reviewed and approved the subject Water Main Easement Grant Deed.

RECOMMENDATION

Staff recommends that the City Council:

1. Accept the attached Water Main Easement granted by Qing Kai Investment, LLC, as shown in Exhibits A and B; and

2. Authorize the Mayor to sign on behalf of the City and direct the City Clerk to record with the County as approved by the City Attorney.

Derek Nguyen, Ph.D., P.E., BCEE
Director of Water Resources

Thaddeus McCormack
City Manager

RECORDING REQUESTED BY
and
WHEN RECORDED MAIL TO:

City Clerk
City of Lakewood
5050 Clark Ave.
Lakewood, CA 90712

SPACE ABOVE THIS LINE FOR RECORDER'S USE

THIS DOCUMENT IS EXEMPT FROM DOCUMENTARY TRANSFER TAX PUSUANT TO SECTION 11922 OF THE REVENUE & TAXATION CODE

THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO SECTION 27383 OF THE GOVERNMENT CODE

Assessor's Identification Number: 7160-019-027
Project No.

WATER MAIN EASEMENT GRANT DEED

FOR A VALUABLE CONSIDERATION RECEIVED, receipt of which is hereby acknowledged, Qing Kai Investment, LLC, a California limited liability company (hereinafter referred to as GRANTOR), does hereby grant to the CITY OF LAKEWOOD, a California municipal corporation (hereinafter referred to as GRANTEE), an easement to lay, construct, install, maintain, operate, use, alter, add- to, repair, replace, renew, remove and change the size of, water pipelines, metering, regulating and other equipment, for the purpose of transporting and distributing water, together with the right of ingress and egress to and from the same for the purpose of any or all of the foregoing, including making of connections thereto or expanding any of the foregoing, in, on and over the following described real property situated in the City of Lakewood, County of Los Angeles, State of California, and more particularly described on EXHIBIT 'A' attached hereto and made a part hereof and as shown on EXHIBIT 'B' also attached hereto and made a part hereof.

TOGETHER WITH the right of necessary access from the surface of said real property and the right of necessary ingress and egress over the adjacent land of Grantor at reasonable times for the purpose of exercising the rights herein granted.

Provided:

First, any installation, operation, maintenance, repair or replacement performed hereunder shall be at no cost to Grantor unless agreed to in writing by Grantor and shall be so performed as to interfere as little as reasonably possible with the use and enjoyment of the above-described real property and Grantor' s adjacent land by persons occupying the same or lawfully present thereon. To effectuate this intent, Grantee shall: i) provide and maintain safe vehicular access for use by Grantor's customers, agents, employees and invitees, where necessary to maintain reasonable access to Grantor' s store and parking lot; and (ii) keep the easement and Grantor' s adjacent areas free of equipment and materials at all times, except

when workmen are actively working in the easement area, unless Grantor gives its prior written consent to do otherwise

Second, if the surface of the easement area and/ or surface of Grantor' s adjacent real property and/ or any improvements thereon shall be disturbed by installation, operation, maintenance, repair or replacement, said surface and/ or improvements shall be promptly restored by Grantee to their condition just prior to such disturbance.

Third, that Grantor agrees no building structure shall be erected or permitted on the easement; provided, however, Grantor reserves the right to require, at Grantor's expense, the relocation of all or part of the utilities installed by Grantee hereunder to the extent from time to time necessary to permit further development of Grantor' s real property.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Grant of Easement on this ____ day of _____, 2026.

GRANTEE:

CITY OF LAKEWOOD
a California municipal corporation

By _____
Mayor

By _____
City Clerk

APPROVED AS TO FORM

_____
City Attorney

GRANTOR:

Qing Kai Investment, LLC
a California limited liability company

By _____
Title:

By _____
Title:

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which the certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
COUNTY OF _____)

ON _____ BEFORE ME, _____,
PERSONALLY APPEARED _____
_____,
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S) OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE _____

EXHIBIT 'A'

LEGAL DESCRIPTION OF AN EASEMENT
WITHIN PARCEL 2 OF PARCEL MAP 26399 (BK. 318 OF PARCEL MAPS, PAGES 7-9)
CITY OF LAKEWOOD, COUNTY OF LOS ANGELES, CALIFORNIA

AN EASEMENT WITHIN PARCEL 2 OF PARCEL MAP NO. 26399, IN THE CITY OF LAKEWOOD, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP FILED IN BOOK 318 OF PARCEL MAPS, PAGES 7 TO 9 INCLUSIVE, IN THE OFFICE OF THE RECORDER OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID PARCEL 2; THENCE NORTH 00°13'56" WEST ALONG THE WEST LINE OF SAID PARCEL 2, 10.00 FEET TO A LINE 10.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID PARCEL 2; THENCE NORTH 89°47'49" EAST ALONG SAID LINE, 148.43 FEET; THENCE NORTH 00°12'11" WEST, 7.00 FEET TO A LINE 17.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID PARCEL 2; THENCE NORTH 89°47'49" EAST ALONG SAID LINE, 10.00 FEET; THENCE SOUTH 00°12'11" EAST, 7.00 FEET TO A LINE 10.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID PARCEL 2; THENCE NORTH 89°47'49" EAST ALONG SAID LINE, 7.57 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF SOUTH STREET; THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING TWO (2) COURSES: 1) SOUTH 44°46'57" WEST, 14.14 FEET; 2) SOUTH 89°47'49" WEST, 156.00 FEET TO THE **POINT OF BEGINNING** AND THE **TERMINUS OF THIS DESCRIPTION.**

CONTAINING 1,680 SQ. FT, MORE OR LESS.

THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF LAKEWOOD BOULEVARD AS ESTABLISHED BY CALIFORNIA STATE PLANE COORDINATES, ZONE 5, NAD83(2011), BEING SOUTH 00°13'56" EAST.



1/20/2026

EXHIBIT 'B'

DEPICTION OF AN EASEMENT
WITHIN PARCEL 2 OF PARCEL MAP 26399 (BK. 318 OF PARCEL MAPS, PAGES 7-9)
CITY OF LAKEWOOD, COUNTY OF LOS ANGELES, CALIFORNIA

BASIS OF BEARINGS

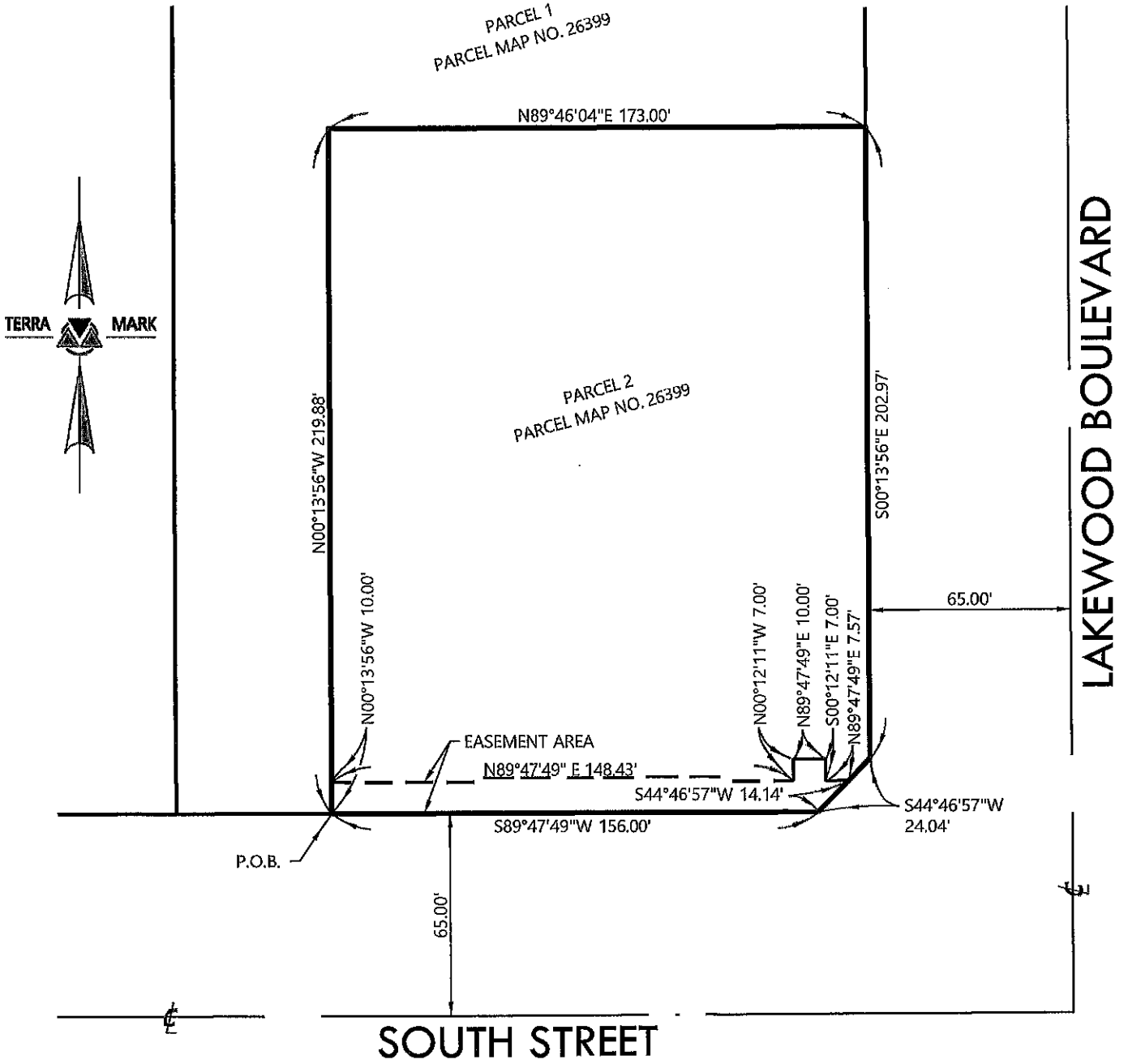
THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF LAKEWOOD BOULEVARD AS ESTABLISHED BY CALIFORNIA STATE PLANE COORDINATES, ZONE 5, NAD83(2011), BEING SOUTH 00°13'56" EAST.

LICENSED LAND SURVEYOR
MICHAEL A. HOFFMANN
EXP. 12-31-27
L.S. 7361
STATE OF CALIFORNIA

1/20/2026

0 50' 100'

SCALE 1" = 50'



DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: The Honorable Mayor and City Council

SUBJECT: Southeast Los Angeles County Workforce Development Board (SELACO WDB)

INTRODUCTION

The City of Lakewood has two private sector representatives serving on the Workforce Investment Board of Southeast Los Angeles County. The Workforce Development Board (WDB) members' terms are fixed and staggered and each year on June 30th one member's term expires.

STATEMENT OF FACTS

Erika Parada has been the Lakewood Business Representative serving on the Workforce Development Board since February 2024. Ms. Parada recently submitted her resignation, and therefore an appointment is necessary to fill her vacated seat. Mr. Eddie Witt Jr. is proposed to represent Lakewood's business community. Mr. Mark Segura of Farmers Insurance, and the city's other representative on the WDB, has indicated support for his appointment.

Mr. Witt is a U.S. Navy Veteran and the founder and owner of Rich Casual, a consulting firm that specializes in business development and marketing. He meets all the requirements of the Federal Workforce Investment Act as a private sector representative on the Workforce Development Board. Eddie is an active and engaged member of the community, as he is an alumnus of the Lakewood Leadership Academy and is an Associate Member of the Lakewood Jaycees. He has a strong interest in serving on the WDB.

RECOMMENDATION

It is recommended that the City Council approve the appointment of Eddie Witt Jr. to the Southeast Los Angeles County Workforce Development Board of Directors.

Paolo Beltran PB
Deputy City Manager

Thaddeus McCormack
City Manager

DIVIDER SHEET

RESOLUTION NO. 2026-7

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAKEWOOD AMENDING AN EXISTING PAY RATE IN ATTACHMENT B OF RESOLUTION NO. 2024-25

THE CITY COUNCIL OF THE CITY OF LAKEWOOD DOES RESOLVE AS FOLLOWS:

SECTION 1. The following job classification and monthly pay rate is hereby amended to Attachment B, attached to Resolution No. 2024-25:

Schedule	Classification	Step 1	Step 2	Step 3	Step 4	Step 5
EDPS	Director of Public Safety	$16997	$17847	$18740	$19677	$20661

ADOPTED AND APPROVED THIS 10TH DAY OF FEBRUARY 2026.

_____
Mayor

ATTEST:

_____
City Clerk

DIVIDER SHEET

Reports

COUNCIL AGENDA
February 10, 2026

TO: The Honorable Mayor and City Council

SUBJECT: Lakewood Youth Hall of Fame Program

INTRODUCTION

The 44th Annual Lakewood Youth Sports Hall of Fame Banquet is scheduled for Monday, February 23, 2026, beginning at 6:30 p.m. at The Centre. This annual event celebrates the athletic accomplishments of young athletes who reside in Lakewood or attend school within the city, while also recognizing outstanding coaches and teams for their contributions and achievements. This year's honorees will be recognized for achievements during sports seasons concluding in the 2025 calendar year.

STATEMENT OF FACT

The Lakewood Youth Hall of Fame is a collaborative community recognition program that brings together public, private, and nonprofit partners. The program is primarily sponsored by the City of Lakewood and Piazza Family McDonald's Restaurants, with additional support from more than a dozen local businesses and service organizations, including the Rotary Club of Lakewood and Soroptimist International of Lakewood/Long Beach.

Community nominations are accepted each year from November through December, with submissions outlining athletes' achievements for award consideration. On Thursday, January 8, 2026, the Board of Electors met to select the 2025 Hall of Fame inductees. The volunteer-based Hall of Fame Board of Electors is composed of community members and school administrators who review nominations and selects honorees by secret ballot.

Anthony Eyanson from Louisiana State University (LSU), a standout baseball pitcher who helped lead the Tigers to a College World Series championship, was selected as the 2025 Athlete of the Year, the highest distinction awarded by the Lakewood Youth Hall of Fame. Anthony is a Lakewood High School alumni and proud Lakewood resident. He was recently selected by the Boston Red Sox in the third round of the 2025 Major League Baseball draft, on his way to representing Lakewood at the highest competitive level in the sport.

In addition to the Athlete of the Year, a total of 17 Performers of the Year, 35 Distinguished Nominees, 11 Special Achievement recipients, 16 Championship Teams a Coach of the Year were selected to be honored.

STATEMENT OF FACT – Continued

All honorees are invited to attend the Hall of Fame Banquet on Monday, February 23, where they are formally recognized and receive their award and certificates of commendation from state and local elected officials. Award recipients receive complimentary admission, and guests may attend for an additional fee. Tickets are available through February 12 at $50 for adults and $40 for students. Following the banquet, new honorees are added to the Lakewood Youth Hall of Fame display at the McDonald's restaurant on Woodruff Avenue.

SUMMARY

On Monday, February 23, the 44th Annual Lakewood Youth Hall of Fame Banquet will take place at The Centre, recognizing Lakewood youth athletes for outstanding achievements during sports seasons concluding in the 2025 calendar year. Attendance is expected to exceed 300 community members as they gather to celebrate the 2025 inductees.

RECOMMENDATION

Staff recommends the City Council receive and file this report.

Valarie Frost, Director VF
Recreation and Community Services

Thaddeus McCormack
City Manager

DIVIDER SHEET

TO: The Honorable Mayor and City Council

SUBJECT: 2026 Legislative Platform

INTRODUCTION

The City Council's Intergovernmental Relations Committee has completed its discussions and thereby recommends the city's Legislative Platform for 2026. The Legislative Platform establishes the work program of the City Council's Intergovernmental Relations Committee and City staff for this year.

STATEMENT OF FACTS

The City Council recognizes the need for an active state and federal legislative program to protect the city's interests in Sacramento and Washington, D.C. The 2026 Legislative Platform provides a framework for the City of Lakewood's legislative program. Adopted annually, the Legislative Platform is the foundation of a focused advocacy strategy and serves as a reference guide for legislative positions and objectives that provide direction for the City Council and staff throughout the year.

The primary objective of the Legislative Platform is for the City Council to adopt official city positions on clearly stated legislative issues. By doing this, the legislative approval process is streamlined by eliminating the need for repetitive concurrence and direction from the City Council on previously approved issues. The Legislative Platform is developed and maintained using the goals and objectives of the City Council, a review of legislative priorities from the League of California Cities, League's Los Angeles Division, California Contract Cities Association and other partner agencies, input from City Council and staff, research of current law and pending legislation, as well as discussions with local legislative staff and the City's legislative advocates.

Federal and state legislative proposals and policies consistent with the Legislative Platform may be supported by the City. Policies and proposals inconsistent with this Legislative Platform may be opposed by the City. For proposed legislation, either consistent with the City's Legislative Platform or consistent with legislative positions the City has taken in the past, City staff shall be authorized to prepare position letters with the Mayor's authorization. Items not addressed in the City's Legislative Platform may require further direction from the Intergovernmental Relations Committee and/or the City Council.

Legislative priorities may only address issues directly relevant to or impacting the provision of municipal services. Generally, the City will not address matters that are not pertinent to the City's local government services.

RECOMMENDATION

It is recommended the City Council adopt the Legislative Platform for 2026.

Paolo Beltran PB
Deputy City Manager

Thaddeus McCormack
City Manager

Encl:
2026 Legislative Platform

2026 LEGISLATIVE PLATFORM



CITY OF LAKEWOOD
CALIFORNIA

www.lakewoodca.gov

February 2026

LEGISLATIVE PLATFORM



PURPOSE STATEMENT

The Lakewood City Council recognizes the importance of an active state and federal legislative program to protect the City's interests in Sacramento and Washington, D.C. The 2026 Legislative Platform establishes the framework for the City of Lakewood's legislative advocacy efforts. Adopted annually, the Legislative Platform serves as the foundation for a focused advocacy strategy and as a reference guide for legislative positions and objectives, providing clear direction to the City Council and staff throughout the year.

LEGISLATIVE PROGRAM

The primary objective of the Legislative Platform is to enable the City Council to adopt official City positions on clearly defined legislative issues. Establishing these positions streamlines the legislative approval process by reducing the need for repeated Council concurrence or direction on previously approved matters.

The Legislative Platform is developed and maintained based on the City Council's goals and objectives; a review of legislative priorities from the League of California Cities, the League's Los Angeles Division, the California Contract Cities Association, and other partner agencies; input from City Council and staff; research on existing law and pending legislation; and discussions with local legislative staff and the City's legislative advocates.

Federal and state legislative proposals and policies that are consistent with the Legislative Platform may be supported by the City, while those that are inconsistent may be opposed. For proposed legislation that aligns with the Legislative Platform or with legislative positions previously adopted by the City, staff are authorized to prepare position letters with the Mayor's approval. Legislative matters not addressed in the Platform may require additional direction from the Intergovernmental Relations Committee and/or the City Council.

Legislative priorities shall be limited to issues that directly relate to or impact the provision of municipal services. Generally, the City will not take positions on matters that are not pertinent to its local government responsibilities.

VISION, MISSION & VALUES

VISION STATEMENT:

To be a welcoming and thriving community where everyone can live, work and play in a safe and healthy environment.

MISSION STATEMENT:

To enhance the quality of life of the Lakewood community by providing efficient public services that are responsive and fiscally prudent and with a commitment to legendary customer service.

VALUES STATEMENT:

Legendary Customer Service: We exceed the expectations of our customers and leave a lasting positive impression by delivering exceptional service.

Honest, Ethical and Trustworthy: We are truthful, transparent and straightforward in all interactions; do what is right, just and fair; are reliable and dependable; and consistent in our commitments to each other and to our community.

Fiscally Responsible and Financially Prudent: We manage the city's financial resources in a wellorganized and cost-effective manner that benefits our community and the city organization over the long term.

Responsive and Accountable: We respond to the needs of the Lakewood community by being open, accessible and prompt and by taking responsibility for our actions and decisions.

Equitable, Diverse and Inclusive: We strive to ensure that all members of our community have access to the city's opportunities and resources. We recognize and embrace the differences that exist in our community and seek to create a welcoming environment in which community members feel valued and respected.

Teamwork and Collaboration: We work together and with our public partners and community members to realize our vision for Lakewood and accomplish our organizational mission using our unique skills, knowledge and perspectives. We seek opportunities to work with others within and outside the City of Lakewood to achieve success in realizing our mission and carrying out our vision.







Organizations whose legislative programs the City follows:

FEDERAL

- American Planning Association
- American Public Works Association
- American Water Works Association
- International Council of Shopping Centers
- National Association of Telecommunications Officers and Advisors (NATOA)
- National League of Cities
- National Recreation and Parks Association
- U.S. Conference of Mayors

STATE

- Association of California Water Agencies
- California Association of Enviromental Professionals
- California Association of Local Ecomonic Development
- California Building Officials
- California Chapter, American Planning Association
- California Contract Cities Association (CCCA)
- California Municipal Revenue and Tax Association
- California Municipal Utilities Association
- California Park & Recreation Society
- League of California Cities (CalCities)

REGIONAL

- California Joint Powers Insurance Authority
- Central Basin Municipal Water District
- Coalition for Practical Regulation
- Gateway Cities Council of Governments (Gateway COG)
- Gateway Water Management Authority
- Greater Los Angeles County Vector Control District
- Los Angeles County Sheriff's Department
- Metropolitan Transportation Authority
- Southern California Chapter of NATOA
- Southeast Los Angeles Workforce Development Board
- Southeast Water Coalition
- Southern California Association of Governments

CITY OF LAKEWOOD
CALIFORNIA

PROGRAM GOALS AND STRATEGIES



PROGRAM GOALS:

I. **Advocate the City's legislative interests at the Federal, State and County levels.**

II. **Inform and share information with our Legislators, City Council and staff on the legislative process and key issues and legislation that could have a potential impact on the City.**

III. **Serve as an active participant with other local governments, the League of California Cities, regional agencies such as CCCA, Gateway COG and other local professional organizations on legislative/regulatory issues that are important to the City and region.**

IV. **Seek grant and funding assistance for City projects, services and programs to enhance infrastructure and services for the community.**

STRATEGIES:

I. **Communicate legislative positions on proposed Federal, State and County legislation, measures, initiatives and governmental regulations.**

- Work collaboratively with City departments and legislative advocates to develop and evaluate positions on proposed legislative measures, incorporating analysis from the League of California Cities, input from legislative advocates, and guidance from other local government and professional associations.
- The City will take positions only on proposals that clearly impact the City or pose a threat to local control.
- Actively track key bills through the legislative process, utilizing the City's advocacy services, various legislative websites and other government and professional associations.
- Work cooperatively with other cities, associations and the League of California Cities on advocating the city's legislative positions.

PROGRAM GOALS AND STRATEGIES

- As necessary, participate in drafting and amending of proposed federal and state measures that have the potential to significantly impact the City.
- Meet with legislators and their representatives, as well as other federal, state and county government officials on a regular basis, to discuss local government issues, proposed legislation, requests for funding assistance and City projects, programs and services.

II. Seek federal, state and county funding through earmarks, grants and other discretionary funding for City projects, services and programs.

- Identify City projects for potential submittal for federal earmark consideration. Develop a submittal packet for legislators that provides funding need and project information.
- Provide information to City departments on potential grant funding opportunities and recognition programs.
- Advocate and request letters of support for grant applications that are being considered for federal, state and county funding.

III. Share information with the City Council, staff and the community on legislative issues.

- Work closely with department heads and staff to determine their legislative priorities and funding needs for the upcoming legislative session.
- Provide updates on legislative issues to the Council and departments throughout the year.
- Educate the community in the City's advocacy efforts on legislative issues and funding requests.





LEGISLATIVE PLATFORM

FEBRUARY 2026

I. LOCAL CONTROL

SUPPORT

- The provision of municipal services through contracting.
- Legislation that preserves and enhances local control.

OPPOSE

- Preemption of local authority whether by county, state or federal legislation or ballot measures.

II. MUNICIPAL FINANCE

SUPPORT

- Legislation that further protects local government revenue from being taken, confiscated, shifted, diverted or otherwise used to fund state government operations and responsibilities.
- Legislation that allows cities to collect their “fair share” of sales tax allocation on internet or other remote transactions.
- Legislation that reforms the local government financing structure to create long term stability for public services, facilities and future city growth.
- Continued funding for the items below:
    - Community Development Block Grant (CDBG) program
    - Community Oriented Policing Services (COPS) program
    - Justice Assistance Grant (JAG) program
    - Public, Educational, and Government (PEG) community access television

OPPOSE

- Legislation that would impose state mandated costs for which there is no guarantee or realistic expectation of local reimbursement or offsetting benefits.
- Legislation that would preempt or reduce local discretion over locally-imposed taxes.
- Legislation that changes the sales or property tax collection method or formula that would result in less overall tax revenue to local governments.
- Legislation that threatens a local government’s right to receive compensation for use of its public right of way.
- Any effort to eliminate, or cap, the tax-exempt status of municipal bonds, one of the few tools left for local governments to finance large capital projects.

LEGISLATIVE PLATFORM

III. PUBLIC SAFETY





SUPPORT

- Legislation and funding that promote enhanced law enforcement services in the community.
- Legislation that provides for greater protection to victims of crime and accountability in criminal prosecution and sentencing.
- Legislative efforts to address the negative impacts of AB 109, Proposition 47 and Proposition 57 on local governments and provide local law enforcement with the appropriate tools to reduce criminal activity.
- Legislation that maintains public safety and provides additional tools and resources to address challenges such as homelessness, mental health, and drug rehabilitation.
- Legislation that encourages legislators to coordinate and consult closely with law enforcement agencies prior to introducing legislation that affects public safety.
- Reasonable criminal justice reform measures that are inclusive of concerns from prosecutors, victims' rights groups, and law enforcement agencies and do not hinder law enforcement's ability to protect the community.
- Programs that help ensure public safety through the assistance and rehabilitation of individuals challenged with mental and/or substance abuse illnesses and increase awareness and training opportunities.
- Legislation that provides funding to local agencies for emergency planning, disaster training, preparedness, prevention, protection, mitigation, response, recovery and resiliency to disasters, biological and environmental threats.
- Legislation and funding that promote traffic and pedestrian safety.
- Legislation that criminalizes illegal behavior in cyberspace and on social media.
- Legislation that increases fines to greater than $1,000 for local ordinance violations related to the sale, use, possession and/or transportation of illegal and/or dangerous fireworks as defined by the Health and Safety Code.
- Legislation that establishes statewide safety standards for e-bikes, e-motorcycles and e-scooters.

LEGISLATIVE PLATFORM

IV. ECONOMIC DEVELOPMENT AND LOCAL LAND USE

SUPPORT

- Legislation that encourages sustainable economic development for cities to create jobs and improve the economy.
- Legislation that strengthens local control for land use and zoning regulations.
- Legislation that returns local governments' ability to enact property tax increment financing or other redevelopment tools.
- Training and development initiatives and funding that support the collaboration between community partners, including, but not limited to non-profits, school and community college districts and the workforce development board.
- Measures that support the City's continued efforts to retain and promote local businesses and for removal of regulations that impose excessive requirements or restrictions that hinder the success of these enterprises.
- Legislation that will restore funding mechanisms to promote continued economic development, including initiatives to provide financing for business assistance loans and infrastructure improvements.
- Legislation preserving the city's interest in telecommunication, broadband and infrastructure operations.

OPPOSE

- Efforts to require additional CEQA review and process requirements that delay projects and increase costs.
- Legislation that seeks to limit or eliminate municipal authority to regulate street and sidewalk vendors.





LEGISLATIVE PLATFORM

V. HOUSING AND HOMELESSNESS



SUPPORT

- Legislation that seeks to address the inequitable allocation of property taxes to "No and Low" property tax cities. This is critically important as the State attempts to address the housing crisis.
- Legislation that provides flexibility, support and resources to cities to assist with the development of affordable housing options and programs for all income levels in the community.
- Incentives for cities to create regional and collaborative solutions to address homelessness.
- The expansion of conservatorship laws to allow for increased guardianship authority and enhanced health supervision for individuals suffering from mental illness, and recognize mental illness and addiction as contributing factors to chronic homelessness.
- Legislation and funding from the county, state and federal government for expanded outreach teams in collaboration with law enforcement, first responders, and the county's health and mental health departments for those affected by homelessness and mental health issues.
- Legislation that addresses chronic homelessness among individuals with diminished mental capacity.
- Direct Measure A funding on an annual basis for cities like Lakewood that are required to contribute additional sales tax.
- The repeal of state laws that affect local control on housing and land use.

OPPOSE

- Legislation that seeks to convert the Regional Housing Needs Allocation (RHNA) process from a planning process to a production standard.
- Legislation that penalizes a city or local government if the units identified in RHNA are not constructed.
- Efforts and legislation that propose to limit public engagement, design and environmental review related to housing projects.
- Legislation that would remove local control, allow for irresponsible housing development and interfere with protection of established residential neighborhoods.

LEGISLATIVE PLATFORM

VI. INFRASTRUCTURE

SUPPORT

- Legislation and park bond measures that provide adequate, consistent funding—including per capita grants—to local governments for the acquisition, rehabilitation, development, operation, maintenance, and capital improvement of parks, community facilities, and recreation services and programs that enhance the quality of life for Lakewood residents.
- Legislation that provides ongoing and sustainable transportation infrastructure funding, including funds for the preservation and maintenance of streets and roads.
- Legislation that appropriates state funds to local and regional projects for transportation projects.
- Legislation that provides funding for water, wastewater and stormwater infrastructure; flood prevention, water resources planning and development; and water quality improvement.
- Development of reasonable policies, strategies and programs to protect the environment, reduce greenhouse gas emissions, increase energy efficiency and increase the use of alternative/renewable energy sources.
- Legislation that allocates cap and trade auction revenue to local governments.
- Legislation that bridges the digital divide.
- Regional planning and investments in electric vehicle charging infrastructure (both public and private) and zero-emissions equipment through robust grants and financial incentives.
- Legislation that supports local control and flexibility to regulate solid waste and recyclables.
- Legislation that provides funding for local governments to create capacity around current and future State recycling mandates.





OPPOSE

- Unnecessary modifications to the Los Angeles County Flood Control conveyance system, including the Los Angeles and San Gabriel Rivers that could require properties to purchase federal flood insurance.
- Federal Emergency Management Agency (FEMA) flood insurance reforms to require properties in residual risk areas, those protected by dams or levees, to purchase flood insurance even when the man-made structures are certified to provide at least 100-year protection.
- Legislation to establish a public goods charge or other permanent statewide tax on water to fund statewide water solutions.
- Legislation that directs local transportation funds away from cities.





VII. GENERAL GOVERNMENT

SUPPORT

- Legislation that preserves public, educational, government (PEG) television channel funding, and programming support by video service providers, such as: payments to local government of franchise fees and PEG fees.
- Reasonable reform of local government pension systems that is respectful of local control and local collective bargaining processes.
- Legislation that reforms the workers compensation system to lower employer costs while continuing to protect employees.
- Legislation for cities to maintain services and provide relief to residents and businesses, including shoring up funding for the decline in sales tax revenue and providing flexibility on funding for cities to continue to provide services.
- Legislation that enhances community control of public education.
- Legislation or regulations that ensure funding sources, such as Measure R and M and any other local funds, use only local procurement processes and not the federal process.

- Legislation that simplifies pass-through of federal funding from the state to local agencies. The ability to apply for and use these funds in a timely manner should be made as simple as possible.
- Legislation that applies to local governing boards should also equally apply to state representatives.



OPPOSE

- Legislation that usurps local government's authority to restrict or regulate the sale, manufacture and use of alcohol, medical marijuana dispensaries, collectives and cooperatives, and recreational marijuana dispensaries or other distribution points.
- Policies and legislation that compromise the City's ability to enforce state and local parking ordinances.

VIII. SOCIAL JUSTICE AND EQUITY

SUPPORT

- Legislation and funding that provides residents with equitable access to City programs and services.
- Legislation and funding for the City and its community partners to proactively engage with residents on issues of prejudice, discrimination and social justice to promote education, understanding, expanded opportunity and acceptance between diverse groups in the community, making Lakewood a welcome place for everyone.







CITY OF LAKEWOOD

LAKEWOOD CITY COUNCIL



CASSANDRA CHASE
Mayor

JEFF WOOD
Vice Mayor

DAVID ARELLANO
Council Member

STEVE CROFT
Council Member

TODD ROGERS
Council Member

CITY ORGANIZATION & ROLES



THADDEUS MCCORMACK
City Manager

PAOLO BELTRAN
Deputy City Manager

STEVE SKOLNIK
City Attorney

CITY COMMISSIONS:
Community Safety
Planning & Environment
Recreation & Community Services

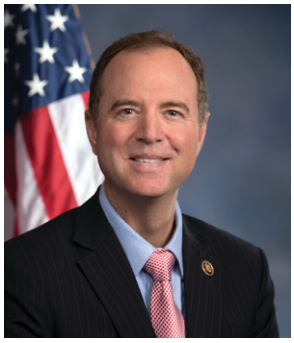
CITY OF LAKEWOOD
5050 Clark Avenue • Lakewood, CA 90712
www.lakewoodca.gov • 562-866-9771

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ELECTED REPRESENTATIVES



Alex Padilla
U.S. Senator



Adam Schiff
U.S. Senator



Nanette Barragán
Representative ▪ CA-44



Robert Garcia
Representative ▪ CA-42



Derek Tran
Representative ▪ CA-45



Lena A. Gonzalez
State Senator ▪ District 33



José Luis Solache, Jr.
Assemblymember ▪ District 62



Janice Hahn
LA County Supervisor ▪ District 4

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: Honorable Mayor and City Council

SUBJECT: Shopping Cart Retention and Retrieval Program Status Report

INTRODUCTION.

One year ago on January 14, 2025, the Lakewood City Council conducted the first reading of the 2025 Shopping Cart Ordinance and subsequently adopted it. The ordinance created the Cart Retention and Retrieval Program (CRRP) that required retail shopping cart owners to participate in a program designed to retain, retrieve and identify retail shopping carts, as permitted by State law, namely Business and Profession Code (BPC) Section 22435.

The ordinance required shopping cart owners to complete the following, prior to obtaining a renewal of their business license:

1. **Cart Identification.** Permanently attach a sign to each cart that includes the business name, address, contact phone number and email address to facilitate the retrieval and return of any abandoned carts to the business. In addition, the cart sign shall indicate that removal of such carts without written permission is prohibited and constitutes a violation of state law (BPC 22435) and that it will be enforced.
2. **Property Sign Program.** Property to be posted with warning that carts are to remain.
3. **Cart Retention.** Establish a security protocol to discourage removal (theft) of carts
4. **Cart Retrieval.** Establish a program to retrieve carts if removed from property.
5. **Annual Confirmation.** Complete a form annually confirming continuing compliance.

STATEMENT OF FACTS.

The Cart Retention and Retrieval Program (CRRP) was implemented during 2025, and the following summarizes the results of that implementation. Code Enforcement staff initially determined that there were 38 retail stores and 6 laundries *(i.e., 44 total)* with five or more carts that were required to participate in the program. Staff estimated that there was a total of 3,600 carts, of which 50 were in the six laundries.

At the end of 2025, code enforcement staff determined that there are now 37 retail stores *(Jo Ann's closed)* with 4,324 carts and 5 laundries *(Laundry Lane closed) (i.e., 42 total)* with 50 carts required to participate in the program. On December 9, 2025, Courtesy Notices were sent to nine (9) businesses that had not complied with the CRRP requirements at that time. Three of those are now in compliance. Therefore, there are now only 6 stores of the 42 (14%) not in compliance, yielding an 86% compliance rate in the first year of the program with 36 stores participating.

In terms of compliance 31 of 37 of the retail operations (84%) have complied and 5 of the 5 laundries (100%) have complied. *(Note: a spread sheet is attached.)* Three of the noncomplying retail operations *(i.e. Albertson's and the two Von's)* did not participate because they paid their business license renewal fee early and prior to the CRRP implementation, leaving no leverage to gain compliance in 2025. The other three non-complying stores are the Dollar Tree and Home Depot in the mall and the Ralph's at 5951 Del Amo Boulevard. Staff will continue with efforts to bring all six stores into compliance.

Staff is questioning the need to regulate laundry carts, as these have not been observed to be used by the unhoused or being abandoned on any street in the area. Laundry carts are not designed to be pushed for long distances. The casters often wobble and do not travel in a straight line. Staff is suggesting that it may be appropriate to remove them from the CRRP requirements.

RECOMMENDATION

1. Staff recommends that the City Council receive and file this report; and
2. Staff recommends that the City Council direct staff to modify the CRRP regulations and procedures to remove laundry carts from the CRRP regulations.

Aldo Cervantes
Director of Community Development

Thaddeus McCormack
City Manager

Attachments:

- Incomplete CRRP Application Status *(Spreadsheet)*

INCOMPLETE CRRP APPLICATION STATUS (Updated 1/21/2026)

44 Businesses Have Five or More Shopping Carts and require CRRP compliance				
7 CCRP Applications are Incomplete as of 1/21/2025				
Business	**Address**	**CE Case #**	**Courtesy Notice**	**Notes**
Albertsons	5015 Del Amo Blvd	25-0982	12/9/2025	Paid renewal prior to CCRP Implementation
Dollar Tree	5209 Graywood Ave	25-0983	12/9/2025	Paid renewal without submitting forms
Home Depot	5000 Hardwick St	25-0986	12/9/2025	No Response
Ralphs	5951 Del Amo Blvd	25-0988	12/9/2025	Requested application 12/15 and sent 12/17/25 CC
Vons	5500 Woodruff Ave	25-0989	12/9/2025	Paid renewal prior to CCRP Implementation
Vons	4226 Woodruff Ave	25-0990	12/9/2025	Paid renewal prior to CCRP Implementation

Status	Retail Sales (37)	Laundry (5)	Total (42)
Noncompliant	16%	0%	14%
Compliant	84%	100%	86%

DIVIDER SHEET

COUNCIL AGENDA
February 10, 2026

TO: Honorable Mayor and Members of the City Council

SUBJECT: Resolution No. 2026-6 – A Resolution of the City Council of the City of Lakewood Adopting an Updated Local Hazard Mitigation Plan

INTRODUCTION

The City of Lakewood's Local Hazard Mitigation Plan (LHMP) was updated and adopted in April 2018. A LHMP is required to be reviewed and updated every five years. Staff initiated and completed the process to update the City's LHMP. The updated plan is ready for City Council adoption.

STATEMENT OF FACT

A Local Hazard Mitigation Plan (LHMP) is a community driven, FEMA-approved document that identifies natural and human-caused hazards, assesses risks to life and property, and outlines long-term, actionable strategies to minimize damage. It acts as a roadmap to increase resilience, often required for eligibility for federal hazard mitigation grants. The key elements of a Local Hazard Mitigation Plan include Risk Assessment; Mitigation Strategies; Public and Stakeholder Involvement; Mandatory Updates; and Sustainability. An approved LHMP is not just a plan; it makes a municipality, county, or tribe eligible to apply for and receive pre- and post- FEMA grant funding for disaster assistance.

The LHMP is a federal requirement. In October 2000, Congress passed the Disaster Mitigation Act (DMA 2000) to reduce the amount of financial assistance it was paying out to communities for repetitive and predictable disaster events. DMA 2000 requires every local, county, and state government to prepare a LHMP to identify and mitigate impacts that may occur as the result of a natural disaster to reduce damage to property and the need for federal monetary assistance. The LHMP is updated every five years. Having an approved LHMP ensures that Lakewood will be eligible for pre- and post-disaster funding.

The LHMP includes a detailed analysis of Lakewood's historical, physical, social, and economic characteristics which are taken into consideration in reducing economic losses caused by each type of natural hazard. The LHMP assesses natural hazards that have the potential to cause damage in Lakewood, the potential level of damage, and proposes action items to reduce the potential for damage. The LHMP includes Action Items that the City may implement to reduce or eliminate identified risks.

The City was awarded a grant from FEMA for the LHMP update. Through a request for proposal (RFP) process, a contract was awarded to the Risk Management Professionals (RMP) consultant group.

RMP began working on the update in September 2024. A draft was completed in early August 2025 and was submitted to CalOES Mitigation Planning Division on August 18, for review and approval. CalOES identified several areas that either needed more information or further clarification. These areas were addressed and RMP resubmitted the plan to the CalOES document reviewer.

STATEMENT OF FACT – Continued

On December 2, the CalOES reviewer let us know that the plan was ready to be sent to FEMA. The updated plan was submitted to FEMA on December 2, along with the CalOES plan review tool showing that all requirements had been met.

On December 11, FEMA sent an "approvable pending adoption," notification confirming that the updated document was ready to be presented to the Lakewood City Council for adoption.

Updates to Lakewood's LHMP are minor. Data was updated where appropriate and improved maps and graphics were inserted into the LHMP. The four most significant changes since the last plan update include:

1) Expanded and strengthened the hazard coverage (including man-made hazards) and developed mitigation actions for those risks.

The updated LHMP takes a more comprehensive approach by including several human-caused (e.g., air quality issues, disease outbreak, urban fire, adversarial events, transportation incidents, hazardous materials release, and power loss). While the prior plan touched on a few of these topics, the focus on the previous plan was on natural hazards. As such, mitigation actions were not developed for man-made hazards. This update fully incorporates these hazards and includes corresponding mitigation actions, resulting in a more well-rounded strategy for the range of risks that can impact the city.

2) Updated mitigation actions developed by a new planning team, with clear implementation focus.

Because the HMPC was made up almost entirely of new members compared to the previous planning process, the city developed a new set of mitigation actions that the committee felt were specific, actionable, and measurable, supporting meaningful progress over the next several years. Ongoing efforts are still acknowledged in the plan as part of normal City operations, while the mitigation actions themselves reflect new priorities identified by the HMPC based on staff experience and public input.

3) Stronger link between hazards, vulnerabilities, and the mitigation actions.

Each mitigation action is now directly tied back to the hazards and vulnerabilities identified in the plan, with supporting narrative that explains why the action was created. This rationale is grounded in HMPC discussions and public feedback, which helps readers (and Cal OES/FEMA reviewers) understand the intent behind each action and ensures the plan remains usable as a "living document" for future staff and decision-makers.

STATEMENT OF FACT – Continued

4) Expanded public outreach and engagement efforts to capture broader community input.

Public participation was built on prior outreach methods (including a public workshop and a survey), but also added new, more targeted engagement approaches to reach additional demographics and gather more meaningful in-person feedback. This included targeted outreach at the Senior Center, Palms Park Community Center, and the Farmers Market. These efforts helped increase awareness of the plan update and provided deeper insights into community concerns and resilience ideas.

RECOMMENDATION

It is recommended the City Council adopt the proposed Resolution adopting the draft City of Lakewood Local Hazard Mitigation Plan and direct staff to submit the approved Resolution to CalOES and FEMA.

Joshua Yordt
Director of Public Safety

Thaddeus McCormack
City Manager

RESOLUTION NO. 2026-6

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAKEWOOD ADOPTING THE CITY OF LAKEWOOD UPDATED LOCAL HAZARD MITIGATION PLAN.

WHEREAS, the preservation of life and property is an inherent responsibility of local, state and federal government; and

WHEREAS, the City is charged and entrusted with the protection of persons and property prior to and during emergencies, and/ or disaster conditions; and

WHEREAS, various communities across the nation have experienced devastation from a variety of natural disasters thereby creating significant financial impacts for which the Federal government normally provides financial assistance following such natural disasters; and

WHEREAS, the Federal government has passed the Disaster Mitigation Act of 2000 (DMA 2000), which requires every local, county, and state government to conduct an assessment of the natural hazards that pose a threat to the jurisdiction, determine the potential financial impact of such hazards, create a plan to mitigate such hazards, and implement a plan to reduce the impacts of such natural disasters; and

WHEREAS, the Local Hazard Mitigation Plan represents a comprehensive description of the City' s commitment to reducing, preventing, or eliminating potential impacts of disasters caused by natural and human- caused hazards; and

WHEREAS, City staff has collaborated with hazard experts Risk Management Professionals (RMP) consultant group to update and develop the LHMP in compliance with the Disaster Mitigation Act of 2000; and

WHEREAS, the City has received notification from CalOES and FEMA identifying the City's LHMP as eligible for approval pending final adoption by the City Council; and

WHEREAS, City Council adoption of a current LHMP will make the City eligible to receive earmarked mitigation grant funding, as well as eligible to apply for additional federal mitigation grants, and Public Assistance funding for disaster recovery; and

NOW, THEREFORE, the City Council of the City of Lakewood does resolve as follows:

SECTION 1. The City Council of the City of Lakewood does hereby approve and adopt the updated Local Hazard Mitigation Plan.

SECTION 2. The City Manager, or designee, is hereby directed to submit a copy of this approved resolution to CalOES and FEMA confirming adoption of the updated Local Hazard Mitigation Plan.

SECTION 3. This resolution supersedes Resolution No. 2018-15.

ADOPTED AND APPROVED THIS 10TH DAY OF FEBRUARY, 2026.

_____
Mayor

ATTEST:

_____
City Clerk







City of Lakewood

Local Hazard Mitigation Plan

January 2026

Prepared By:
Risk Management Professionals
8717 Research Drive, Suite 150, Irvine, California 92618
949/282-0123 www.RMPCorp.com

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ES
EXECUTIVE SUMMARY

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ES.1 Plan Requirements and Objectives

The City of Lakewood (City) Hazard Mitigation Plan is a living document that reflects ongoing hazard mitigation activities. Hazard mitigation involves strategies to reduce short- and long-term vulnerability to identified hazards. This document serves as the framework for the ongoing identification and implementation of hazard mitigation strategies developed in the City.

Background Information

In 2000, the United States Congress determined that disasters and, more importantly, lack of preparedness for disasters, were significant causes of loss of life, human suffering, loss of income, and property loss and damage. Furthermore, because disasters often disrupt the normal functioning of governments and communities and adversely affect individuals and families with great severity, special measures designed to assist the efforts of the affected States in expediting the rendering of aid, assistance, and emergency services, and the reconstruction and rehabilitation of devastated areas, were necessary. As a result, Congress passed the Disaster Mitigation Act of 2000 (DMA 2000), or Public Law 106-390, to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This provides an opportunity for States, Tribal governments, and local jurisdictions to apply for assistance from the Federal government in carrying out their responsibilities to alleviate the suffering and damage which results from such disasters by:

a. revising and broadening the scope of existing disaster relief programs;

b. encouraging the development of comprehensive disaster preparedness and assistance plans, programs, capabilities, and organizations by the States and by local governments;

c. achieving greater coordination and responsiveness of disaster preparedness and relief programs;

d. encouraging individuals, States, and local governments to protect themselves by obtaining insurance coverage to supplement or replace governmental assistance;

e. encouraging hazard mitigation measures to reduce losses from disasters, including development of land use and construction regulations; and

f. providing Federal assistance programs for both public and private losses sustained in disasters.

DMA 2000 allows State, Tribal, and local jurisdictions to obtain Federal assistance through pre-disaster hazard mitigation planning. As part of the requirements for receiving Federal grants for improving a locality's resistance to disasters, each locality must determine their existing vulnerabilities and develop a plan to reduce or eliminate these vulnerabilities and must have this plan approved by the appropriate State and Federal officials. Upon approval of this plan, each locality is eligible to receive various types of disaster-related assistance through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Assistance (HMA) Program. This includes the Building Resilient Infrastructure and Communities (BRIC) program and Hazard Mitigation Grant Program (HMGP) which releases grant funds before and after a hazard event as well as the Flood Mitigation Assistance Grant (FMA) Program which appropriates funds for projects and planning that will reduce long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP).

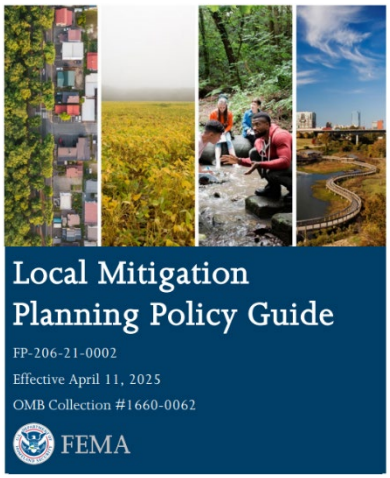
The BRIC program provides funds for hazard mitigation planning and the implementation of mitigation actions prior to a disaster event. These grants are funded and approved through FEMA on a competitive basis. The HMGP provides grants to implement long-term hazard mitigation measures after a major disaster declaration. These grants are funded by FEMA but are distributed by the State. In California, that agency is the Governor's Office of Emergency Services (Cal OES).

FEMA has developed guidance to assist communities in developing both the vulnerability assessments and plans to reduce or eliminate their vulnerabilities to disasters. These tools, coupled with techniques from the safety and security industries were used to develop the City's Hazard Mitigation Plan. Additional information regarding the HMGP and BRIC programs can be found in FEMA's "Hazard Mitigation Assistance Unified Guidance" document, located in FEMA's Hazard Mitigation Planning portal. Additional information including guidance and regulations can be found at the Cal OES's Local Hazard Mitigation Planning Program portal.

In order to be eligible for certain Federal disaster assistance and mitigation funding, the City is required to have a Cal OES- and FEMA-approved Hazard Mitigation Plan in place. As a result, the City obtained grant funding to update this document to fulfill Cal OES and FEMA requirements and provide direction and guidance on implementing hazard mitigation actions on a hazard-level, probability, and cost-priority basis. The overall goal of the Hazard Mitigation Plan is to reduce the potential for damage to critical assets from natural and man-made hazards. In addition, the plan

describes past and current hazard mitigation activities and philosophies and outlines future mitigation goals and strategies.

FEMA Requirements



FEMA requires that the Hazard Mitigation Plan meet certain requirements. First, the planning process must be open and public and must allow the public to have an opportunity to comment during the drafting stage and prior to plan approval. Second, the process must allow other local jurisdictions to be involved in the planning process. Third, the Plan must incorporate, if appropriate, existing plans, studies, reports, and technical information.

FEMA expects that each Hazard Mitigation Plan has the following information:

1. Documentation of the ***planning process*** used to develop the plan
2. A ***risk assessment*** that provides a factual basis for upgrades and recommendations
3. A ***description of the natural hazards*** that can affect the jurisdiction
4. A ***description of the jurisdiction's vulnerability*** to these hazards
5. A ***description of land usage***, and an ***estimate of losses*** should a disaster occur
6. A ***mitigation strategy***
7. A plan ***maintenance process***
8. ***Documentation*** that the plan has been adopted by the jurisdiction's governing body
9. ***Review*** by the State Hazard Mitigation Officer

ES.2 Mitigation Definition

Mitigation is an ongoing effort to prevent or lessen future emergency or disaster incidents, and the impacts they might have on people, property, and the environment. Examples of mitigation activities include the following:

- Legislation, laws, and regulations;
- Variances;
- Zoning and land use management;
- Engineering and building codes;
- Hazard mitigation plans & teams;
- Technical guidance & assistance;
- Financial assistance;
- Hazard Identification;
- Risk Analysis;
- Evaluation;
- Research; and
- Education

Mitigation decreases the demand for emergency response resources, reduces the principal causes of injuries and deaths, enables a quicker lifesaving response and economic recovery because the community infrastructure remains intact, and reduces the societal impacts of the emergency because it results in less disruption to the social environment. In essence, mitigation is the foundation of sustainable community development.

ES.3 Planning Process Summary

Hazard mitigation planning is a dynamic process built on realistic assessments of past and present information that enables the City to anticipate future hazards and provide mitigation strategies to address possible impacts and identified needs. The overall approach to the Hazard Mitigation Plan included developing a baseline understanding of natural and man-made hazards, determining ways to reduce those risks, and prioritizing mitigation recommendations for implementation.

To complete these objectives, the City compiled a qualified team with various expertise to participate in a Hazard Mitigation Planning Committee (HMPC) to guide the development of the City's comprehensive Hazard Mitigation Plan. The City solicited participation in the HMPC by contacting both internal and external stakeholders. Internal stakeholders included members of the various City departments. External stakeholders were comprised of representatives from local agencies and neighboring communities, including the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, American Red Cross, and representatives of vulnerable populations.

Additionally, the HMPC actively engaged the public throughout the planning process, with a focus on reaching vulnerable populations. This included posting a survey on the City website, distributing flyers at City facilities and events, visiting the Senior Center to engage a key at-risk group, setting up booths at a local farmers' market and community center, hosting a public workshop, presenting at a Planning and Environment Commission meeting, and requesting feedback at a City Council meeting. These efforts aimed to encourage public input throughout the drafting process and ensure the draft Plan was accessible for review and comment. Chapter 1: Planning Process contains descriptions of the Planning process, including information on the HMPC and public involvement.

ES.4 Hazard Analysis

The City is vulnerable to a wide range of natural and man-made hazards that threaten life and property. To identify the hazards that the City and neighboring communities perceive as the largest threat, each member of the HMPC participated in the Hazard Identification Workshop during the first HMPC Meeting. The HMPC brainstormed potential hazards based on past incidents that have impacted the City and information incorporated from other studies. (Incorporated Plans and studies are described in Section 1.3 "Review and Incorporation of Existing Plans"). Each identified hazard was then qualitatively ranked based upon hazard probability/frequency, consequence/severity, and the City's overall vulnerability using an interactive model. Section 3.2 Hazard Identification contains detailed information regarding the hazard ranking. Table ES.1 provides a summary of the hazard rankings.

Table ES.1: City of Lakewood Hazard Ranking Summary

HAZARD RANK	SCORE
EARTHQUAKE	50
AIR QUALITY	40
DISEASE OUTBREAK	30
URBAN FIRE	30
WINDSTORM	27
EXTREME HEAT	27
DAM FAILURE	25
ADVERSARIAL EVENTS	25

HAZARD RANK	SCORE
TRANSPORTATION INCIDENT	24
POWER LOSS	16
DROUGHT	16
HAZARDOUS MATERIALS RELEASE	15
FLOOD	8

Note: The HMPC did not identify any Low ranked hazards

Asset Inventory and Loss Estimates

In addition to the hazard profiles, the Risk Assessment contains a detailed asset inventory that lists the City's assets, such as buildings, public facilities, parks, and water facilities. This asset inventory was used in the vulnerability assessment to estimate potential losses for each hazard. The HMPC reviewed each hazard and assigned a potential percentage of damage expected. This also included loss of function values for lifeline and emergency service interruptions. Section 3.7 Loss Estimates includes a detailed breakdown of the vulnerability assessment calculations. Table ES.2, listed below, highlights the summary of loss estimates for each identified hazard.

Table ES.2: Loss Estimate Summary

HAZARD	NAME
Dam/Reservoir Failure	$86,067,683
Earthquake	$79,392,879
Adversarial Events	$31,386,372
Flood	$23,000,920
Hazardous Materials Release	$8,234,281
Urban Fire	$6,788,292
Transportation Incident	$6,604,618
Windstorm	$6,570,313
Extreme Heat	$1,043,279
Air Quality	$1,043,279

HAZARD	NAME
Drought	$1,043,279
Disease Outbreak	$1,043,279
Power Loss	$0

Note: Values are rounded to the nearest thousand.

ES.5: Mitigation Strategies and Implementation Plan

Plan Goals and Objectives

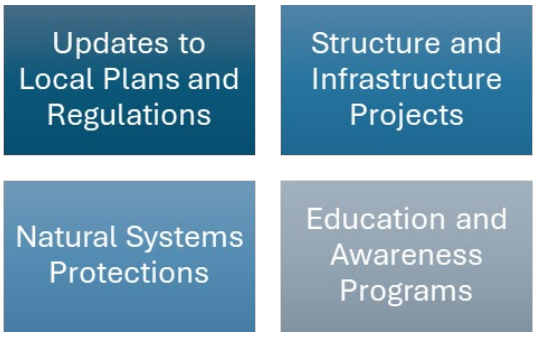
As part of the development process, Plan goals and objectives were revalidated to provide a framework for mitigating hazards and proposing potential mitigation actions. The goals are consistent with the California State Hazard Mitigation Plan and the Los Angeles County Hazard Mitigation Plan and were developed by the HMPC. The City's overall Plan goals are to:

1. Protect Life and Property
2. Improve Emergency Management Capabilities and Post- Disaster Recovery
3. Explore Funding Sources for Mitigation Actions
4. Enhance Public Awareness and Education
5. Protect the Environment

In addition to the overall Plan goals, individual objectives were developed that more specifically address mitigation strategies. Section 4.1 Mitigation Goals and Objectives contains the full list of the Plan goals and objectives.

Mitigation Strategies

Mitigation strategies are administrative and/or engineering project recommendations to reduce the vulnerability to the identified hazards. The HMPC identified specific mitigation actions to reduce the impact or likelihood of the hazards. The specific objectives served as a starting point for developing the mitigation actions, and additional actions were taken from City's General Plan. Each of the mitigation recommendations fell into one or more of the following categories:



Implementation Plan

Following the identification of mitigation actions, a simplified Benefit-Cost Review was applied in order to prioritize the mitigation actions for implementation. The priority for implementing mitigation actions depended upon the overall cost effectiveness of the action, when taking into account monetary and non-monetary costs and benefits associated with each action. Additionally, the following questions were considered when developing the Benefit-Cost Review:

- How many people will benefit from this action?
- How large of an area is impacted?
- How critical are the facilities that benefit from the action?
- Environmentally, does it make sense to do this project for the overall community?

The Benefit-Cost Review yielded a relative priority ranking (High, Medium, or Low) for each mitigation action. Each ranking was defined as follows.

- High: Benefits are perceived to exceed costs without further study or evaluations; or the action is critical.
- Medium: Benefits are perceived to exceed costs but may require further study or evaluation prior to implementation.
- Low: Benefits and costs require evaluation prior to implementation.

Mitigation actions identified as high priority are typically implemented before lower ranked actions. Results from the Benefit-Cost Review are located in Chapter 4.3 Prioritization of Mitigation Recommendations. The HMPC considered responsible departments, funding resources, and estimated implementation timeframe when developing the implementation plan.

Chapter 4 Mitigation Strategies contains additional information regarding the mitigation strategies and implementation plan. Table ES.3 on the following pages provides a summary of each mitigation action, including the hazard(s) mitigated, responsible agency/department, and relative priority rank taken from the Benefit-Cost Review.

Table ES.3: Mitigation Action Summary

Action ID	Mitigation Action	Hazards Mitigated	Responsible Agency/Dept.	Priority
2025.HMP.01	Incorporate structural seismic strengthening into new and ongoing City structures and assets to ensure that facilities remain operational	Earthquake	Public Works	Medium
2025.HMP.02	Implement seismic studies to determine vulnerable locations throughout critical City facilities and implement structural improvements accordingly	Earthquake	Public Works	Medium
2025.HMP.03	Increase public education efforts regarding earthquake preparedness by expanding existing online outreach through social media, newsletters, and website updates	Earthquake	Communications Department	High
2025.HMP.04	Improve public outreach through multiple City platforms regarding air quality, focusing on vulnerable populations such as the elderly and very young, by providing clear guidance for protecting health during poor air quality events	Air Quality	Communications Department	High
2025.HMP.05	Support public health efforts during disease outbreaks by distributing materials provided by public health agencies through multiple City platforms to ensure timely access to clear health protection guidance	Disease Outbreak	Communications Department	High
2025.HMP.06	Increase outreach and training for preselected Medical Points of Distribution (MPOD) sites in the city by regularly conducting training sessions for city staff and local volunteers to ensure operational readiness and effective coordination during emergencies	Disease Outbreak	Public Safety Department	High
2025.HMP.07	Conduct a study to assess the capacity of existing water lines and infrastructure, identifying areas where flow rates and water	Urban Fire	Water Resources Department	Medium

Action ID	Mitigation Action	Hazards Mitigated	Responsible Agency/Dept.	Priority
	pressure can be improved to better support fire suppression efforts during urban fire events			
2025.HMP.08	Adjust the cycle of vegetation trimming in the City by identifying and prioritizing species that grow more aggressively, ensuring that trees and shrubs are regularly maintained to reduce the risk of windstorm damage	Windstorm	Environmental Resources Division	High
2025.HMP.09	Develop and distribute recommendations for residents on how to protect their properties from windstorm damage, including recommended mitigation measures and best practices	Windstorm	Communications Department	Medium
2025.HMP.10	Increase tree plantings around buildings to provide shade for parking lots and along public rights-of-way, prioritizing high-traffic areas and vulnerable populations, to reduce heat exposure and mitigate the urban heat island effect	Extreme Heat	Public Works	High
2025.HMP.11	Develop and distribute educational materials through City platforms to raise awareness of the benefits of cool roofing, including its role in cooling buildings, reducing heat-related health risks, and improving overall energy efficiency	Extreme Heat	Communications Department	High
2025.HMP.12	Explore developing a process to ensure access to City pools during high heat events by advertising them as cooling options alongside cooling centers, and, if pool use is restricted, temporarily expand access to those who might not typically have access, and prioritize vulnerable populations if capacity limits are reached	Extreme Heat	Recreation and Community Services/ ERD	Medium
2025.HMP.13	Establish and maintain a mass notification system for the City, ensuring it is ready to deliver timely alerts and services during emergencies by conducting regular system setup, testing, and staff training	Dam Failure/ Multi-Hazard	Public Safety Department	High

Action ID	Mitigation Action	Hazards Mitigated	Responsible Agency/Dept.	Priority
2025.HMP.14	Make active shooter training available in multiple languages, including English, by providing translated materials and conducting sessions in languages spoken by the Limited English Proficient (LEP) population within the City	Adversarial Events	Communications Department	High
2025.HMP.15	Conduct cybersecurity risk assessments of City systems to identify vulnerabilities and implement necessary measures and updates to protect against cyber threats	Adversarial Events	Administrative Services	Medium
2025.HMP.15	Distribute outreach materials to residents on how to respond during power outages, including safety tips, emergency contacts, and resources for maintaining essential services	Power Loss/ Multi- Hazard	Communications Department	High
2025.HMP.17	Coordinate with utility providers to establish a prioritization plan for power restoration to critical City facilities, ensuring rapid response during emergencies	Power Loss	Public Works/ Water Department	High
2025.HMP.18	Assess the feasibility of expanding reclaimed water use and identify new locations on City properties for the installation of drought-tolerant landscaping to enhance water conservation and drought resilience	Drought	Public Works/ Water Department	Low
2025.HMP.19	Explore possible incentives for alternative landscaping and other water saving initiatives for additional areas	Drought	Environmental Resources Division	Medium
2025.HMP.20	Provide the public with updated information on the impacts of a release, including first response actions and community resources for relief, through accessible City platforms	Hazardous Materials Release	Communications Department	High
2025.HMP.21	Organize and conduct awareness and training courses for City personnel, including courses from the Paradigm Pipeline Organization, to enhance preparedness and response capabilities for emergency situations	Hazardous Materials Release	City Personnel	Medium

Action ID	Mitigation Action	Hazards Mitigated	Responsible Agency/Dept.	Priority
2025.HMP.22	Conduct an updated commodity flow study to identify specific vulnerabilities in commercial transport routes, such as chokepoints or high-risk areas, and collaborate with regional agencies to develop contingency plans for mitigating disruptions that could affect public safety and businesses	Hazardous Materials Release	Administration/ Public Works	High
2025.HMP.23	Expand coordination with Long beach Airport (and expand to other regional airports) to identify opportunities to reduce the vulnerability of residents to aviation incidents	Transportation Incidents	Administration/ City Manager's Office	High
2025.HMP.24	Assess drainage capacities throughout the City to identify areas of concern and prioritize improvements to reduce flood risk and enhance stormwater management	Flood/Dam Failure	Public Works	Low
2025.HMP.25	Ensure public outreach materials, including City and County mental health resources, are available in multiple languages on City platforms to ensure equitable access to important information	Multi- Hazard	Communications Department	High
2025.HMP.26	Identify elderly care facilities that may require assistance during evacuation scenarios and develop contingency plans to secure housing and shelter for impacted residents	Dam Failure/Multi-Hazard	Community Development/ Recreation and Community Services	High
2025.HMP.27	Reevaluate and update evacuation routes to ensure they are accessible, effective, and safe for all residents during an emergency event and provide the updated routes to the public through City communication platforms	Multi- Hazard	Community Development	Medium

ES.6: Monitoring, Evaluating, and Updating the Plan

The Hazard Mitigation Plan is a living document that reflects ongoing hazard mitigation activities and requires monitoring, evaluating, and updating to ensure the mitigation actions are implemented. To facilitate the Hazard Mitigation Planning process and adhere to regulatory requirements, the Plan will be reviewed annually, and any major revisions will be incorporated into the five-year update. In addition, public involvement will be requested when applicable. Chapter 5: Plan Maintenance outlines the update requirements and planning mechanisms the City has in place for ongoing hazard mitigation.



CHAPTER 1
PLANNING PROCESS

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1.1 Narrative Description of the Planning Process

Hazard mitigation planning is a dynamic process built on realistic assessments of past and present information that engages the City of Lakewood (City) to anticipate future hazards and provide meaningful strategies to address possible impacts and identified needs. The hazard mitigation planning process involves the following tasks:



The overall approach to updating the Hazard Mitigation Plan includes building off the baseline understanding of the natural hazards as defined in the 2018 Hazard Mitigation Plan, determining ways to focus solely on those risks which impact the City, continuing to reduce those risks, and prioritizing those recommendations for implementation. The following task descriptions provide a detailed narrative of the overall project progression.

§201.6(c)(1): *[The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

Organize Resources

Identify Stakeholders and Compile Hazard Mitigation Planning Committee

Kaitlin Sanchez, Public Safety Manager for the City, invited and coordinated participation for a Hazard Mitigation Planning Committee (HMPC) from the appropriate law enforcement, emergency response, academia, health organizations, local businesses, City personnel, local government representatives, and vulnerable populations. The HMPC was responsible for providing essential insight into past hazard events, current hazard vulnerability (including specific locations), critical assets, and possible mitigation projects. The following groups were invited via email to participate in the plan development.

> ***§201.6(b):*** *In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:*
>
> *(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process; and*

Table 1.1 Stakeholders Invited to Participate in the Plan Update

Local/Regional Agencies	Agencies with Authority to Regulate Development	Businesses/ Academia/Other Private Organizations	Neighboring Communities	Volunteer/Non-Profit Organizations
-City of Lakewood Public Works *-City of Lakewood Public Safety* *-City of Lakewood Water Resources* *-City of Lakewood Administrative Services* *-City of Lakewood Recreation and Community Services* *-Los Angeles County Sheriff's Department* *-Los Angeles County Fire Department* *-SoCal Edison* *-Golden State Water Company*	*-City of Lakewood Planning and Environment Commission* *-City of Lakewood Planning Division*	*-Tenet Health* *-Macerich Commercial Real Estate (Lakewood Center)* *-Care Solace Mental Health Care* *-Paramount Unified School District* *-ABC Unified School District* *--Bellflower Unified School District* *-Long Beach Unified School District*	*-City of Bellflower* *-City of Paramount* *-City of Signal Hill* *-City of Los Alamitos* *-City of Cypress* *-City of Artesia* *-City of Cerritos* *-City of Long Beach*	*-American Red Cross* *-YMCA*

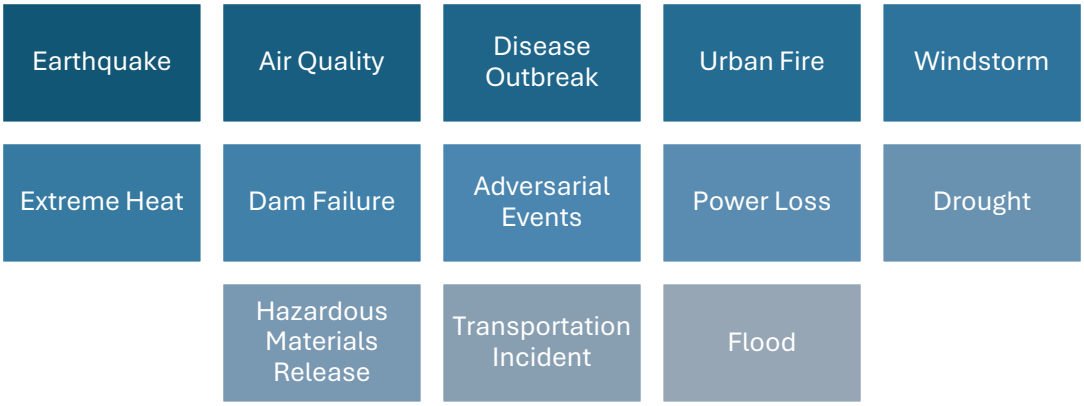
Public Process

The Disaster Mitigation Act of 2000 requires an "Open and Public Process" for developing the Hazard Mitigation Plan. This process requires, at a minimum, that the public be allowed to comment on the Hazard Mitigation Plan during the drafting phase and prior to adoption. To meet this requirement, the City conducted public outreach efforts to gather input during the planning process to invite public comments on the draft before its submission for review with the Federal Emergency Management Agency (FEMA). A public survey was made available prior to and during the drafting stage and was advertised on social media and the City's website, allowing residents to provide feedback on hazard risks and mitigation strategies. Additionally, the City hosted an in-person public workshop and engaged with the community through various events to collect input and address concerns. Documentation of public involvement is provided in Annex D.

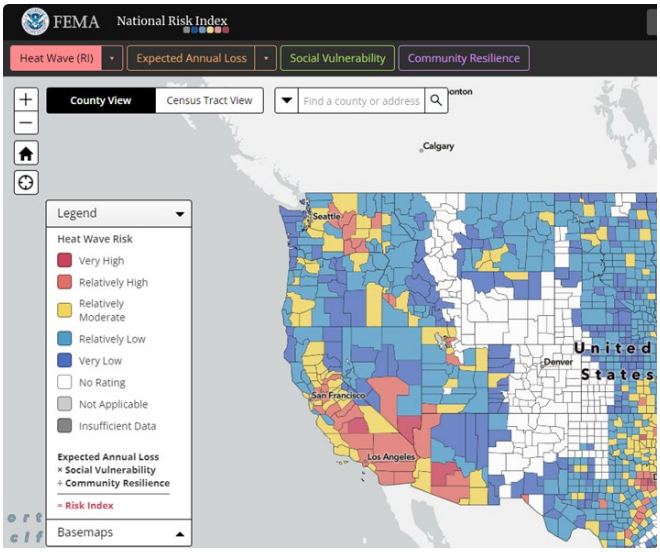
Risk Assessment

Identify Hazards

This task was designed to identify all the natural and man-made hazards that *might* affect the City and then narrow the list to the hazards that are most likely to occur. The hazards included natural and human-caused events, with an emphasis on the effect of disasters on the City's critical facilities. To compile the list, the Project Team built upon the list of hazards identified in the 2018 Local Hazard Mitigation Plan and those identified for Los Angeles County through FEMA's National Risk Index, determined which hazards were specific to the City, and then continued to research numerous sources to determine any additional hazards. In addition, the HMPC reviewed a list of hazards that have affected the City in the past with specific information regarding frequency, magnitude, and associated consequences. A Hazard Identification exercise was conducted during the first and second HMPC Meeting to identify and evaluate each selected hazard. The following hazards were included in the Hazard Mitigation Plan:



The list above is not all-inclusive of the hazards discussed during the Hazard Identification exercise. Hazards not thought to pose significant risk to the City were not included. For example, FEMA's National Risk Index indicates that wildfire might be a high risk for cities in Los Angeles County. Given that the City's relative location in Los Angeles County, coupled with the city being mostly built out with no significant open areas, wildfire was not deemed a credible hazard for this Plan. To address this hazard, the team identified Urban Fire as being a higher hazard specific to the City. In addition, some items were captured as sub-items of the hazards listed above. For example, climate change is discussed with hazards where the impact of changes in weather patterns could act as a catalyst for those scenarios.



Profile Hazard Events

Hazard profiles consist of either a map indicating the area impacted by each hazard or an important piece of data regarding the characteristics of hazard events within the City and surrounding area. To update the detailed hazard profiles, the Project Team researched and reviewed relevant open-source natural hazard studies and mapping projects. In addition, the City supplied any hazard studies that have been developed specifically for the City. This task determined the hazard magnitude, frequency, and location characteristics (e.g., predicted ground acceleration values, fault locations, floodplains, etc.) that were used as the design-basis for the hazard rankings and loss estimates.

Asset Inventory & Loss Estimates

The purpose of this task was to determine the quantity of City facilities and assets that lie in the different hazard areas and what proportion of the City this represents. The asset inventory was compiled with data provided by the City. The completed asset inventory enables the HMPC to estimate losses which was critical in determining which assets are subject to the greatest potential damage and which hazard event is likely to produce the greatest potential losses. The conclusion of this task precipitated a comprehensive loss estimate for each identified hazard for each specific asset in terms of damage, economic loss, and the associated consequences.

Vulnerable Populations

To improve the City's insight into how hazards affect vulnerable populations and ensure compliance with FEMA's updated guidelines, the HMPC convened to explore the impacts of various hazard scenarios on vulnerable populations. The discussion focused on the City's ability to provide resources and information to better serve vulnerable populations.

Mitigation Strategy Development

Development of Mitigation Goals and Objectives

The HMPC discussed the mitigation features and resources that the City currently has in place. These mitigation features provided a framework to determine where practical improvements could be made and where sufficient improvements would be prohibitive due to cost, schedule, or impracticality of implementation.

For each of the hazard events, mitigation goals and objectives were developed with the intention of reducing or eliminating the potential hazard impacts. The mitigation goals and objectives were developed at a HMPC Meeting to provide the basis for determining the associated mitigation projects.

Identify and Prioritize Mitigation Actions

Mitigation strategies are administrative and/or engineering project recommendations to reduce the vulnerability to the identified hazards. It was imperative to have City Planners and community developers involved in this phase of the Plan to develop strategies and projects that will mitigate the hazards cost-effectively, as well as ensure consistency with the City’s long-term mitigation goals and capital improvements. At a HMPC Meeting, a team-based approach was used to brainstorm mitigation projects based on the identified hazards and associated loss estimates. The evaluation and prioritization of the mitigation actions produced a list of recommended mitigation actions to be incorporated into the Hazard Mitigation Plan. A separate HMPC meeting was held to conduct a Benefit-Cost Review for each proposed mitigation action to determine the relative priority level of the recommendation.

Implementation and Monitoring

Preparation of Implementation Strategy

The Project Team developed an action plan to detail how the mitigation recommendations will be prioritized, implemented, and administered by the City. During the Hazard Mitigation Plan creation process, the Project Team coordinated with the HMPC to determine the mitigation project

implementation strategy (including identifying responsible departments, funding resources, and estimated implementation timeframe).

1.2 Hazard Mitigation Planning Committee and Public Involvement

> **§201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:
>
> (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.
>
> (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process; and
>
> **§201.6(c)(1):** The plan **shall** document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

While the City and Risk Management Professionals, a consultant hired by the city to assist with the planning effort, had lead responsibility for the update of the City's Hazard Mitigation Plan, neighboring communities, agencies, businesses, and other interested parties were invited to participate in the HMPC to review the Hazard Mitigation Plan during each phase of the document development, in order to compile a list of HMPC participants, the Project Team assessed community support through active community leaders, built a planning Team, and engaged the public participants during the planning process. Each member of the HMPC had the opportunity to participate in all aspects of the planning process

Hazard Mitigation Planning Committee Participant Solicitation

The City solicited participation in the HMPC by contacting both internal and external stakeholders. Internal stakeholders included members of the various City departments. External stakeholders were comprised of representatives from local agencies and neighboring communities, including the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, Los Angeles County Office of Emergency Management, representatives of vulnerable populations, and the public.

Hazard Mitigation Planning Committee Participants

The City brought together personnel from Public Safety, Public Works, Building and Planning, Water Resources, Recreation and Community Services, Administrative Services, and Community Development to ensure the HMPC included a variety of departments and provided a mechanism for receiving input from each participant. Additionally, the City compiled historical hazard data, provided relevant planning documents for incorporation into the Hazard Mitigation Plan, and coordinated participation with the public. Each draft chapter was reviewed by the HMPC and specific comments and input were incorporated into the plan. The multidisciplinary HMPC enabled

the City to work together and incorporate each individual's expertise to provide a comprehensive Hazard Mitigation Plan. The Hazard Mitigation Plan was developed with assistance and advice from participants from the City and neighboring agencies. Table 1.2 provides a list of the HMPC participants.

Table 1.2 Hazard Mitigation Planning Committee Participants

Name	Affiliation	Title
Kaitlin Sanchez	City of Lakewood	Public Safety Manager
Joshua Yordt	City of Lakewood	Director of Public Safety
Chuck Martucci	City of Lakewood	Emergency Manager
Paul Kuykendall	City of Lakewood	Senior Planner
Caitlin Cariaso	City of Lakewood	Community Services Supervisor
Vicki Stuckey	City of Lakewood	Planning and Environment Commission
Wilfred Cochico	City of Lakewood	Purchasing Officer
Anthony Manzano	City of Lakewood	Assistant Water Director
Mike McDade	City of Lakewood	Maintenance Supervisor
Leonel Martin	City of Lakewood	Associate Civil Engineer
Veronica Copeland	City of Lakewood	Special Events Assistant
Frank Ontiveros	City of Lakewood	Administrative Assistant
Jack Wopschell	City of Lakewood	Senior Management Analyst
Luz Ramirez	City of Lakewood	Recreation and Community Services Intern
Ruby Picon	City of Lakewood	Management Analyst

Khoi Dao	Los Angeles County Fire	Chief Officer
Manny Carreon	Los Angeles County Fire	Battalion Chief
Gabby McCormick	American Red Cross	Disaster Program Manager
Judy Aquino	City of Cypress	Planning
Luis Valdez	City of Long Beach	Disaster Preparedness Officer
Tania Villegas	Lakewood Interfaith Council	Representative
Chet Snyder	YMCA	Director of Facilities
Shireen Kulkarni	Risk Management Professionals	Technical Consultant
Ryan Bray	Risk Management Professionals	Senior Technical Consultant

The HMPC met five times over the course of the project to discuss project progress and obtain valuable input and information for documenting the Hazard Mitigation Plan. The meetings are detailed over the subsequent pages. Annex D – Public Participation contains copies of the presentations used at each meeting and specific meeting handouts.

Hazard Mitigation Planning Committee Meeting Descriptions

Hazard Mitigation Planning Committee Meeting #1- September 16th, 2024: Project Initiation, Hazard Identification, and Information Collection

During the Project Initiation, Hazard Identification, and Information Collection Meeting, Risk Management Professionals presented an overview presentation that detailed the objectives and scope of the project. After a review of the project schedule and key tasks, the HMPC participants' areas of expertise, resultant member responsibilities, and the community meeting process were discussed. The HMPC meeting also served as a mechanism to determine the hazards to profile in detail. To effectively characterize the City's risk and vulnerability, Risk Management Professionals facilitated a discussion of the historical hazards with the HMPC members during this meeting.

The HMPC determined the initial hazard profile ranking through a facilitated exercise using an automated interactive spreadsheet that asked specific questions on potential hazards and then

assigned a relative value to each potential hazard, accordingly, including numerical rankings (1-5) of the following criteria:

- **Consequence/Severity** – How widespread is the impact area?
- **Secondary Effects** – Could the event trigger another event and separate response?
- **Probability/Frequency** – Historical view of how often this type of event occurs locally and projected recurrence intervals.
- **Warning/Onset** – Advance warning of the event, or none.
- **Duration** – Length of elapsed time where response resources are active.
- **Recovery** – Length of time until lives and property return to normal

Chapter 3: Risk Assessment outlines the methodology used for hazard rankings. Additionally, all HMPC participants were requested to provide existing plans and technical studies, GIS data, and identify existing mitigation features as part of an information request.

Hazard Mitigation Planning Committee Meeting #2- October 15th, 2024: Mitigation Goals and Objectives

The hazard risk ranking from HMPC Meeting #1 was reviewed, updated, and validated with the HMPC with a review of the hazard profiles. Additionally, the Plan's mitigation goals and objectives were updated with the intention of reducing or eliminating the potential hazard impacts, which also provided the basis for determining the associated mitigation projects. The HMPC reviewed the goals and objectives from the City's 2018 Local Hazard Mitigation Plan, the 2020 Los Angeles County Hazard Mitigation Plan, and the 2023 California State Hazard Mitigation Plan as a baseline for determining the City's current mitigation goals and objectives.

Hazard Mitigation Planning Committee Meeting #3- November 19th, 2024: Vulnerability Assessment and Critical Facilities Loss Estimate

The asset inventory was developed to determine the quantity of buildings, facilities, and other assets in the City that lie in the different hazard areas and what proportion of the City this represents. The asset inventory included locations and specifications for city well sites, civic buildings, and parks. The asset inventory was then used to develop loss estimates for all hazard scenarios. The hazard probabilities and recurrence intervals were applied to the City assets to determine which assets were subject to the greatest potential damages and which hazard events were likely to produce the greatest potential losses.

To enhance the City's understanding of how hazards impact vulnerable populations and comply with FEMA's new requirements, a HMPC meeting was held to examine the effects of hazard scenarios on these populations. As detailed in Section 2.4 (Demographics), the City identified several groups likely to experience heightened impacts during hazard events, including the elderly, children, individuals with cognitive or physical disabilities, economically disadvantaged residents, and those with limited English proficiency (LEP).

During the meeting, a productive discussion took place regarding the City's capacity to provide resources and information to better support these populations. This resulted in a deeper analysis of the hazard understanding in Chapter 3 and the mitigation actions in Chapter 4 of the plan. Moreover, as the City gained greater clarity on FEMA's expectations for mitigation planning, Chapter 5 was updated to reflect the City's commitment to addressing the needs of vulnerable populations in future mitigation efforts.

Hazard Mitigation Planning Committee Meeting #4- December 10th, 2024: Mitigation Action Identification

The purpose of this meeting was to identify potential mitigation actions and projects that will reduce the impact of identified hazards. First, the mitigation goals and objectives from HMPC Meeting #2 were reviewed and validated. Then, during the meeting, the HMPC participants brainstormed possible projects and actions to mitigate the effects of the identified hazards.

As the mitigation projects were identified, the HMPC discussed the mitigation action implementation plan according to the following characteristics:

- **Mitigation Action Category** – Prevention, Property Protection, Public Education and Awareness, Natural Resource Protection, Emergency Services, and Structural Projects
- **Corresponding Goals and Objectives**
- **Responsible Department** – Building and Safety, Engineering, Administration, Community Development, Public Works, etc.
- **Resources** – General Fund, Grant Programs, Staff Time, Capital Improvements, etc.
- **Implementation Timeframe** – Ongoing, Short-Term (within two years), Medium-term (between three and ten years), and Long-Term (greater than ten years)
- **Whether or not the projects protect new or future buildings**

Hazard Mitigation Planning Committee Meeting #5- February 18th, 2025: Mitigation Action Finalization and Benefit Cost Review

During the fifth HMPC Meeting, the identified mitigation actions from HMPC Meeting #4 were reviewed and validated with the HMPC. The HMPC then performed a high-level Benefit-Cost Review on each of the identified mitigation actions. The review consisted of identifying all benefits and costs associated with implementing each mitigation action. Typical benefits include:

- **Avoided physical damage** (e.g., to buildings, infrastructure, and equipment)
- **Avoided loss of function costs** (e.g., loss of utilities and lifelines)
- **Avoided casualties**
- **Avoided emergency management costs** (e.g., emergency operations center costs, evacuation/rescue costs, and other management costs)

Once the benefits and costs were estimated, a relative priority was assigned for each action based upon the evaluation. More detailed information can be found in Section 4.4 “Prioritization of Mitigation Recommendations.

Public Meetings and Outreach

The City actively solicited public involvement through a variety of outreach efforts to engage the community and gather feedback. These efforts included an online survey, public outreach events, and a public workshop.

> ***§201.6(b):*** *In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:*
>
> *(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*

The survey, which was hosted on the City’s website for 6 months, allowed residents to provide input on hazard risks and mitigation strategies. The survey assessed the community’s level of concern with various hazards and the steps each respondent had taken to prepare for a disaster. The survey was an accessible way for a wide range of community members to participate in the planning process.

In addition to the online survey, the City organized several in-person events to engage with residents who may not have participated online. These events were designed to reach diverse groups within the community and ensure broad public involvement. The City visited the Weingart Senior Center on January 27th, 2025 to gather input from older adults, who may have unique concerns about hazards and mitigation strategies. By attending the Lakewood Farmers Market, on February 1st, 2025, which attracts many local residents, the City was able to engage with



a large cross-section of the community in an informal setting. A booth was set up at the Palms Park and Community Center on February 17th, 2025 to ensure that residents attending various activities at these popular locations had the opportunity to provide feedback. Additionally, a public workshop was hosted on March 24, 2025 to present the draft plan and gather further input from community members in an interactive format. Finally, the draft plan was posted on the City website, providing an opportunity for members of the public to review and provide final comments.



These outreach activities were crucial in meeting the public participation requirements set by FEMA for the Hazard Mitigation Plan. By offering multiple opportunities for residents to engage, the City was able to reach a wide and diverse audience, ensuring that the community's concerns and ideas were reflected in the final plan. Additional documentation regarding public involvement and additional information on the City Council Meeting, including the attendance log and presentation, can be found in Annex D.

1.3 Review and Incorporation of Existing Plans

While developing the City's Hazard Mitigation Plan, the Project Team reviewed existing plans (detailed below) and incorporated relevant information into the planning efforts.

> **§201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:
>
> (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

City of Lakewood Local Hazard Mitigation Plan (2018)

The 2018 Local Hazard Mitigation Plan was crucial in comparing the previous mitigation ideas and attitudes to the City's current needs and concerns. The project team referred to this plan constantly throughout the updating process. The Hazard Mitigation Plan provides insight into hazard ranking, hazard history, previously proposed mitigation projects, etc.

City of Lakewood Housing Element (2024).

The Housing Element of the City's General Plan, which outlines the city's housing goals from 2021 through 2029, provided critical data on demographics, housing supply, and areas identified for future development. This information helped the LHMP assess potential vulnerabilities and prioritize mitigation strategies. Mitigation projects defined in the LHMP will be required to align with the objectives outlined in the Safety Element of the General Plan. Proposed mitigation actions are found in Chapter 4 of this document.

City of Lakewood Urban Water Management Plan (2020)

The City of Lakewood 2020 Urban Water Management Plan is updated every five years to monitor water supply issues and mitigate drought situations. As part of Urban Water Management Plan updates, the City will review the drought hazard profile in the HMP and incorporate the drought mitigation actions identified in the plan.

California State Hazard Mitigation Plan (2023)

The State Hazard Mitigation Plan was reviewed to ensure consistency between the State and City Plan, with respect to identified hazards and vulnerability, goals and objectives, and mitigation actions. The State goals served as the basis for developing the goals at the City level. City goals and objectives are outlined in Chapter 4.

County of Los Angeles Hazard Mitigation Plan (2021)

Los Angeles County's All-Hazard Mitigation Plan was reviewed to ensure consistency between the County and City Plan. The County Plan, updated in 2021, outlines the County's approach to hazard mitigation, focusing on natural hazards, human-caused events, and technological emergencies.

County of Los Angeles Climate Action Plan (2045)

The County's Climate Action Plan provides guidance to promote effective and integrated action to prepare for climate change. The information from the assessment was used to develop those hazard profiles which may be the result of climate change.

California Adaptation Planning Guide (2020)

FEMA, CalOES, and the California Natural Resources Agency developed the California Adaptation Planning Guide to assist municipalities in recognizing local climate change and to provide guidance addressing potential vulnerabilities. The information was used to develop potential hazards and to provide background information that allowed the HMPC to make

educated decisions regarding mitigation actions designed to alleviate the effects of climate change.

FEMA's Flood Insurance Rate Map (FIRM)

The FIRM, or FEMA's official map of the community delineating Special Flood Hazard Areas (SFHAs), Base Flood Elevations (BFEs) and flood risk zones was reviewed to determine flood hazard areas with the City boundary. Portions of the map are included in the Flood Hazard Profile in Chapter 3 which was used to support the City's understanding of flood-related risks within the City.



CHAPTER 2
PLANNING AREA PROFILE

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2.1 Region Description

The City of Lakewood (City) is a suburban municipality characterized by a mix of residential neighborhoods, commercial centers, and light industrial areas. Located in the southeastern portion of Los Angeles County, Lakewood sits approximately 23 miles southeast of downtown Los Angeles. The City is bordered by Long Beach to the south and west, Bellflower to the north, Cerritos to the northeast, La Palma to the east, and Cypress to the southeast. The Long Beach Municipal Airport is located southwest, and Lakewood is within proximity to the ports of Long Beach and Los Angeles, making it part of a highly interconnected urban region. Lakewood has a total area of 9.5 square miles.

Lakewood's climate is consistent with Southern California's Mediterranean climate, which is defined by warm, dry summers and mild, wet winters. Summer temperatures typically reach the high 70s to low 80s in degrees Fahrenheit, while winter temperatures often range in the 50s. August is generally the warmest month, with average highs around 83°F, and December or January are the coolest months, with average lows in the mid-40s. Rainfall is limited, with the majority occurring between November and March. On average, Lakewood receives approximately 13 inches of rainfall per year, with February typically being the wettest month.

Lakewood's modern history began in the mid-20th century, emerging from agricultural roots to become a postwar suburban community. Originally, the area remained largely undeveloped until the post–World War II housing boom. In 1950, the Lakewood Park development, a project that built over 17,000 homes in less than three years, transformed the area into one of the first planned communities of its kind. Lakewood became an official city in 1954, initiating the "contract city" model by outsourcing many municipal services. This approach allowed Lakewood to maintain local control while benefiting from existing county services, and it became a model for other cities across California and the nation. Today, Lakewood maintains its identity as a family-oriented community while continuing to adjust to the challenges of urbanization, infrastructure, and resilience planning.

2.2 Development Trends

44 CFR 201.6(c)(2)(ii)(C): The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

The City is 9.5 square miles in area. The Housing Element of the City's General Plan provides a guide for land use and development within the City. Since the 2018 Hazard Mitigation Plan, there have been no major changes in development that have greatly affected the City's vulnerability to the identified hazards.

The following describes land use designations, as amended, for the City. These descriptions were excerpted from the City's 2022 Housing Element as an attempt to designate the proposed general distribution and intensity of uses of the land for housing, business, industry, open space, public facilities, and other categories of public and private uses.

Residential Land Uses

Single Family (R-1) or Planned Development Residential (PDSF)

The R-1 zone is designated for single-family residential development, allowing one dwelling unit per lot. The PDSF (Planned Development Single Family) zone permits single-family homes within a planned development context, offering flexibility in design and layout while maintaining residential character.



Single Family Residential Limited Agriculture (R-A)

The R-A zone accommodates single-family residences with provisions for limited agricultural uses, such as home gardening and small-scale animal husbandry, preserving a semi-rural lifestyle within the city.

Multiple Family (MFR) or Planned Development Residential (PD-MF)

The MFR zone allows multiple-family residential structures, including apartments and condominiums, to provide higher-density housing options. The PDMF (Planned Development Multiple Family) zone supports multifamily housing within a planned development, promoting cohesive design and community amenities.

Mobile Home Park (MHP)

The MHP zone is designated for mobile home park developments, offering an alternative housing option that accommodates manufactured homes in a community setting.

Commercial Land Uses

Neighborhood Commercial (C-1)

The C-1 zone supports small-scale retail and service establishments that cater to the daily needs of nearby residential neighborhoods, such as convenience stores and personal service shops.

Intermediate Commercial (C-3)

The C-3 zone permits a broader range of commercial activities, including larger retail stores, offices, and service providers, serving both local and citywide markets.

General Commercial (C-4)

The C-4 zone encompasses extensive commercial uses, such as shopping centers, automotive services, and entertainment venues, intended to serve the wider community and accommodate higher traffic volumes.

Industrial Zones

Light Manufacturing (M-1)

The M-1 zone is intended for light industrial use, including manufacturing, assembly, and processing activities that are conducted within enclosed buildings and have minimal environmental impacts.

Heavy Manufacturing (M-2)

The M-2 zone accommodates heavier industrial operations that may involve significant noise, emissions, or outdoor storage, such as large-scale manufacturing and processing facilities.

Other Zones

Agriculture (A)

The A zone is designated for agricultural uses, including crop cultivation, management of animals, and related activities, while maintaining specific standards for lot size, location, and public health to preserve compatibility with surrounding areas.

Open Space Land (O-S)

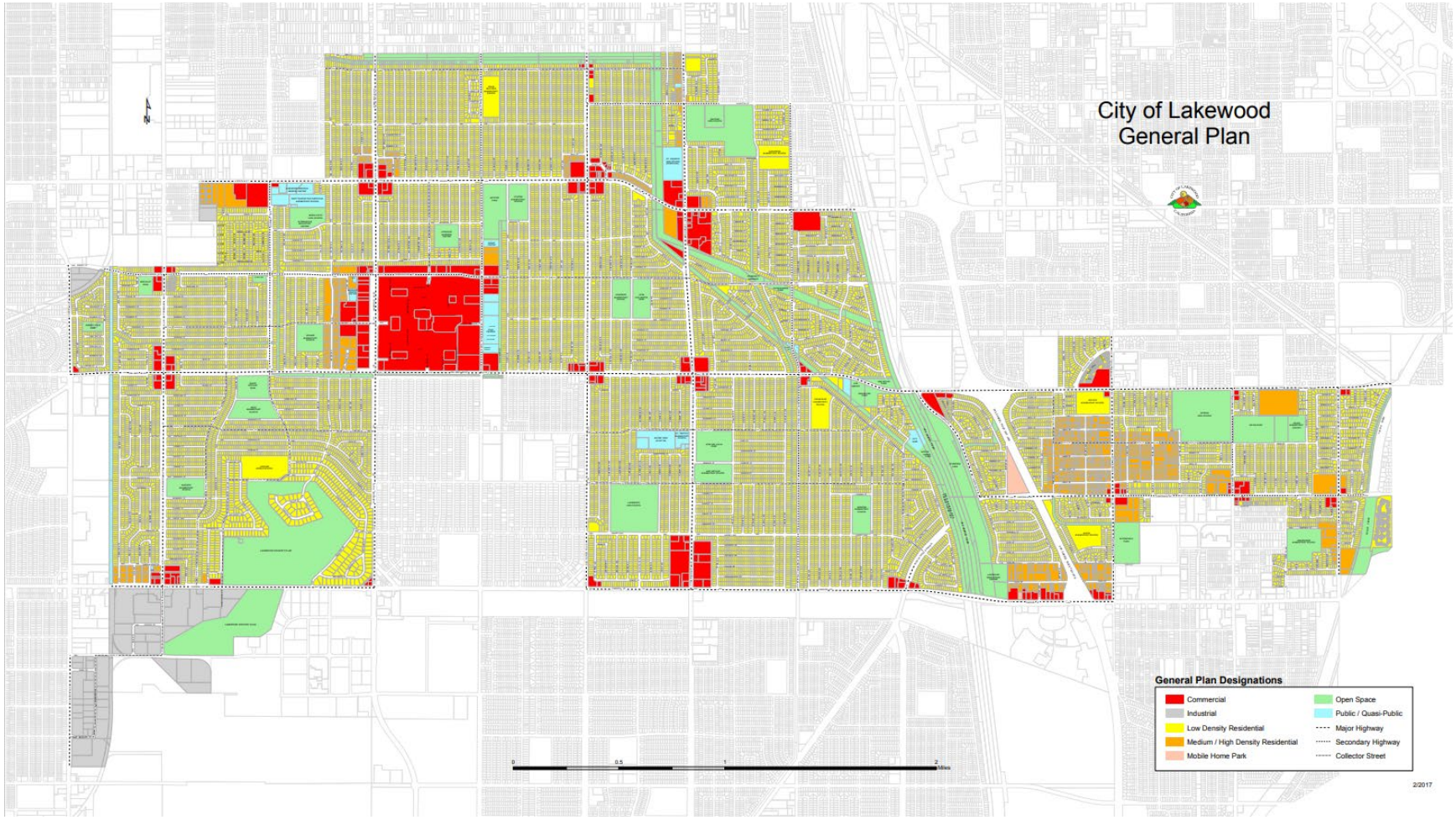
The O-S zone is intended to protect and maintain open space areas for public use, recreation, and conservation purposes, such as parks, trails, and natural preserves.

Figure 2.1: City of Lakewood Regional Area Map



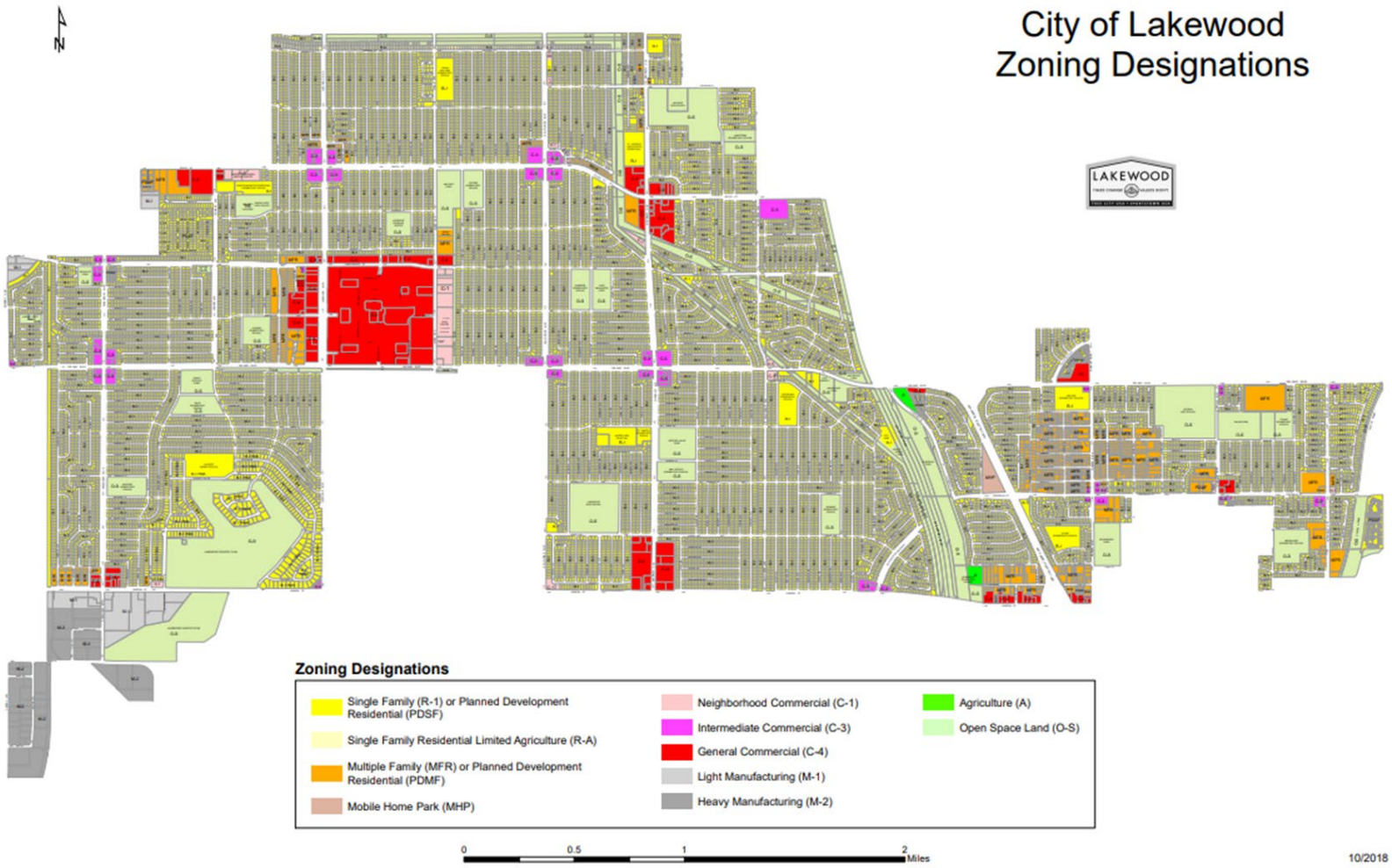
Source: City of Lakewood Regional Map

Figure 2.2: City of Lakewood General Plan Map



Source: City of Lakewood General Plan Map

Figure 2.3: City of Lakewood Zoning Designations Map



Source: City of Lakewood Zoning Designations Map

2.3 Population

Since its incorporation in 1954, the City has grown from a small town to a city with more than 78,000 residents according to the U.S. Census Bureau (2022). However, future population growth is expected to slow as the city is largely built out, with few remaining opportunities for significant development. The population of Lakewood is projected to increase by 8.15% between 2023 and 2045, with an average growth rate of 0.41% per year. The table below, based on the Southern California Association of Governments Demographic and Growth Forecast, shows estimated population growth through 2045.

Table 2.1: Estimated Population Growth

Year	***2016***	***2023***	***2045***
Population	79,300	78,135	84,500

Source: 2020 Southern California Association of Governments Demographics and Growth Forecast

Census data indicates the population of Lakewood increased dramatically from 1960 to 1970, with a slight decline in the years following. Since 2000, population growth has been minimal, averaging .1% annually from 2000 to 2010. This slow growth can be attributed to limited land availability for new development and an aging population. Lakewood's population trends closely mirror those of other fully built-out cities in Los Angeles County where vacant residential land is scarce and growth relies more on redevelopment than expansion. As a highly urbanized city with minimal vacant residential land, future growth will likely rely on targeted redevelopment, densification, and housing policy updates.

As highlighted in the City's Housing Element, over the next eight years, the local population is expected to grow slightly, primarily due to an increase in the number of individuals per household as younger families move into the City. Additional residential growth may result from the redevelopment of single-family homes in the M-F-R zone into multifamily units, the construction of accessory dwelling units (ADUs), and the conversion of underutilized commercial or industrial sites into residential or mixed-use developments.

2.4 Demographics



When considering the impacts of hazard scenarios on the community, the City is cognizant that some portions of the community will be impacted to a greater extent than others. A better understanding of how disasters impact the community, even disproportionately, can help guide resiliency efforts to better serve the entire community. Although other factors may be present, this section will focus on how low economic status, age, physical or cognitive disabilities, and limited English proficiency might make certain groups more vulnerable and can exacerbate the impacts of a hazard scenario.

Federal Emergency Management Agency (FEMA) Guidance requires agencies engaging in hazard mitigation planning to consider vulnerable populations as part of the planning process. The Center for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) defines social vulnerability as the "demographic and socioeconomic factors (such as poverty, lack of access to transportation, and crowded housing) that adversely affect communities-level stressors." To address this planning requirement the City considered vulnerable groups as part of the plan update through identifying areas with the City more prone to hazard stresses due to multiple factors. The City utilized guidance from the CDC/ATSDR to identify elements contributing to vulnerability. Those elements are listed below.

Socioeconomic Status	Household Characteristics	Housing Type & Transportation
•Below Poverty •Unemployed •Housing Cost Burden •No High School Diploma •No Health Insurance	•Aged 65 & Older •Aged 17 & Younger •Civilian with a Disability •Single-Parent Household •Limited English Language Proficiency	•Multi-Unit Structures •Moblie Homes •Crowding •No Vehicle •Group Quartes

To further refine the vulnerable population within the City, the Steering Committee considered the community and established the following individual vulnerability factors that drove community vulnerability discussions throughout the plan development process.

- Age

- Socioeconomic Status
- Mobility and Transportation
- Language/Communication Barriers
- Housing

The vulnerability factors that impact the community within the City are included in Table 2.2 below.

Table 2.2: Demographic Estimates

ESTIMATE CATEGORY	CENSUS ESTIMATES
Population (2022) *	78,135
Persons under 5 years, percent	5.9%
Persons under 18 years, percent	21.0%
Persons 65 years and over, percent	14.5 %
Persons with a disability under age 65, percent (2018-2022)	6.1%
Persons with independent living difficulty, percent	4.6%
Households (2019-2023)	26,118
Persons per household (2018-2022)	3.08
Limited English Speaking (LEP) Households, percent	5%
Households with a computer, percent (2018-2022)	96.7%
Households with a broadband internet subscription, percent (2018-2022)	93.6%
High School graduate or higher, percent of persons aged 25 years+ (2019-2023)	90.4%
Bachelor's degree or higher percent of persons aged 25 years+ (2019-2023)	32.6%

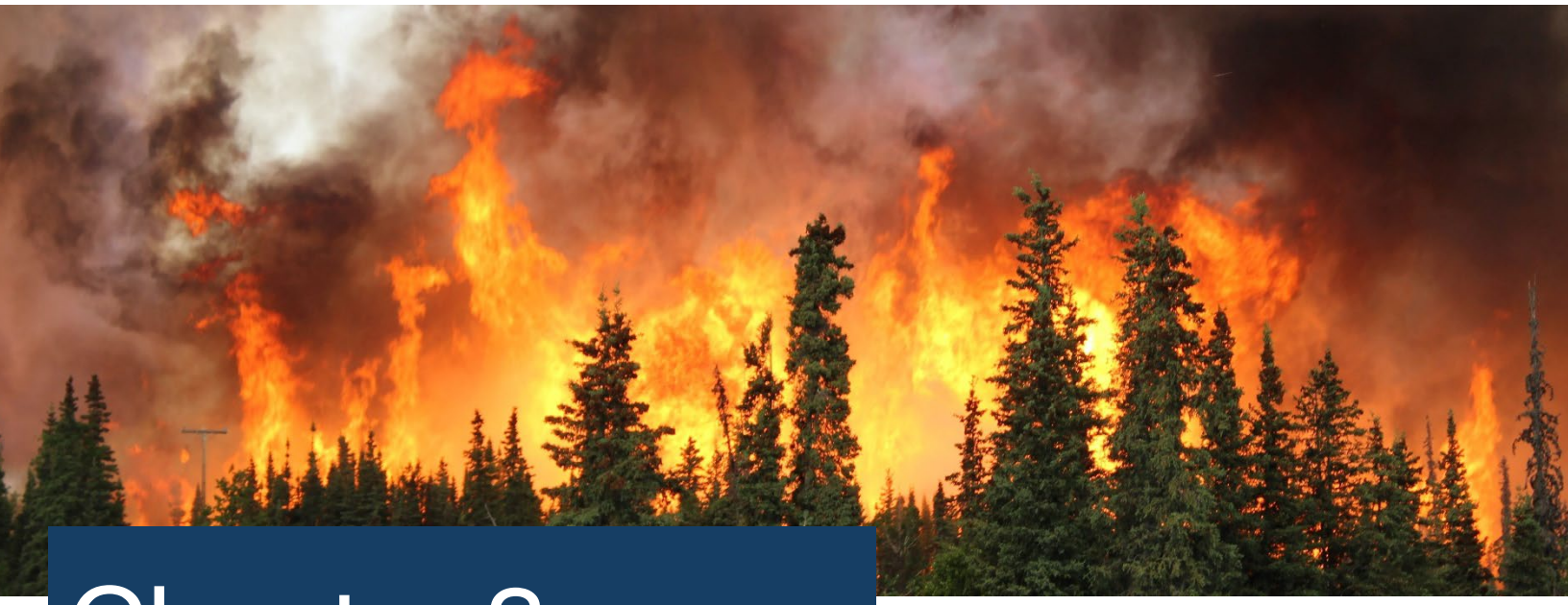
Median Household income (in 2022 dollars, 2018-2022)	$116,794
Per capita income in past 12 months (in 2022 dollars, 2018-2022)	$44,444
Persons in poverty, percent	5.9%

Source: U.S. Census Bureau , Los Angeles County Public Health City and Community Health Profiles

Although many inferences could be made based on the table above, it is clear 5.9% of the community is recorded being at or below poverty level. Additionally, 14.5% of the community is over the age of 65 while 5.9% are under the age of 5. Based on the data provided for the City, 6.1% of the population under the age of 65 within the City's jurisdiction are classified as being disabled. Additionally, of the population that was identified as being between the ages of 18 and 64, 4.6% of the individuals were classified as having a disability which includes independent living difficulty. Of the total households within the City's jurisdiction, it was identified that 5% of households include individuals that can be classified as LEP. While each of these groups represents a small portion of the City, it can be assumed this percentage of the public will be impacted by disasters to a higher degree than the rest of the community. As the City moves forward, considerations for this small sector of the population should be made to provide effective resilience measures.



The Hazard Mitigation Planning Committee (HMPC) is cognizant of the complicated, intersection nature of social vulnerabilities. As such, the HMPC discussed that more research was needed to more fully understand the levels of vulnerabilties throughout the City. The effort to better serve the community is ongoing and the City intends to expand its understanding of vulnerable populations and expand its capabilties to provide equitable services when considering future planning efforts.



Chapter 3
Risk Assessment

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Appendix J – Power Loss

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Appendix L – Hazardous Materials Release

Appendix M – Flood

3.1 Risk Assessment

The Risk Assessment consists of four steps: Hazard Identification, Hazard Profiling, Asset Inventory, and Loss Estimates. This chapter includes the Hazard Identification and Hazard Profiling steps to evaluate the hazards of primary concern to local decision-makers in order to provide a basis for loss estimates. Additionally, the Risk Assessment provides a foundation for the evaluation of mitigation actions which can help reduce the impacts of potential hazard events.



Step 1 Identify Hazards

This step identified the natural and man-made hazards which might affect the City of Lakewood (City) and then narrowed the list to those hazards which are most likely to occur. These hazards included natural, technical, and human-caused events, with an emphasis on the effect of disaster events on critical facilities (e.g., government buildings as well as public services including police and fire) and vulnerable populations.The Hazard Mitigation Planning Committee (HMPC) participated in a hazard identification exercise to identify and rank the potential hazards within the City.

Step 2 Profile Hazard Events

Hazard profiles consist of either a map indicating the area impacted by each hazard or key information regarding the characteristics of hazard events within the planning area. To develop detailed hazard profiles, relevant open-source natural hazard studies and mapping projects were reviewed and documented within this report. This planning step determined the magnitude, frequency, and location characteristics or relevant natural hazards (predicted ground acceleration values, fault locations, flood plains, etc.) that were utilized as the design-basis for the loss estimates.These profiles are in the appendices attached to this chapter.

Step 3 Inventory Assets

The purpose of this step was to determine the quantity of buildings, people (specifically vulnerable populations), and City assets which lie in the different hazard areas and what proportion of the City this represents. The asset inventory was completed utilizing a June 2024 property valuation insurance report which included asset locations and specifications for the following assets:

- City Government Facilities
- Water System Components: well sites & pump stations
- Recreation Buildings

The development of the comprehensive inventory facilitated the development of loss estimates for all hazard scenarios.

Step 4 Loss Estimates

The loss estimate step relied on detailed information regarding the hazard probability and maps that were completed as part of the hazard profiles. This information was utilized to apply the hazard probabilities and recurrence intervals to the assets and vulnerable populations within the City. This step was critical in determining which assets and popuation groups were subject to the greatest potential impacts and which hazard event was likely to produce the greatest potential losses or injuries.The conclusion of this step precipitated a comprehensive loss estimate which captured the projected impacts to city assets and population groups throughout the City. This undersdtanding of the vulnerabiltiy for the community and City infrastructrure was used to develop mitigation actions which seek to promote resiliency for the affected community/assets.

3.2 Hazard Identification

The hazard identification and ranking was obtained primarily from the Hazard Identification Exercise. Each hazard profile includes a summary of the Hazard Identification Exercise identified risk factors and overall rank for each hazard, in addition to the detailed hazard description, historical occurrences, and projected future probability, magnitude, and frequency.

The hazard identification exercise was conducted as a participatory HMPC workshop to identify the potential hazards within the City. The hazard identification exercise was facilitated utilizing an interactive spreadsheet program that asks specific questions on potential hazards and then rated them accordingly. These questions guide the team in the correct facilitation and application of the program. Table 3.1 summarizes the Hazard Identification Exercise risk factors, lists the descriptions of each factor, provides the specific descriptor choices for each risk factor, and summarizes the risk ranking associated with each hazard.

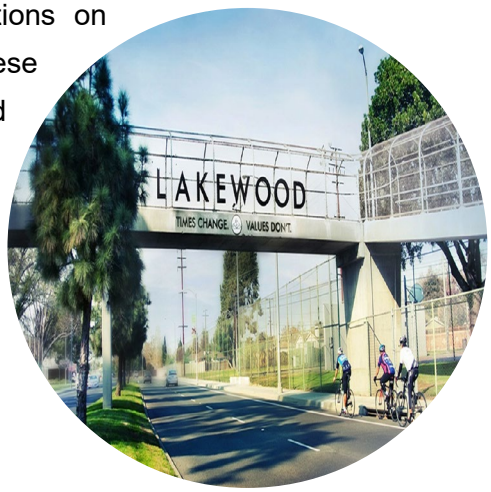


Table 3.1 Risk Factors for Hazard Identification

RISK FACTOR	DESCRIPTION	DESCRIPTORS	VALUE
PROBABILITY/ FREQUENCY	Prediction of how often a hazard will occur in the future.	Rare event - occurs less than once every 50 years	1
		Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
		Regular event - occurs between once a year and once every 7 years	3
		Frequent event - occurs more than once a year	4
CONSEQUENCE/SEVERITY	Physical Damage - structures and lifelines Economic Impact – loss of function for power, water, sanitation, roads, etc., as applicable	No damage	1
		Minor/slight damage to buildings and structures, no loss of lifelines	2
		Moderate building damage, minor loss of lifelines (less than 12 hours)	3
		Moderate building damage, lifeline loss (less than 24 hours)	4
		Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
VULNERABILITY	Impact Area - area impacted by a hazard event, Secondary Impacts - Capability of triggering additional hazards Onset - Period of time between initial recognition of an approaching hazard and when the hazard begins to impact the community	No physical damage, no secondary impacts	1
		Localized damage area	2
		Localized damage area, minor secondary impacts, delayed hazard onset	3
		Moderate damage area, moderate secondary impacts, moderate warning time	4
		Widespread damage area, significant secondary impacts, no warning time	5

Each profile also includes a ranking of the hazard (ranging from low hazard to high hazard). Table 3.2 illustrates the matrix for how each hazard was ranked according to all of the previously mentioned factors. Table 3.3 provides the value determinations for each ranking. The HMPC determined this initial profile ranking based on the hazard identification, profile research, group discussion, and evaluation of all of the data.

Table 3.2 Risk Rank Matrix

PROBABILITY/ FREQUENCY DESCRIPTION	RISK RANKING MATRIX						
Rare Event: Occurs less than once every 50 years	Probability/Frequency Value	1	Consequence/Severity 1	2	3	4	5
	Vulnerability	1	1	2	3	4	5
		2	2	4	6	8	10
		3	3	6	9	12	15
		4	4	8	12	16	20
		5	5	10	15	20	25
Infrequent Event: Occurs between once every 8 years and once every 50 years (inclusive)	Probability/Frequency Value	2	Consequence/Severity 1	2	3	4	5
	Vulnerability	1	2	4	6	8	10
		2	4	8	12	16	20
		3	6	12	18	24	30
		4	8	16	24	32	40
		5	10	20	30	40	50
Regular Event: Occurs between once a year and once every 7 years	Probability/Frequency Value	3	**Consequence/Severity** 1	2	3	4	5
	Vulnerability	1	3	6	9	12	15
		2	6	12	18	24	30
		3	9	18	27	36	45
		4	12	24	36	48	60
		5	15	30	45	60	75

Table 3.3 Risk Rank Categorization

High Hazard	**50-100**
Moderately High Hazard	**25-49**
Moderate Hazard	**15-24**
Moderately Low Hazard	**5-14**
Low Hazard	**1-4**

Table 3.4 provides the hazard ranking summary for the City.

Table 3.4 Hazard Ranking Summary

HAZARD RANK	SCORE
EARTHQUAKE	50
AIR QUALITY	40
DISEASE OUTBREAK	30
URBAN FIRE	30
WINDSTORM	27
EXTREME HEAT	27
DAM FAILURE	25
ADVERSARIAL EVENTS	25
TRANSPORTATION INCIDENT	24
POWER LOSS	16
DROUGHT	16
HAZARDOUS MATERIALS RELEASE	15
FLOOD	8

Note: The Hazard Mitigation Planning Committee did not identify any Low ranked hazards.

Trends in Perceived Vulnerability

As illustrated above, the HMPC reviewed its perceived vulnerability to determine the potential impact of each hazard on the City. The Steering Committee began with the hazards identified in the 2018 Hazard Mitigation Plan and used the list as a springboard in determining current perceived vulnerability. The current update retains Earthquake, Flood, Windstorm, and Drought as identified hazards. Additionally, the team added new hazards, including: Air Quality, Disease Outbreak, Urban Fire, Extreme Temperatures, Dam Failure, Adversarial Events, Power Loss, Hazardous Materials Release, and Transportation Incident. This was done in an effort to focus HMPC efforts on target hazards the City would like to mitigation during the next 5-year planning period. Also, the HMPC discussed that, should a shift in percieved hazard vulnerability occur within the next 5-year planning period, the HMPC could reconvene and ammend this plan to inlcude the missing hazard.

During the Plan Update, The HMPC considered the hazards which impact the region. For this effort, the HMPC consulted FEMA's National Risk Index wich indicated, for Los Angeles County, the City should consider Wildfire, Riverine Flooding, Landslide, Heat Wave, and Earthquake. Apart from Earthquake and Heat Wave, which was changed to reflect Extreme Heat for this Plan, the rest of the hazards were not inlcuded in the final list of identified hazards. This was because, generally, these hazards do not apply to the City. With very few open areas, wildfire was not considered credible. There are no rivers to allow for riverine flooding and the terrian is predominantly flat rendering landslide and inapplicable as well. In conclusion, the final list of identified hazards developed to focus only on those hazards the HMPC considered significant and relevant over the next 5-year planning period.

3.3 Considerations for Climate Change

With the release of the California Adaptation Planning Guide (APG) in March 2015 and revised in 2021, the City aimed to include the effects of climate change in the Hazard Mitigation Plan update. As identified in the "Understanding Regional Characteristics" portion of the APG, the City is located in the South Coastal Region of California. As a result, the City considered the following climate change impacts as recommended by the APG:

- Increased Temperatures
- Reduced Precipitation
- Sea Level Rise
- Reduce tourism
- Reduced Water Supply
- Wildfire Risk
- Coastal Erosion
- Public Health (heat and air quality)

The HMPC engaged in a discussion to determine which impacts posed a viable threat to the City and what areas might be impacted. While some impacts clearly applied to the City, some required additional research. Studies were conducted to look at recorded trends for sea level rise, wildfire, and regional temperature increases. The result of the study was the following list of perceived, feasible impacts which were assumed could impact all portions of the City over the next five to ten years:

- Increased Temperatures
- Reduced Precipitation
- Reduced Water Supply



After reviewing the results of each of these impacts, the HMPC considered how these impacts would be perceived by the City. For instance, increased temperatures and reduced water supply would likely lead to drought conditions, while increased temperatures and reduced precipitation could indicate a higher likelihood of fire conditions. Additionally, flooding and water shortages could be further impacted by climate change, as shifting weather patterns may alter rainfall frequency and intensity. These considerations are also discussed in detail within the hazard profile appendices. The City recognizes the potential influence of changing weather patterns, and the HMPC has noted that, should new information emerge demonstrating a significant impact from climate change, the HMPC will reconvene to amend the current plan accordingly.

3.4 Asset Inventory

A critical step in completing the Risk Assessment is developing a detailed asset inventory and documenting potential asset damages due to each identified hazard. The calculated loss estimates are based on values determined during the initial asset inventory. The City developed a comprehensive inventory of all assets, including their locations, to ensure accurate loss estimates. Specific values were assigned to critical City facilities, with the understanding that these values are estimates used for planning purposes.

The replacement values for facilities were derived from a variety of sources, including insurance surveys and data from previous plans. For public facilities and critical infrastructure, the replacement value represents the cost of rebuilding the facility to the same size and functionality, using current construction prices and materials. This value provides a baseline for understanding the potential financial impact if these assets were damaged or destroyed by a hazard. Next, the HMPC reviewed each asset and assigned a percent damage for each identified hazard, considering factors such as the type of hazard, location, and vulnerability of the asset. The percent damage indicates the anticipated degree of damage that each asset could experience in the event of a hazard. These percentages were determined based on historical data and skilled judgment from City staff who had information specific to each type of hazard. Finally, the Loss Estimates were calculated by applying the assigned percent damage to the total replacement value of each asset. This provides an estimate of the financial loss expected for each facility or service in the event of a hazard, helping the City to understand potential impacts and prioritize mitigation actions.

Future Developments

Currently, there are no planned developments for future buildings within the City; however, the hazard maps and loss estimates are dynamic, and the calculations will be updated to account for future developments as the potential arises. The Asset Inventory Summary Tables and map depicting the asset locations for the City of are presented on the following pages. The following tables present the asset categories, facility names, addresses, total replacement values, percent damage, and corresponding loss estimates for each identified hazard. These estimates were used to guide mitigation action strategy development.

Table 3.5: Asset Inventory Summary

TYPE	NAME	ADDRESS	TOTAL VALUE
City Property	LAKEWOOD CITY HALL	5200 CLARK AVENUE, LAKEWOOD, CA 90712	$8,081,422
City Property	CITY HALL POST OFFICE	5200 CLARK AVENUE, LAKEWOOD, CA 90712	$4,355,000
City Property	THE CENTRE	5000 CLARK AVENUE, LAKEWOOD CA 90712	$14,955,913
City Property	GEORGE NYE LIBRARY	6600 DEL AMO BOULEVARD, LAKEWOOD CA 90712	$2,362,000
City Property	MOBILE OFFICE BUILDINGS EQUESTRIAN CENTER	11369 EAST CARSON STREET, LAKEWOOD CA 90715	$500,692
City Property	WEINGART SENIOR CENTER	11369 EAST CARSON STREET, LAKEWOOD CA 90715	$4,343,400

City Property	BURNS CENTER	5510 CLARK AVENUE, LAKEWOOD, CA 90712	$6,694,500
City Property	YOUTH CENTER	4658 WOODRUFF AVENUE, LAKEWOOD CA 90713	$2,603,000
City Property	MAE BOYAR PARK COMMUNITY CENTER	6701 DEL AMO BOULEVARD, LAKEWOOD, CA 90712	$2,127,200
City Property	PALMS PARK COMMUNITY CENTER	12305 207TH STREET, LAKEWOOD CA 90715	$4,674,200
City Property	MAYFAIR PARK MAIN ACTIVITY BUILDING	5720 CLARK AVENUE, LAKEWOOD CA 90712	$5,712,800
City Property	BISCAILUZ PARK RECREATION BUILDING	2601 DOLLAR STREET, LAKEWOOD CA 90712	$1,054,090
City Property	BOLIVAR PARK RECREATION BUILDING	3300 DEL AMO BOULEVARD LAKEWOOD, CA 90712	$1,054,090
City Property	DEL VALLE PARK RECREATION BUILDING	5939 HENRILEE STREET	$1,054,090

		LAKEWOOD CA90713	
City Property	SAN MARTIN PARK RECREATION BUILDING	5231 OCANA AVENUE LAKEWOOD CA 90713	$1,054,090
City Property	BLOOMFIELD PARK RECREATION BUILDING	21420 PIONEER BOULEVARD, LAKEWOOD CA 90715	$2,762,300
City Property	MONTE VERDE PARK RECREATION BUILDING	6929 NIXON STREET, LAKEWOOD CA 90713	$1,353,000
City Property	ARBOR YARD (WATER RESOURCES MAINTENANCE/STORAGE)	5812 ARBOR ROAD, LAKEWOOD CA 90713	$26,828,036
City Property	NIXON YARD (PUBLIC WORKS MAINTENANCE FACILITY)	6929 NIXON STREET, LAKEWOOD CA 90713	$2,943,728
Water	WELL SITES	VARIOUS LOCATIONS	$8,042,692
Water	PUMP STATIONS	VARIOUS LOCATIONS	$1,771,605
Note: Values provided by June 2024 Assessment by Alliant Insurance Services			**$104,327,848**

Table 3.6: Loss of Function

LOSS OF FUNCTION / CONTINUITY PREMIUM (1 DAY)				
POPULATION:	**78,135**			
CATEGORY	**Value Per Person**	**Value Per Day**	**Continuity Premium**	**Total**
WATER SERVICE	$136	$10,626,360	-	$15,115,500
Note: Population taken from 2023 census data provided on the City's website. Note: Values Per Person were listed from FEMA's "BCA Reference Guide, June 2009"				**$15,115,500**

Table 3.7: Loss Estimates for Earthquake, Urban Fire, Windstorm, Flood, and Dam/Reservoir Failure

CITY OF LAKEWOOD VULNERABILITY ASSESSMENT CALCULATIONS				EARTHQUAKE		URBAN FIRE		WINDSTORM		FLOOD		DAM/RESERVOIR FAILURE	
TYPE	Name	Address	TOTAL	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
CITY PROPERTY	Lakewood City Hall	5050 Clark Avenue, Lakewood, CA 90712	$8,081,422	80%	$6,465,138	5%	$404,071	5%	$404,071	20%	$1,616,284	80%	$6,465,138
CITY PROPERTY	City Hall Post Office	5200 Clark Avenue, Lakewood, CA 90712	$4,355,000	100%	$4,355,000	5%	$217,750	5%	$217,750	20%	$871,000	80%	$3,484,000
CITY PROPERTY	The Centre	5000 Clark Avenue, Lakewood CA 90712	$14,955,913	85%	$12,712,526	5%	$747,796	5%	$747,796	30%	$4,486,774	90%	$13,460,322
CITY PROPERTY	George Nye Library	6600 Del Amo Boulevard, Lakewood CA 90712	$2,362,000	80%	$1,889,600	5%	$118,100	5%	$118,100	20%	$472,400	80%	$1,889,600
CITY PROPERTY	Mobile Office Building Equestrian Center (LEC)	11369 East Carson Street, Lakewood CA 90715	$250,346	50%	$125,173	5%	$12,517	10%	$25,035	10%	$25,035	80%	$200,277
CITY PROPERTY	Weingart Senior Center	5220 Olivia Street, Lakewood CA 90712	$4,343,400	80%	$3,474,720	20%	$868,680	5%	$217,170	30%	$1,303,020	80%	$3,474,720
CITY PROPERTY	Burns Center	5510 Clark Avenue, Lakewood, CA 90712	$6,694,500	80%	$5,355,600	5%	$334,725	5%	$334,725	30%	$2,008,350	80%	$5,355,600
CITY PROPERTY	Youth Center	4658 Woodruff Avenue, Lakewood CA 90713	$2,603,000	60%	$1,561,800	5%	$130,150	5%	$130,150	25%	$650,750	80%	$2,082,400
CITY PROPERTY	Mae Boyar Park Community Center	6701 Del Amo Boulevard, Lakewood, CA 90712	$2,127,200	40%	$850,880	5%	$106,360	5%	$106,360	30%	$638,160	90%	$1,914,480
CITY PROPERTY	Palms Park Community Center	12305 207th Street, Lakewood CA 90715	$4,674,200	80%	$3,739,360	5%	$233,710	5%	$233,710	20%	$934,840	90%	$4,206,780

CITY PROPERTY	Mayfair Park Main Activity Building	5720 Clark Avenue, Lakewood CA 90712	$5,712,800	70%	$3,998,960	5%	$285,640	5%	$285,640	25%	$1,428,200	80%	$4,570,240
CITY PROPERTY	Biscailuz Park Recreation Building	2601 Dollar Street, Lakewood CA 90712	$1,054,090	30%	$316,227	5%	$52,705	5%	$52,705	20%	$210,818	80%	$843,272
CITY PROPERTY	Bolivar Park Recreation Building	3300 Del Amo Boulevard, Lakewood CA 90712	$1,054,090	30%	$316,227	5%	$52,705	5%	$52,705	20%	$210,818	80%	$843,272
CITY PROPERTY	Del Valle Park Recreation Building	5939 Henrilee Street, Lakewood CA 90713	$1,054,090	30%	$316,227	5%	$52,705	5%	$52,705	20%	$210,818	80%	$843,272
CITY PROPERTY	San Martin Park Recreation Building	5231 Ocana Avenue, Lakewood CA 90713	$1,054,090	30%	$316,227	5%	$52,705	5%	$52,705	20%	$210,818	80%	$843,272
CITY PROPERTY	Bloomfield Park Recreation Building	21420 Pioneer Boulevard, Lakewood CA 90715	$2,762,300	40%	$1,104,920	5%	$138,115	5%	$138,115	20%	$552,460	80%	$2,209,840
CITY PROPERTY	Monte Verde Park Recreation Building	6929 Nixon Street, Lakewood CA 90713	$1,353,000	30%	$405,900	15%	$202,950	5%	$67,650	30%	$405,900	90%	$1,217,700
CITY PROPERTY	Arbor Yard (Water Resources Maintenance/Storage)	5812 Arbor Road, Lakewood CA 90713	$26,828,036	80%	$21,462,429	5%	$1,341,402	10%	$2,682,804	20%	$5,365,607	80%	$21,462,429
CITY PROPERTY	Nixon Yard (Public Works Maintenance Facility)	6929 Nixon Street, Lakewood CA 90713	$2,943,728	90%	$2,649,355	15%	$441,559	5%	$147,186	30%	$883,118	90%	$2,649,355
WATER	Well Sites	Various Locations	$8,042,692	80%	$6,434,154	10%	$804,269	5%	$402,135	5%	$402,135	80%	$6,434,154
WATER	Pump Stations	Various Locations	$1,771,605	80%	$1,417,284	10%	$177,161	5%	$88,580	5%	$88,580	80%	$1,417,284
				Earthquake	**$79,392,879**	**Urban Fire**	**$6,788,292**	**Windstorm**	**$6,570,313**	**Flood**	**$23,000,920**	**Dam/Reservoir Failure**	**$86,067,683**

Table 3.8: Loss Estimates for Adversarial Events, Power Loss, Hazardous Materials Release, and Transportation Incident

CITY OF LAKEWOOD VULNERABILITY ASSESSMENT CALCULATIONS				ADVERSARIAL EVENTS		POWER LOSS		HAZARDOUS MATERIALS RELEASE		TRANSPORTATION INCIDENT	
TYPE	Name	Address	TOTAL	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
CITY PROPERTY	Lakewood City Hall	5050 Clark Avenue, Lakewood, CA 90712	$8,081,422	50%	$4,040,711	0%	$0	7%	$565,700	5%	$404,071
CITY PROPERTY	City Hall Post Office	5200 Clark Avenue, Lakewood, CA 90712	$4,355,000	50%	$2,177,500	0%	$0	7%	$304,850	5%	$217,750
CITY PROPERTY	The Centre	5000 Clark Avenue, Lakewood CA 90712	$14,955,913	50%	$7,477,957	0%	$0	7%	$1,046,914	5%	$747,796
CITY PROPERTY	George Nye Library	6600 Del Amo Boulevard, Lakewood CA 90712	$2,362,000	10%	$236,200	0%	$0	7%	$165,340	10%	$236,200
CITY PROPERTY	Mobile Office Building equestrian Center (LEC)	11369 East Carson Street, Lakewood CA 90715	$250,346	10%	$25,035	0%	$0	7%	$17,524	5%	$12,517
CITY PROPERTY	Weingart Senior Center	5220 Olivia Street, Lakewood CA 90712	$4,343,400	10%	$434,340	0%	$0	7%	$304,038	5%	$217,170
CITY PROPERTY	Burns Center	5510 Clark Avenue, Lakewood, CA 90712	$6,694,500	10%	$669,450	0%	$0	7%	$468,615	10%	$669,450
CITY PROPERTY	Youth Center	4658 Woodruff Avenue, Lakewood CA 90713	$2,603,000	10%	$260,300	0%	$0	7%	$182,210	10%	$260,300

CITY PROPERTY	Mae Boyar Park Community Center	6701 Del Amo Boulevard, Lakewood, CA 90712	$2,127,200	10%	$212,720	0%	$0	7%	$148,904	10%	$212,720
CITY PROPERTY	Palms Park Community Center	12305 207th Street, Lakewood CA 90715	$4,674,200	10%	$467,420	0%	$0	7%	$327,194	5%	$233,710
CITY PROPERTY	Mayfair Park Main Activity Building	5720 Clark Avenue, Lakewood CA 90712	$5,712,800	10%	$571,280	0%	$0	7%	$399,896	10%	$571,280
CITY PROPERTY	Biscailuz Park Recreation Building	2601 Dollar Street, Lakewood CA 90712	$1,054,090	10%	$105,409	0%	$0	10%	$105,409	10%	$105,409
CITY PROPERTY	Bolivar Park Recreation Building	3300 Del Amo Boulevard, Lakewood CA 90712	$1,054,090	10%	$105,409	0%	$0	10%	$105,409	10%	$105,409
CITY PROPERTY	Del Valle Park Recreation Building	5939 Henrilee Street, Lakewood CA 90713	$1,054,090	10%	$105,409	0%	$0	10%	$105,409	10%	$105,409
CITY PROPERTY	San Martin Park Recreation Building	5231 Ocana Avenue, Lakewood CA 90713	$1,054,090	10%	$105,409	0%	$0	10%	$105,409	10%	$105,409
CITY PROPERTY	Bloomfield Park Recreation Building	21420 Pioneer Boulevard, Lakewood CA 90715	$2,762,300	10%	$276,230	0%	$0	7%	$193,361	7%	$193,361
CITY PROPERTY	Monte Verde Park Recreation Building	6929 Nixon Street, Lakewood CA 90713	$1,353,000	10%	$135,300	0%	$0	7%	$94,710	5%	$67,650
CITY PROPERTY	Arbor Yard (Water Resources Maintenance/Storage)	5812 Arbor Road, Lakewood CA 90713	$26,828,036	35%	$9,389,813	0%	$0	10%	$2,682,804	5%	$1,341,402
CITY PROPERTY	Nixon Yard (Public Works Maintenance Facility)	6929 Nixon Street, Lakewood CA 90713	$2,943,728	35%	$1,030,305	0%	$0	7%	$206,061	10%	$294,373

WATER	Well Sites	Various Locations	$8,042,692	35%	$2,814,942	0%	$0	7%	$562,988	5%	$402,135
WATER	Pump Stations	Various Locations	$1,771,605	35%	$620,062	0%	$0	7%	$124,012	5%	$88,580
				Adversarial Events	**$31,386,372**	**Power Loss**	**$0**	**Hazardous Materials Release**	**$8,234,281**	**Transportation Incident**	**$6,604,618**

Table 3.9: Loss Estimates for Extreme Heat, Air Quality, Disease Outbreak, and Drought

CITY OF LAKEWOOD VULNERABILITY ASSESSMENT CALCULATIONS				EXTREME HEAT		AIR QUALITY		DISEASE OUTBREAK		DROUGHT	
TYPE	Name	Address	TOTAL	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
CITY PROPERTY	Lakewood City Hall	5050 Clark Avenue, Lakewood, CA 90712	$8,081,422	1%	$80,814	1%	$80,814	1%	$80,814	1%	$80,814
CITY PROPERTY	City Hall Post Office	5200 Clark Avenue, Lakewood, CA 90712	$4,355,000	1%	$43,550	1%	$43,550	1%	$43,550	1%	$43,550
CITY PROPERTY	The Centre	5000 Clark Avenue, Lakewood CA 90712	$14,955,913	1%	$149,559	1%	$149,559	1%	$149,559	1%	$149,559
CITY PROPERTY	George Nye Library	6600 Del Amo Boulevard, Lakewood CA 90712	$2,362,000	1%	$23,620	1%	$23,620	1%	$23,620	1%	$23,620
CITY PROPERTY	Mobile Office Building equestrian Center (LEC)	11369 East Carson Street, Lakewood CA 90715	$250,346	1%	$2,503	1%	$2,503	1%	$2,503	1%	$2,503
CITY PROPERTY	Weingart Senior Center	5220 Olivia Street, Lakewood CA 90712	$4,343,400	1%	$43,434	1%	$43,434	1%	$43,434	1%	$43,434
CITY PROPERTY	Burns Center	5510 Clark Avenue, Lakewood, CA 90712	$6,694,500	1%	$66,945	1%	$66,945	1%	$66,945	1%	$66,945
CITY PROPERTY	Youth Center	4658 Woodruff Avenue, Lakewood CA 90713	$2,603,000	1%	$26,030	1%	$26,030	1%	$26,030	1%	$26,030
CITY PROPERTY	Mae Boyar Park Community Center	6701 Del Amo Boulevard, Lakewood, CA 90712	$2,127,200	1%	$21,272	1%	$21,272	1%	$21,272	1%	$21,272
CITY PROPERTY	Palms Park Community Center	12305 207th Street, Lakewood CA 90715	$4,674,200	1%	$46,742	1%	$46,742	1%	$46,742	1%	$46,742
CITY PROPERTY	Mayfair Park Main Activity Building	5720 Clark Avenue, Lakewood CA 90712	$5,712,800	1%	$57,128	1%	$57,128	1%	$57,128	1%	$57,128
CITY PROPERTY	Biscailuz Park Recreation Building	2601 Dollar Street, Lakewood CA 90712	$1,054,090	1%	$10,541	1%	$10,541	1%	$10,541	1%	$10,541
CITY PROPERTY	Bolivar Park Recreation Building	3300 Del Amo Boulevard, Lakewood CA 90712	$1,054,090	1%	$10,541	1%	$10,541	1%	10,541	1%	10,541
CITY PROPERTY	Del Valle Park Recreation Building	5939 Henrilee Street, Lakewood CA 90713	$1,054,090	1%	$10,541	1%	$10,541	1%	10,541	1%	10,541

CITY PROPERTY	San Martin Park Recreation Building	5231 Ocana Avenue, Lakewood CA 90713	$1,054,090	1%	$10,541	1%	$10,541	1%	10,541	1%	10,541
CITY PROPERTY	Bloomfield Park Recreation Building	21420 Pioneer Boulevard, Lakewood CA 90715	$2,762,300	1%	$27,623	1%	$27,623	1%	$27,623	1%	$27,623
CITY PROPERTY	Monte Verde Park Recreation Building	6929 Nixon Street, Lakewood CA 90713	$1,353,000	1%	$13,530	1%	$13,530	1%	$13,530	1%	$13,530
CITY PROPERTY	Arbor Yard (Water Resources Maintenance/Storage)	5812 Arbor Road, Lakewood CA 90713	$26,828,036	1%	$268,280	1%	$268,280	1%	$268,280	1%	$268,280
CITY PROPERTY	Nixon Yard (Public Works Maintenance Facility)	6929 Nixon Street, Lakewood CA 90713	$2,943,728	1%	$29,437	1%	$29,437	1%	$29,437	1%	$29,437
WATER	Well Sites	Various Locations	$8,042,692	1%	$80,427	1%	$80,427	1%	$80,427	1%	$80,427
WATER	Pump Stations	Various Locations	$1,771,605	1%	$17,716	1%	$17,716	1%	$17,716	1%	$17,716
				Extreme Heat	**$1,043,279**	**Air Quality**	**$1,043,279**	**Disease Outbreak**	**$$1,043,279**	**Drought**	**$$1,043,279**

Table 3.10: Loss Estimates Summary

HAZARD	NAME
DAM/RESERVOIR FAILURE	$86,067,683
EARTHQUAKE	$79,392,879
ADVERSARIAL EVENTS	$31,386,372
FLOOD	$23,000,920
HAZARDOUS MATERIALS RELEASE	$8,234,281
URBAN FIRE	$6,788,292
TRANSPORTATION INCIDENT	$6,604,618
WINDSTORM	$6,570,313
EXTREME HEAT	$1,043,279
AIR QUALITY	$1,043,279
DROUGHT	$1,043,279
DISEASE OUTBREAK	$1,043,279
POWER LOSS	$0

Note: Values are rounded to the nearest thousand

Appendix A
Earthquake

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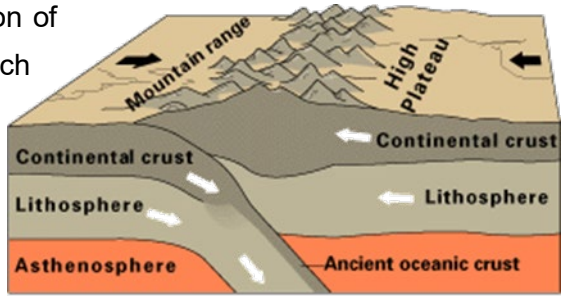
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A.1 Earthquake Identification and Background

Plate tectonics is a starting point for understanding the forces within the Earth that cause earthquakes. Plates are thick slabs of rock that make up the outermost 100 kilometers of the Earth. The term "tectonics" describes the deformation of the Earth's crust, the forces producing such deformation, and the geologic and structural features that result. The constant motion of the plates causes stress in the brittle upper crust of the earth. These tectonic stresses build as the rocks are gradually deformed. The rock deformation, or strain, is stored in the rocks as elastic strain energy. When the strength of the rock is exceeded, rupture occurs along a fault. The rocks on opposite sides of the fault slide past each other as they spring back into a relaxed position. The strain energy is released partly as heat and partly as elastic waves called seismic waves. The passage of these seismic waves produces the ground shaking in earthquakes.



Continental-continental convergence

Faults are more likely to produce future earthquakes if they have rapid rates of movement, have had recent earthquakes along them, experience greater total displacements, and are aligned so that movement can relieve the accumulating tectonic stresses. Geologists classify faults by their relative hazards. “Active” faults, which represent the highest hazard, are those that have ruptured to the ground surface during the Holocene period (about the last 11,000 years). In contrast, “potentially active” faults are those that displaced layers of rock from the Quaternary period (the last 1,800,000 years). Determining if a fault is “active” or “potentially active” depends on geologic evidence, which may not be available for every fault.

Ground Failure

Fissuring, settlement, and permanent horizontal and vertical shifting of the ground often accompanies large earthquakes. Although not as pervasive or as costly as the shaking itself, these ground failures can significantly increase damage and, under certain circumstances, can be the dominant cause of damage. The following is a list of different ground failure scenarios.

Fault Rupture

The sudden sliding of one part of the earth’s crust past another releases the vast store of elastic energy in the rocks as an earthquake. The resulting fracture is known as a fault, while the sliding movement of earth on either side of a fault is called fault rupture. Fault rupture begins below the

ground surface at the earthquake hypocenter, typically between three and ten miles below the ground surface in California. If an earthquake is large enough, the fault rupture will actually travel all the way to the ground surface, severely damaging structures built across its path.

Liquefaction

In addition to the primary fault rupture that occurs right along a fault during an earthquake, the ground many miles away can also fail during the intense shaking. One common type of failure occurs when soft, water-saturated soil settles, causing the water to eject sediment particles as it works its way to the ground surface. This phenomenon, known as liquefaction, turns the soil into a fluid, causing it to lose the ability to support buildings and other structures. Areas susceptible to liquefaction include places where sandy sediments have been deposited by rivers along their course or by wave action along beaches.

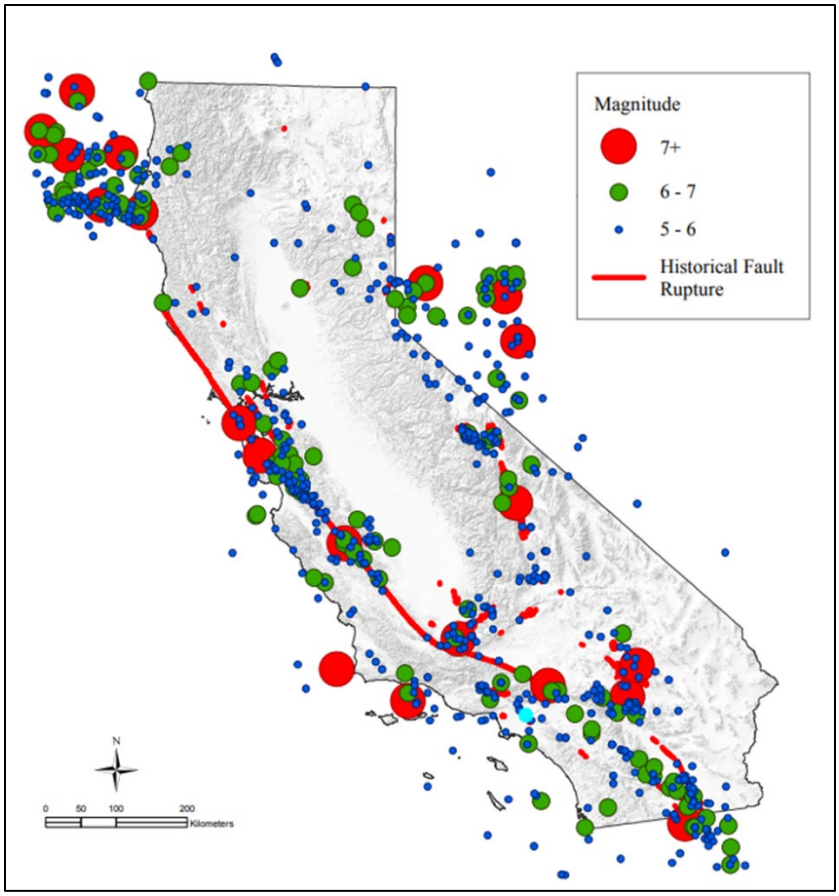
Landslides

Landslides are the result of the down-slope movement of unstable hillside materials under the influence of weathering and gravity over time. Strength of rock and soil, steepness of slope, and weight of the hillside material all play an important role in the stability of hillside areas. Weathering and absorption of water can weaken slopes, while the added weight of saturated materials or overlying construction can increase the chances of slope failure. Sudden failure can be triggered by heavy rainfall, excavation of weak slopes, and earthquake shaking, among other factors.

A.2 Earthquake Location

Even if the epicenter of a major earthquake is not located directly within the City, the aftershocks associated with that earthquake can cause significant damage. The hazards associated with aftershock earthquakes are the same as mainshock earthquakes and may cause significant damage and disruption. The primary difference between mainshock and aftershock earthquakes is aftershock earthquakes are categorized by the following two guidelines. First, it must occur within one rupture length of the mainshock rupture surface, or alternatively, within an "aftershock zone" based upon early aftershock activity and defined by seismologists. Second, it must occur within that designated area before the seismicity rate in that area returns to its "background", meaning pre-mainshock, level. Figure A.1, from the California Department of Conservation, details the locations and magnitudes for historic California earthquakes since 1769.

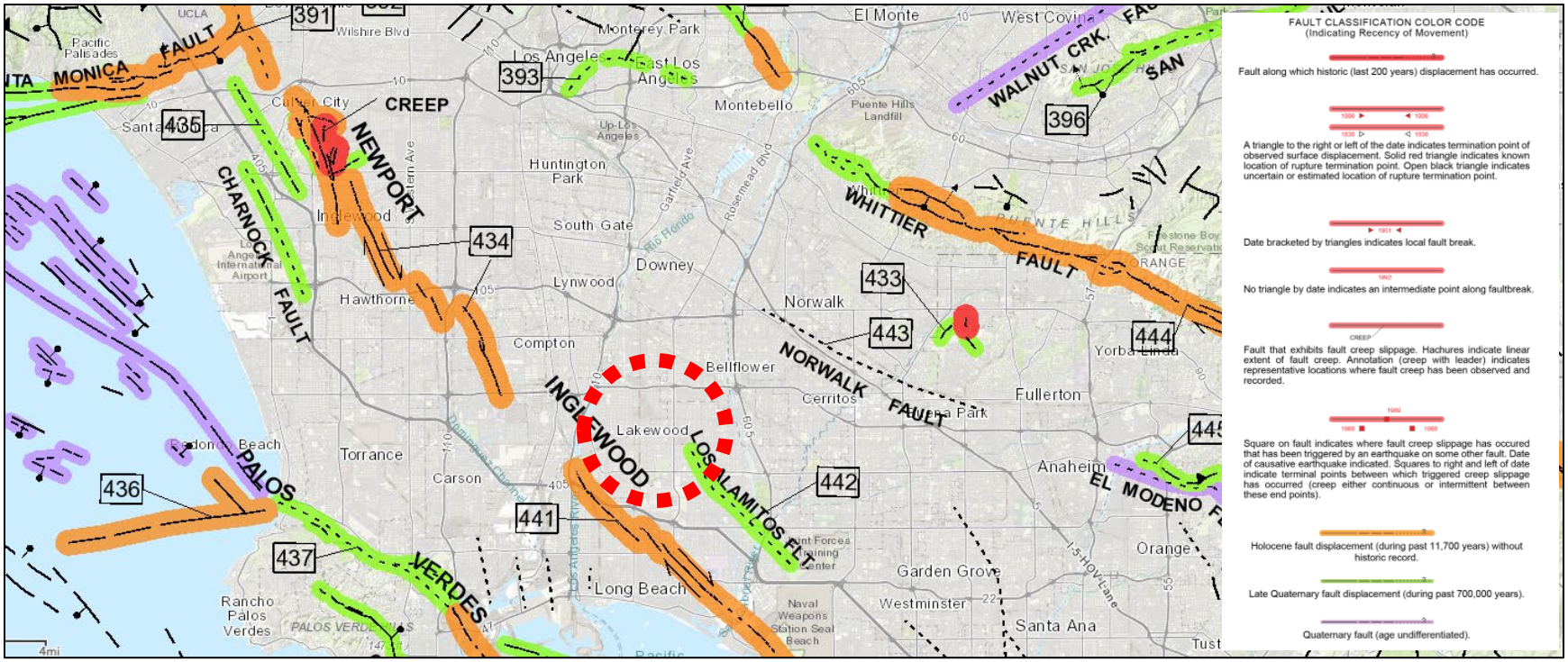
Figure A.1. California Historic Earthquake Map



Source: California Department of Conservation Map Sheet 48: Earthquake Shaking Potential for California

The Hazard Mitigation Planning Committee (HMPC) ranked earthquakes as the greatest threat to the City. According to the Department of Conservation California Geological Survey, the City is located in a seismic fault zone near the Newport-Inglewood Fault, Los Alamitos Fault, and Whittier Fault and is located in a high seismic risk zone.

Figure A.2 Southern California Earthquake Fault Map



Source: [California Geological Survey Fault Activity Map of California]

Fault Zones

There are many faults and fault zones throughout Southern California. After reviewing maps of the United States, California and specifically the southern California area, the research resulted in earthquakes that could impact the City. Faults that were reviewed include: San Andreas, Whittier, Newport-Inglewood, San Joaquin, Palos Verdes, and San Clemente Faults. These faults, all considered active, are capable of producing earthquakes in the 4.5 – 8+ range. This report focused on the six faults that could most seriously impact the area.

1. San Andreas Fault
2. Whittier Fault
3. Newport-Inglewood Fault
4. San Joaquin Hills Thrust Fault
5. Palos Verdes Fault
6. San Clemente Fault

A major earthquake along any of these five faults could result in substantial casualties and damage resulting from collapsed buildings, damaged roads and bridges, fires, flooding, and other threats to life and property. There may still be unmapped earthquake faults throughout southern California that could also affect the City. Tables A.1 through A.6 give fault specific information from the Southern California Earthquake Data Center for local faults that could affect the City.

The San Andreas Fault

Table A.1 San Andreas Fault Information

Type of fault:	Right-lateral strike-slip
Length:	1200 km
Nearby Communities:	Parkfield, Frazier Park, Palmdale, Wrightwood, San Bernardino, Banning, Indio
Last Major Rupture:	January 9, 1857 (Mojave segment); April 18, 1906 (Northern segment)
Slip rate:	20-35 mm/yr.
Interval Between Major Ruptures:	Average of about 140 years on the Mojave segment; recurrence interval varies greatly from under 20 years (at Parkfield only) to over 300 years

Probable Magnitudes:	6.8-8.0

This fault marks the boundary between the North American and Pacific tectonic plates and is capable of producing earthquakes in the magnitude 8+ range. It has been scientifically determined through a carbon dating process that a major earthquake on this fault has occurred approximately every 145 years plus or minus 20 years. The last major earthquake on the Mojave segment of the Fault occurred in 1857 (159 years ago as of 2016). The San Andreas Fault is considered one of the most active faults in the world today, and a major earthquake up to an 8.3 magnitude is expected to occur again within the next 20 years. The Fault traverses the southern California region and is located east of the City. The ground shaking of an 8.3 magnitude earthquake on the Southern San Andreas Fault would result in serious damage in Southern California, including the City.

The Whittier Fault

Table A.2 Whittier Fault Information

Type of fault:	Right-lateral strike-slip with some reverse slip
Length:	About 40 km
Nearby Communities:	Yorba Linda, Hacienda Heights, Whittier, Cerritos, Downey
Most Recent Surface Rupture:	Holocene
Slip rate:	2.5- 3.0 mm/yr
Interval Between Major Ruptures:	Unknown
Probable Magnitudes:	6.0-7.2

The Whittier Fault is a strike-slip fault located to the northeast of the City. It is part of the extensive network of faults that cross Southern California. The fault is relatively short but capable of producing moderate to large earthquakes. The most recent significant shaking occurred in 1987, with a magnitude 5.9 earthquake. Although the fault is not as active as the San Andreas Fault, it still poses a significant seismic risk to the surrounding areas, especially in the event of a larger rupture.

The Newport-Inglewood Fault

Table A.3 Newport-Inglewood Fault Information

Type of fault:	Right lateral; local reverse slip associated with fault steps
Length:	75 km
Nearby Communities:	Lakewood, Culver City, Inglewood, Gardena, Compton, Signal Hill, Long Beach, Seal Beach, Huntington Beach, Newport Beach, Costa Mesa
Last Major Rupture	March 10, 1993, MW 6.4
Slip rate:	0.6 mm/yr.
Interval Between Major Ruptures:	Unknown
Probable Magnitudes:	6.0-7.4

The Newport-Inglewood Fault is considered the second most active fault in California. It runs from the City of Inglewood through Huntington Beach and out into the Pacific Ocean near the Newport Beach area. This fault is capable of producing earthquakes in the range of 6.3 to 7.5 magnitude. The 6.5 magnitude, 1933 Long Beach earthquake occurred on the Newport-Inglewood fault causing 120 deaths and severe damage. Unreinforced masonry buildings collapsed leaving people trapped beneath the rubble.

When scientists refer to the San Andreas Fault, they often call it “The Big One.” In 1990, the Los Angeles Times newspaper did a series of articles on the Newport-Inglewood Fault and described it as “The Bigger One.” Both faults would cause considerable damage; however, a 7.5 magnitude Newport-Inglewood earthquake have a more severe impact on the City than an 8.3 on the San Andreas due to the fault’s proximity. The cost estimates of damage are much greater for the Newport-Inglewood worst-case scenario than the San Andreas worst-case scenario.

The San Joaquin Hills Fault

Table A.4 San Joaquin Fault Information

Type of fault:	Blind thrust
Length:	39 km

Nearby Communities:	Huntington Beach, Costa Mesa, Newport Beach, Laguna Beach, Laguna Niguel, Dana Point
Most recent surface rupture:	Unknown
Slip rate:	Unknown

According to a California Institute of Technology (Caltech) study, the San Joaquin Hills Fault is a blind thrust fault, which will not break the earth's surface but can cause severe damage. It is 24 miles in length from Dana Point to Huntington Beach. This thrust fault may interact with the projected Compton Thrust Fault to the west. Caltech reported that the maximum magnitude the fault could produce was up to a 7.3 earthquake, which is a large and powerful seismic event. Caltech utilized the research on the fault conducted by Lisa Grant at UCI to complete an earthquake-shaking model showing the intensity, velocity, and acceleration.

Palos Verdes Fault

Table A.5 Palos Verdes Fault Information

Type of fault:	Right reverse
Length:	Roughly 80 km
Nearby Communities:	San Pedro, Palos Verdes Estates, Torrance, Redondo Beach
Most recent surface rupture:	Holocene offshore; Late Quaternary onshore;
Slip rate:	Between 0.1 and 3.0 mm/yr.
Interval between major ruptures:	Unknown
Probable magnitudes:	6.0 – 7.0 (or greater); fault geometries may allow only partial rupture at any one time.

The Palos Verdes Hills Fault is capable of a 6.0-7.0 magnitude earthquake. It has two main branches and continues southward as the Palos Verdes-Coronado Bank Fault Zone. This fault is located off the coast of Huntington Beach. It starts north of Long Beach and extends south past

Newport Beach where it is projected to join the Coronado Bank Fault Zone. The issue of concern is the fault causing shaking and liquefaction within the City.

San Clemente Fault

Table A.6 San Clemente Fault Information

Type of fault:	Right lateral and vertical offsets
Length:	At least 210 km; essentially continuous with the San Isidoro Fault Zone, off the coast of Mexico
Nearby Communities:	San Diego (70 km offshore) forms scarp on east side of San Clemente Island
Most recent surface rupture:	Holocene
Slip rate:	Roughly 1.5 mm/yr.

As with the Palos Verdes Fault, the San Clemente Fault is located offshore and could cause ground shaking within the City.

A.3 Earthquake Extent

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales. One of the first was the Richter scale, developed in 1932 by Dr. Charles F. Richter of the California Institute of Technology. The most commonly used scale today is the Moment Magnitude (Mw) Scale. Moment magnitude is related to the total area of the fault that ruptured and the amount of offset (displacement) across the fault. It is a more uniform measure of the energy released during an earthquake.

The other commonly used measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. In general, it decreases with distance from the source of an earthquake, but it may be increased or decreased by a number of factors.

The Modified Mercalli Intensity Scale & Corresponding Richter Scale Magnitudes

Shaking intensity is often described using the Modified Mercalli Intensity Scale which rates an earthquake's effects based on human observation. While an earthquake has only one magnitude, it may have many intensity values which will generally decrease with distance from the epicenter. Table A.7 lists the Mercalli Scale's various intensity levels.

Table A.7 Modified Mercalli Intesity Scale

MERCALLI INTENSITY		DESCRIPTION	RICHTER SCALE MAGNITUDE
I	Instrumental	Detected only by a seismograph	
II	Feeble	Noticed by sensitive people	0.1 to 3.4
III	Slight	Like the vibrations due to a passing truck	3.5 to 4.2
IV	Moderate	Felt by people while walking, rocking of loose objects, including standing vehicles	4.3 to 4.8
V	Rather Strong	Felt generally; most sleepers are awakened and bells ring	4.3 to 4.8
VI	Strong	Trees sway and all suspended objects swing; damage by over-turning and falling of loose objects	4.9 to 5.4
VII	Very Strong	General alarm; walls crack; plaster falls	4.9 to 5.4
VIII	Destructive	Car drivers seriously disturbed; masonry fissured; chimneys fall; poorly constructed buildings damaged	5.5 to 6.1
IX	Ruinous	Some houses collapse where ground begins to crack, and pipes break	6.2 to 6.9
X	Disastrous	Ground cracks badly; many buildings destroyed, and railway lines bent; landslides on steep slopes	7.0 to 7.3
XI	Very disastrous	Few buildings remain standing; bridges destroyed; all services (railway, pipes, and cables) out of action; great landslides and floods	7.4 to 8.1

MERCALLI INTENSITY	DESCRIPTION	RICHTER SCALE MAGNITUDE
XI Catastrophic	Total Destruction; objects thrown into air; ground rises and falls in waves	8.1 +

As described in the Earthquake Probability, the City has roughly a .04% change of a 6.9M earthquake annually. According to Table A.6, this could resutl in severe shaking resulting in housing collapse, ground fissures, and possible damage to underground infrastructure.

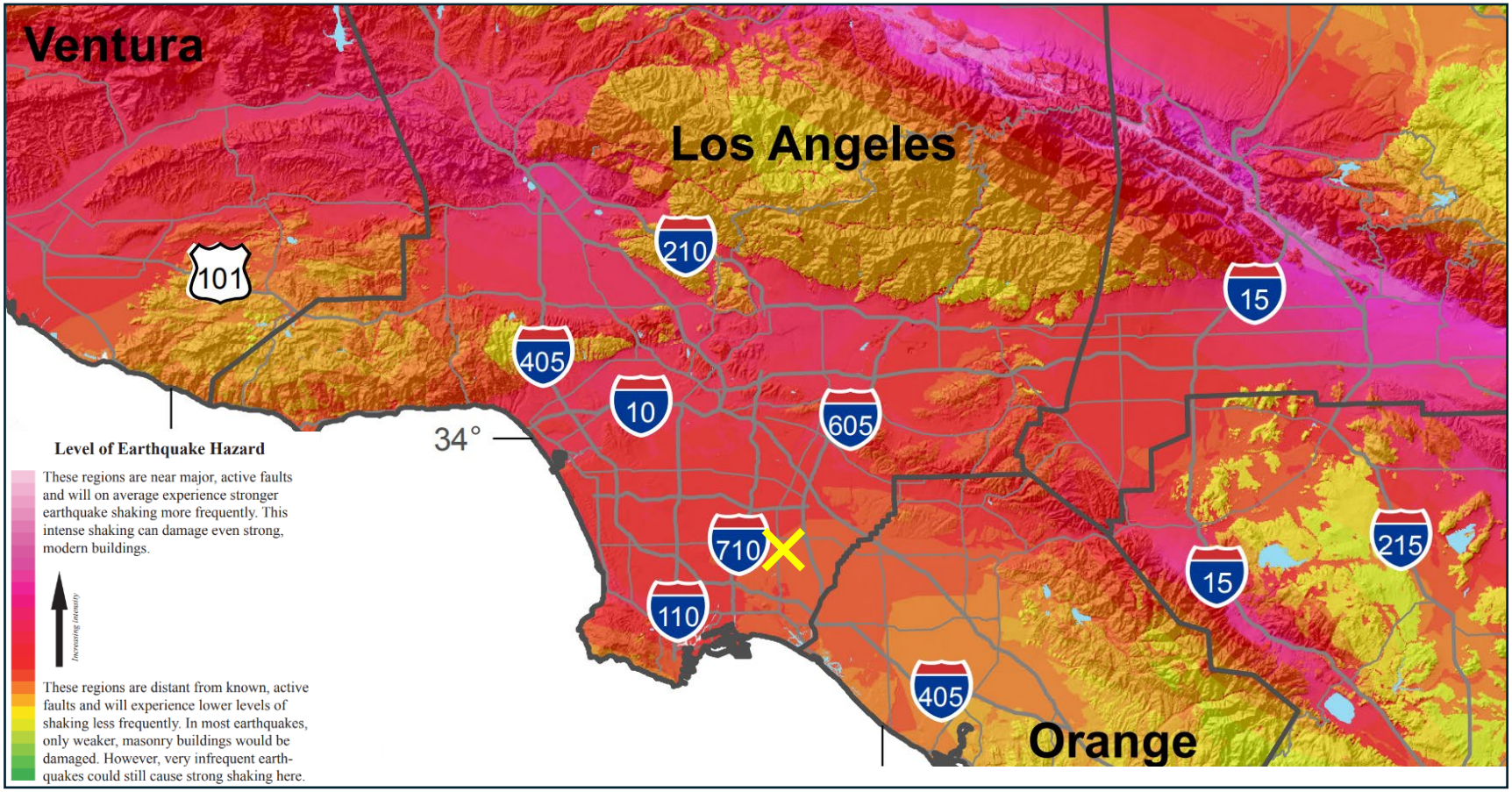
Amplification of Seismic Shaking

Although seismic waves radiate from their source like ripples on a pond, the radiation is not uniform due to the complex nature of an earthquake rupture, the different paths the waves follow through the Earth, and the different rock and soil layers near the Earth's surface. Large earthquakes begin to rupture at their hypocenter deep in the Earth and the fault ruptures outward from that point. Because the speed of an earthquake rupture on a fault is similar to the speed of seismic waves, waves closer to the epicenter can be compounded by waves from farther along the rupture, creating a pulse of very strong seismic waves that moves along the fault in the direction of the fault rupture. Seismic waves may also be modified as they travel through the Earth's crust.

As seismic waves approach the ground surface, they commonly enter areas of loose soils where the waves travel more slowly. As the waves slow down, their amplitude increases, resulting in larger waves with frequencies that are more likely to damage structures. Waves can also be trapped within soft sediments between the ground surface and deep, hard basement rocks, their destructive energy multiplying as they bounce back and forth, producing much greater shaking at the ground surface.

Figure A.3 illustrates the relative earthquake shaking potential across Southern California, highlighting regions with elevated seismic risk. The City, marked with a yellow "X," lies within a zone of high shaking potential due to its proximity to several active fault lines.

Figure A.3 Earthquake Shaking Potential for California



Source: California Geological Survey Map Sheet 48

A.4 Earthquake History

To indicate the potential for an earthquake event, Table A.8 lists significant recorded earthquakes in Southern California and the associated magnitudes (excerpted from the Southern California Earthquake Data Center at Caltech (2013):

Table A.8 Table of Select Historical Earthquakes

MAGNITUDE	YEAR	EARTHQUAKE NAME
MAGNITUDE 5.5 - 6.4	1796	LA Basin Earthquake
MAGNITUDE 6.5 TO 7.4	1800	San Diego Earthquake
MAGNITUDE 6.5 TO 7.4	1812	Wrightwood (or San Juan Capistrano) Earthquake
MAGNITUDE 6.5 TO 7.4	1812	Santa Barbara Earthquake
MAGNITUDE 6.5 TO 7.4	1852	Volcano Lake Earthquake
MAGNITUDE 5.5 - 6.4	1855	Los Angeles Region Earthquake
MAGNITUDE > 7.5	1857	Fort Tejon Earthquake
MAGNITUDE 5.5 - 6.4	1858	San Bernardino Earthquake
MAGNITUDE 5.5 - 6.4	1862	San Diego Earthquake
MAGNITUDE > 7.5	1872	Owens Valley Earthquake
MAGNITUDE 5.5 - 6.4	1881	Parkfield Earthquake
MAGNITUDE 5.5 - 6.4	1883	Santa Barbara Channel Earthquake
MAGNITUDE 6.5 TO 7.4	1890	San Jacinto or Elsinore Fault Region Earthquake
MAGNITUDE 6.5 TO 7.4	1892	San Jacinto or Elsinore Fault Region Earthquake
MAGNITUDE 6.5 TO 7.4	1892	Laguna Salada Earthquake
MAGNITUDE > 7.5	1892	Imperial Valley Earthquake

MAGNITUDE	YEAR	EARTHQUAKE NAME
MAGNITUDE 5.5 - 6.4	1899	Cajon Pass Earthquake
MAGNITUDE 6.5 TO 7.4	1899	San Jacinto Earthquake
MAGNITUDE 5.5 - 6.4	1901	Parkfield Earthquake
MAGNITUDE 5.5 - 6.4	1906	Imperial Valley Earthquake
MAGNITUDE 5.5 - 6.4	1908	Death Valley Region Earthquake
MAGNITUDE 5.5 - 6.4	1910	Elsinore Earthquake
MAGNITUDE 5.5 - 6.4	1915	Imperial Valley Earthquake
MAGNITUDE 5.5 - 6.4	1916	South of Death Valley Earthquake
MAGNITUDE 6.5 TO 7.4	1918	San Jacinto Earthquake
MAGNITUDE 5.5 - 6.4	1922	Parkfield Earthquake
MAGNITUDE 6.5 TO 7.4	1968	Borrego Mountain Earthquake
MAGNITUDE 4.5 - 5.4	1970	Lytle Creek Earthquake
MAGNITUDE 6.5 TO 7.4	1971	San Fernando (Sylmar) Earthquake
MAGNITUDE 4.5 - 5.4	1973	Point Mugu Earthquake
MAGNITUDE 4.5 - 5.4	1975	Galway Lake Earthquake
MAGNITUDE 4.5 - 5.4	1978	Santa Barbara Earthquake
MAGNITUDE 4.5 - 5.4	1979	Malibu Earthquake
MAGNITUDE 5.5 - 6.4	1979	Imperial Valley Earthquake
MAGNITUDE 5.5 - 6.4	1980	White Wash Earthquake
MAGNITUDE 4.5 - 5.4	1982	"Anza Gap" Earthquake

MAGNITUDE	YEAR	EARTHQUAKE NAME
MAGNITUDE 5.5 - 6.4	1986	North Palm Springs Earthquake
MAGNITUDE 4.5 - 5.4	1986	Oceanside Earthquake
MAGNITUDE 6.5 TO 7.4	1987	Elmore Ranch/Superstition Hills Earthquakes
MAGNITUDE 5.5 - 6.4	1987	Whittier Narrows Earthquake
MAGNITUDE 4.5 - 5.4	1988	Tejon Ranch Earthquake
MAGNITUDE 4.5 - 5.4	1988	Upland Earthquake
MAGNITUDE 4.5 - 5.4	1988	Pasadena Earthquake
MAGNITUDE 4.5 - 5.4	1989	Malibu Earthquake
MAGNITUDE 4.5 - 5.4	1989	Newport Beach Earthquake
MAGNITUDE 4.5 - 5.4	1989	Montebello Earthquake
MAGNITUDE 4.5 - 5.4	1990	Upland Earthquake
MAGNITUDE 5.5 - 6.4	1991	Sierra Madre Earthquake
MAGNITUDE 5.5 - 6.4	1992	Joshua Tree Earthquake
MAGNITUDE 6.5 TO 7.4	1992	Landers Earthquake
MAGNITUDE 5.5 - 6.4	1992	Big Bear Earthquake
MAGNITUDE 5.5 - 6.4	1992	Mojave (Garlock) Earthquake
MAGNITUDE 4.5 - 5.4	1993	Wheeler Ridge Earthquake
MAGNITUDE 6.5 TO 7.4	1994	Northridge Earthquake
MAGNITUDE 5.5 - 6.4	1995	Ridgecrest Earthquakes
MAGNITUDE 4.5 - 5.4	1996	Coso Earthquake

MAGNITUDE	YEAR	EARTHQUAKE NAME
MAGNITUDE 4.5 - 5.4	1997	Calico Earthquake
MAGNITUDE 4.5 - 5.4	1998	Coso Earthquake
MAGNITUDE 4.5 - 5.4	1998	Crafton Hills (Redlands) Earthquake
MAGNITUDE 4.5 - 5.4	1998	San Bernardino Earthquake
MAGNITUDE 4.5 - 5.4	1998	Whiskey Springs (Big Bear City) Earthquake
MAGNITUDE 6.5 TO 7.4	1999	Hector Mine Earthquake
UNDER MAGNITUDE 4.5	2001	West Hollywood Earthquake
MAGNITUDE 4.5 - 5.4	2001	Anza Earthquake
MAGNITUDE 5.5 - 6.4	2002	Laguna Salada Earthquake
MAGNITUDE 6.5 TO 7.4	2003	San Simeon Earthquake
MAGNITUDE 4.5 - 5.4	2005	Mettler Earthquake
MAGNITUDE 4.5 - 5.4	2008	Chino Hills Earthquake
MAGNITUDE 4.5 - 5.4	2009	Inglewood Earthquake
MAGNITUDE 5.5 - 6.4	2009	Baja California Earthquake
MAGNITUDE 6.5 TO 7.4	2010	Sierra El Mayor Earthquake
MAGNITUDE 4.5 - 5.4	2010	Ocotillo Earthquake
MAGNITUDE 4.5 - 5.4	2010	Borrego Springs Earthquake
MAGNITUDE 4.5 - 5.4	2011	Calexico Earthquake
MAGNITUDE 4.5 - 5.4	2012	Brawley Earthquake
MAGNITUDE 4.5 - 5.4	2012	Westmoreland Earthquake

MAGNITUDE	YEAR	EARTHQUAKE NAME
MAGNITUDE 4.5 - 5.4	2013	Anza Earthquake
MAGNITUDE 4.5 - 5.4	2013	Isla Vista Earthquake
MAGNITUDE 4.5 - 5.4	2014	Brea Earthquake
MAGNITUDE 4.5 - 5.4	2014	Running Springs Earthquake
MAGNITUDE 4.5 - 5.4	2015	Stovepipe Wells Earthquake
MAGNITUDE 4.5 - 5.4	2016	San Jacinto Earthquake
MAGNITUDE 4.5 - 5.4	2016	Borrego Springs Earthquake
MAGNITUDE 4.5 - 5.4	2018	Santa Cruz Earthquake
MAGNITUDE 5.5 - 6.4	2019	Ridgecrest Earthquake
MAGNITUDE 6.5 TO 7.4	2019	Ridgecrest Earthquake
MAGNITUDE 5.5 - 6.4	2020	Lone Pine Earthquake

Southern California Historic Earthquakes

One of the best indicators of earthquake potential is learning the earthquake history of the area. The following is a discussion on large earthquakes that affected the City, which were also included in Table E.7.

1857 Fort Tejon Earthquake

On January 9, 1857, one of the greatest recorded earthquakes in the U.S. occurred in Southern California. The Fort Tejon earthquake measured 7.9 on the Richter scale and left a surface rupture scare of over 350 kilometers (225 miles) along the San Andreas Fault. Strong shaking was said to have lasted for over a minute, and water from the Los Angeles River was reportedly thrown out of its bed. Damage was not nearly as serious as it would be today since Southern California was sparsely populated at the time. Were the Fort Tejon earthquake to occur today, the damage could easily run into billions of dollars, and the loss of life could be substantial. The present-day communities of Wrightwood and Palmdale lie upon or near the 1857 rupture area.

1933 Long Beach Earthquake



In 1933, the Long Beach 6.4 magnitude earthquake struck the Los Angeles Basin on March 10. The earthquake occurred on the Newport-Inglewood Fault, causing serious damage in Long Beach and other communities. The earthquake resulted in 120 deaths and over $50 million in property damage. Most of the damaged buildings were of unreinforced masonry construction. The following images of the damage were taken from the Southern California Earthquake Data Center website.

1971 Sylmar Earthwuake (San Fernando)



On February 9, 1971, the Los Angeles Basin shook for over one minute. There were 65 deaths and a financial cost of over $500 million. The earthquake resulted in a crack in the Van Norman Dam where an 80-square mile area had to be evacuated due to fear the dam would break. Numerous people were trapped in buildings and fires were started from natural gas line breaks. Two hospitals collapsed killing nine people. The Veterans Administration Hospital had seven deaths (photos left), and the Olive View Hospital had two deaths. Following this earthquake, the Alquist Hospital Seismic Act was passed establishing structural and non-structure classifications for hospital building seismic –safety levels.

1987 Whittier Narrows Earthquake

In October 1987, the Whittier Narrows Earthquake struck the Los Angeles area with a 5.9 magnitude earthquake. This earthquake occurred on a fault system not previously known for seismic activity. There were 8 deaths and 200 injuries. The earthquake damage was estimated at $358 million.

1994 Northridge Earthquake

On January 17, 1994, the Northridge Earthquake struck at a 6.7 magnitude in the Los Angeles area. There were 57 deaths and over 1,500 people were injured. The earthquake caused billions of dollars in damages and disrupted the lives of thousands of residents, schools and businesses in Southern California.



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. According to NASA Ames Research Center, building officials inspected over 66,500 structures and determined 4,000 were severely damaged and deemed uninhabitable. An additional 11,000 buildings were moderately damaged and authorized only for limited occupancy. Several collapsed bridges and overpasses created commuter havoc on the freeway system. In addition, ground shaking caused extensive damage and triggered liquefaction. This ignited dozens of fires throughout the area resulting in further damage.

However, the earthquake occurred early in the morning on a holiday. These circumstances considerably reduced the impact. Many collapsed buildings were unoccupied, and most businesses were not yet open. Still, the direct and indirect economic losses ran into the tens of billions.

State and Federal Declared Earthquake Disasters

While Los Angeles County, where the City is located, has neither had state nor federally declared earthquake disasters since the last plan update, it is important to note that other California counties have. This includes Kern and San Bernadino Counties in July of 2019. This earthquake event resulted in the state declaring a disaster for those counties. In addition, Humboldt County experienced an earthquake in December of 2022, also resulting in the governor classifying the event as a state recognized disaster. It is crucial to recognize the history of state declared earthquake disasters in other California counties due to the fact that the service area is set in an earthquake fault zone and can occur at any moment without warning.

A.5 Earthquake Probability

To asses probability of earhthquake, this report will rely on Peak Ground Acceleration (PGA). PGA mapping represents peak horizontal acceleration of the ground on firm-rock conditions. The approach of representing peak horizontal ground acceleration on firm-rock is a common and widely used method of showing ground accelerations. The development of probabilistic acceleration maps is a result of three types of basic input parameters:

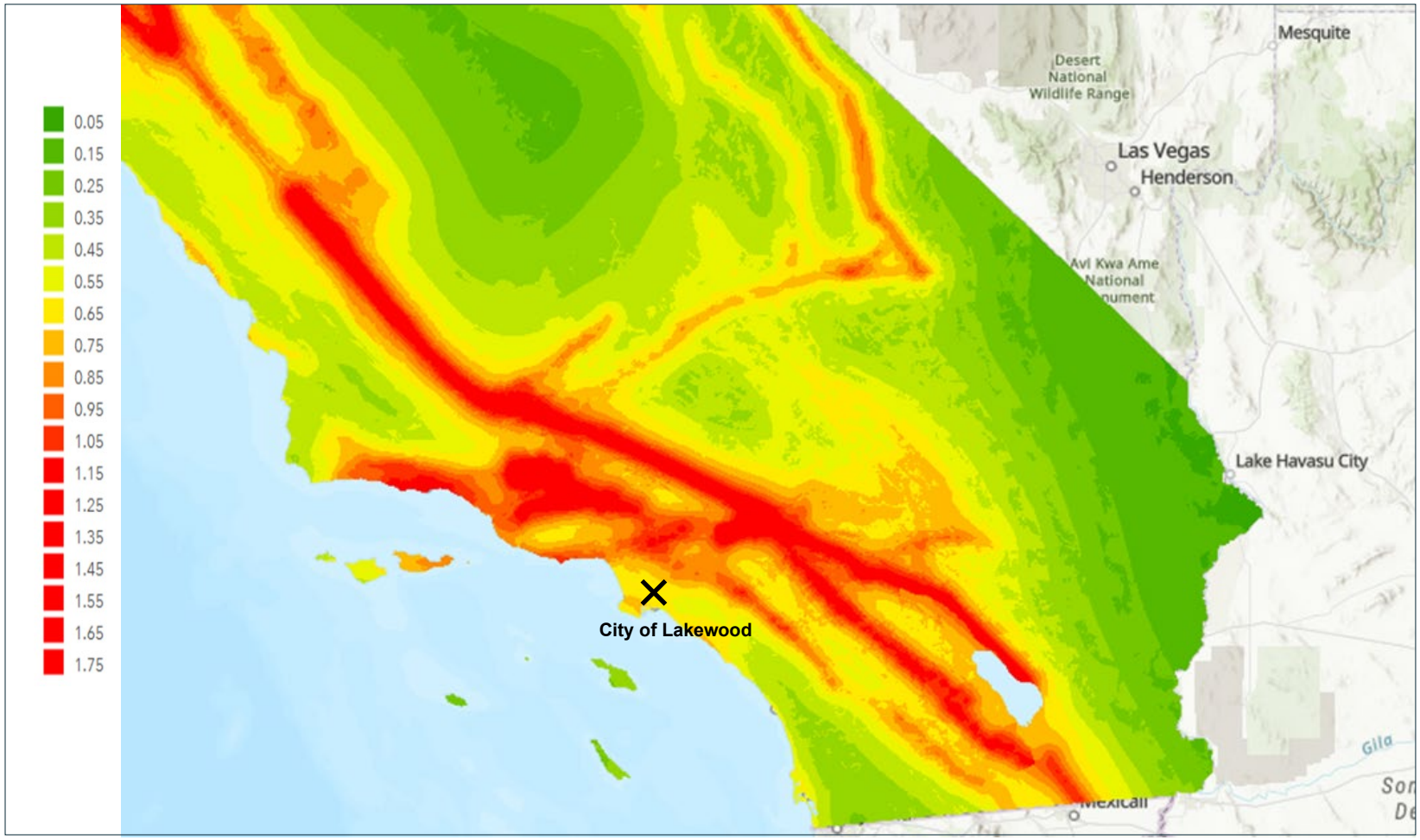
1) Attenuation of ground shaking with distance from the earthquake source.

2) Frequency of earthquakes within an area or region, termed recurrence; and

3) The character and extent of regions and faults that generate earthquakes.

Figure A.4 shows a multi-colored Probabilistic Seismic Hazards Map showing the expected relative intensity of ground shaking in California from anticipated future earthquakes. The shaking potential depicted is the Peak Ground Acceleration with a 2% probability of exceedance in 50 years, which is the same as the level of ground-shaking with about a 2500-year average repeat time. The City is marked with an “X” and is located within a region where expected PGA values range from approximately 0.6g to 0.75g, indicating a high potential for strong ground shaking during a major seismic event.

Figure A.4 Peak Ground Acceleration Map



Source: [GIS.Conservation.Ca.Gov Peak Ground Acceleration Map]

According to Table A.9 below (provided by the United States Geographic Survey), this PGA Value is typically associated with a 6.9 magnitude earthquake. Thus, there is a 0.04% annual possibility of a 6.9 magnitude earthquake affecting the City.

Table A.9 Mercalli intesity and Corresponding Peak Group Acceleration

MERCALLI INTESITY	RICHTER INTESITY	ACCELERATION (%G)	VELOCITY (CM/S)	PERCIEVED SHAKING	POTENTIAL DAMAGE
I	3.5	< 0.17	< 0.1	Not Felt	None
II-III	4.2 – 4.3	0.17 - 1.4	0.1 - 1.1	Weak	None
IV	4.8	1.40 – 3.9	1.1 - 3.4	Light	None
V	4.9 – 5.4	3.9 - 9.2	3.4 - 8.1	Moderate	Very light
VI	5.5 – 6.0	9.2 - 18	8.1 - 16	Strong	Light
VII	6.1	18 - 34	16 - 31	Very Strong	Moderate
VIII	6.2	34 - 65	31 - 60	Severe	Moderate to Heavy
IX	6.9	65 - 124	60 - 116	Violent	Heavy
X+	.7.0	> 124	> 116	Extreme	Very Heavy

The City has been impacted by earthquakes numerous times over the years. Typical of many locations in Southern California, seismic building standards have prevented these earthquakes from causing any severe damage within the City. However, as noted above, the potential for a large-scale earthquake is possible. Based on data the proximity of identifies fault lines and the information demonstrated in the PGA maps, it is clear the whole community are at risk to the impacts of an earthquake event. Given the frequency, and likelihood, of earthquake occurrences in the area coupled with the possibility for a large-scale scenario, the City has ranked earthquakes as one of the hazards with highest vulnerability for the City. It should be noted that the HMPC

determined that the impacts climate change would not have any effect on the probability of earthquake scenarios.

A.6 Earthquake Vulnerability

Vulnerability to Structures

A major earthquake in the region could result in widespread structural damage to key City-owned facilities, severely impacting government operations, public safety services, and the City's ability to provide shelter, resources, and support during a disaster. Based on loss estimates detailed in Chapter 3, structural damage across City facilities could exceed $78 million in a worst case scenario. The Centre, one of the City's most prominent civic buildings, could potentially experience over $12.7 million in damage. City Hall, which serves as the administrative and emergency coordination center, could sustain losses of approximately $6.5 million. Arbor Yard, the City's primary public works and maintenance facility, has the highest single-site loss estimate at over $21.4 million. Additional facilities, including Nixon Yard, the Weingart Senior Center, George Nye Library, Burns Community Center, and several community centers and park buildings, could experience varying degrees of structural damage ranging from 30 to 90 percent, depending on age, design, and usage.

To reduce this vulnerability, the City has developed and prioritized targeted mitigation strategies. Mitigation Action 2025.HMP.01 calls for incorporating structural seismic strengthening into new and ongoing City structures and assets to ensure they remain operational following an earthquake. This approach proactively reduces structural failure and limits service disruptions at key facilities. Mitigation Action 2025.HMP.02 supports implementing seismic studies to identify structurally vulnerable locations across critical City infrastructure and follow up with the necessary retrofits and reinforcements. These evaluations will provide insights that guide cost-effective and risk-based improvements.

Table A.10 Earthquake Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	80%	$6,465,138
City Hall Post Office	$4,355,000	100%	$4,355,000
The Centre	$14,955,913	85%	$12,712,526

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
George Nye Library	$2,362,000	80%	$1,8899,600
Mobile Office Building Equestrian Center (LEC)	$500,692	50%	$250,346
Weingart Senior Center	$4,343,400	80%	$3,474,720
Burns Center	$6,694,500	80%	$5,355,600
Youth Center	$2,603,000	60%	$1,561,800
Mae Boyar Park Community Center	$2,127,200	40%	$850,880
Palms Park Community Center	$4,674,200	80%	$3,739,360
Mayfair Park Main Activity Building	$5,712,800	70%	$3,998,960
Biscailuz Park Recreation Building	$1,054,090	30%	$316,227
Bloomfield Park Recreation Building	$2,762,300	40%	$1,104,920
Monte Verde Park Recreation Building	$1,353,000	30%	$405,900
Arbor Yard	$26,828,036	80%	$21,462,429
Nixon Yard	$2,943,728	90%	$2,649,355
Well Sites	$8,042,692	80%	$6,434,154

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Pump Stations	$1,771,605	80%	$1,4177,284

Note: Values provided by June 2024 Assessment by Alliant Insurance Services and are for planning purposes only.

Vulnerability to People

A significant earthquake poses a sizable risk to the safety and well-being of the people living and working in the City. The population is vulnerable not only to the physical dangers of ground shaking, such as falling debris, structural collapse, and utility disruptions, but also to the cascading effects that follow, including fire, injury, displacement, and lack of access to critical resources. Residents living in older, unreinforced structures or multi-unit buildings may face increased risk of injury or entrapment, especially if these buildings are not retrofitted to current seismic standards. Vulnerable populations such as seniors, individuals with disabilities, and low-income residents may have limited mobility, fewer resources to prepare or evacuate, and a greater reliance on City services. Facilities such as the Weingart Senior Center, which cater to older adults, could face interruptions in service or structural damage that jeopardize the safety of individuals who depend on them.

A significant earthquake also threatens the City's ability to maintain essential services and coordinate emergency response efforts. Disruption to power, water, and transportation infrastructure could isolate parts of the community, delay response times, and strain first responders. Schools, childcare centers, and public assembly areas may be affected, placing children and families at heightened risk during and after the event.

To reduce vulnerability, the City has developed several mitigation actions to protect its population during and after a major seismic event. Mitigation Action 2025.HMP.01 calls for the incorporation of structural seismic strengthening into new and ongoing City structures and assets to ensure that facilities remain operational during and after an earthquake. This will help safeguard people who depend on these facilities for shelter, services, or emergency response coordination. Additionally, Mitigation Action 2025.HMP.02 supports the implementation of seismic studies to determine vulnerable locations throughout critical City facilities and implement structural improvements accordingly, reducing the likelihood of injury or building failure in places where people gather. Finally, recognizing that preparedness at the individual level is just as important, Mitigation Action

2025.HMP.03 is designed to increase public education efforts regarding earthquake preparedness by expanding existing online outreach through social media, newsletters, and website updates.

Additionally, Mitigation Action 2025.HMP.25 was developed to ensure that emergency preparedness and mental health resources be made available in multiple languages on City platforms, enabling all residents, regardless of language spoken, to understand critical information before and after a seismic event. Mitigation Action 2025.HMP.26 addresses the unique needs of elderly residents by identifying care facilities that may need evacuation support and developing housing and shelter contingency plans for impacted individuals. Furthermore, Mitigation Action 2025.HMP.27 prioritizes the reevaluation and updating of evacuation routes to ensure they remain accessible, functional, and safe for all community members and promotes widespread distribution of these updated routes through City communication channels.

Together, these mitigation actions help reduce the overall vulnerability of people in the City by enhancing both the structural safety of the environment and the readiness of the community.

Appendix B

Air Quality

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B.1 Air Quality Identification and Background

Air quality refers to the condition of the air within a given area and its suitability for both people and the environment. Poor air quality is primarily driven by external factors such as smoke from regional wildfires, vehicular emissions, industrial activities, and, to a lesser extent, ash from distant volcanic activity.

As noted by the California Air Resources Board, wildfire smoke consists of a complex mixture of gases and fine particulate matter. Many studies focus on PM2.5, which stands for particulate matter with a diameter of 2.5 micrometer or smaller which has the ability to penetrate deep into the lungs and, potentially, the blood steam. Smoke containing PM2.5 as the ability to infiltrate homes, schools, and public buildings, and can remain suspended in the atmosphere for days or even weeks. Exposure to PM2.5 has been associated with significant adverse health effects, including respiratory distress, cardiovascular problems, and aggravated asthma, especially among vulnerable populations. Additionally, poor air quality may exacerbate existing public health inequities, as individuals with limited access to healthcare may experience more severe outcomes.

Air quality is monitored through standardized metrics such as the Air Quality Index (AQI), which measures pollutants. As explained by the South Coast Air Quality Management District, AQI is calculated based on common air pollutants, including particulate matter (PM2.5 and larger), ozone, carbon monoxide, and nitrogen dioxide. The AQI provides an accessible measure for public understanding, with higher values indicating worse air quality. In Southern California, wildfire smoke events, including events such as the Greater Los Angeles fire, can cause AQI readings to rise from moderate levels (50–100) to unhealthy levels (151–200 or more) during significant fire seasons, as detailed by AirNow.gov.



B.2 Air Quality Location

Air quality degradation events related to wildfire smoke and other airborne pollutants impact the entire geographic area of the City. Due to the City's relatively small size, flat terrain, and predominantly urban development pattern, the distribution of air quality impacts is considered citywide.

While degraded air quality can affect the entire city, its impacts are not felt equally across all neighborhoods. Areas adjacent to major traffic corridors, particularly those along Lakewood Boulevard and near the I-605 Freeway, may experience more frequent or severe air quality issues due to elevated levels of vehicle emissions and cumulative pollution exposure. These areas face compounded risks during regional air quality events such as wildfire smoke, potentially resulting in greater health burdens for nearby residents.



The severity of air quality impacts is further influenced by the socioeconomic and demographic makeup of neighborhoods. Populations that include higher proportions of children, elderly residents, and individuals with pre-existing health conditions are more vulnerable to respiratory and cardiovascular effects. Key sensitive facilities in the City include the Weingart Senior Center, which serves elderly residents, and elementary and middle schools where children may be exposed during recess or outdoor activities. Outdoor community spaces are heavily used by families and children and may require temporary closures or restricted use during air quality emergencies. Similarly, City operations with outdoor components, including maintenance activities at Arbor Yard and Nixon Yard, may face disruptions due to prolonged exposure risks for workers.

In summary, while air quality hazards are geographically widespread across the City, special consideration should be given to neighborhoods located near major highways and thoroughfares, as well as to vulnerable populations who may suffer disproportionately during periods of degraded air quality.

B.3 Air Quality Extent

The extent of air quality hazards is measured primarily through the AQI, a standardized system developed by the U.S. Environmental Protection Agency (EPA) that categorizes air pollution levels and associated health risks. The AQI is a number that ranges from 0 to 500 that indicates how clean or polluted the air is, what associated health effects might be of concern to diverse individuals within a population and recommend precautions at each level. The AQI focuses on health effects individuals may experience within a few hours or days after breathing polluted air. The higher the AQI values, the greater the level of air pollution and the greater the health concern. Key AQI categories are detailed in Table B.1.

Table B.1: Air Quality Index Basics for Ozone and Particle Pollution

DAILY AQI COLOR	LEVELS OF CONCERN	VALUES OF INDEX	DESCRIPTION OF AIR QUALITY
BLUE	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
GREEN	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
ORANGE	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
RED	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
PURPLE	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
MAROON	Hazardous	301 and Higher	Health warning of emergency conditions: everyone is more likely to be affected.

Source: AQI Basics | AirNow.gov

Poor air quality may result in smoky skies, reduced visibility, the smell of smoke at ground level, and occasional ashfall during major nearby fires. Impacts vary depending on the duration and intensity of the event. Short-term spikes in pollution may cause acute respiratory symptoms, while prolonged exposure can lead to increased hospital admissions, missed work or school days, and restrictions on outdoor recreational and City services. While the City's structures are not physically damaged by poor air quality events, City operations that depend on outdoor activities, such as parks, maintenance, and recreation programming, may be temporarily suspended to protect public health.

B.4 Air Quality History



Air quality degradation in the City has been significantly influenced by regional wildfire events, particularly those occurring in Los Angeles County and surrounding areas. During significant wildfire events, AQI levels in the region have historically reached readings in the "Unhealthy" (151–200) to "Very Unhealthy" (201–300) range. In January 2025, a series of devastating wildfires, including the Palisades, Eaton, and Hurst Fires, led to severely degraded air quality across Southern California. These fires destroyed over 12,000 structures, resulted in at least 16 fatalities, and prompted evacuation orders affecting more than 150,000 residents. The smoke from these fires caused hazardous air quality levels, with advisories issued for Los Angeles County and neighboring regions. In response to these events, both state and federal disaster declarations were issued. On January 7, 2025, California Governor Gavin Newsom proclaimed a state of emergency for Los Angeles and Ventura Counties. Subsequently, on January 8, 2025, President Joseph R. Biden, Jr. approved a Major Disaster Declaration for California (DR-4856-CA), enabling federal assistance for recovery efforts related to the wildfires and associated impacts, including air quality degradation.

Table B.2 shows AQI data collected by EPA over the last planning period. The table outlines the number of days per year that fall into various AQI categories, from “Good” to “Very Unhealthy,” based on concentrations of major pollutants such as ozone and particulate matter. The last three columns (AQI Max, AQI 90th Percentile, and AQI Median) provide insight into both peak and typical daily air quality levels. AQI Max represents the single worst daily AQI reading recorded in that year. The 90th Percentile AQI indicates that 90% of the days had AQI values at or below this number, showing how frequently high pollution events occurred. The AQI Median reflects the midpoint AQI value for the year, giving a general sense of overall conditions.

Over the past several years, the data indicates a trend toward poorer air quality. Notably, the number of “Good” air quality days has decreased since 2023, while “Unhealthy for Sensitive Groups” and “Unhealthy” days have increased. The AQI Max and 90th Percentile AQI values remain consistently high, with 2024 recording one of the highest 90th percentile values (164) and a spike in the number of “Very Unhealthy” days (9). These patterns suggest that while extremely hazardous days remain rare, the frequency and intensity of poor air quality days have worsened, posing increased health risks, particularly for vulnerable populations.

Table B.2: Air Quality Index Reports for Los Angeles County

YEAR	#DAYS GOOD	#DAYS MODERATE	#DAYS UNHEALTHY/ SENSITIVE GROUPS	#DAYS UNHEALTHY	#DAYS VERY UNHEALTHY	#DAYS HAZARDOUS	AQI MAX	AQI 90TH PERCENTILE	AQI MEDIAN
2024	38	195	78	46	9	0	230	164	80
2023	41	237	52	32	3	0	210	147	67
2022	17	254	65	28	1	0	209	140	74
2021	9	259	70	26	1	0	281	143	79
2020	35	194	77	43	17	0	250	166	85
2019	34	245	57	28	1	0	201	136	72

Source: Air Quality Index Report | US EPA

B.5 Air Quality Probability

Poor air quality events in the City are considered highly probable and are expected to occur multiple times per year. Although the City is not located in a high wildfire risk area itself, it is routinely affected by regional wildfire smoke, particularly during Southern California's fire season which generally occurs bewteen July and September each year. Based on historical patterns and regional air quality data, it is reasonable to expect that the City will continue to experience poor air quality days annually.

In addition to wildfire smoke, vehicular emissions, industrial activities in the greater Los Angeles basin, and climate-driven factors such as higher temperatures and atmospheric conditions contribute to ongoing air quality concerns throughout the year. T the he City's to Long Beach Airport also presents an additional source of localized air pollution, particularly for neighborhoods situated along Lakewood Boulevard and near the I-605 Freeway. Aircraft emissions, combined with traffic-related pollutants, can lead to elevated concentrations of particulate matter and ozone in these areas, increasing the overall exposure risk for nearby residents. While short-term wildfire smoke episodes cause dramatic spikes in air pollution, long-term air quality challenges related to ozone and particulate matter are also continuing risks.

Given the increasing frequency and intensity of wildfires in California, exacerbated by prolonged drought conditions and brush accumulation in open areas around Los Angeles County, as well as the increasing impact of ongoing emissions from transportation and aviation sources, the probability of experiencing significant air quality events is likely to increase over the next several decades.

B.6 Air Quality Vulnerability

Vulnerability to Structures

Air quality hazards, such as wildfire smoke and elevated particulate pollution, do not typically cause direct physical damage to structures in the City. Buildings, facilities, and infrastructure are not structurally harmed by poor air quality events. Instead, impacts are largely indirect, such as temporary closures of City facilities or disruptions to outdoor City services.

Based on the Hazard Mitigation Planning Committee's analysis, the damage potential to City structures from air quality events was ranked as low. Loss estimates calculations, detailed in Chapter 3, indicate that across major City-owned facilities, the expected damage from air quality-

related events is minimal. For example, structures such as City Hall, The Centre, and various community and senior centers were all estimated to experience only approximately 1% potential damage under severe air quality scenarios, resulting primarily from costs associated with HVAC strain or short-term operational interruption. Given this low level of structural vulnerability, mitigation efforts related to air quality focus primarily on protecting people rather than strengthening physical assets.

Table B.3: Air Quality Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	1%	$80,814
The Centre	$14,955,913	1%	$149,559
Weingart Senior Center	$4,343,400	1%	$43,434
Arbor Yard	$26,828,036	1%	$268,280
Nixon Yard	$2,9437,28	1%	$29,437

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

Air quality hazards pose a significant vulnerability to residents of the City, particularly sensitive populations such as young children, the elderly, and individuals with pre-existing respiratory or cardiovascular conditions. According to the U.S. Census Bureau Data, approximately 20% of the City's population falls into the young or elderly age groups, which are most susceptible to the health effects of degraded air quality, including asthma attacks, respiratory distress, cardiovascular events, and other complications. Additionally, an estimated 5.6% of residents are uninsured, which may limit their access to timely medical care, preventative treatments, or necessary medications during hazardous air quality events. This lack of access increases the risk of serious health outcomes, especially during prolonged exposure to wildfire smoke or elevated regional particulate levels. During such periods, vulnerable groups may experience severe health impacts.

Recognizing these risks, the City has prioritized public education and outreach to help safeguard its residents. While the City cannot directly control regional air quality, given that pollution sources such as wildfires, freeway traffic, and emissions from neighboring jurisdictions and Long Beach Airport are largely outside of its authority, it can take meaningful steps to reduce the health impacts on its community. Mitigation Action 2025.HMP.04 calls for the City to improve public outreach through multiple platforms regarding air quality, with a focus on protecting vulnerable populations such as the elderly and very young. This action includes providing clear health guidance during poor air quality events, such as advising residents to stay indoors, use air filtration where possible, and reduce outdoor exertion during air quality alerts. By proactively expanding communication efforts and tailoring health protection strategies to those most at risk, the City aims to significantly reduce the health consequences associated with future hazardous air quality events.

Appendix C

Disease Outbreak

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C.1 Disease Outbreak Identification and Background



A disease outbreak is the occurrence of more cases of a particular illness than normally expected within a defined population and time period. These outbreaks can be caused by various infectious agents, including viruses, bacteria, or parasites. Transmission routes vary widely and may include direct person-to-person contact, airborne spread, contaminated food or water, or exposure to vectors such as mosquitoes or ticks. Disease outbreaks can range in severity and scale, from small, localized events to widespread epidemics or pandemics, and may affect both human and animal populations. The onset of an outbreak can be sudden or gradual, depending on the pathogen, how it spreads, and how quickly it is detected.

Identifying a disease outbreak typically involves monitoring data from hospitals, clinics, laboratories, and public health surveillance systems. Health authorities use established case definitions and epidemiological tools to detect unusual increases in illness reports, analyze trends, and confirm outbreaks through diagnostic testing. Once an outbreak is identified, public health agencies coordinate a response, which may include containment measures such as isolation or quarantine, vaccination campaigns, medical treatment, vector control, and public education efforts.

The impacts of disease outbreak can be widespread and deeply disruptive. When an outbreak occurs, local health departments work closely with state and federal agencies to investigate the source, contain the spread, and protect public health. Depending on the nature and severity of the disease, response actions may include issuing public health advisories, closing schools or public facilities, activating emergency operations centers, and coordinating healthcare resources. Healthcare systems may become strained due to increased patient volume, and essential services may be interrupted as workers fall ill or are required to isolate. Additionally, public fear and misinformation can also complicate response efforts, making clear and timely communication a critical part of managing the outbreak. In severe cases, such as during the COVID-19 pandemic,

communities may experience prolonged disruptions to daily life, economic hardship, and long-term social and mental health effects.

C.2 Disease Outbreak Location

Disease outbreaks have the potential to impact the entire City. Unlike localized hazards, infectious diseases can spread quickly through person-to-person contact, affecting residents, visitors, and workers across all neighborhoods. Public spaces, workplaces, schools, and homes all become interconnected transmission points during a major outbreak. Given the City's strong regional ties, such as shared shopping areas, recreational spaces, and transportation corridors, outbreaks in adjacent communities can rapidly influence conditions within the city. As a result, response efforts must be coordinated not only at the City level but also with neighboring jurisdictions and countywide public health agencies to help slow the spread of disease and protect public health. Because disease transmission is not tied to specific physical features or infrastructure, the entire community must be considered vulnerable during a major outbreak.

C.3 Disease Outbreak Extent



The extent of a disease outbreak can vary widely depending on the type of disease, its transmission method, and the public health response. Some outbreaks may result in a limited number of cases over a short duration, while others, such as the COVID-19 pandemic, can lead to widespread illness lasting months or even years. Outbreak severity is typically measured by factors such as infection rates, hospitalization rates, and mortality rates. Diseases like COVID-19 can have high transmission rates and impact multiple sectors, including healthcare, education, business, and government services. Other diseases, such as the West Nile Virus, may affect smaller segments of the population but can still cause serious health consequences, particularly among vulnerable groups like the elderly. Transmitted by mosquitoes, West Nile Virus is a recurring concern in Southern California, where seasonal conditions can support mosquito breeding. Local outbreaks may prompt mosquito control measures, public health advisories, and targeted outreach to reduce exposure risk. Future disease outbreaks could

range from localized health concerns to widespread regional emergencies, depending on the nature of the disease and the effectiveness of early containment measures.

C.4 Disease Outbreak History

Disease outbreaks have had significant impacts worldwide. While major biological outbreaks causing catastrophic loss of life have become less common in recent decades, outbreaks of infectious diseases continue to pose serious risks to public health.

Influenza outbreaks occur seasonally each year, but certain strains have raised heightened concerns. For example, in 2006, public health officials warned of the threat posed by the highly pathogenic H5N1 avian influenza virus spreading across Eastern Asia and other countries. The H5N1 virus was particularly alarming due to its virulence, transmission through migratory birds, ability to cross from birds to humans in some cases, and its continual evolution-factors that highlighted the potential for a human pandemic.

In 2012, Middle East Respiratory Syndrome (MERS) emerged as another global health concern. MERS, caused by a virus, spreads through close contact with infected individuals' respiratory secretions. Although the U.S. experienced only two confirmed cases among healthcare workers returning from Saudi Arabia, agencies like the Centers for Disease Control and Prevention (CDC) monitored the situation closely to mitigate risks to the general public.

Ebola virus disease also raised alarm globally in 2014. Though rare in the U.S., there were four confirmed domestic cases, two involving healthcare workers who treated infected patients. The CDC and medical professionals worked quickly to contain the threat and maintain a low risk of community spread.

Additionally, the 2015 California measles outbreak originated at Disneyland in Anaheim, California. By February of that year, 125 measles cases were linked to the theme park, affecting several states as well as Canada and Mexico. Given Lakewood's proximity to Orange County and the regional interconnectedness of Southern California, the event highlighted how quickly infectious diseases can impact the local population.

The COVID-19 pandemic beginning in late 2019 marked the most profound recent health crisis. The World Health Organization (WHO) first identified the coronavirus as a pneumonia-like illness in Wuhan, China. By January 2020, the virus had reached the United States. COVID-19 proved particularly disruptive because of its high transmissibility, severe health impacts, and long-lasting

societal effects. Communities throughout Los Angeles County, experienced widespread disruptions to daily life, public services, and economic activities.



In addition to COVID-19, West Nile Virus remains an ongoing concern in Southern California. West Nile Virus is transmitted by mosquitoes and poses a greater threat to seniors and those with compromised immune systems. Although it typically results in fewer fatalities, its presence serves as a reminder that infectious diseases can continue to emerge in both small and large-scale outbreaks.

Despite these events, there have been no state or federal disaster declarations specifically for disease outbreaks impacting the City as of this plan update.

C.5 Disease Outbreak Probability

Given past trends and ongoing global travel and trade patterns, the probability of future disease outbreaks impacting the City is considered moderate. While widespread pandemics like COVID-19 may not occur every year, more localized outbreaks of diseases such as seasonal influenza, West Nile Virus, and other emerging illnesses are expected to continue to pose threats on an annual or semi-regular basis. Public health agencies, including the CDC and the Los Angeles County Department of Public Health, regularly monitor disease trends and issue advisories, highlighting the ongoing nature of this hazard. Given these conditions, disease outbreaks are anticipated to occur periodically, though the severity, scale, and specific pathogens involved may vary from year to year.

C.6 Disease Outbreak Vulnerability

Vulnerability to Structures

Disease outbreaks primarily impact human populations and public health systems, not physical structures. As a result, the Hazard Mitigation Planning Committee ranked the vulnerability of structures to disease outbreaks as low, as detailed in Chapter 3. Buildings themselves are not physically damaged during a disease event. However, facilities that serve vulnerable population, such as senior centers, community centers, and emergency shelters, may experience operational disruptions if outbreaks affect staffing levels or require temporary closures for cleaning,

quarantine, or infection control measures. While direct structural loss is unlikely, maintaining the functionality of critical public facilities remains important during a health emergency.

Table C.1: Disease Outbreak Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	1%	$80,814
The Centre	$14,955,913	1%	$149,559
Weingart Senior Center	$4,343,400	1%	$43,434
Arbor Yard	$26,828,036	1%	$268,280
Nixon Yard	$2,9437,28	1%	$29,437

Note: Values provided by June 2024 Assessment by Alliant Insurance Services

Vulnerability to People

Disease outbreaks pose a threat to public health and safety in the City. Residents, particularly vulnerable populations such as seniors, individuals with preexisting health conditions, young children, and those without easy access to healthcare, face the greatest risk during an outbreak. Infectious diseases can spread rapidly across the community, causing serious illness, straining healthcare resources, and disrupting everyday life. Outbreaks can also exacerbate existing health disparities. Individuals without health insurance may delay seeking care, leading to more severe health outcomes and increased transmission risk. Additionally, outbreaks can strain healthcare systems, leading to shortages of medical supplies, hospital beds, and healthcare personnel. This strain can impede the ability to provide adequate care not only for those affected by the outbreak but also for patients with other medical needs. Beyond the immediate health impacts, disease outbreaks can disrupt daily life by necessitating school closures, canceling public events, and affecting local businesses. Such disruptions can have economic consequences and affect the mental well-being of residents.

To address this vulnerability, the City has identified specific mitigation actions aimed at improving community resilience during disease outbreaks. Mitigation Action 2025.HMP.05 supports public

health efforts by committing to the timely distribution of health protection guidance materials provided by public health agencies across multiple City communication platforms. This ensures that residents receive accurate and up-to-date information to protect themselves and their families. Additionally, Mitigation Action 2025.HMP.06 focuses on increasing outreach and training for the City's preselected Medical Points of Distribution (MPOD) sites. Regularly training City staff and volunteers strengthens the City’s capacity to distribute critical medications, vaccines, and supplies quickly and effectively during health emergencies, helping to limit disease spread and protect the community.

Appendix D

Urban Fire

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D.1 Urban Fire Identification and Background

Fire is a rapid oxidation process that can lead to uncontrolled burning, exposing and possibly consuming structures. Fires often spread quickly and are usually signaled by dense smoke that may fill the area for miles around. Fires can be human-caused through acts of arson or can be caused by natural events such as lightning. Fires are typically classified according to the following categories:



- **Urban fires** are primarily those associated with structures and the activities in and around them.
- **Wildland fires** occur in forests or other generally uninhabited areas and are fueled primarily by natural vegetation.
- **Urban Interface fires** occur where development and forest interface, with both vegetation and structures providing fuel, and are sometimes referred to as urban-wildland interface fires.

The following factors contribute significantly to aforementioned fire behavior.

- **Slope/Topography**: As slope increases the rate of fire spread increases. In the northern hemisphere, south facing slopes are also subject to greater solar radiation, making them drier and thereby intensifying fire behavior.
- **Fuel**: Weight and volume are the two methods of classifying fuel, with volume also referred to as fuel loading. Each fuel is assigned a burn index (the estimated amount of potential energy released during a fire), an estimate of the effort required to contain a fire, and an expected flame length.
- **Weather**: Variations in weather conditions have a significant effect on the occurrence and behavior of fires.

Firestorms that occur during extreme weather (e.g., high temperatures, low humidity, and high winds) have high intensity, which makes fire suppression virtually impossible. These events typically burn until the conditions change, or the fuel is exhausted. Even small fires can threaten lives and resources and destroy properties. It is also important to note that, in addition to affecting

people, fires may severely affect livestock and pets. Such events may require the emergency watering/feeding, shelter, evacuation, and even burying of animals.

Fire Secondary Events

The aftermath of a fire can be as disastrous, if not more so, than the fire. A particularly destructive fire burns away plants and trees that prevent erosion. If heavy rains occur after such a fire, landslides, ash flows, and flash floods can occur. This can result in property damage outside the immediate fire area, and can affect the water quality of streams, rivers, and lakes.

Fire as a Secondary Event

In addition to typical ignition sources for fires, earthquakes and floods have the potential to rupture buried gas lines, and high winds or accidents could cause overhead electric lines to break, creating ignition sources for fires. Catastrophic earthquakes could cause widespread urban fires, as multiple gas and electrical lines could be broken or disrupted.

D.2 Urban Fire Location

The hazard of urban fire affects the entire City, as the City's dense built environment increases the vulnerability to fire incidents. Due to the residential, commercial, and public spaces within the city, urban fires can spread quickly across neighborhoods and may involve multiple buildings simultaneously. The City is largely characterized by developed urban spaces, with limited areas of open land. As such, the city's infrastructure, including public buildings, residential areas, commercial areas, and parks, are all at risk from urban fires. These areas are concentrated and connected by major roads, which could potentially serve as fire corridors in the event of large-scale fire outbreaks.

Areas closer to the World Energy Paramount Faciltiy, which is not within the city boundaries, pose a substantial risk. The facility's proximity to the City means that any significant fire event at the facility could impact surrounding neighborhoods and critical infrastructure, potentially leading to widespread damage and evacuation needs. Specific locations, including Monte Verde Park Recreation Building, Nixon Yard, Arbor Yard, Well Sites and Pump Stations, are at higher risk based on their exposure, infrastructure, and current loss estimates, as detailed in Chapter 3.

Another vulnerability lies in residential neighborhoods with limited access, such as cul-de-sacs or communities with only one way in and out. These configurations can create dangerous bottlenecks during evacuation or emergency response, particularly if streets become obstructed or impassable due to fire, debris, or damaged infrastructure. In a fast moving urban fire, these access limitations can delay emergency services and increase the risk to residents.

D.3 Urban Fire Extent



Urban fires can have a range of impacts, depending on factors such as weather conditions, the availability of fire suppression resources, and the size of the fire. If high winds are present, they could drive the fire through multiple structures in a very short amount of time. Given the city's dense development and limited open space, the spread of fire could be worsened by the close proximity of buildings and other combustible materials. Development in urban areas often features buildings which are situated closely together, increasing the potential for fire to spread quickly from one structure to another.

Fires in densely populated urban environments can also be made worse by limited access to water resources, inadequate firefighting infrastructure, and the time it takes to mobilize emergency responders. The city's infrastructure, including essential utilities like water supply and electricity, could be severely impacted. Fires affecting key facilities, such as water pump stations or maintenance yards, could interrupt critical services and slow the recovery process. Public spaces, recreational facilities, and commercial areas would also be at risk, especially if they are not equipped with fire suppression systems or are difficult to access by firefighting teams due to overcrowded roads or other urban challenges.

The is marked potential for an urban fire to escalate quickly, especially if a fire ignites in one of the city's densely populated, such as those near commercial centers or industrial areas. A fire in an industrial area, for instance, could involve hazardous materials and cause not only property damage but also health risks to nearby residents and workers. Furthermore, fires in densely populated areas could lead to significant loss of life, injuries, and mass evacuations if escape routes become blocked or if the fire spreads uncontrollably.

In short, the extent of an urban fire in the City could be significant, affecting the city's residential, commercial, and public properties, as well as essential infrastructure. The rapid spread of fire could have long-term impacts on public health, safety, and the city's economic well-being.

D.4 Urban Fire History

Urban fire hazards in the region are often linked to dense development patterns, aging infrastructure, and human activity. While much public attention focuses on wildfires in the hillsides and forested areas, structural fires in urban neighborhoods, such as the City, can be just as

damaging, particularly in older communities where buildings are closely spaced. Fires caused by electrical faults, cooking accidents, industrial malfunctions, or arson can quickly spread in residential and commercial districts, overwhelming local resources and endangering lives. Recent incidents throughout Los Angeles County demonstrate the ongoing risk posed by urban fire in highly built environments.

Pico Rivera Apartment Fire (2018)



Around 4 p.m. on February 22, 2018, a fire was reported for an apartment building in the 9100 block of Burke Street. The fire, which started in the attic of the structure, quickly engulfed the first and second floors. Fortunately, only 3 injuries were reported, but around 300 residents were displaced after more than 141 unites were impacted by the fire: 45 of them with fire and smoke damage. More than 100 firefighters were dispatched to fight the flames while City officials worked with property owners to provide hotel vouchers for displaced residents. Due to the need for critical repairs, residents could not begin to return home for at least 3 to 5 days after the fire. Although specifics were not provided to the public, in the aftermath, the Los Angeles County Sherriff's Department stated that investigators believed a problem with the building's plumbing caused the fire. Pico Rivera is less than 15 miles from the City

Lomita Apartment Complex Fire (2024)

On April 15, 2024, a significant fire erupted in an apartment complex in Lomita, California. The blaze, believed to have started in a lower-level unit, quickly spread to multiple floors, impacting over 20 units in the building. Firefighters from multiple agencies, including Los Angeles County Fire Department, responded to the scene and were able to bring the fire under control after several hours. Approximately 50 residents were displaced, and temporary shelters were set up in coordination with city officials to provide emergency housing and support services. Although no fatalities were reported, several individuals sustained minor injuries, and the fire highlighted the risks posed by densely populated residential buildings in urban areas. The incident also emphasized the importance of fire safety education, building inspections, and timely response efforts to mitigate such events in the future.

Eaton Fire (2025)

The Eaton Fire, which ignited in Altadena in January 2025, serves as a stark example of how wildland fires can transition into destructive urban fire events. Driven by extreme Santa Ana winds and dry conditions, the fire rapidly moved from the wildland-urban interface into densely built neighborhoods, destroying over 9,418 structures, including homes, businesses, and historic community landmarks. Though it began in a more natural setting, the fire's most catastrophic impacts occurred in urbanized areas where high structure density, aging infrastructure, and limited defensible space allowed flames to spread quickly between buildings.

Palisades Fire (2025)

The Palisades Fire, which ignited on January 7, 2025, in the Santa Monica Mountains, rapidly evolved into one of Los Angeles' most destructive wildfires. Propelled by extreme Santa Ana winds and prolonged drought conditions, the fire swiftly descended into the urban neighborhoods of Pacific Palisades, Topanga, and Malibu. Over its 24-day duration, the blaze scorched approximately 23,713 acres and destroyed 6,837 structures, including homes, schools, churches, and cultural landmarks . Notable structures lost included the Community United Methodist Church of Pacific Palisades and the Los Angeles Public Library's Palisades Branch. Educational institutions such as Palisades Elementary and Marquez Elementary Schools were also destroyed, while Palisades Charter High School suffered significant damage. The fire claimed 12 lives and injured several others, highlighting the severe threat wildfires pose to urban communities. The Palisades Fire underscores the increasing risk of wildfires encroaching upon densely populated urban areas, exacerbated by climate change and expanding development into wildland-urban interfaces.

D.5 Urban Fire Probability

While the probability of an urban fire occurring in the City is considered low, it remains a concern due to the region's history of fire related events. The City's compact, developed nature means that fires can spread quickly through buildings and infrastructure, particularly in areas with limited open space. Past incidents, such as fires at nearby facilities like the Paramount Petroleum plant, underscore the potential risks. Additionally, past wildfires and urban fires in Southern California, though not directly in the City, have demonstrated the potential for such events to escalate under certain conditions. Given the proximity of high-risk facilities like the World Energy Paramount Facility, the likelihood of an urban fire affecting the city, while low, cannot be dismissed entirely.

D.6 Urban Fire Vulnerability

Vulnerability to Structures

The Hazard Mitigation Planning Committee discussed that in the event of an urban fire, several key structures within the City would be at risk, particularly those with critical functions or large, densely built facilities. Detailed in the loss estimates in Chapter 3, the most vulnerable locations include Monte Verde Park Recreation Building, Nixon Yard, Arbor Yard, as well as various well sites and pump stations. These structures are vital to the city's infrastructure, and their damage could significantly disrupt operations and services.

The Weingart Senior Center, an essential community facility, is estimated to suffer 20% damage in the event of an urban fire, with a projected loss of $868,680. Monte Verde Park Recreation Building is assessed to have a 15% damage potential in the event of an urban fire, with an estimated loss of $202,950. Nixon Yard is another significant site, with a 15% estimated damage potential, leading to a potential loss of $441,559. As a maintenance facility, its function could be severely disrupted if affected by a fire. Arbor Yard also presents a vulnerability with an estimated 5% damage potential and a loss estimate of $1,341,402. As a water resources maintenance and storage facility, any damage here could compromise the city’s water infrastructure. Well Sites and Pump Stations, scattered across various locations throughout the City, are also at risk. These facilities provide critical water supply services, and the estimated 10% damage potential could result in significant operational challenges, with an estimated combined loss of $981,430.

The compact nature of the city, along with the proximity of certain high-risk facilities, increases the overall vulnerability to urban fires, particularly in densely developed areas where fires can spread quickly between structures. The potential damage to these key facilities would not only cause financial losses but could also affect the city’s ability to respond to emergencies and provide essential services. In response to these vulnerabilities, Mitigation Action 2025.HMP.07 has been proposed to assess the capacity of existing water lines and infrastructure. The goal of this study is to identify areas where flow rates and water pressure can be improved to better support fire suppression efforts during urban fire events. Enhancing the water infrastructure will help ensure that firefighting resources are more readily available, reducing the potential for extensive damage to these critical facilities and improving the City’s overall resilience to urban fire hazards.

Table D.1: Urban Fire Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Weingart Senior Center	$4,343,400	20%	$868,680
Monte Verde Park Recreation Building	$1,353,000	15%	$202,950
Arbor Yard	$26,828,036	5%	$1,341,402
Nixon Yard	$2,943,728	15%	$441,559
Well Sites	$8,042,692	10%	$804,269
Pump Stations	$1,771,605	10%	$177,161

Note: Values provided by June 2024 Assessment by Alliant Insurance Services and are used for planning purposes

Vulnerability to People

The vulnerability of people in the City during an urban fire event is influenced by several factors, including the density of development, the characteristics of the built environment, and the presence of vulnerable populations. Urban fires, especially in highly developed areas with limited open space, present significant risks to residents, visitors, and workers within the city.

One of the key vulnerabilities lies in the densely populated nature of the city. The close proximity of structures in urban areas increases the risk of rapid fire spread, potentially affecting a large number of people in a short period of time. Residential neighborhoods, particularly those with older buildings, may lack the modern fire-resistant materials and design features that are found in newer developments, which could increase the likelihood of injuries or fatalities during an urban fire event.

Certain populations, including the elderly, individuals with disabilities, and children, are more susceptible to harm during a fire. These groups may have difficulty evacuating quickly, which can significantly impact their safety during a fire emergency. The elderly, for example, may have mobility challenges that make it harder for them to evacuate, and individuals with respiratory conditions or other health issues may be more vulnerable to the effects of smoke inhalation or heat exposure. Additionally, children, who may be in public spaces such as schools or community centers during the day, may need special considerations for safe evacuation and care in the event

of a fire. Low-income residents are another vulnerable group that could face heightened risks during an urban fire. These individuals may have limited access to resources such as fire safety equipment, transportation, or the ability to secure temporary shelter during a fire event. Without the financial means to evacuate quickly or secure alternative housing, they may be exposed to higher levels of risk during an urban fire emergency.

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Windstorm

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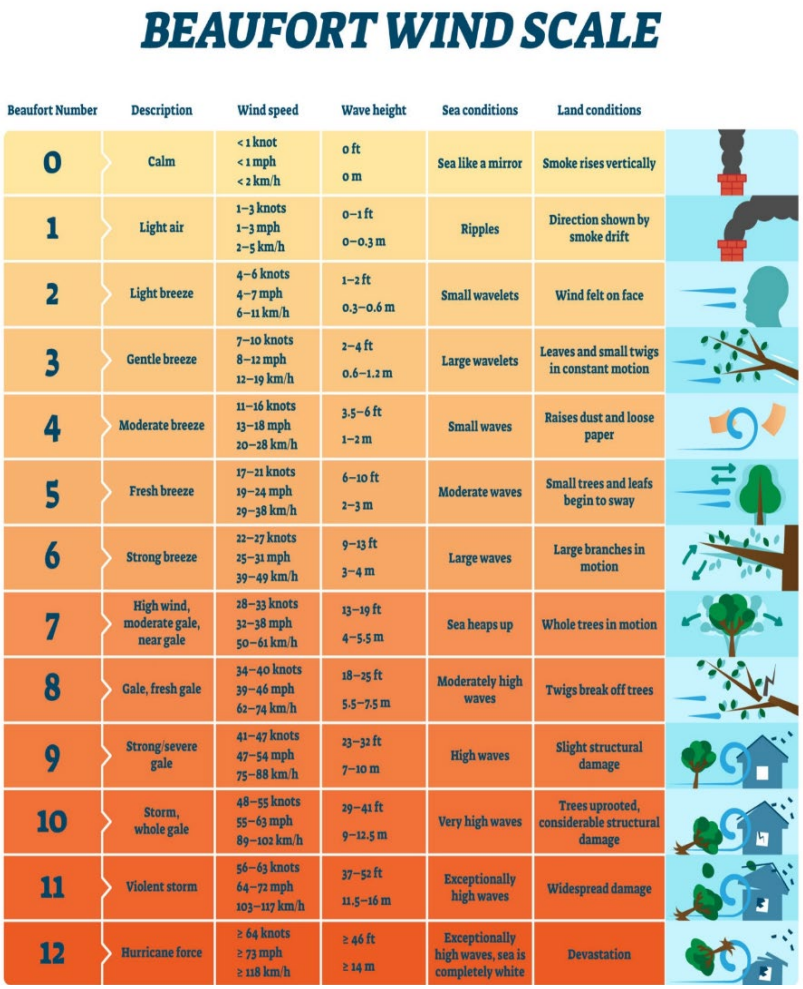
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E.1 Windstorm Identification and Background

Wind can be described as the flow of air caused by differences in atmospheric pressure within the Earth's atmosphere. Air naturally moves from areas of high pressure to areas of lower pressure, and the greater the difference between these two areas, the faster the air moves. When these differences are substantial, they can result in strong winds capable of causing damage to natural and built environments. Strong winds have historically been responsible for a range of impacts, from minor property damage such as broken tree limbs and displaced roof tiles to the complete destruction of large structures. In addition to physical damage, windstorms can disrupt utility services, telecommunications, and transportation networks, leading to broader community impacts.

The Beaufort Scale is widely used to describe wind speeds based on observed conditions, particularly at sea, and has been adapted for land-based assessments. Updated in the 1940s, the Beaufort Scale uses a seventeen-level system that measures wind speeds from calm conditions to winds exceeding 140 miles per hour (mph) or 120 knots. Windstorm events typically feature airspeeds ranging from 65 mph (56 knots) to 72 mph (63 knots), levels at which significant property damage, infrastructure disruptions, and public safety hazards can occur. Because of the destructive potential of strong winds, windstorms are a hazard of concern in many communities.



Beaufort Number	Description	Wind speed	Wave height	Sea conditions	Land conditions
0	Calm	< 1 knot < 1 mph < 2 km/h	0 ft 0 m	Sea like a mirror	Smoke rises vertically
1	Light air	1–3 knots 1–3 mph 2–5 km/h	0–1 ft 0–0.3 m	Ripples	Direction shown by smoke drift
2	Light breeze	4–6 knots 4–7 mph 6–11 km/h	1–2 ft 0.3–0.6 m	Small wavelets	Wind felt on face
3	Gentle breeze	7–10 knots 8–12 mph 12–19 km/h	2–4 ft 0.6–1.2 m	Large wavelets	Leaves and small twigs in constant motion
4	Moderate breeze	11–16 knots 13–18 mph 20–28 km/h	3.5–6 ft 1–2 m	Small waves	Raises dust and loose paper
5	Fresh breeze	17–21 knots 19–24 mph 29–38 km/h	6–10 ft 2–3 m	Moderate waves	Small trees and leafs begin to sway
6	Strong breeze	22–27 knots 25–31 mph 39–49 km/h	9–13 ft 3–4 m	Large waves	Large branches in motion
7	High wind, moderate gale, near gale	28–33 knots 32–38 mph 50–61 km/h	13–19 ft 4–5.5 m	Sea heaps up	Whole trees in motion
8	Gale, fresh gale	34–40 knots 39–46 mph 62–74 km/h	18–25 ft 5.5–7.5 m	Moderately high waves	Twigs break off trees
9	Strong/severe gale	41–47 knots 47–54 mph 75–88 km/h	23–32 ft 7–10 m	High waves	Slight structural damage
10	Storm, whole gale	48–55 knots 55–63 mph 89–102 km/h	29–41 ft 9–12.5 m	Very high waves	Trees uprooted, considerable structural damage
11	Violent storm	56–63 knots 64–72 mph 103–117 km/h	37–52 ft 11.5–16 m	Exceptionally high waves	Widespread damage
12	Hurricane force	≥ 64 knots ≥ 73 mph ≥ 118 km/h	≥ 46 ft ≥ 14 m	Exceptionally high waves, sea is completely white	Devastation

Source: What is the Beaufort Scale?

E.2 Windstorm Location

The City is a largely built-out, suburban community characterized by residential neighborhoods, commercial centers, parks, and community facilities. While the City does not experience large-scale tornado activity like other regions of the country, localized windstorm events have impacted the community. Notably, during the 2023-2024 New Year's period, a rare wind event resembling a mini tornado occurred near City Hall, demonstrating Lakewood is not immune to high wind hazards.

Lakewood's generally flat topography does not provide natural wind breaks such as hills or mountains, making structures, trees, and utilities more susceptible to wind damage when strong gusts occur. The City's abundant tree canopy, while enhancing the community's environment, also increases the risk of falling limbs and uprooted trees during severe wind events, which can damage homes, vehicles, and infrastructure.

Although windstorm events in the City are typically localized, the widespread distribution of public facilities, water infrastructure, and residential areas across the city means that damage can occur in multiple areas simultaneously during a severe event, and that the entire planning area is at risk for high wind events.

E.3 Windstorm Extent

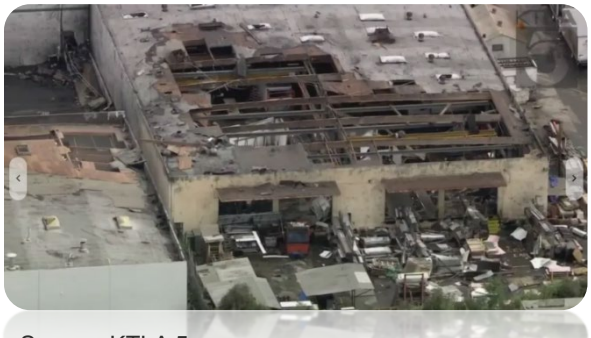
Windstorm intensity can vary significantly depending on atmospheric conditions. However, typical wind events associated with property damage generally involve sustained winds or strong gusts exceeding 45 to 60 miles per hour (mph). In more extreme cases, wind speeds can reach 65 mph (56 knots) to 72 mph (63 knots). Damage from windstorms in a suburban community like the City typically includes downed trees and branches, damaged roofs, broken windows, overturned small structures, and disrupted utility services. Heavily treed areas, mobile structures, and older buildings are particularly susceptible to wind-related impacts. Public infrastructure such as water systems, power lines, and public facilities may also experience disruption or physical damage due to falling debris or the direct force of wind gusts. Although major windstorms in the City are relatively rare, even moderate wind events can produce localized damage across the city, requiring emergency response efforts and leading to temporary utility outages, road blockages, and service interruptions.

E.4 Windstorm History

Windstorms have historically been infrequent, but occasionally impactful, events in the area. While the region generally experiences moderate wind events throughout the year, there have been a few notable incidents that highlight the community's vulnerability to stronger windstorms. Most recently, a localized tornado event was reported near City Hall around New Year's 2023-2024, causing minor property damage, downed trees, and temporary power outages. Similarly, the nearby community of Montebello experienced a *rare EF1 tornado* in 2023, which was notably the strongest tornado to impact the Los Angeles metro area since 1983. The National Weather Service confirmed that the tornado touched down around 11:20 a.m. PDT, carving a 0.42-mile path through an industrial area. It caused significant damage to 17 structures-11 of which were severely affected—uprooted a tree, snapped a power pole, and injured one person. Although tornadoes and intense windstorms are rare in this part of Southern California, these recent events demonstrate that under the right conditions, damaging winds can occur.

Prior to these incidents, strong Santa Ana winds and occasional winter storms have periodically brought elevated wind speeds to the region, causing scattered damage to trees, fences, roofs, and utilities. It should be noted that federal major disaster declarations FEMA-DR-4699-CA (2023) and FEMA-DR-4856-CA (2025) were both issued for severe weather events that included straight-line winds and covered Los Angeles County. These declarations apply to the City, as it is located in Los Angeles County. Additionally, a state of emergency was declared in California in January of 2025 in response to fire and windstorm conditions, which affected Ventura County and Los Angeles County.

E.5 Windstorm Probability



Source: KTLA 5

The probability of future windstorm events occurring in the City is considered moderate. While strong wind events are not a daily occurrence, seasonal weather patterns, particularly Santa Ana wind conditions, create recurring opportunities for elevated wind speeds capable of causing property damage, downed trees, and disruptions to utilities. Recent incidents, such as the 2023-2024 New Year's localized strong wind event near City Hall and the 2023 Montebello EF1 Tornado illustrate that while major windstorms and tornado-like events are rare, they are possible within the region.

These recent occurrences suggest that damaging winds may happen sporadically, especially during certain weather patterns. Although the City has not experienced frequent severe windstorms historically, the potential for localized damage remains.

The Hazard Mitigation Planning Committee (HMPC) noted that high wind events are a frequent occurrence within Los Angeles County and the City, often accompanying seasonal weather systems and severe winter storms. Based on local experience and historical records, there is a 100% chance of windstorm events impacting the City on an annual basis. While individual storm intensity varies from year to year, high-wind conditions are expected to occur in some form each year. Overall, the probability of minor to moderate windstorm events impacting the City is present, with the possibility of stronger, more damaging events being low but not impossible.

E.6 Windstorm Vulnerability

Vulnerability to Structures

Structures within the City are generally well-built and maintained, which helps reduce overall vulnerability to windstorm damage. However, strong wind events can still pose a risk to certain facilities, particularly those with characteristics that make them more susceptible to high winds. Based on the loss estimates detailed in Chapter 3, most City-owned structures are anticipated to experience approximately 5% damage in a typical windstorm event. However, two facilities, the Mobile Office Building at the Equestrian Center and the Arbor Yard (Water Resources Maintenance/Storage Facility), are estimated to experience slightly higher damage percentages.

The Mobile Office Building is assessed at a 10% damage potential, with an estimated loss of approximately $25,035. As a mobile structure, it is inherently more vulnerable to strong winds due to lighter construction materials and more limited anchoring compared to permanent, reinforced buildings. Similarly, the Arbor Yard is estimated at a 10% damage potential, with a potential loss of approximately $2,682,804. This facility's vulnerability stems from its role in housing important maintenance and storage infrastructure, with some equipment and materials exposed to outdoor conditions that could be affected during windstorm events.

To address these vulnerabilities, the City has developed specific mitigation efforts. Mitigation Action 2025.HMP.08 focuses on adjusting the cycle of vegetation trimming throughout the City, particularly around critical facilities such as the Mobile Office Building and Arbor Yard. Overgrown or unstable trees and vegetation near these structures could pose additional hazards during wind events, potentially causing secondary damage from falling limbs or uprooted trees. By systematically identifying and trimming fast-growing or vulnerable vegetation near these

structures, the City can reduce the risk of impact-related damage, thereby protecting not just the buildings themselves but also essential operations housed within them.

Table E.1: Windstorm Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Mobile Office Building Equestrian Center (LEC)	$250,346	10%	$25,035
Arbor Yard	$26,828,036	10%	$2,682,804

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

Windstorms can have significant impacts on public safety, especially during severe events involving high winds. The most vulnerable populations during windstorms include elderly individuals, young children, people with mobility issues, and those living in aging homes. In such events, these individuals may face a higher risk of injury from flying debris, downed trees, or damaged structures. Additionally, people living in mobile homes or temporary structures, which are more susceptible to high winds, may be at greater risk of being displaced or injured during a windstorm. The impact of windstorms on people can also extend to the broader community, as power outages may disrupt daily life, healthcare services, and transportation systems. Public spaces and community centers may become unsafe or unusable, making it difficult for people to access essential services during or after the event. In areas with dense vegetation, such as parks and residential zones, falling trees or branches can create additional hazards for pedestrians and motorists.

To mitigate these risks, the City has implemented specific mitigation actions aimed at protecting vulnerable populations. Mitigation Action 2025.HMP.08, which involves adjusting the cycle of vegetation trimming to reduce overgrowth, directly addresses the safety concerns related to falling trees and branches. By addressing trimming in high-risk areas, particularly near public facilities and residential zones, the City can help minimize the likelihood of tree-related injuries and property damage during windstorms. Additionally, Mitigation Action 2025.HMP.09 will provide residents with recommendations for protecting their homes and properties from windstorm damage. By distributing this guidance, the City will encourage residents to take preventative measures that reduce the risk of injury and property loss.

Appendix F

Extreme Heat

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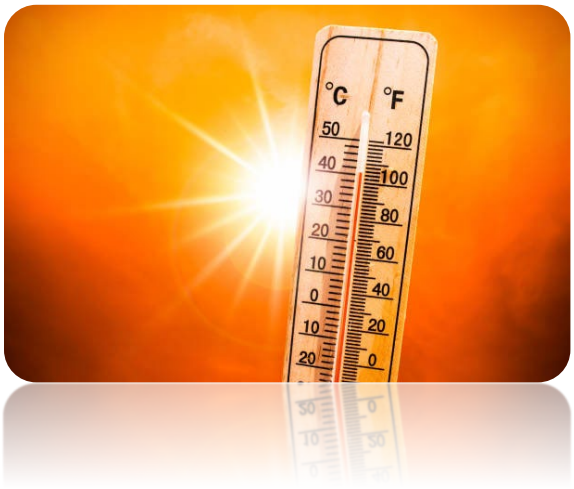
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F.1 Extreme Heat Identification and Background

Extreme heat refers to prolonged periods of excessively high temperatures, often accompanied by elevated humidity, that can severely affect human health, infrastructure, ecosystems, and public services. The *National Weather Service* defines a heat wave as a period of abnormally hot weather generally lasting more than two days. Heat waves can occur with or without high humidity. They have potential to cover a large area, exposing a high number of people to hazardous heat. However, the term is relative and depends on what is considered "normal" for a given geographic area. In cooler climates, lower temperatures may still qualify as a heat wave if they deviate significantly from local norms. These events may be seasonal or exceptionally rare, occurring only once in a century in some regions.



Extreme heat poses a number of public health risks. Among the most dangerous is heatstroke, a medical emergency that occurs when the body is unable to regulate its core temperature. It is typically diagnosed when body temperature exceeds 105°F due to environmental conditions and, even with treatment, has a fatality rate of approximately 15%. Other heat-related conditions include:

- Heat Exhaustion - While much less serious than heatstroke, heat exhaustion victims may complain of dizziness, weakness, or fatigue. Body temperatures may be normal or slightly/moderately elevated.
- Heat Syncope - This refers to sudden loss of consciousness and is typically associated with people exercising who are not acclimated to warm temperatures.
- Heat Cramps – These may occur in people unaccustomed to exercising in the heat and generally ceases to be a problem after acclimatization.

In addition to direct health impacts, extreme heat can stress infrastructure systems such as power grids.These disruptions can limit access to cooling systems, affect vulnerable populations which are reliant on electrically powered medical devices, and challenge emergency response services. Elevated temperatures may also increase the demand for fire and medical assistance and can exacerbate existing health conditions. The effects of extreme heat extend to natural systems as

well. Prolonged high temperatures can damage vegetation and dry out landscaping, increasing the risk of wildfires. As climate change accelerates, communities across the country are experiencing more frequent and intense heat waves.

F.2 Extreme Heat Location

The City is located in the southeastern portion of Los Angeles County, which experiences a Mediterranean climate characterized by warm, dry summers and mild, wet winters. Due to its proximity to the Pacific Ocean, the City typically benefits from coastal influences that moderate temperatures, especially during the summer months. However, the city is still vulnerable to extreme heat events, particularly during heat waves that may occur when high-pressure systems settle over Southern California.

In recent years, heat waves have become more frequent and intense, driven by climate change. While the City is not located in a desert or semi-arid region, it is subject to elevated temperatures during the summer and early fall, when high temperatures can reach the low 90s°F (32–34°C) or higher. The City is also susceptible to the urban heat island effect, which is more pronounced in areas with dense development, limited green space, and high amounts of asphalt and concrete, as explained by *California Environmental Protection Agency.* This effect can lead to temperatures that are several degrees higher than surrounding rural areas, particularly in built-up neighborhoods with little shading or tree cover. The City's location within Los Angeles County also places it within a region prone to sporadic heat waves, which can last for several days and may result in dangerously high temperatures, especially in areas with low-income residents who may lack access to air conditioning. The Hazard Mitigation Planning Committee (HMPC) noted that the entire planning area is at risk for extreme heat hazards.

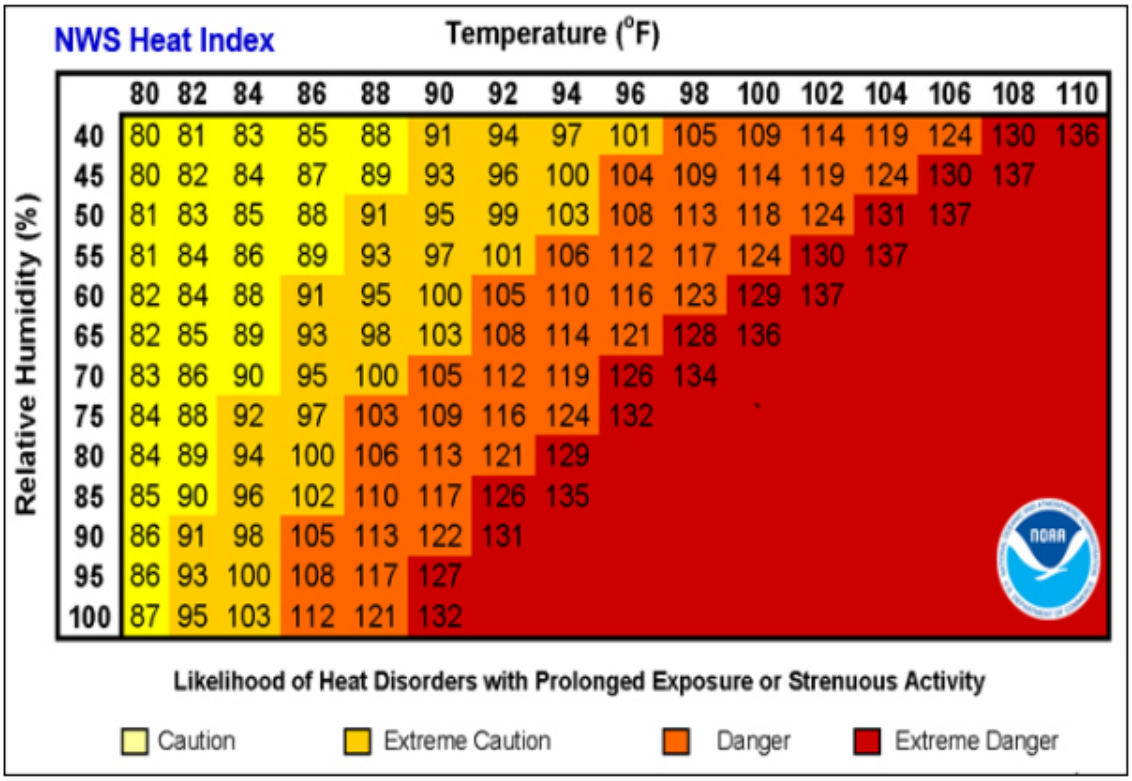
F.3 Extreme Heat Extent

The extent of extreme heat events is primarily determined by the duration of high temperatures, the intensity of heat waves, and the occurrence of elevated humidity levels. During a heat wave, temperatures can consistently exceed 90°F (32°C) for three or more consecutive days. While these conditions are typical of Southern California summers, extreme heat events in the City can push temperatures to the low 100s°F (38°C) or higher, particularly when high-pressure systems create prolonged hot spells.

The impact of extreme heat is further increased by high humidity levels, which can significantly increase the heat index, as show in Figure F.1, which is a measure that combines temperature and humidity to assess how hot it actually feels. When the heat index reaches or exceeds 105°F

(40°C), the potential for heat-related health risks increases dramatically, especially for vulnerable populations such as the elderly, children, and individuals with pre-existing medical conditions.

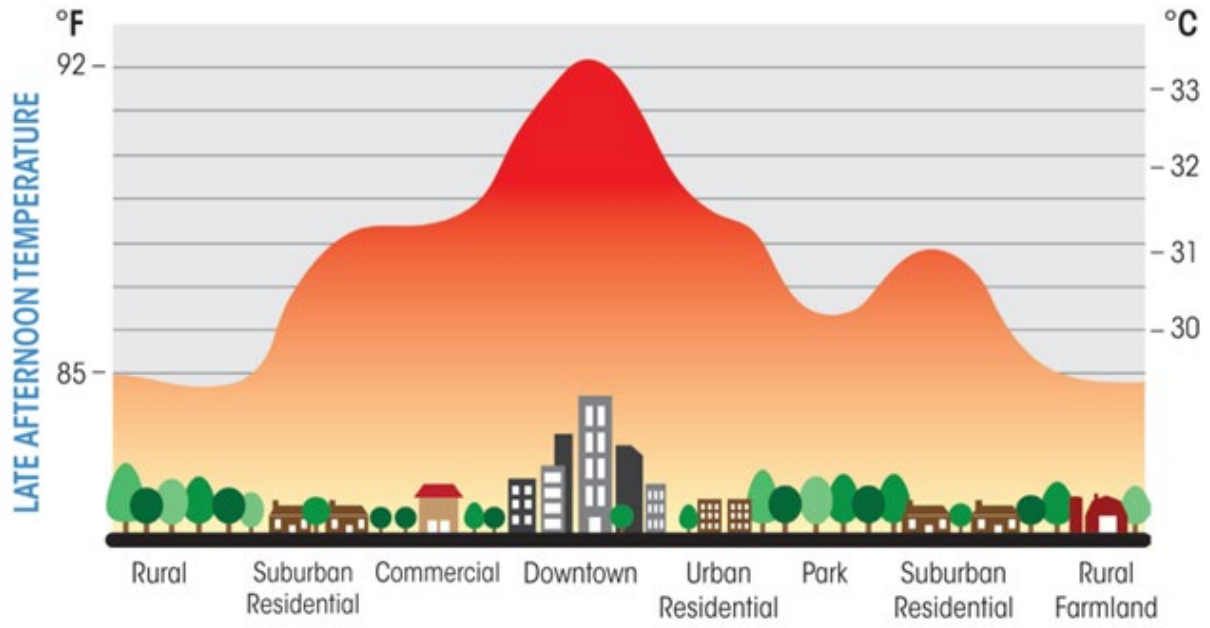
Figure F.1: Heat Index



Source: National Weather Service

In addition to direct temperature measurements, the urban heat island effect plays a critical role in the extent of extreme heat in the City. Urban areas with dense construction, limited vegetation, and expansive asphalt can experience temperatures several degrees higher than surrounding rural areas. This localized increase in temperature can make heat waves even more hazardous in certain neighborhoods, especially those that lack adequate tree cover or green spaces.

Figure F.2: Urban Heat Island Effect



Source: Urban Heat Island Effect: Eco-Intelligent™

The city is also susceptible to PSPS during heat events. These power disruptions can further amplify the challenges posed by extreme heat, as residents may lose access to air conditioning and other cooling systems, intensifying the health risks of prolonged heat exposure.

F.4 Extreme Heat History

The City has experienced multiple extreme heat events over the past several decades. While not located in California's inland desert regions, the city remains vulnerable to periodic heat waves, especially during late summer and early fall when high-pressure systems can trap hot air over the Los Angeles Basin.

Notable regional events that have affected the City include the September 2020 heat wave, during which parts of Los Angeles County recorded temperatures exceeding 110°F, as detailed by *NASA's Earth Observatory*. Although the City's coastal proximity helped moderate temperatures somewhat, the City hit a record high of 104°F. This event led to excessive heat warnings, increased demand for emergency medical services, and higher electricity usage.

More recently, the 2022 and 2023 summers brought several periods of elevated temperatures, often in the mid- to high-90s°F, accompanied by regional power conservation alerts and increased use of cooling centers in nearby jurisdictions. These heat waves placed strain on local resources

and infrastructure, particularly among communities without access to air conditioning or adequate shade.

In response to record-breaking temperatures, beginning in August of 2022, California Governor Gavin Newsom proclaimed a State of Emergency and subsequently issued Executive Order N-15-22 on September 6, 2022, to extend emergency measures addressing the statewide extreme heat event. The order temporarily suspended certain permitting and air-quality restrictions to allow increased electricity generation and backup power use during peak demand hours. Because Los Angeles County was included in this statewide proclamation, the City was also covered under this declaration. However, no federal major disaster declarations have been issued specifically for extreme heat events affecting the County, which includes the City, since the last planning period.

The frequency and intensity of these events have increased in recent years, aligning with broader trends in climate change that indicate a growing risk of extreme heat across Southern California, including in suburban areas like the City.

F.5 Extreme Heat Probability

The City is increasingly susceptible to extreme heat events due to rising temperatures and the effects of climate change. The Hazard Mitigation Planning Committee (HMPC) identified extreme heat as one of the most frequent and predictable hazards affecting the City, noting that heat events occur annually within Los Angeles County. Consequently, there is a 100% chance of extreme heat impacting the City each year. Projections from the 2021 Los Angeles County Climate Vulnerability Assessment indicate a significant escalation in the frequency, duration, and intensity of such events, with the region expected to experience up to a tenfold increase in the occurrence of heat waves by mid-century. This increase is attributed to factors such as the urban heat island effect and broader climate change trends. Further research from NASA's Ames Earth Science Office Project, supporting the agency's *Science Mission Directorate Field Research*, highlights that inland urban areas of Los Angeles County- including the City- are particularly vulnerable to heatwaves, with strong upward trends in frequency, duration, and intensity closely tied to nighttime warming. These projections reinforce that extreme heat will continue to pose an escalating and recurring hazard for the City.

F.6 Extreme Heat Vulnerability

Vulnerability to Structures

Extreme heat is primarily a threat to human health, energy systems, and vulnerable populations rather than to the structural integrity of buildings. Unlike hazards such as earthquakes or floods,

high temperatures generally do not cause direct physical damage to buildings or infrastructure. Therefore, the Hazard Mitigation Planning Committee concluded that structural loss related to extreme heat is expected to be minimal.

However, prolonged periods of excessive heat can contribute to indirect impacts on structures, such as increased strain on HVAC systems and potential service disruptions caused by energy demand spikes. Facilities that rely on continuous power, such as community centers, senior centers, and water infrastructure, may be temporarily affected if high temperatures lead to brownouts or PSPS. Although these operational disruptions can reduce functionality, they do not typically result in significant structural damage. As such, the vulnerability of structures in the City to extreme heat is considered low.

Table F.1: Extreme Heat Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	1%	$80,814
The Centre	$14,955,913	1%	$149,559
Weingart Senior Center	$4,343,400	1%	$43,434
Arbor Yard	$26,828,036	1%	$268,280
Nixon Yard	$2,9437,28	1%	$29,437

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

Extreme heat poses significant risks to human health, particularly for vulnerable populations. As explained in the *Los Angeles County Climate Vulnerability Assessment*, these include people living in mobile homes, who are more susceptible to overheating due to their lack of insulation and less access to cooling systems; individuals who depend on electrically powered medical devices, such as those using oxygen or dialysis equipment, who face heightened risks during power outages; people experiencing homelessness, who lack shelter and protection from the heat; and outdoor workers, such as landscapers, who endure prolonged exposure to high temperatures without adequate recovery time, are also particularly vulnerable.

In response to these challenges, the City has developed several mitigation actions aimed at directly addressing the needs of its residents. 2025.HMP.10 focuses on increasing tree plantings around buildings and along public rights-of-way, particularly in high-traffic and vulnerable areas, to reduce heat exposure and mitigate the urban heat island effect. This is complemented by 2025.HMP.11, which includes educational initiatives to raise awareness of the benefits of cool roofing, helping to lower indoor temperatures, reduce reliance on air conditioning, and improve overall energy efficiency. Furthermore, 2025.HMP.12 explores ways to expand access to public pools during extreme heat events, ensuring that all residents, particularly vulnerable populations, have access to cooling centers, even if they don't typically use these facilities. These mitigation actions align with the City's commitment to serving its residents, particularly those at higher risk during heat waves, by ensuring that critical cooling resources are available and accessible to all.

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Figure G.4 : Carbon Canyon Inundation Map ..... Dam Failure-9

G.1 Dam Failure Identification and Background

A dam is a barrier preventing the flow of water or loose solid materials (such as soil or snow) or a barrier built across a watercourse for impounding water. Dams are artificial barriers, which are 25 feet or more in height or have an impounding capacity of 50 acre-feet or more. Dams are important because they provide water for drinking, for industry, irrigation, fishing and recreation, water for hydroelectric power production, water for navigation in rivers, and other needs. Dams also protect people by reducing or preventing floods.

There are four general types of dams: Arch, Buttress, Gravity, and Embankment. Each of these types of dams has different failure characteristics.

Arch Dams

Arch dams are best suited to narrow canyons where they divert the force of the water behind the dam to the sides of the canyon in order to help support the weight. Therefore, arch dams need not be as thick as gravity dams since the dam itself supports less weight making them less expensive to construct. Arch dams may carry less weight than other dams; however, they are affected by the same kinds of force. These forces include pressure of the water, weight of the water, and weight of the dam.

Buttress Dams

Buttress dams are also known as Ambursen dams, named after the American engineer who implemented this design in the early 20th century. Originally, buttress dams were used in areas requiring irrigation, but where the land was not capable of supporting the size and weight of other types of dams. Generally, buttress dams are built in wide valleys. The name "buttress" dam comes from the structure of the dam itself. The dam is supported at intervals by several buttresses, concrete slabs reinforced with steel, which form a watertight seal against the river. There are two main types of buttress dams: flat slab and multiple arches.

Gravity Dams

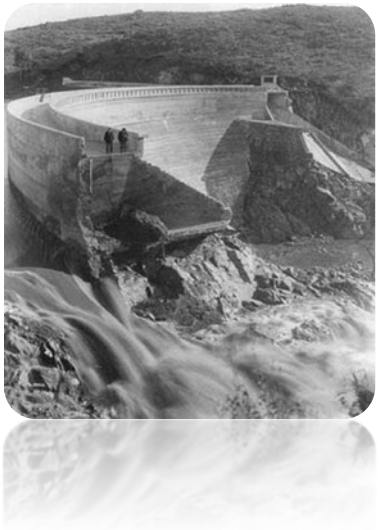
Gravity dams serve the same purposes as arch and buttress dams; however, they differ in structure and method of retaining water. This type of dam is solid and triangular in shape; therefore, it requires a large amount of concrete or other construction material. The immense weight of the concrete provides stabilization and allows the dam to maintain control of the water.

Embankment Dams

Embankment dams are massive dams made of earth or rock. Embankment dams usually have some sort of waterproof interior (called the core), which is covered with earth or rock fill. Grass may even grow on the earth fill. Water will seep in through the earth or rock fill but should not seep into the core. They rely on weight to resist the flow of water, similar to concrete gravity dams. The embankment dam is the only dam type that is not made of concrete. Embankment dams may be made of earth or rock, both of which are pervious to water, that is, water can get into it. Water seeps into the core material and should stop at the seepage line. The core material is usually more watertight than the rock or earth that is on the outside of the dam, but the core material is still not totally impervious to water.

According to the FEMA website, dam failures are generally caused by one or a combination of the following reasons:

Overtopping



The Association of State Dam Safety Officials (ASDSO) reports 34% of all U.S. dam failures are due to overtopping as a result of inadequate spillway design, debris blockage of spillways, or settlement of the dam crest. Overtopping occurs when primary and emergency spillways are not sufficient to pass floodwater and the excess runs over the top of the dam. The overflow can erode the embankment, weakening the dam wall and potentially cause a full dam failure. While the City has not experienced the repercussions of a major dam failure, the Sweetwater Dam failure that occurred on January 27, 1916, is an example of a failure in Southern California that was the result of overtopping. After experiencing a long period of drought, the area received more than thirty-nine inches of rain. As a result, more than 200 bridges were washed out, entire communities were swept away, levees collapsed, and valleys were inundated.

Acts of sabotage

Sabotage, or deliberate actions aimed at disrupting normal dam operations, can occur for many reasons. Like an act of terrorism or public demonstration, acts of sabotage can be motivated by a number of factors; political, socio-economic, and religious are a just a few. Often, they occur suddenly, and without warning. However, according to the Stanford University National Performance of Dams Program (NPDP), sabotage and vandalism have been the cause of the

fewest dam failures between the years 1975 and 2001. Therefore, while the City is vulnerable to acts of sabotage, it is unlikely to occur.

Structural failure of materials used in dam construction

According to the NPDP, dam failure due to structural deficiencies are only marginally more common than the acts of sabotage. Due to state regulations for dam construction and maintenance, failures due to inadequate structural integrity are rare.

According to FEMA, causes of dam failure in this category may include:

- Movement and/or failure of the foundation supporting the dam,
- Settlement and cracking of concrete or embankment dams,
- Piping and internal erosion of the soil in embankment dams, and
- Inadequate maintenance and upkeep.

G.2 Dam Failure Location

The City lies within the potential inundation zones of several major dams in Southern California. While dam failure is a rare event, especially with modern engineering standards, seismic activity or extreme flood events could compromise a dam's structural integrity. If a failure were to occur during such events, portions of the City could be significantly affected.

There are four primary dams upstream of Lakewood that pose potential inundation risks in the event of a catastrophic failure: Brea Dam, Carbon Canyon Dam, Prado Dam, and Whittier Narrows Dam. These structures are part of the region's comprehensive flood control system.

Carbon Canyon Dam

Carbon Canyon Dam is located in northeastern Orange County, near the cities of Brea and Yorba Linda. It sits within the Carbon Canyon Regional Park area and is part of the Santa Ana River watershed. Although not directly adjacent to the City, its downstream flow path includes portions of the city, particularly in the eastern areas.

Prado Dam

Prado Dam is located along the Santa Ana River near the city of Corona in Riverside County. It is one of the region's largest flood control structures and influences flood management for a broad area of western Riverside and northern Orange counties. Water released or spilled from Prado Dam can travel through the Santa Ana River system toward the southern areas of the City.

Whittier Narrows Dam

Whittier Narrows Dam is located to the north of the City in the Whittier Narrows Recreation Area, near the city of Pico Rivera. It lies at the confluence of the San Gabriel and Rio Hondo Rivers and is the closest major dam to the City. Due to its position and the natural flow of watercourses, a failure of this dam could have the most extensive impact on the City.

Brea Dam

Brea Dam is located in northern Orange County near downtown Brea, within the Brea Dam Recreation Area. Though relatively smaller in size, its position along the Brea Creek flood control system connects it to downstream communities, including the eastern portion of the City. The dam is primarily surrounded by urbanized areas, increasing its relevance to nearby cities during a flood event.

The inundation maps detailed on the following pages represent worst-case, full-failure scenarios where impounded water is released rapidly and without warning. These maps do not include depth or flow velocity information, but flow conditions and topography suggest that both would taper off at the edge of the inundation zones. Partial failures or failures occurring during lower water levels would likely result in smaller, less severe impacts.

Figure G.1: Whittier Narrows Dam Inundation Map

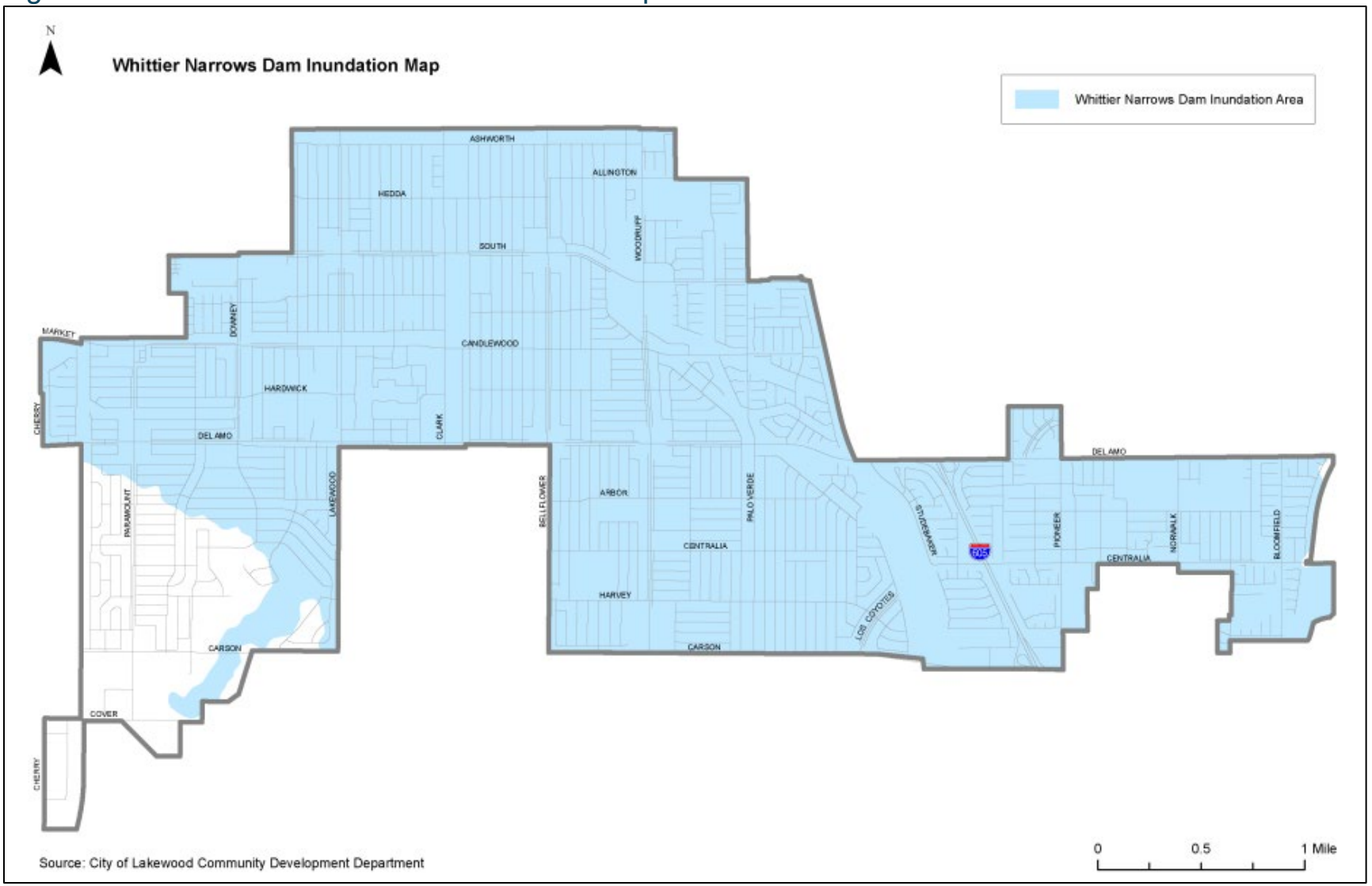


Figure G.2: Prado Dam Inundation Map

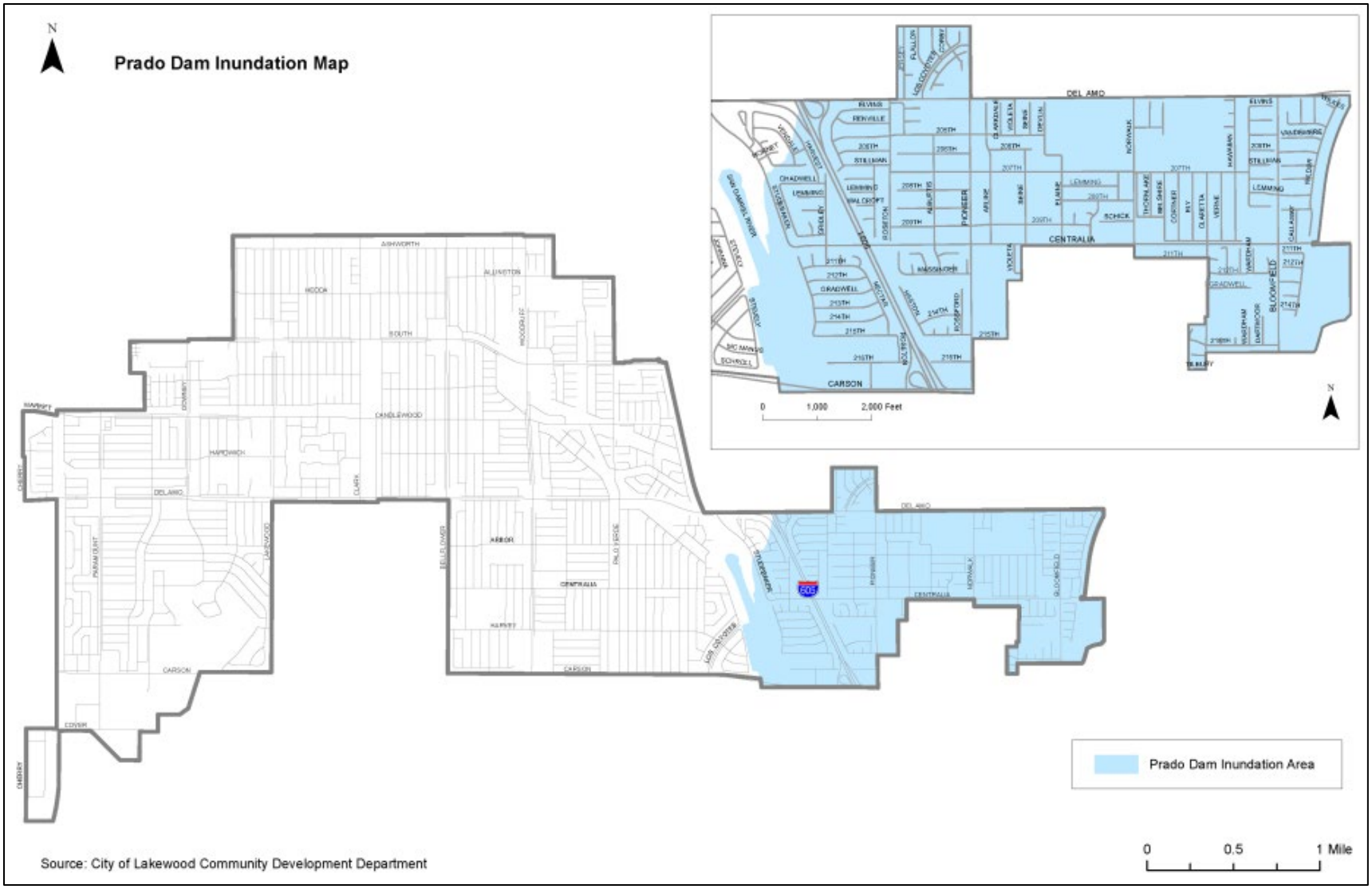


Figure G.3 : Brea Dam Inundation Map

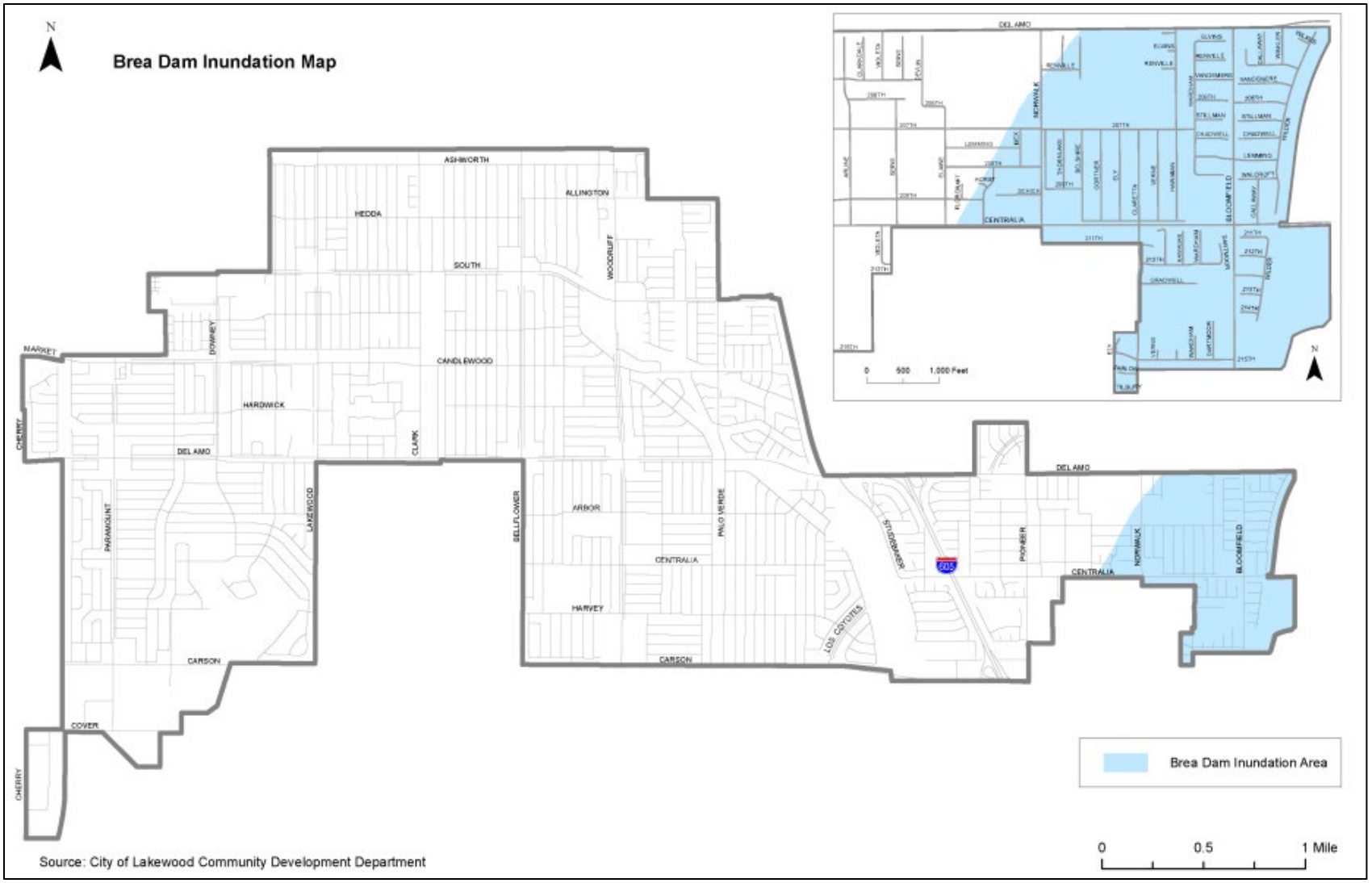
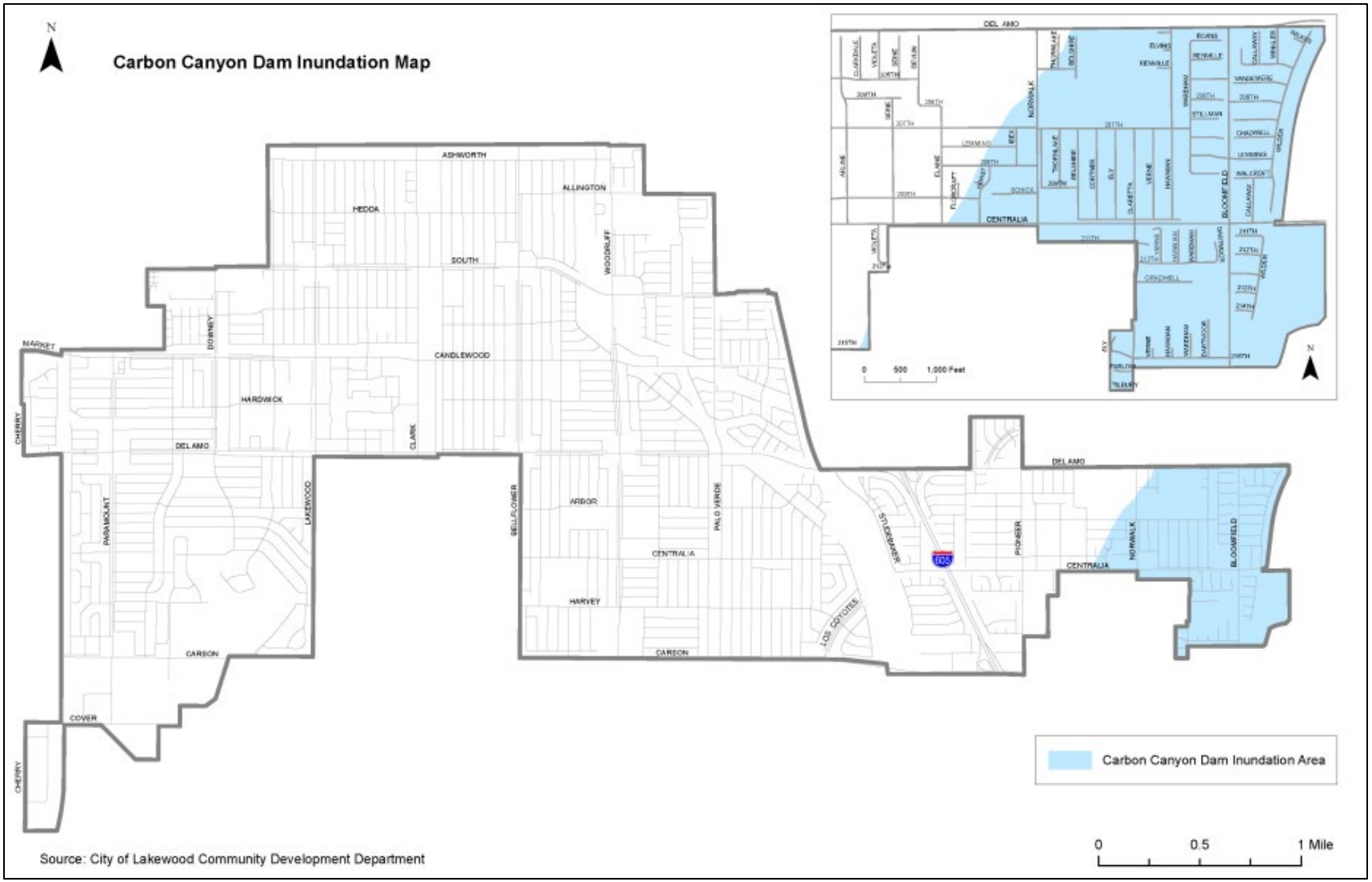


Figure G.4 : Carbon Canyon Inundation Map



G.3 Dam Failure Extent

In the event of a catastrophic failure of one of the dams upstream of the City, the extent of the resulting inundation would vary depending on the size of the dam and the volume of water released. The four primary dams of concern for the City are the Brea Dam, Carbon Canyon Dam, Prado Dam, and Whittier Narrows Dam. While the probability of such failures is low, the consequences would be significant, potentially affecting large portions of the city. Each dam's storage capacity and modeled or estimated inundation depths are summarized below, based on information from the U.S. Army Corps of Engineers and supporting public sources.

- **Whittier Narrows Dam**: A failure of the Whittier Narrows Dam would likely have the most severe impact on the City, with floodwater potentially affecting a significant portion of the city. The inundation could extend across much of the urban area, particularly in the eastern sections, with substantial impacts on both residential neighborhoods and critical infrastructure, such as roads, parks, and public facilities. Whittier Narrows Dam, constructed in 1957 and operated by the U.S. Army Corps of Engineers, has a total storage capacity of approximately 67,060 acre-feet and regulates runoff from a 554-square-mile drainage area within the Los Angeles County Drainage Area flood control system. In a worst-case scenario, modeling by the U.S. Army Corps of Engineers, and subsequent reporting by the Los Angeles Times, indicate that a catastrophic failure could produce flood depths of up to 20 feet in nearby Pico Rivera and about 15 feet in downstream communities such as Downey, with shallower but still significant depths- generally 5 to 10 feet- possible in lower-lying areas of the City of Lakewood. The scale of flooding could overwhelm areas near lower-lying regions, resulting in widespread damage to properties and major disruption to the community. Because of its large storage volume, low-lying outlet connection to both the San Gabriel River and Rio Hondo Channel, and its Dam Safety Action Class I designation ("very high urgency for action"), the City continues to regard Whittier Narrows Dam as the highest-consequence dam-failure hazard affecting the City, despite its low probability of occurrence.

- **Prado Dam**: A failure of the Prado Dam could also have a significant impact, particularly in the eastern part of the City. Floodwater could affect a substantial portion of the city's residential areas. Prado Dam currently has a gross storage capacity of 217,000 acre-feet below the spillway crest elevation of 543 feet (NGVD 29), of which 205,000 acre-feet is utilized for temporary storage of flood runoff and 12,000 acre-feet for sediment accumulation, as noted by the U.S. Army Corps of Engineers. As part of the Santa Ana River Project, ongoing spillway modifications will increase the dam's capacity to approximately 362,000 acre-feet once completed. Given Prado Dam's large storage volume, a breach would release a surge moving through the Santa Ana River system that could generate several feet of flooding in low-lying areas of the City. The extent of the flooding would depend on the severity of the failure, but it could still result in considerable damage to infrastructure and homes, particularly in areas with low elevations.



- **Brea Dam**: While a failure of the Brea Dam would have a more limited impact compared to the Whittier Narrows or Prado Dam scenarios, it could still cause significant flooding in the eastern portion of the City of Lakewood. Residential properties in the affected areas would be at risk of inundation. The dam, operated by the U.S. Army Corps of Engineers, has a storage capacity at spillway crest of approximately 4,009 acre-feet. The extent of the damage would depend on the volume and speed of the water release, but given the potential sudden release of thousands of acre-feet, localized flooding depths of several feet could reasonably be expected in lower elevation zones, resulting in property damage, disruptions to traffic and utilities, and localized evacuation needs.
- **Carbon Canyon Dam**: While a failure of the Carbon Canyon Dam would have a more limited impact compared to the Whittier Narrows Dam or Prado Dam scenarios, it could still cause significant flooding in the eastern portion of the City. Residential properties in the affected areas would be at risk of inundation. The dam, completed in 1961 and operated by the U.S. Army Corps of Engineers (Los Angeles District), has a storage capacity of approximately 6,614 acre-feet at spillway crest, per the U.S. Army Corps of Engineers Fact Sheet and an investigation from the U.S. Army Corps of Engineer Digital Library cites a "maximum storage capacity" of about 12,063 acre-feet. Given the potential release of thousands of acre-feet of water, local flooding depths of several feet could

reasonably be expected in low-lying zones of the City, resulting in property damage, disruptions to traffic and utilities, and localized evacuations.

In all of these scenarios, floodwaters would likely spread more widely and decrease in intensity as they move away from the source of the failure. However, the most significant damage would occur in the areas closest to the dams, where water would flow with the greatest velocity and depth. These inundation zones would affect a mix of residential, commercial, and public infrastructure, with the potential for significant destruction in areas that are most vulnerable to flooding.

G.4 Dam Failure History

The history of dam failures in Southern California serves as a stark reminder of the risks associated with aging infrastructure and the region's natural hazards. While catastrophic failures have been rare, the consequences of these events are often devastating, prompting advancements in engineering standards and emergency planning. By examining these historical failures, we gain valuable insights into the vulnerabilities of critical infrastructure and the importance of ongoing maintenance and oversight.

In the Orange County and Los Angeles region, several notable dam failures—or near failures—have shaped local infrastructure practices and policies. These events have not only impacted the immediate communities but have also served as catalysts for improved safety measures and regulations across California.

St. Francis Dam Failure (1928)

One of the most catastrophic dam failures in U.S. history occurred in 1928 when the St. Francis Dam, located in northern Los Angeles County, collapsed just two years after its completion. The failure unleashed a 12-billion-gallon flood wave that swept through the Santa Clara River Valley, destroying everything in its path. Over 400 people lost their lives in this tragedy, and entire towns were devastated. The disaster revealed critical engineering flaws and a lack of adequate oversight during the dam's construction, leading to sweeping changes in dam safety regulations statewide.

Prado Dam Challenges

Although not a failure, Prado Dam, located near Corona in Riverside County and serving as a vital flood control structure for Orange County, has faced significant maintenance issues. In the early 2000s, concerns about seepage and aging infrastructure prompted a major rehabilitation effort to ensure the dam's continued functionality. Heavy rainfall during these periods heightened

fears of potential failure, emphasizing the importance of proactive management and regular assessments to address vulnerabilities.

Santiago Dam and Irvine Lake

The Santiago Dam, which forms Irvine Lake, has also experienced structural concerns during periods of heavy rain. While no catastrophic failure has occurred, these concerns highlight the risks associated with aging infrastructure, particularly as climate change increases the frequency of extreme weather events. Regular inspections and maintenance of the dam have been essential to ensuring the safety of nearby communities.

Overall, there have been at least 460 deaths from dam failures in California. A brief selection of these failures is outlined in Table G.1.

Table G.1: Selected Dam Failures in California

YEAR FAILED	DAM	LOCATION	CAUSE OF FAILURE/DEATHS
1883	English	Sierra County	Dam Crumbles to foundations, decay of timber used
1892	Long Valley Creek	San Jacinto	Heavy rains, dam carried away by flood
1895	The Angels	Calaveras County	Undetermined during flood, poor foundation
1896	Vernon Heights	Oakland	Shallow foundation
1898	Snake Ravine	Stanislaus County	Poor compaction
1916	Sweetwater	San Diego	Dam collapse releasing 13 billion gallons of water
1925	Sheffield	Santa Barbara	Earthquake comprised foundation integrity
1928	St. Francis	Los Angeles County	Likely instability of underlying soil
1963	Baldwin Hills	Los Angeles	Leak through embankment turned into washout
1964	Hell Hole	Rubicon River	Failed during construction due to unprecedented rains

YEAR FAILED	DAM	LOCATION	CAUSE OF FAILURE/DEATHS
1965	Matilija	Ventura	Bad foundation and concrete disintegrating
1971	San Fernando	Los Angeles	Gate failure only resulting from earthquake
1995	Folsom Dam	Sacramento	Gate failure only – minor damage to dam and spillway
2017	Oroville	Oroville	Inundated spillways resulted in severe erosion

Source: Association of State Dam Safety Officials and various open sources

No federal major disaster declaration or state emergency proclamation specific to dam failure in Los Angeles County, where the City is located, has been identified since the last planning period.There is no recorded history of dam failures directly affecting the City, and no reports of damage from dam-related flooding have been identified. However, given the extent of development in the region and the potential impacts identified in inundation mapping, the City continues to treat dam failure as a significant, though unlikely, hazard in its planning efforts.

G.5 Dam Failure Probability

The Hazard Mitigation Planning Committee (HMPC) classified dam failure as a rare event, defined as occurring less than once every 50 years. This equates to an estimated annual probability of less than 2 percent. Although the likelihood of dam failure impacting the City of Lakewood is very low, the potential consequences are severe due to the high volume of water that could be released from upstream facilities.The probability of a dam failure impacting the City is considered low but cannot be entirely ruled out. The City is vulnerable to potential flooding from Whittier Narrows Dam, Prado Dam, Brea Dam, and Carbon Canyon Dam. These dams serve as critical flood control structures designed to mitigate the effects of heavy rainfall and stormwater runoff. However, in the event of a dam failure, the consequences could be catastrophic, leading to loss of life, destruction of high-value properties, and disruption to residential areas, businesses, and tourism. Although both dams are maintained under strict regulatory oversight, historical incidents, such as the 2005 seepage event at Prado Dam that prompted evacuations, highlight the ongoing need for vigilance.

G.6 Dam Failure Vulnerability

Vulnerability to Structures

In the event of a dam failure, all City assets face significant risk, with varying degrees of vulnerability. Detailed in Chapter 3, the vulnerability assessment calculations indicate that many of the city's facilities, particularly those with key infrastructure and public services, are at high risk. While the majority of these structures would suffer substantial damage, some properties are slightly more at risk due to their location, structural characteristics, and the nature of the services they provide. Below is a summary of the vulnerability of key city assets to a potential dam failure event.

City Hall faces an estimated $6,465,138 loss, with 80% damage. As the central hub of the city's governmental operations, the loss of City Hall would severely disrupt administrative functions. Nearby, The Centre is expected to incur $13,460,322 in damage, with a projected 90% damage. This facility plays a vital role in hosting community events and providing social services, making its vulnerability a major concern for community resilience. The Weingart Senior Center is projected to sustain $3,474,720 in damage with 80% of the structure being damaged. Given its role in supporting the senior population, the loss of this center would disproportionately impact one of the city's most vulnerable groups. Arbor Yard, a key facility for water resources maintenance and storage, represents the largest single asset at risk, with estimated damage at 80% and a loss of $21,462,429. Damage to this facility would significantly disrupt the city's ability to maintain and manage its water infrastructure. In addition, the City's well sites and pump stations, which are distributed throughout the city, also face considerable risk. The well sites have a combined potential loss of $6,434,154, and pump stations are estimated at $1,417,284, both expected to sustain 80% damage. The loss or impairment of these critical water facilities would jeopardize the city's water supply and distribution capabilities, further compounding the impacts of a dam failure event. While these are just a few of the City's critical assets, the overall vulnerability to dam failure remains high across all city properties, particularly those serving essential functions.

Table G.2: Dam Failure Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	80%	$6,465,138
The Centre	$14,955,913	90%	$13,460,322

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Weingart Senior Center	$4,343,400	80%	$3,474,720
Mae Boyar Park Community Center	$2,127,200	90%	$1,914,480
Palms Park Community Center	$4,674,200	90%	$4,206,780
Monte Verde Park Recreation Building	$1,353,000	90%	$1,217,700
Arbor Yard	$26,828,036	80%	$21,462,429
Nixon Yard	$2,943,728	90%	$2,649,355
Well Sites	$8,042,692	80%	$6,434,154
Pump Stations	$1,771,605	80%	$1,417,284

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

In the event of a dam failure, the City's residents, particularly vulnerable populations, would face significant risks. The elderly population, many of whom rely on facilities like the Weingart Senior Center for essential services, would be at heightened risk due to limited mobility and access to emergency resources. A dam failure could disrupt these services, with potential damage exceeding 80% for key facilities, leaving seniors and other vulnerable populations without critical support. Public facilities such as The Centre and the community parks, which may serve as emergency shelters, would likely be rendered unusable, further complicating efforts to provide shelter and resources for displaced residents. Moreover, damage to water infrastructure could lead to contamination or scarcity, further endangering vulnerable groups.

To mitigate these risks, 2025.HMP.13 proposes establishing and maintaining a mass notification system for the City. This system will ensure timely alerts and services during emergencies by conducting regular system setup, testing, and staff training. By enhancing communication and

evacuation plans, the city can better protect its residents, particularly vulnerable populations, during a dam failure event, ensuring a more coordinated and effective response.

Appendix H
Adversarial Events

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H.1 Adversarial Events Identification and Background

Adversarial events are deliberate actions intended to cause harm, disrupt systems, or intimidate populations. These events may include terrorism, cyber attacks, sabotage, mass shootings, and other forms of violence or disruption initiated by individuals, groups, or hostile organizations. The motivation for such events can range from political or ideological beliefs to personal grievances, and they may target individuals, institutions, infrastructure, or governments.

Terrorism is one of the most recognized forms of adversarial events. It is defined as 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.

A weapon of mass destruction (WMD) is a type of weapon that can bring significant harm to a large number of people or structures. Examples of WMD include nuclear, radiological, biological, or chemical agents. Aside from attacking local targets, terrorists might also use WMD to inflict harm on a large population. The Federal Bureau of Investigation (FBI) has categorized two types of terrorism in the United States.

International Terrorism involves terrorist activity committed by groups or individuals who are foreign-based and/or directed by countries or groups outside the United States, or whose activities transcend national boundaries.

Domestic Terrorism involves groups or individuals whose terrorist activities are directed at elements of our government or population without foreign direction.

Well-known international terrorist groups include Islamic Fundamentalist groups, such as Islamic State in Iraq and Syria (ISIS); European terrorists, including the Red Brigade in Italy, Spain's Euskadi Ta Askatasuna (ETA), and the Japanese Red Army; separatist groups, such as Sierra Lumenoso, and the "Shining Path" in Peru. Add to these a host of narco-terrorists, such as the Medellin and Cali drug cartels.

In the United States, a number of animal rights activists; environmentalist groups; white supremacists, such as the League of Aryan nations; and groups including the Covenant, Sword and Arm of the Lord, New World Order, and skinheads have been responsible for acts of terrorism on United States soil. Added to these are groups like the Klu Klux Klan; survivalists, such as the Freemen in Montana; and doomsday cults, such as David Koresh in Waco, Texas, and Jim Jones in Guyana.

There are a number of methods a terrorist may use to carry out their objective, including attacks of a chemical, biological, radiological, nuclear, explosive, and cyber nature. In addition, terrorists conduct hijackings, assassinations, armed assaults, kidnappings/hostage taking, arson fires, sabotage of critical infrastructures such as utilities and transportation, and the dissemination of confidential or otherwise vulnerable information for the planning of terrorist attacks.

Chemical Attack

Chemical agents involve the use of chemical compounds to kill or seriously injure victims. There are numerous kinds of chemical weapons, and their effectiveness is determined by a number of factors, including age, purity, weather conditions, wind direction, and means of dissemination.

Biological Attack

Biological agents include microbes, such as bacteria or viruses, and toxins derived from plants or animals that can produce illness or death. Illegal facilities that manufacture these substances are difficult to detect because they employ fermentation technology commonly used in the production of legitimate products such as antibiotics, vaccines, and consumables.

Cyber Attack



Cyber terrorism is a premeditated, politically motivated attack against information, computer systems, computer programs, and data which results in violence against noncombatant targets by sub-national groups or clandestine agents. Cyber terrorists can be domestic or international. Classification of being a cyber-terrorist depends on if the terrorist relies on cyber terrorism to further their cause or uses it in addition to conventional terrorism.

Radiological and Nuclear Attack

Radiological or nuclear terrorism is the use of radioactive materials and/or nuclear explosives, as well as any terrorist actions against nuclear facilities by individuals or groups, to inflict harm on a population and advance political or social objectives. Sources of radiological material including nuclear fuel cycle waste, medical and dental equipment, military weaponry, and machines used in private industry.

Mass Shootings and Armed Assaults

These involve the use of firearms or other weapons to target people in public or private settings, including schools, workplaces, government buildings, or places of worship. Often ideologically or personally motivated, these events have become an increasing concern due to their unpredictability and high fatality rates.

Explosive Attact

The impact of a bombing depends largely on the type, size, and placement of the device used. Additionally, a WMD in combination with an explosive device expands the lethality, physical damage, and economic disruption. The use of an explosive device can also inflict significant disruption of society through destruction of critical infrastructure and widespread fear amongst the target population.

Sabotage and Infrastructure Disruption



Deliberate tampering with utility systems (e.g., power, water, communications), transportation networks, or emergency services, potentially causing widespread service outages and safety risks.

Additional Terrorism Methods

Additional terrorism methods include hijackings, kidnappings, and the taking of hostages;; assassinations of public figures; the dissemination of confidential information that would aid terrorist organizations when planning an attack; arson fires; and many other means of disrupting normal society or endangering lives and property.

H.2 Adversarial Events Location

Adversarial events, including acts of terrorism, civil unrest, targeted violence, and cyberattacks, can occur citywide, but are most likely to impact areas with high public visibility, symbolic significance, or concentrations of people. Key locations of concern include major public facilities, government buildings, and high-traffic commercial areas.

One of the most prominent potential targets is Lakewood Center Mall, which serves as a regional shopping destination. Due to its high volume of daily visitors, economic importance, and central role in community activity, the mall could be vulnerable to active shooter scenarios or other adversarial acts. Similarly, City Hall, The Centre, and adjacent municipal buildings form a concentrated civic complex that may be perceived as symbolic government targets. In an

adversarial event, disruption at these sites could paralyze essential government functions and affect public safety operations.

Past events have demonstrated the city's exposure to civil unrest. During the 2020 protests following the death of George Floyd, cities across the Los Angeles County region, including neighboring jurisdictions, experienced widespread demonstrations. The City recognizes that future social or political unrest could impact public spaces, especially those near major transportation corridors or gathering areas like parks and civic centers. Critical infrastructure such as Arbor Yard, Nixon Yard, water well sites, and pump stations are also at risk, particularly from sabotage or coordinated physical or cyberattacks. These sites are essential for public works, water supply, and city operations. Their partial impairment could cause citywide service disruptions.

Because adversarial events can be unpredictable and vary widely in type and target, the entire City is considered potentially at risk. However, certain locations, particularly those with high public visibility, civic importance, or essential service, face a higher likelihood of being directly impacted.

H.3 Adversarial Events Extent

Adversarial events vary widely in nature, scale, and impact. These incidents can range from isolated threats, such as vandalism or minor acts of civil disobedience, to more severe and coordinated actions, including active shooter incidents, terrorism, cyberattacks, and large-scale civil unrest. The extent of such events is typically measured by the severity of physical damage, number of casualties, duration of disruption, and extent of service interruption.

A localized adversarial incident, such as a bomb threat or active shooter situation, may impact a single building or facility, such as City Hall, a community center, or a school, but could result in significant casualties and emergency response challenges. More widespread events, such as civil unrest or coordinated attacks, could involve multiple sites and require citywide deployment of emergency services, law enforcement, and mutual aid support. Cyberattacks, which are becoming more frequent and sophisticated, have the potential to affect critical infrastructure systems simultaneously and over extended periods. A successful attack on city networks or utility systems could disable communications, disrupt water and power supply, or compromise sensitive data.

The scale and severity of these events depend on various factors, including the location and method of attack. Regardless of the nature of the incident, the impact on public safety, city infrastructure, and the ability to provide essential services could be significant.

H.4 Adversarial Events History

While the City has not experienced any direct acts of terrorism, mass violence, or civil unrest in recent history, adversarial events- both domestic and international—remain a persistent and evolving threat nationwide. These events are characterized by deliberate actions intended to cause harm, disrupt services, or instill fear within the population. The following examples illustrate the range of adversarial events that have occurred in the United States and Southern California, and provide context for understanding how similar incidents could affect the City either directly or indirectly.

September 11, 2001 – Coordinated Terrorist Attacks



Source: BBC

On September 11, 2001, a coordinated terrorist plot carried out by the extremist group al-Qaeda resulted in the hijacking of four commercial airplanes. Two aircraft were flown into the World Trade Center towers in New York City, one struck the Pentagon in Washington, D.C., and the fourth crashed into a field in Pennsylvania after passengers intervened. Nearly 3,000 lives were lost, and the attacks prompted a nationwide overhaul of security protocols, emergency response frameworks, and intelligence coordination. The event remains the deadliest terrorist attack on U.S. soil and serves as a benchmark for preparedness planning.

August 2016- Orange County Transportation Authority Cyberattack

As explained in the *Orange County Register*, the Orange County Transportation Authority (OCTA) became a victim of a significant cyberattack that exploited vulnerabilities in a third-party vendor's system in 2016. This ransomware attack encrypted critical files, rendering them inaccessible and disrupted OCTA's operations. The attackers demanded a ransom for the decryption key, and while some data was eventually restored, irreplaceable information was permanently lost. The financial impact was substantial, with the agency spending over $600,000 on recovery efforts, including enhanced cybersecurity measures and system restoration. This incident not only disrupted OCTA's ability to deliver transportation services effectively but also highlighted the risks posed by external vendors.

October 1, 2017 – Las Vegas Mass Shooting

The Las Vegas mass shooting, which occurred on October 1, 2017, was the deadliest mass shooting by an individual in modern U.S. history. A lone gunman fired more than 1,000 rounds into a crowd of concertgoers from a hotel window, killing 60 people and injuring hundreds more. The shooter had no known ideological motive, underscoring the unpredictability of lone-wolf attacks and the difficulty of preventing them. This event highlighted the need for active shooter preparedness, mass casualty response coordination, and public alert systems.

May 2020 – George Floyd Protests and Civil Unrest



In May 2020, the killing of George Floyd by a police officer in Minneapolis sparked widespread protests and civil unrest across the country. In Los Angeles County, responses ranged from peaceful demonstrations to episodes of looting, vandalism, and violent confrontations. While the City remained largely unaffected by physical damage or large-scale gatherings, local officials took proactive measures to increase law enforcement visibility and engage with community members and businesses. The event emphasized the importance of real time situational awareness, inter-agency communication, and rapid deployment capabilities during periods of social unrest.

H.5 Adversarial Events Probability

Although the City has not experienced a large-scale adversarial event in recent years, the probability of future incidents remains moderate and is increasing in certain areas of concern. Factors such as population density, proximity to major transportation corridors, and the presence of high-traffic public facilities contribute to the city's exposure. The threat of civil unrest persists, particularly in times of heightened political or social tension. As observed during the 2020 George Floyd demonstrations, even cities that do not experience direct unrest may still face indirect impacts, such as emergency response demands or threats to public order. Given the evolving national climate, similar events could occur again in the future.

Cybersecurity threats also pose a growing risk to local governments. As the city increasingly relies on digital platforms to manage public services, infrastructure systems, and communication networks, it becomes a more attractive target for cyber criminals. Nationwide trends show that

local governments are experiencing a rising number of cyberattacks each year, with ransomware and data breaches becoming more common.

While the probability of a targeted terrorism or active shooter incident is considered low, it cannot be ruled out, especially in public areas with symbolic or high-profile value. Overall, while the likelihood of any single type of adversarial event remains uncertain, the increasing frequency of such threats across jurisdictions suggests a continued need for readiness and ongoing investment in prevention and response capabilities.

H.6 Adversarial Events Vulnerability

Vulnerability to Structures

The Hazard Mitigation Planning Committee recognized that all city-owned facilities are potentially vulnerable to adversarial events but noted that certain assets were assigned a higher percentage of estimated damage due to their visibility, public accessibility, and symbolic or operational significance. As detailed in Chapter 3, facilities such as City Hall, The Centre, and the City Hall Post Office were identified as more attractive for threats. These locations serve as central points of government and community activity, making them more likely to be impacted in the event of an adversarial incident. Other facilities, including infrastructure yards, well sites, and community centers, were also evaluated for their potential exposure. While some structures were given lower damage estimates of 10%, critical assets such as Arbor Yard, Nixon Yard, and the City's water infrastructure were projected to sustain up to 35% damage, resulting in significant financial loss and operational disruption.

To address this risk, Mitigation Action 2025.HMP.15 focuses on conducting regular cybersecurity risk assessments to protect key systems and infrastructure, especially those tied to city operations. In parallel, Mitigation Action 2025.HMP.14 supports physical preparedness by promoting multilingual active shooter training across City facilities, ensuring staff and community members are equipped to respond appropriately. These measures aim to reduce both the likelihood and severity of future adversarial impacts on the City’s public structures.

Table H.1: Adversarial Events Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	50%	$4,040,711

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
City Hall Post Office	$4,355,000	50%	$2,177,500
The Centre	$14,955,913	50%	$7,477,957
Weingart Senior Center	$4,343,400	10%	$434,340
Arbor Yard	$26,828,036	35%	$9,389,813
Nixon Yard	$2,943,728	35%	$1,030,305
Well Sites	$8,042,692	35%	$2,814,942
Pump Stations	$1,771,605	35%	$620,062

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

Adversarial events not only threaten physical structures in the City but also pose a significant risk to the safety and well-being of people who live, work, or gather at City facilities. The Hazard Mitigation Planning Committee emphasized that high-traffic locations such as City Hall, The Centre, and community centers are especially vulnerable due to the concentration of staff, residents, and visitors they attract on a regular basis. These sites often host public meetings, events, and services that can draw large crowds, increasing the potential for harm during incidents such as targeted violence, civil unrest, or coordinated attacks. Facilities that serve sensitive populations, such as the Weingart Senior Center and youth-focused community centers, were also flagged for heightened concern. In addition to the physical threat posed by adversarial actions, disruption of essential city services, such as water, public works, and emergency response, could further impact community members, particularly vulnerable populations.

To help mitigate these risks, Mitigation Action 2025.HMP.14 prioritizes public safety training by offering active shooter preparedness in multiple languages, ensuring accessibility for the City's Limited English Proficient (LEP) population. This inclusive approach enhances the City's overall readiness and fosters a more informed and resilient community. These preparedness efforts, coupled with security and cyber-related improvements under Mitigation Action 2025.HMP.15, aim to safeguard not only infrastructure but the people who rely on it every day.

Appendix I
Transportation Incident

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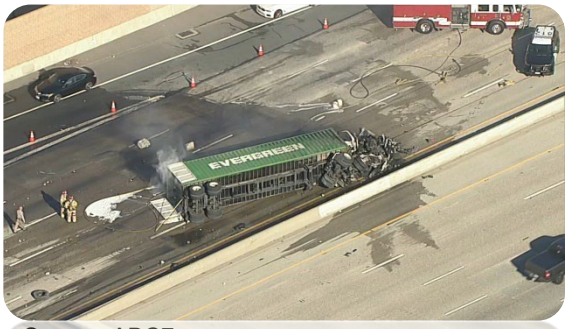
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I.1 Transportation Incident Identification and Background

Transportation incidents can pose serious risks to life, property, and infrastructure, particularly in areas with high volumes of roadway, rail, and air traffic. These incidents may include freeway accidents, train derailments—especially those involving hazardous materials—and aircraft emergencies such as crashes or mid-air collisions. While the frequency and severity of these events can vary, the potential consequences in densely populated or industrial areas can be significant.

Roadway Incident

Freeway accidents are a common occurrence in the Los Angeles County region, with California averaging approximately 3,000 freeway accident-related deaths annually in recent years. Major transportation routes throughout the region contribute to local traffic congestion and elevate the risk of transportation accidents. The high volume of traffic on these routes increases the likelihood of incidents that may affect both the safety of residents and the efficiency of emergency response operations.



Source: ABC7

Railway Incident

A major train derailment that occurs in a heavily populated industrial area could result in significant damage and potential loss of life. Both freeway and rail accidents can be a further hazard if the impacted vehicles are transporting hazardous materials.

Airborne Incident

Aircraft incidents, including crashes, mid-air collisions, and other aviation-related emergencies, present a potential risk to communities located beneath flight paths, especially those near airports. While these incidents are rare, their consequences can be severe, particularly in densely populated areas. Cities situated near busy airports or major air traffic routes may face an

increased likelihood of exposure to such risks due to the frequent low-altitude flyovers of both small private aircraft and larger commercial planes

I.2 Transportation Incident Location

The City is situated at the intersection of several major transportation corridors, making it particularly vulnerable to transportation incidents, including accidents involving vehicles, railway car, aircraft, and hazardous materials. The City is bordered by the 605 Freeway to the east, the 91 Freeway to the north, the 405 Freeway to the south, and the 710 Freeway to the west. These major freeways serve as key routes for the transportation of goods, including hazardous materials such as oil, gas, and chemicals, which increases the likelihood of transportation-related incidents, especially in the event of vehicle crashes or derailments.

The presence of oil and gas pipelines running through the City adds another layer of vulnerability. These pipelines transport hazardous materials through densely populated areas, posing a significant risk in the event of a rupture or leak. Similarly, fuel storage facilities located on the western border of the city, near Long Beach, further contribute to the potential hazards associated with transportation incidents, as accidents involving these facilities could have widespread impacts on surrounding areas. The proximity to Long Beach Airport also presents a risk from potential aviation incidents. While the probability of such incidents is low, the consequences could be catastrophic, particularly for neighborhoods located near the airport or in-flight paths. In addition to these transportation routes and infrastructure risks, areas of the City with limited access points, such as cul-de-sacs or areas with constrained ingress and egress, may face challenges during emergency response or evacuation efforts in the event of a major transportation incident.

In summary, the City's location along critical transportation corridors, combined with the presence of hazardous materials pipelines and proximity to aviation routes, places various areas of the city at risk. Key infrastructure and facilities, particularly those near major highways and pipelines, could experience significant damage in the event of a transportation-related incident.

I.3 Transportation Incident Extent

The extent of a transportation incident in the City can vary greatly depending on the type and severity of the event. A vehicular accident on one of the major freeways, such as the Interstate 605 or 91 Freeway, could lead to localized traffic disruptions, hazardous materials spills, and

potential fires or explosions, particularly if the incident involves trucks or vehicles transporting hazardous goods. In such cases, the effects could extend to nearby residential areas, commercial zones, and key public facilities. The risk of damage to infrastructure depends on the location of the accident and the volume of hazardous materials involved.

In the case of a rail-related incident, such as a derailment involving hazardous chemicals, the impact could be more widespread. The City's proximity to active rail corridors that transport oil and gas compounds the potential risk, especially in areas near industrial zones or pipelines. A train accident could result in toxic chemical spills, fires, or explosions, potentially impacting large portions of the city, including densely populated residential areas, parks, and schools. The scale of such an event would likely overwhelm local emergency response capabilities.

Aviation incidents, though less probable, could have severe consequences for the City's southern neighborhoods. If an aircraft were to crash in or near the city, it could cause widespread damage to property, including residential homes and key infrastructure. The potential for fires and debris from the crash could lead to extensive damage within a specific radius, affecting not only the immediate vicinity but also areas further from the crash site due to smoke, toxic exposure, or infrastructure failures.

I.4 Transportation Incident History

The City is located in close proximity to several busy highways and railways. Table L.1, taken from the Bureau of Transportation Statistics, presents recent traffic fatalities in California. These statistics highlight the ongoing risks associated with roadway travel in densely populated and highly trafficked urban areas like the City. While not all of these incidents occur within the City, the data stresses the importance of considering transportation hazards, particularly those involving commercial transportation routes.

Table I.1: Traffic Fatalities in California

	2018	2019	2020	2021	2022
Highway Fatalities	3,798	3,719	3,980	4,513	4,428
Rail Fatalities	144	182	174	177	219
Transit Fatalities	32	45	37	44	43

Source: Transportation Safety | Bureau of Transportation Statistics

Additionally, while the City itself has not experienced a significant aircraft incident in recent history, its location beneath a busy flight path presents an ongoing potential hazard. Aircraft traveling to and from nearby airports pass over the city regularly, creating the possibility-however rare-of an accident impacting the community. Nearby cities, unfortunately, have experienced firsthand the devastating consequences of aircraft incidents.

Cerritos Air Disaster



One of the most tragic and notable events occurred in Cerritos in 1986. On August 31, 1986, Aeromexico DC-9 Flight 498 collided with a single-engine Piper Archer at 6,500 feet above the City at about 11:52 AM. The collision sent the smaller airplane into an empty playground at Cerritos Elementary School while the larger DC-9 crashed into a residential neighborhood at Holmes Avenue and Reva Circle. All 67 of the passengers and crew aboard each of the aircraft, along with 15 residents on the ground, died in the aftermath with an additional eight injured. The collision also caused catastrophic damage to a residential neighborhood, destroying several homes. This event serves as a sobering reminder of the potential risks associated with urban areas located beneath busy flight paths. Although the City has been fortunate to avoid such incidents, its proximity to heavily trafficked airspace and its dense urban environment amplify the importance of preparedness and mitigation efforts. The concentration of residential neighborhoods, public facilities, and essential infrastructure beneath the flight path means that even a low-probability event could have severe consequences.

I.5 Transportation Incident Probability

The probability of a large scale transportation incident occurring in the City is considered low, particularly in terms of aircraft related events. However, due to the city's proximity to major freeways, highway accidents are more likely to occur and are a more frequent source of transportation related emergencies. While most of these incidents are minor and managed at the local level, the potential exists for severe multi-vehicle accidents or hazardous material spills that

could strain local resources. Although aircraft incidents are much less likely, the proximity of Long Beach Airport and the city's location under certain flight paths means the risk, while low, is not zero. Given the potentially severe consequences of a large scale transportation incident, this hazard remains an important consideration for the City.

I.6 Transportation Incident Vulnerability

Vulnerability to Structures

The Hazard Mitigation Planning Committee discussed that in the event of a major transportation incident—particularly one involving hazardous materials or a multi-vehicle collision—several key City-owned structures could be affected. While most City facilities were determined to have a potential loss of approximately 5%, some locations were assigned slightly higher damage estimates due to their proximity to major transportation routes such as Interstate 605, State Route 91, and other heavily trafficked corridors. Detailed in the loss estimates in Chapter 3, the most vulnerable locations include the George Nye Library, the Burns Center, Mae Boyar Community Center, the Youth Center, the Mayfair Park Main Activity Building, Biscailuz Park Recreation Building, and Nixon Yard. George Nye Library is assessed to have a 10% damage potential in the event of a transportation incident, with an estimated loss of $236,200. The Burns Center, a high-use community facility, has a similar 10% damage potential, resulting in a projected loss of $669,450. The Youth Center and Mayfair Park Main Activity Building are also considered at greater risk due to their proximity to major transportation routes, each with a 10% estimated damage potential and projected losses of $260,300 and $571,280, respectively. Nixon Yard, the City’s Public Works Maintenance Facility, could face significant operational disruptions, with a 10% damage potential and an estimated loss of $294,373.

To help reduce the vulnerability of these critical facilities, particularly those located beneath flight paths or near high-traffic corridors, Mitigation Action 2025.HMP.23 calls for expanded coordination with Long Beach Airport and other regional airports. While the primary focus of the mitigation action is on aviation incidents, collaborative planning and improved communication resulting from this action are expected to benefit the City’s overall readiness for a range of transportation related hazards. Identifying potential impact zones, sharing data, and aligning emergency response protocols will help protect essential structures and reduce recovery time in the event of a transportation emergency.

Table I.2: Transportation Incident Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	5%	$404,071
The Centre	$14,955,913	5%	$747,796
Weingart Senior Center	$4,343,400	5%	$217,170
Arbor Yard	$26,828,036	5%	$1,341,402
Nixon Yard	$2,943,728	10%	$294,373

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

In the event of a transportation incident, residents, employees, and visitors in the City could be exposed to safety risks, particularly in areas near major highways, as well as under common flight paths from nearby airports. The potential for hazardous material spills, multi-vehicle collisions, or aircraft-related incidents introduces a range of threats, including physical injury, air quality impacts, and the need for rapid evacuation. Vulnerable populations, such as residents at the Weingart Senior Center, children at recreation centers, and individuals with limited mobility, may face greater challenges during such emergencies due to transportation dependence or difficulty evacuating.

Although large-scale incidents are considered unlikely, the severity of potential consequences justifies proactive mitigation. To address these concerns, Mitigation Action 2025.HMP.23 proposes expanding coordination with Long Beach Airport and other regional airports to identify opportunities to reduce the vulnerability of residents to aviation related incidents. While this action is aviation specific, it supports the broader goal of enhancing interagency coordination and improving situational awareness for transportation related threats. By improving communication channels and response planning with regional transportation partners, the City can better protect its residents from a range of potential transportation incidents.

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Power Loss

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J.1 Power Loss Identification and Background

A power outage is the loss of the electricity supply to an area. Power failure can result from a defect in a power station, damage to a power line or other part of the distribution system, a short circuit, or overloading of electricity mains. A power outage may be referred to as a blackout if power is lost completely, or as a brownout if some power supply is retained, but the voltage level is below the minimum level specified for the system, and a short circuit indicates a loss of power for a short amount of time (usually seconds). Some brownouts, also called voltage reductions, are made intentionally to prevent a full power outage.



The absence of electrical power at City facilities for extended periods can, in some areas, preclude water deliveries or force reliance on back-up power to maintain water service. This will result in a loss of water and sewer services to the local area. In and of itself, these short duration utility losses, typically do not generate large hazards that substantiate a dramtic impact. However, utility losses in conjunction with other hazards can make response efforts much more difficult. For example, since water is typically pumped from a source, a loss of water during a fire will decrease the effectiveness of firefighting systems, or a sewer system failure in conjunction with a flood will result in increased localized flooding in residences and the streets. Since water and sewer systems usually require power sources for the pumps, adequate backup power should be available for critical systems in the event of a power outage.

J.2 Power Loss Location

Power loss is a hazard that can affect the entire City, although some areas and facilities may be more vulnerable due to infrastructure conditions or dependence on continuous electrical service. Large transmission lines run directly through the city, increasing exposure to regional grid disturbances or potential damage from adjacent hazards such as urban fires. During periods of extreme heat, widespread use of air conditioning units can overload local transformers, posing a localized risk of outages in residential neighborhoods.

The City has been subject to a few Public Safety Power Shutoffs (PSPS) due to high wind events, although such shutoffs have been infrequent. These PSPS events, designed to reduce wildfire risk, could impact parts of the city depending on weather conditions and utility infrastructure

vulnerabilities. Critical city facilities are distributed throughout the City and may be affected if not prioritized for power restoration. Facilities supporting vulnerable populations or essential services are of special concern, as prolonged outages could disrupt operations or place residents at risk.

J.3 Power Loss Extent

Power loss events in the City can vary significantly in extent, ranging from short-term, localized outages lasting a few hours to widespread disruptions that persist for multiple days. The severity of these events is typically influenced by the underlying causes, such as equipment failure, severe weather, high energy demand, or planned utility shutoffs like PSPS. Localized outages caused by overloaded transformers during periods of extreme heat may affect single neighborhoods or streets, while broader grid disturbances or PSPS events can impact large portions of the City simultaneously. Extended outages, particularly those lasting more than 24 hours, can interrupt city operations, compromise access to essential services, and pose health and safety risks to vulnerable populations, especially seniors and individuals dependent on electrically powered medical equipment.

The potential for high-impact outages also exists due to regional factors, including the presence of major transmission infrastructure running through the City. Additionally, solar flares, though less common, could disrupt power infrastructure on a much larger scale if the electromagnetic impact is severe enough to damage grid components.

J.4 Power Loss History

While the City has not experienced frequent or prolonged citywide blackouts in recent years, isolated power loss incidents have occurred due to a combination of local infrastructure strain and regional utility actions. Below are a few instances of hsitorical power loss incidents that have occurred in the Southern California region.

California Energy Crisis

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. The 2000 and 2001 blackouts occurred due to losses in transmission or generation and/or extremely severe temperatures that lead to heavy electric power consumption.

2011 Southwest Blackout

In September of 2011, five separate power grids serving nearly 7 million people in southern California, western Arizona, and parts of Mexico went out in the span of 11 minutes. The power outage, termed the 2011 Southwest Blackout, was the largest power failure in California history and lasted over twelve hours.

Affected metropolitan areas were crippled from the loss of traffic signals; as a result, trains stopped running and freeways experienced extreme congestion. Public gas stations were also unable to pump fuel, leaving many stranded vehicles. The power outage also caused several sewer pumping stations to fail, resulting in contaminated beaches and potentially unsafe water supplies. Restaurants and grocery stores also suffered large losses from spoiled food.

2020/2021 Rolling Blackouts

During the summers of 2020 and 2021, historically high temperatures, a drought and wildfires compounded to cause rolling blackouts throughout California. Wildfires damaged infrastructure throughout northern California while triple digit temperatures led to a sharp increase in air conditioning and electricity usage. This increased stress on an already vulnerable power grid threatened to damage the electrical infrastructure. In response, electric companies began to implement rolling blackouts. Although severe infrastructure and personnel damage was avoided, as climate change continues to increase daily temperatures, blackouts may become more common and more severe.

J.5 Power Loss Probability

The probability of a major power loss event in the City is considered low, based on historical trends and the city's existing infrastructure resilience. While minor, localized outages occasionally occur, often due to extreme heat overloading transformers or equipment failures. These are typically short in duration and affect limited areas. The City has experienced only one Public Safety Power Shutoff in recent years, indicating that preemptive utility shutoffs due to wildfire risks are rare in this area. Additionally, while large transmission lines do run through the City, no significant outages related to these lines have been reported. Although low in likelihood, the Hazard Mitigation Planning Committee acknowledged the potential for more severe or widespread outages due to rare events such as solar flares. However, these remain unlikely under normal operating conditions.

J.6 Power Loss Vulnerability

Vulnerability to Structures

The Hazard Mitigation Planning Committee concluded that while power loss events are unlikely to result in physical damage to City-owned structures, they present a substantial risk to the continuity of critical services and operations. Chapter 3's Loss Estimate summary specifies that all City facilities, including administrative buildings, community centers, maintenance yards, and water infrastructure, were assigned 0% damage and $0 in estimated structural losses for this hazard. This reflects the understanding that power outages are thought to be non-destructive in a physical sense. However, it should be noted that key assets such as City Hall, The Centre, Nixon Yard, and Arbor Yard serve vital roles in governance, public safety, and infrastructure management. In the event of a prolonged outage, these facilities could experience significant operational delays, especially if backup systems are limited or compromised. Additionally, water infrastructure such as well sites and pump stations could be impacted, affecting water distribution and pressure across the City.

To reduce this vulnerability, Mitigation Action 2025.HMP.17 outlines the need to coordinate with utility providers to establish a prioritization plan for power restoration. This action is intended to ensure that critical facilities receive timely service during outages, thereby maintaining the City's capacity to respond to emergencies and deliver essential public functions without major disruption.

Table J.1: Power Loss Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	0%	$0
The Centre	$4,355,000	0%	$0
Weingart Senior Center	$4,343,400	0%	$0
Arbor Yard	$26,828,036	0%	$0
Nixon Yard	$2,943,728	0%	$0

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

Although structural damage from power outages is not anticipated in the City, the impacts to residents, particularly vulnerable populations, can be significant. Prolonged loss of electricity may interrupt access to life-sustaining systems such as heating, air conditioning, medical devices, refrigeration for medications, and communication tools. This is especially concerning for seniors, people with disabilities, low-income households, and those with limited English proficiency, who may lack the resources or information needed to respond effectively during an outage. Residents living in multi-family units or dense housing areas may also be disproportionately affected due to higher reliance on electric-powered amenities and shared infrastructure. In addition, outages that occur during extreme heat or cold events can exacerbate health risks and stress on emergency services.

To address these vulnerabilities, Mitigation Action 2025.HMP.16 calls for the distribution of multilingual outreach materials providing clear guidance on how to stay safe during power outages. These materials will include emergency contact information, tips for preserving essential services, and resources for accessing support during emergencies. By enhancing public awareness and preparedness, the City aims to reduce the health and safety risks associated with power loss, especially among its most at-risk populations.

Appendix K

Drought

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K.1 Drought Identification and Background



A drought or an extreme dry periodic climate is an extended period where water availability falls below the statistical requirements for a region. Drought is not a purely physical phenomenon, but rather an relationship between natural water availability and human demands for water supply. The precise definition of drought is made complex owing to political considerations, but there are generally four types of conditions that are referred to as drought:

- **Meteorological drought** is brought about when there is a prolonged period with less than average precipitation.
- **Agricultural drought** is brought about when there is insufficient moisture for average crop or forage production. This condition can arise, even in times of average precipitation, owing to soil conditions or agricultural techniques.
- **Hydrologic drought** is brought about when the water reserves available in sources such as aquifers, lakes, and reservoirs fall below the statistical average. This condition can arise, even in times of average (or above average) precipitation, when increased usage of water diminishes the reserves.
- **Socioeconomic drought** associates the supply and demand of water services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of weather-related supply shortfall.

Due to the extensive nature of water supply infrastructure – reservoirs, groundwater basins, and inter-regional conveyance facilities – mitigation for the effect of short-term dry periods is implicit for most systems. 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.

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 wildland fires, occur relatively rapidly and afford little time for preparing for disaster response. Droughts, however, occur slowly and over a multi-year 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 dryland grazing, rural residents relying on wells in low-yield rock formations, or small water systems lacking a reliable source. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.

Droughts may cause a shortage of water for human and industrial consumption, hydroelectric power, recreation, and navigation. Water quality may also decline, and the number and severity of wildland fires may increase. Severe droughts may result in the loss of agricultural crops and forest products, undernourished wildlife and livestock, lower land values, and raise unemployment.

K.2 Drought Location

As stated in the *City's 2020 Urban Water Management Plan*, The City relies entirely on groundwater drawn from the Central Groundwater Basin, located in southeastern Los Angeles County. This basin is adjudicated, meaning water rights are regulated by a court agreement that limits how much each agency can pump. The City holds rights to extract up to 9,432 acre-feet of groundwater per year and pumped an average of 8,467 acre-feet between 2016 and 2020. This includes water used by City residents and businesses, as well as water delivered to other agencies. Because the city depends solely on this groundwater source, drought conditions that reduce groundwater levels or recharge can directly affect the City's overall water supply and system reliability.

Two water purveyors serve the City. The City supplies water to areas west of the San Gabriel River, while the Golden State Water Company, a privately operated utility regulated by the California Public Utilities Commission, serves areas east of the river. The City's water system includes about 180 miles of water mains, 10 wells, a treatment facility, and three storage facilities with a combined capacity of 13.1 million gallons. Emergency water connections with neighboring systems in Cerritos, Long Beach, Signal Hill, and Golden State Water Company provide additional support during drought or system shortages.

The City is part of the Gateway Water Management Authority (GWMA), a coalition of cities and agencies that work together to manage water resources across southeastern Los Angeles County. The City also coordinates with the Central Basin Municipal Water District (CBMWD) and participates in regional water planning, including future supply projections under normal, single dry, and multiple dry year conditions. While the city's reliance on local groundwater remains its primary source, these partnerships and planning efforts help increase resilience against future drought impacts.

A prolonged or severe drought would impact the entire city, as groundwater levels decline, and water supply becomes more limited. Residents and businesses across the City could face stricter water conservation measures, such as outdoor watering restrictions and tiered rate increases. Reduced water availability can also affect fire suppression capacity, landscape health, and the operation of public facilities that rely on consistent water access. While emergency interconnections and imported water connections offer some backup, these resources are also subject to regional demand and drought conditions. As a result, the entire community is vulnerable to the cascading effects of a long-term drought, which can strain infrastructure, increase costs, and limit water availability for essential needs.

K.3 Drought Extent

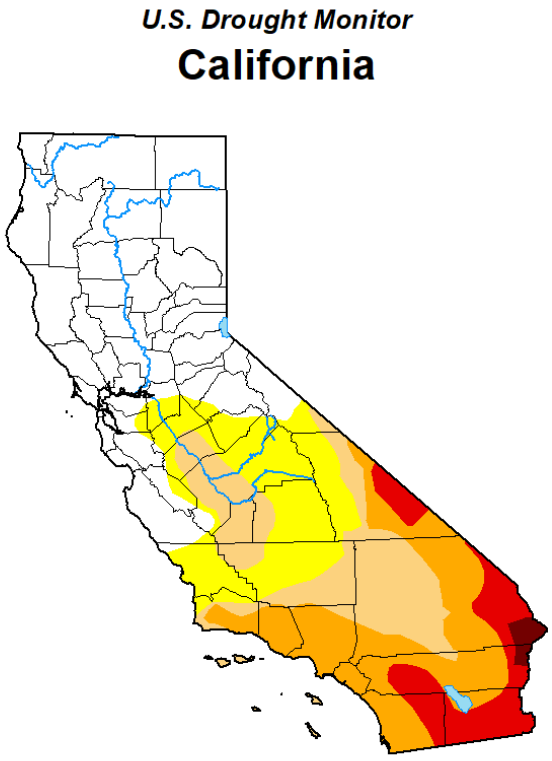
Drought in the City is typically characterized by prolonged periods of below-average precipitation, resulting in a significant shortage of water resources. The extent of a drought event is typically determined by several factors, including the severity of rainfall deficits, the duration of dry periods, and the impact on the availability of water for public, agricultural, and environmental use. The City's average annual rainfall is approximately 13 inches, with most precipitation occurring in the winter months (November to March). Drought conditions typically arise when annual rainfall falls below 75% of the average, indicating a significant deficit that can strain water supply systems.

The extent of drought can be measured by its duration and the severity of water shortages it causes. Short-term droughts (lasting less than a year) may lead to temporary water restrictions, while long-term droughts (lasting several years) can result in substantial reductions in water supply, which may affect both the quantity and quality of available water. In addition to low rainfall, drought conditions can also be measured by tracking streamflow, groundwater levels, and reservoir storage. During drought conditions, streamflow typically decreases, and groundwater levels may drop, which exacerbates the overall water shortage. In Southern California, reliance

on imported water from sources such as the State Water Project and the Colorado River further compounds the effects of drought, especially when these sources also experience low flows. The City relies heavily on imported water, with local groundwater resources being insufficient to meet the city's demand during drought periods. In the event of a severe or extended drought, water deliveries from sources may be reduced, triggering mandatory water conservation measures. The extent of drought is also influenced by the availability of storage systems, such as reservoirs, which can buffer short-term shortages but may be inadequate in prolonged droughts.

The U.S. Drought Monitor provides a nationwide system for tracking drought severity, using categories ranging from "Abnormally Dry" to "Exceptional Drought." This system is used to evaluate the extent of drought across California. Figure J.1 on the following page shows the latest data from the U.S. Drought Monitor, which highlights the current drought conditions for the state of California.

Figure K.1: U.S. Drought Monitor for California



U.S. Drought Monitor

California

April 22, 2025

(Released Thursday, Apr. 24, 2025)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.66	56.34	39.81	24.73	8.30	0.73
Last Week 04-15-2025	43.71	56.29	39.81	24.73	8.30	0.73
3 Months Ago 01-21-2025	33.22	66.78	39.39	32.86	11.90	0.00
Start of Calendar Year 01-07-2025	39.11	60.89	35.93	10.43	1.06	0.00
Start of Water Year 10-01-2024	28.40	71.60	10.67	0.08	0.00	0.00
One Year Ago 04-23-2024	97.32	2.68	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

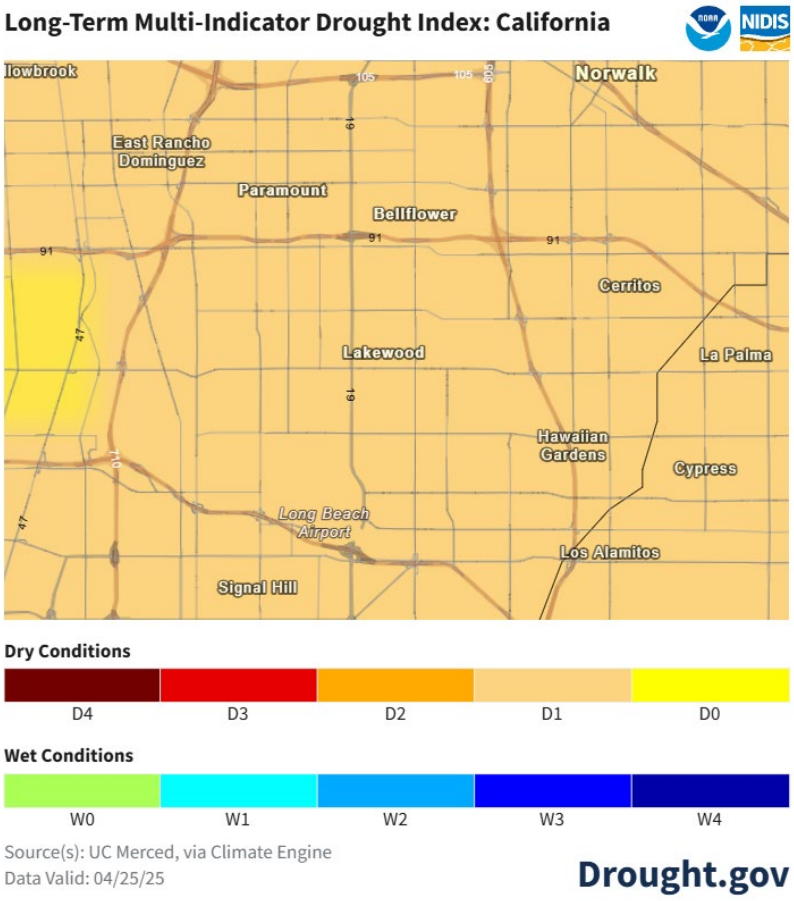
Richard Tinker

CPC/NOAA/NWS/NCEP

droughtmonitor.unl.edu

As shown in the Long-Term Multi-Indicator Drought Index Map (LT-MIDI) map in Figure J.2, the City is currently classified as being in a D1 – Moderate Drought condition. The LT-MIDI combines multiple long-term climate indicators, such as precipitation trends, soil moisture levels, vegetation stress, and temperature anomalies, to provide a more complete picture of drought severity over an extended period. A D1 classification indicates the presence of moderate drought conditions, which may result in stressed vegetation, increased wildfire risk, and voluntary water conservation measures. While not as extreme as higher drought levels, this designation suggests the early stages of water supply strain. The current D1 rating highlights the importance of ongoing monitoring, conservation efforts, and regional collaboration to ensure long-term water resilience

Figure K.2: Long- Term Multi-Indicator Drought Index



Source: National Integrated Drought Information System

K.4 Drought History

California has experienced several major droughts over the past century. The 1929 to 1934 drought stands as one of the earliest and most widespread water shortages in the state's history. Although the City was not yet incorporated at the time, this drought laid the groundwork for California's large-scale water infrastructure projects, including reservoirs, aqueducts, and groundwater management systems. These projects would later support the development of communities like the City during its post-incorporation growth.

Another severe drought occurred between 1987 and 1992, often referred to as California's longest drought of the 20th century. Lasting six years, this event strained statewide water systems and revealed the vulnerability of local agencies that depended on limited or single sources of water. Although urban water systems like the City's were less impacted than agricultural regions, the drought reinforced the importance of drought preparedness and regional cooperation.

One of the most significant droughts in California's recorded history occurred from 2011 to 2017. This event was characterized by record-low snowpack levels, reduced reservoir storage, and limited groundwater recharge. In response, the State implemented mandatory water restrictions, and urban areas were required to reduce water use. During this period, the City experienced increased pressure on its water supply and implemented various conservation measures to meet state-mandated targets. The drought prompted long-term investments in water efficiency, increased public awareness, and a renewed emphasis on regional water planning.

While droughts are a natural part of California's climate cycle, climate change is expected to increase the frequency and severity of these events. Historical droughts have shown the importance of long-term planning, diversified water supplies, and conservation measures to protect water security for the City.

On October 19, 2021, California Governor Gavin Newsom issued a Statewide Drought Emergency Proclomation due to prolonged and severe drought conditions affecting all 58 counties. Because Los Angeles County was included in this proclamation, the City was covered under this statewide declaration. No federal major disaster declarations for drought have been issued for Los Angeles County, where the City is located, since 2019.

K.5 Drought Probability

Drought is a recurring hazard in California and is expected to become more frequent and severe in the future due to the effects of climate change. While droughts do not follow a predictable pattern, the combination of prolonged dry periods, reduced snowpack, and increasing temperatures across the state significantly increases the likelihood of future drought events. Given historical patterns, ongoing climate trends, and statewide water management forecasts, the probability of future droughts affecting the City is considered realtively low to moderate. Although the city has emergency connections to nearby agencies and participates in regional water planning, future droughts are likely to lead to increased conservation mandates, higher water costs, and potential supply constraints.

The Hazard Mitigation Planning Committee (HMPC) identified drought as an infrequent event for the City, occurring approximately once every 8 to 50 years. This corresponds to an estimated annual probability of occurrence between 2 percent and 12.5 percent. Although drought events are less frequent than other hazards, they tend to have long durations and widespread regional impacts once they occur. As such, while the numerical probability is relatively low, the consequences of sustained drought remain significant the City.

K.6 Drought Vulnerability

Vulnerability to Structures

Drought poses minimal direct risk to physical structures throughout the City. As reflected in the loss estimate table presented in Chapter 3, the Hazard Mitigation Planning Committee assigned a damage estimate of just 1% for all city-owned structures for the drought hazard. This low percentage reflects the nature of drought, which, unlike earthquakes or floods, does not physically damage buildings, roads, or other infrastructure.

However, prolonged drought can increase operational strain on city systems, particularly in the areas of landscaping, parks, and water infrastructure. To proactively address this, the City has identified mitigation strategies focused on enhancing water efficiency and drought resilience. Action 2025.HMP.18 proposes assessing the feasibility of expanding reclaimed water use and identifying locations on City property where drought-tolerant landscaping can be installed. This measure not only reduces demand on potable water supply but also improves the sustainability of city facilities under extended drought conditions. Additionally, Action 2025.HMP.19 supports the

exploration of incentives for water-saving practices and alternative landscaping, reinforcing the City's commitment to reducing structural vulnerability by managing water demand and preserving green space.

Table K.1: Drought Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	1%	$80,814
The Centre	$14,955,913	1%	$149,559
Weingart Senior Center	$4,343,400	1%	$43,434
Arbor Yard	$26,828,036	1%	$268,280
Nixon Yard	$2,9437,28	1%	$29,437

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

While drought may not directly damage structures, it can have a significant impact on people, particularly vulnerable populations such as the elderly, low-income households, and those with health conditions. Extended drought conditions can lead to increased utility costs, restricted water use, and heightened health risks related to heat and air quality, challenges that could disproportionately affect those with limited resources or mobility. Residents may face restrictions on outdoor water use, changes in landscaping aesthetics, and higher water rates as the cost of managing a limited supply increase. For households already experiencing financial stress, these changes can be burdensome. Additionally, reduced urban vegetation during droughts can contribute to the urban heat island effect, worsening extreme heat conditions, which is a compounding hazard that can further impact public health. To help address these challenges, Mitigation Action 2025.HMP.18 calls for the City to assess the feasibility of expanding reclaimed water use and identify new locations on City-owned properties for installing drought-tolerant landscaping, which helps conserve water and keep public areas livable. In addition, Mitigation Action 2025.HMP.19 involves exploring possible incentives for residents and businesses to adopt

alternative landscaping and other water-saving strategies. Together, these efforts aim to reduce the overall impact of drought on the City's population.

Appendix L

Hazardous Materials Release

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L.1 Hazardous Materials Release Identification and Background

A hazardous material is any substances that can pose a significant risk to the general population if released. These substances may be highly toxic, reactive, corrosive, flammable, radioactive or infectious. They are present in nearly every community in the United States, where they may be manufactured, used, stored, transported, or disposed. Because of their nearly ubiquitous presence, there are hundreds of hazardous material release events annually that contaminate air, soil, and groundwater resources, potentially triggering millions of dollars in clean-up costs, human and wildlife injuries, and occasionally cause human deaths.

Accidents which result in chemical clouds or release of hazardous materials into public water or sewer systems may affect outlying neighborhoods or the community at large. Depending upon the scale of the release, large segments of the residential and the business populations may need to be evacuated quickly for extended periods of time. Effective emergency planning with regard to hazardous materials, therefore, requires the concentrated efforts of emergency reposnders as well as other public safety officials and private organizations. Hazardous material releases may occur from any of the following:



Fixed-Site Release

Includes all releases involving the production and manufacturing, handling, and storage of a hazardous product at a single facility as well as any releases that may occur at a designated hazardous waste disposal site.

Transportation Release

Includes all releases that occur while the product is in transit from one facility to another or enroute to be disposed of at a designated hazardous waste disposal site, of which the main concerns for the City are the 105, 710, 605, and 91 freeways.

Intentional Spills and Releases

Includes all criminal acts and acts of terrorism in which a hazardous material is used to intentionally cause injuries and/or fatalities, damage the environment and/or property, or advance a political or social agenda. Terrorism and Weapons of Mass Destruction will be discussed in further detail in the Adversarial Events section of this document

In response to concerns over the environmental and safety hazards posed by the storage and handling of toxic chemicals, Congress passed the Emergency Planning and Community Right to Know Act (EPCRA) in 1986. To reduce the likelihood of hazardous material releases, EPCRA established specific requirements on federal, state, and local governments, Indian tribes, and industry to plan for hazardous materials emergencies. EPCRA's Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities working with facilities can use the information to improve chemical safety and protect public health and the environment. Under EPCRA, hazardous materials must be reported to the Environmental Protection Agency (EPA), even if they do not result in human exposure. Hazardous material releases may include the following:

- Air emissions (e.g., pressure relief valves, smokestacks, broken pipes, water, or ground emissions with vapors)
- Discharges into bodies of water (e.g., outflows to sewers, spills on land, water runoff, contaminated groundwater)
- Discharges onto land
- Solid waste disposals in onsite landfills
- Transfer of wastewater to public sewage plants
- Transfers of waste to offsite facilities for treatment or storage

In addition to human-caused events, natural hazards may cause the release of hazardous materials and complicate response activities. The impact of earthquakes may be particularly damaging to facilities due to loss of structural integrity or failure of containment facilities. The threat of any hazardous material event may be magnified due to restricted access, reduced fire suppression and spill containment, and even complete cut-off of emergency response personnel and equipment.

In recognition of the dangers associated with keeping hazardous substances, the California State legislature has enacted several laws regulating the use and transport of identified hazardous materials. In particular, Chapter 6.95 of the Health and Safety Code requires all businesses using these materials to inform local government agencies of the materials and quantities stored on site. This disclosure enables emergency response agencies to respond quickly and appropriately to accidents involving dangerous substances. Chapter 6.95 of the California Health and Safety Code, and Title 19 of the California Code of Regulation, describes the requirements for chemical disclosure, business emergency plans, and community right to know programs. According to these state requirements, a business that uses or handles hazardous materials in amounts equal to or greater than 55 gallons, 500 pounds or 200 cubic feet at any one time must prepare a business emergency plan and chemical inventory. The inventory must be updated annually, and the business plan every two years. The chapter also has incorporated certain requirements from Federal Superfund Amendments and Reauthorization Act (SARA) Title III for chemicals designated as acutely hazardous. These regulations apply to industrial accidents, refinery explosions and incidences of high-volume releases.

L.2 Hazardous Materials Release Location

The City is exposed to potential hazardous materials incidents from both transportation routes and fixed infrastructure, with pipelines identified by the Hazard Mitigation Planning Committee as the primary source of concern. Several underground pipelines run through the city, including natural gas and petroleum lines, which could pose serious risks in the event of a rupture, leak, or explosion. Of note is a new gas line installed along Del Amo Boulevard, which adds to the network of utilities that must be carefully monitored for integrity and safety.

In addition to pipelines, hazardous materials are regularly transported along key corridors such as Lakewood Boulevard, Del Amo Boulevard, Carson Street, South Street, and Interstate-605. Commercial trucks using these roads may carry flammable or toxic substances to and from nearby industrial zones. The risk is further elevated by a rail line that passes through Lakewood and is known to transport chlorine, a hazardous chemical that can pose severe health risks in the event of a spill or release.

Although the City itself is largely residential and commercial, it is situated near cities with heavy industrial activity, including Long Beach, Carson, and Paramount, and Torrance, which house oil refineries, chemical plants, and fuel storage facilities. A major incident at one of these nearby sites could have regional effects, depending on wind and environmental conditions. Given the City's

dense development and proximity to critical infrastructure, a hazmat release could impact residential neighborhoods, schools, parks, or other community spaces.

L.3 Hazardous Materials Release Extent

The extent of a hazardous materials release in the City would depend on factors such as the type and quantity of material involved, the location of the release, and environmental conditions such as wind or rainfall. Areas near Del Amo Boulevard, Lakewood Boulevard, Carson Street, and the I-605 Freeway are particularly vulnerable due to the presence of pipelines, freight rail lines carrying hazardous substances like chlorine, and high traffic volumes from commercial transport. These corridors run through or near densely populated residential neighborhoods, schools, and commercial centers, increasing the potential for public exposure and complicating emergency response efforts in the event of a release.



In a release scenario, the immediate vicinity would face serious risks, including property damage, health impacts, and environmental contamination. If the material involved is highly volatile or reactive, the potential for fires or explosions could cause significant damage. Wind and weather conditions could also carry hazardous material to nearby residential areas, schools, parks, and businesses, expanding the affected area. Furthermore, the City's infrastructure, such as water and utility systems, could be compromised, disrupting services and resources. A large-scale release could have ripple effects in neighboring communities, particularly because of the City's proximity to major transportation routes and industrial sites. The severity of the impact would rely on the effectiveness of emergency response, but the risk of widespread consequences due to local oil and gas operations and heavy traffic makes the potential for significant harm a real concern.

L.4 Hazardous Materials Release History

Compared to other methods of fuel transportation, pipelines are considered the safest means to transport vast quantities of petroleum and natural gas (compared to rail or truck). However, failure incidents regularly occur, causing substantial losses to property and life. According to the *Pipeline and Hazardous Materials Safety Administration*, there has been an annual average of 287

significant pipeline failure incidents for the past twenty years. These events have resulted in a total of 243 deaths, 1,020 injuries, and over $13.1 billion in property damage.

Pipeline failures are caused by a variety of factors. The most common cause is corrosion of the pipeline. Corrosion weakens the structural integrity of the pipeline and makes it more susceptible to rupture and failure. Accidental rupture at a construction site from excavation is another common failure cause. Many natural gas and oil pipelines are buried underground, becoming a potential hazard for excavation projects. Other sources of failure include natural forces such as earthquakes, equipment failure and operations failure, materials failures, including defects and fatigue, and weld failures, as occurred in the well-known 2010 San Bruno pipeline explosion. No pipeline failures have occurred within the City, however, the prevalence of hazardous and flammable gas and liquid distribution pipelines throughout the City gives the potential for a future event.

2010 San Bruno Pipeline Explosion

On September 9, 2010, a 30-inch steel natural gas transmission pipeline owned by Pacific Gas and Electric (PG&E) ruptured in a residential neighborhood in San Bruno, California. The rupture released approximately 47.6 million standard cubic feet of natural gas. The released gas then ignited, resulting in an explosion and fire that killed 8, injured 60, and forced the evacuation of many more people. The fire also caused substantial property damage, destroying 38 homes, and damaging 70 homes. The rupture created a crater 72 feet long by 26 feet wide in the middle of the street. The ruptured pipe segment was 28 feet long, weighed approximately 3,000 pounds, and was found 100 feet from the crater.

An investigation was immediately conducted by the National Transportation Safety Board (NTSB). A review of PG&E records revealed that the pipeline had been labeled in PG&E drawings as seamless API 5L Grade X42 pipe. However, upon examination of the ruptured pipe segment, the NTSB found that it was actually constructed of smaller segments of pipe of unknown origin welded together. The NTSB concluded that the poorly welded pipe section had a visible seam weld flaw that grew over time. As a result, the pipe was not as strong as the listed API 5L Grade X42 steel pipe and ruptured under increased pressure during electrical maintenance at the Milpitas Terminal. 5727

2012 Richmond Refinery Fire

On August 6, 2012, a piping segment at the Number 4 Crude Unit at a Chevron refinery in Richmond, California, failed, leading to a release of hydrocarbons. The hydrocarbon vapor cloud then ignited, resulting in a large, uncontrolled fire. The fire burned for several hours before being contained later that night. The picture below illustrates the smoke plume from the fire. Fortunately, there were no fatalities from the fire. According to the final investigation report completed by the United States Chemical Safety and Hazard Investigation Board, over 15,000 residents surrounding the refinery sought medical treatment for respiratory irritation. The incident tied up many local emergency response agencies and also shut down local service for the Bay Area Rapid Transit (BART). Although the 2012 Richmond Refinery Fire did not impact the City, the incident illustrates the potential major impacts to residential areas that a release of this magnitude could have on the City.

L.5 Hazardous Materials Release Probability

Hazardous materials releases in the City are considered to have a low probability of occurrence, but the potential consequences can be significant due to the city's dense development and proximity to industrial infrastructure. The most likely sources of a hazmat incident are underground pipelines, which run throughout the city and transport natural gas, petroleum, and other substances. The Hazard Mitigation Planning Committee identified key areas of concern, including oil and gas pipelines traversing the City, fuel storage facilities located along the city's western border with Long Beach, and pipelines associated with the Alameda Generating Station.

Additionally, the presence of a freight rail line that transports chlorine and the city's location near regional industrial centers increase the overall hazmat risk profile. While the City does not have a history of frequent or large-scale hazardous materials incidents, the daily transport of chemicals by rail and truck, coupled with the aging infrastructure of some pipeline systems, keeps this hazard relevant. Ongoing urban activity, infrastructure development, and industrial operations in neighboring cities contribute to a continuing risk.

L.6 Hazardous Materials Release Vulnerability

Vulnerability to Structures

While hazardous materials releases typically do not cause widespread structural destruction, they can severely impact the usability and safety of critical public facilities and infrastructure. Facilities located near transportation corridors, oil and gas pipelines, and fuel storage infrastructure,

especially on the City's western border adjacent to Long Beach, are particularly susceptible to temporary closure, contamination, or operational disruptions in the event of a release.

As detailed in Chapter 3's loss estimate table, the City assessed potential damage to key facilities under a hazardous materials release scenario. Most facilities were assigned a 7% damage estimate, reflecting moderate impact, while certain higher-risk locations such as the Arbor Yard were assigned a ten percent damage factor due to their greater exposure and functional vulnerability.

To address the structural risks posed by hazardous materials releases, the City is implementing several mitigation strategies. One key effort involves conducting a commodity flow study, as outlined in Mitigation Action 2025.HMP.22. This study will help analyze how hazardous materials move through the City and identify structural vulnerabilities such as chokepoints and high-risk zones, allowing the City to prioritize and protect facilities that are most exposed. In addition, the City is enhancing response capacity through Mitigation Action 2025.HMP.21, which focuses on training City personnel in HazMat emergency procedures. This includes partnering with the Paradigm Pipeline Organization to participate in specialized courses that will support effective and coordinated responses, ultimately reducing the potential for structural damage during an incident.

Table L.1: Hazardous Materials Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,081,422	7%	$565,700
The Centre	$14,955,913	7%	$1,046,914
Weingart Senior Center	$4,343,400	7%	$304,038
Arbor Yard	$26,828,036	10%	$2,682,804
Nixon Yard	$2,943,728	7%	$206,061

Note: Values provided by June 2024 Assessment by Alliant Insurance Services are for planning purposes only.

Vulnerability to People

The vulnerability of residents in the event of a hazardous materials release is influenced by several key factors, including proximity to hazmat storage sites, transportation corridors, population density, and the City's ability to respond effectively. Populations that live or work near industrial areas, facilities that store or use significant quantities of chemicals, and transportation routes such as the Interstate 605, 91 Freeway and major roadways are at elevated risk of exposure. In the event of release, contact with hazardous substances can cause serious health effects depending on the type and concentration of the material involved.

Certain groups within the community face heightened challenges during such emergencies. Vulnerable populations, including children, seniors, individuals with disabilities, and those with limited English proficiency, may have difficulty evacuating, understanding emergency instructions, or accessing critical services in a timely manner. These risks are further exacerbated in neighborhoods with limited access points, such as cul-de-sacs or areas with restricted ingress and egress, which may delay emergency response or evacuation efforts. Additionally, critical facilities like schools, healthcare centers, and senior living communities located near hazmat routes are particularly susceptible. In a large-scale incident, the City's emergency medical services, public health systems, and transportation networks could quickly become overwhelmed.

To help address these concerns, the City will implement 2025.HMP.20, which focuses on providing the public with updated information about the impacts of a hazardous materials release, including immediate first response actions and community resources for relief. By using accessible City platforms such as the City website, social media, and other outreach tools, this action ensures that residents have timely access to life-saving information during an emergency. This is especially critical for vulnerable populations who may need additional time or assistance to respond appropriately during a hazmat incident.

The City will also enhance internal preparedness through 2025.HMP.21, which supports the organization and delivery of awareness and training courses for City personnel. These courses, including those offered by the Paradigm Pipeline Organization, will strengthen the skills and readiness of first responders and public officials. Trained personnel are vital to effective incident management and can help reduce exposure risks, assist with evacuations, and coordinate medical or hazardous materials response operations.

Appendix M
Flood

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M.1 Flood Identification and Background

According to the *National Flood Insurance Program* (NFIP), flood is the most common type of disaster including both man made and naturally occurring incidents in the United States. Land along rivers, streams, lakeshores, and coastlines are particularly susceptible to flooding.

The primary responsibility of the local governments during widespread flooding is to protect public safety. The second responsibility is protection of the environment followed by property such as highways, streets, bridges, and structure protection.

The types and causes of flooding that can occur within the City are the result of:

- Heavy rain,
- Atmospheric Rivers,
- Flood control channel overflow,
- Wastewater flooding within residences as a result of lift station failures, and
- Coastal, tropical, and/or hurricane storms.

Due to light annual rainfall and the City's location on the flood plain protecting it from channel overflow, dam failure is the most likely cause of flooding with the City.

What are Floods?

A flood occurs any time a body of water rises to cover what is usually dry land. Floods have many causes, including heavy rains, spring snowmelt, coastal storms, and dam or levee failure. When flooding occurs, affected areas may sustain damage to structures and personal property, as well as severe damage to the environment in the form of soil erosion, deforestation and damage to utilities and transportation systems.

Floods can take several hours to days to develop. The following flood characterization designates the amount of time for response.

- **Flood Watch** – a flood is possible in the area.
- **Flood Warning** – flooding is already occurring or will occur soon in the area.
- **Flash Flood Watch** – a flash flood is possible in the area. Those affected should seek immediate shelter or higher ground.

- **Flash Flood Warning** – flooding is already occurring or will occur soon in the area. Flash floods can occur without warning, during heavy rain in mountainous regions ensure that precautions and flash flood warnings are adhered to.

Alluvial Fan Flooding

Alluvial fan flooding occurs in the steep arid or semiarid mountains found throughout California. 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. 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 gravel, 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.

Flash Flooding

A flash flood is a rapid flooding of low-lying areas, rivers and streams that is caused by the intense rainfall associated with a thunderstorm or multiple thunderstorms. Flash floods also occur when a man-made structure, such as a dam, collapses. Flash flooding occurs when the ground under a storm becomes saturated with water so quickly that it cannot be absorbed. The runoff collects in low-lying areas and flows rapidly downhill. As a result, anything in its path is suddenly in rising water. Typically, flash floods begin with a slow-moving thunderstorm. A slow-moving thunderstorm usually takes longer to move out of the affected areas and causes the area to endure a greater amount of rainfall for a longer period of time. In addition, a thunderstorm may pass over an affected area repeatedly, dumping even more rainfall.

The heavy rainfall associated with these storm systems contributes to urban flooding in a number of ways. Primarily, heavy rainfall will often overwhelm the capacity of the conventional drainage system made up of storm drains, catch basins, sewers, and additional natural mechanisms for storm-water management. These systems typically cannot handle more than one or two inches of rainfall per hour before they begin to back up and overflow. This amount is further diminished

if the storm drains, and other components of the storm-water management system, have not been adequately maintained, are clogged with debris such as trash or natural waste, or are old and in a state of disrepair. Heavy rainfall, combined with storm-water runoff, can cause local waterways to rise and overflow their banks.

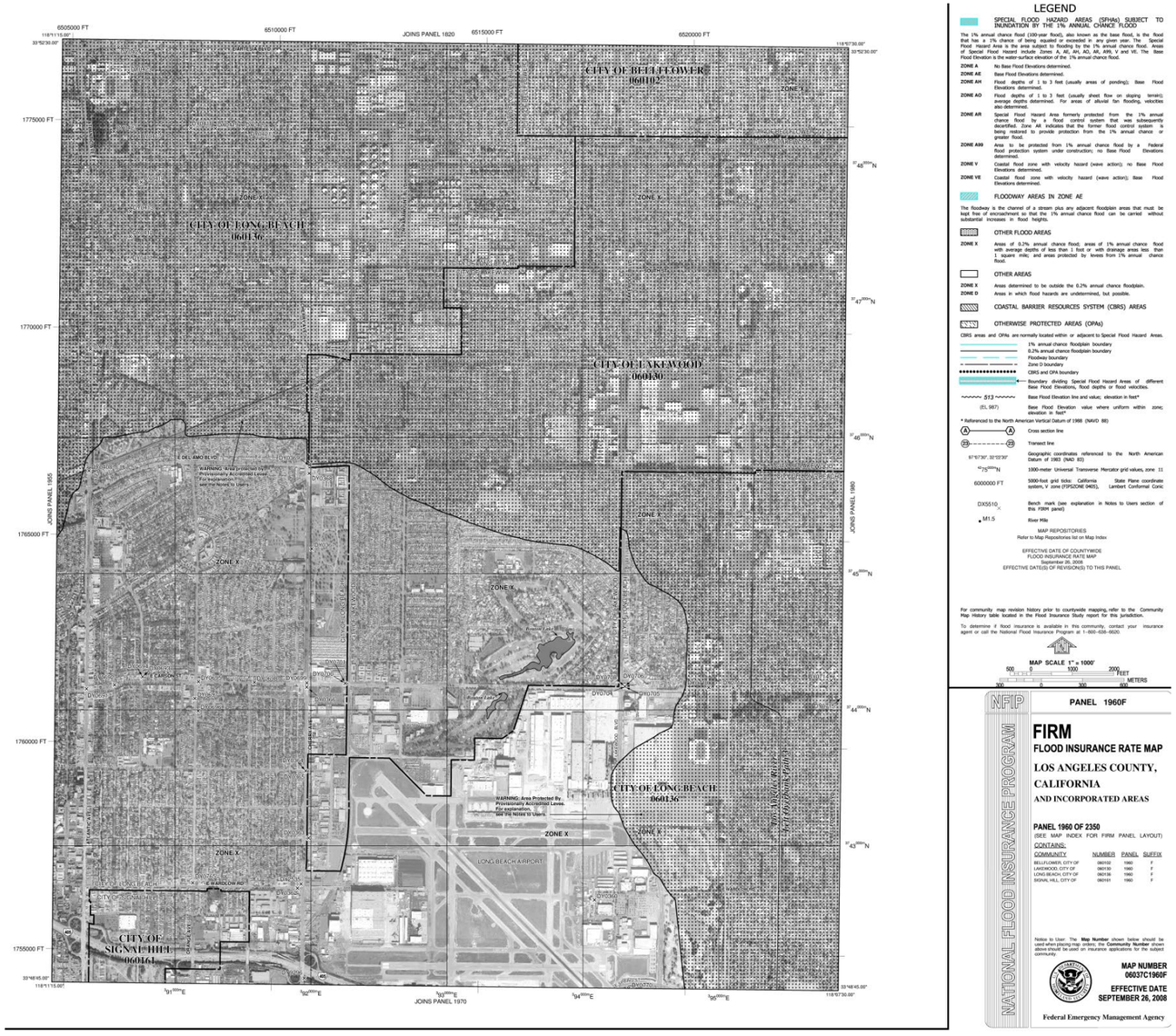
M.2 Flood Location

The City is situated on a relatively flat and broad coastal plain. This plain gently slopes toward the south, which causes floodwaters, when present, to spread out over wide areas at shallow depths. The region's flat topography plays an important role in reducing the velocity of overland flow during large storm events. This geography makes the City less prone to rapid, high-energy flooding compared to more mountainous or steeply graded areas.

Three major regional flood control channels serve the City: the Los Angeles River, the San Gabriel River, and Coyote Creek. These waterways are part of a much larger system designed to transport stormwater runoff from upstream areas through urban communities to the Pacific Ocean. Although these channels generally function well under typical storm conditions, they define the potential pathways for floodwaters should extreme weather events exceed the designed capacity of the flood control system.

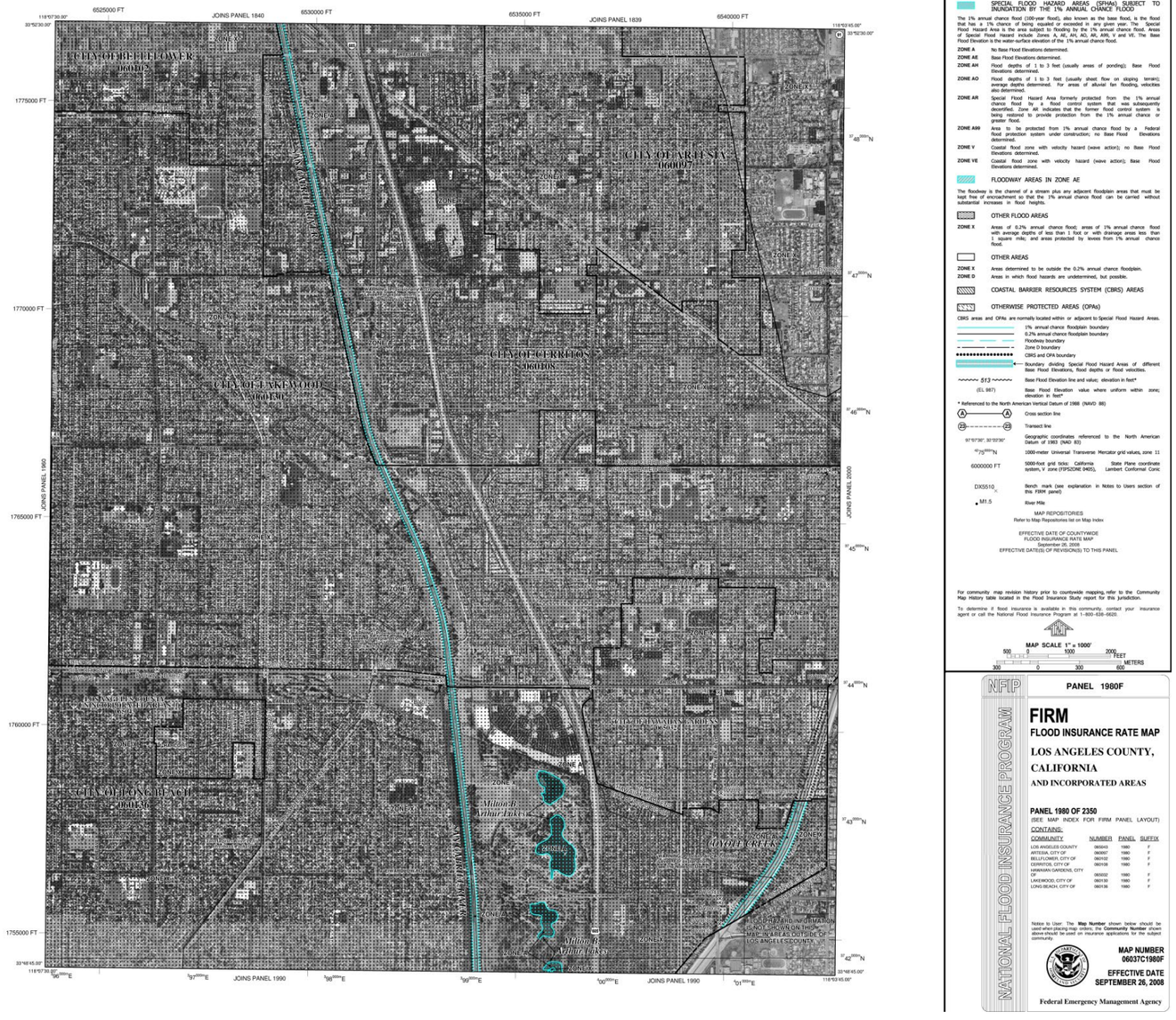
According to the FEMA Flood Insurance Rate Maps (FIRMs) and the associated Flood Insurance Study, the entire City lies within Zone X, meaning it is not expected to flood during a 100-year (1% annual chance) flood event. While most of the City is located within the 500-year floodplain (0.2% annual chance), these areas still represent a relatively low overall risk when compared to high-hazard flood zones. Only a small area in the southwestern part of the City is categorized as Zone X unshaded, representing minimal flood risk.

Figure M.1 FEMA Flood Insurance Rate Map (06037C1960F)



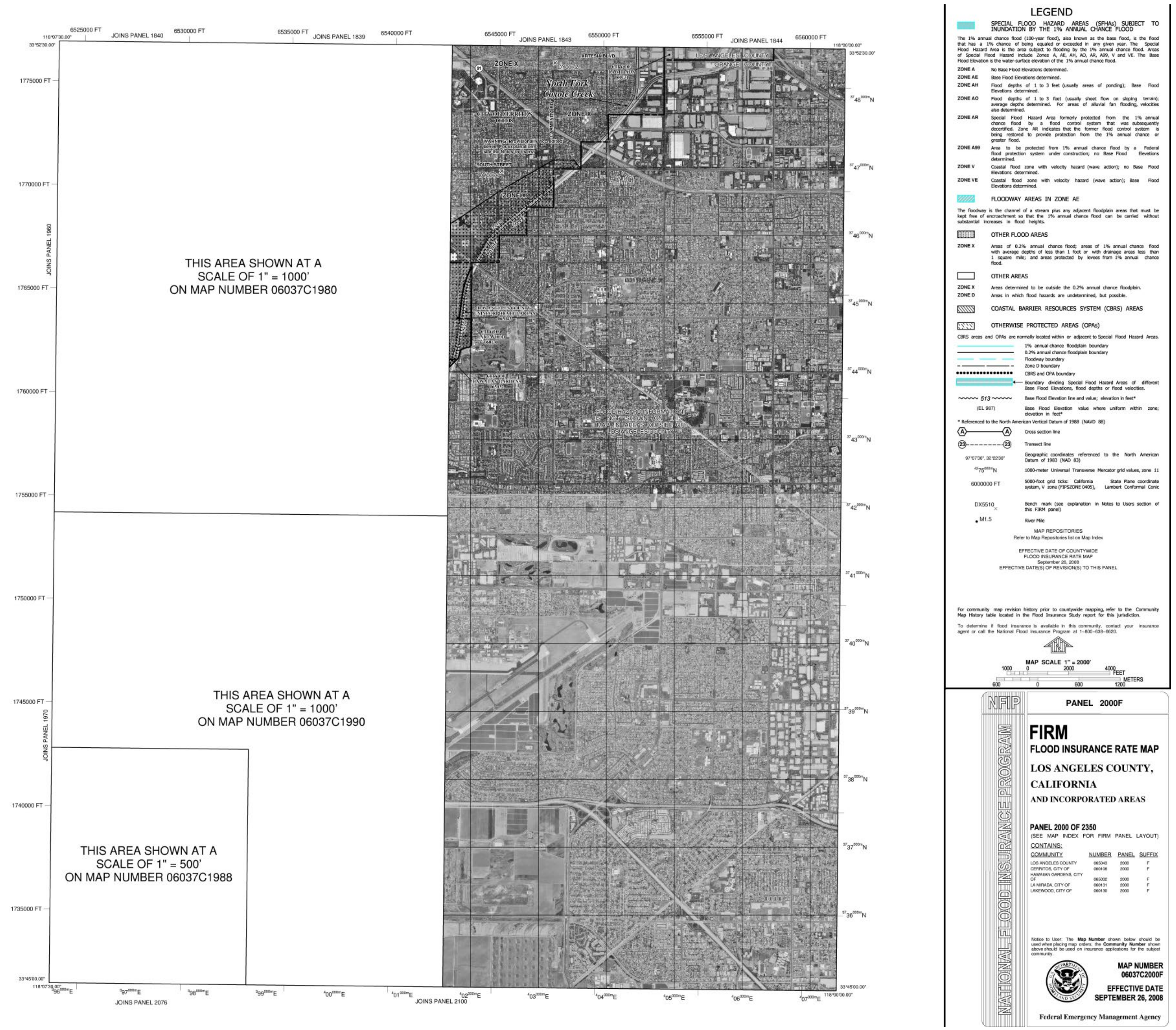
Source: FEMA Flood Insurance Rate Map

Figure M.2 FEMA Flood Insurance Rate Map (06037C1980F)



Source: FEMA Flood Insurance Rate Map

Figure M.3 FEMA Flood Insurance Rate Map (06037C2000F)



Source: FEMA Flood Insurance Rate Map

M.3 Flood Extent

The extent of flooding in the City can vary widely depending on the type, intensity, and duration of heavy precipitation and storm events. In most cases, flooding is localized and short-lived, occurring during heavy rainfall when storm drains become overwhelmed or when water collects in low-lying areas. Street flooding is the most common impact, particularly at intersections, underpasses, and areas with poor drainage. These events typically involve a few inches to a foot of water and may last for several hours until the stormwater system can catch up.

In more severe cases—such as during intense storm events or atmospheric river conditions—flooding could cover larger portions of the city and affect multiple neighborhoods at once. If rainfall exceeds the capacity of the city's drainage system or if multiple storms occur in quick succession, water can back up into streets, parking lots, and even residential or commercial properties.

A 100-year flood event, or a 1% annual chance event, is a standard benchmark for floodplain management and represents a moderate level of risk in most communities. However, the City's FEMA FIRM maps indicate that the entire City is located outside of the 100-year floodplain, meaning there is no expectation of significant flooding from this type of event. Over a 30-year period, there is about a 26% chance of such a flood occurring, but the City's risk remains low due to its infrastructure and topography.

In contrast, a 500-year flood event (0.2% annual chance) could pose greater challenges. According to FEMA, most of the City is within this 500-year floodplain. In such an extreme scenario, the Los Angeles River, San Gabriel River, and Coyote Creek could experience flows that exceed their design capacity, potentially overtopping or even breaching the concrete-lined channels. While the channels are deeply incised and engineered to contain high flows, there is still a risk of shallow, widespread flooding if structural failures or overtopping occurs.

During such a large-scale event, floodwaters would likely spread slowly over the flat terrain, covering large portions of the City. However, the depths of flooding are expected to remain relatively low, with higher flood levels concentrated in low points and areas closest to the rivers. The most likely impacts would be flooded streets and yards, with limited structural damage to buildings in most areas. Higher-risk areas would include those immediately adjacent to the rivers.

M.4 Flood History

Over the years, both state and federally declared disasters have highlighted the significant impacts of flooding on life, property, and infrastructure. These declarations provide critical assistance and resources for response and recovery efforts. The table below lists flood-related disaster declarations taken from FEMA's Website for Disasters and Decalations, and the California Franchise Tax Board, along with their respective disaster codes, offering an overview of past events that have shaped mitigation and preparedness efforts.

Table M.1 Disaster Declarations

DISASTER CODE	INCIDENT PERIOD
EM-3591-CA	01/08/2023-1/31/2023
EM-3592-CA	03/09/2023-07/10/2023
DR-4683-CA	12/27/2022-01/31/2023
DR-4699-CA	02/21/2023-07/10/2023
CA Disaster Loss 109	02/2024-02/2019
CA Disaster Loss 127	12/2021
CA Disaster Loss 135	09/2022
CA Disaster Loss 141	02/2023 & 03/2023
CA Disaster Loss 142	08/2023
CA Disaster Loss 146	02/2024
Ca Disaster Loss 147	03/2024

M.5 Flood Probability

The City's designation as Zone X indicates a low probability of flooding. A 100-year flood (1% annual chance) is not anticipated to significantly impact the City, as no areas fall within the mapped 100-year floodplain. However, while the likelihood of a 500-year flood is very small—approximately 0.2% annually or about 6% over 30 years—it is not zero. Since much of the City lies within the mapped 500-year floodplain (shaded Zone X), this level of event remains a consideration for emergency planning.

Looking ahead, the probability of flooding in the City is expected to increase due to future conditions, including climate change and evolving weather patterns. Climate models project that Southern California will experience more frequent and intense rainfall events, largely driven by the increased prevalence of atmospheric rivers and shifting storm dynamics. Warmer temperatures can increase the atmosphere's capacity to hold moisture, resulting in heavier precipitation during storms. These conditions may elevate flood risk in areas with inadequate drainage infrastructure. Additionally, long-term patterns, such as extended droughts followed by intense rainfall, could further exacerbate flooding hazards. While the City is not currently anticipating changes to land use as a flood mitigation strategy, it recognizes that future adaptation measures may become necessary if climate projections hold true. Taken together, these factors suggest that the probability and potential extent of flooding in the City may rise over the coming decades, particularly during successive storm systems.

M.6 Flood Vulnerability

Vulnerability to Structures

While the City is located in FEMA Zone X, which indicates a low probability of flooding, much of the City lies within the mapped 500-year floodplain. As a result, critical City-owned facilities remain vulnerable in the event of a severe flood. In a worst-case scenario, these structures have the potential to sustain damage, resulting in operational disruptions and costly repairs.

Several key facilities are among the most vulnerable. In the event of a significant flooding event, the Centre could potentially sustain up to 30% damage, with a estimated loss of $4.5 million. Other essential buildings within the Civic Center, such as City Hall and the City Hall Post Office, are also at risk. Community-serving facilities such as the Burns Center, Weingart Senior Center, Youth Center, and multiple park buildings also face considerable risk, with estimated potential

damages ranging from $600,000 to over $2 million. City operations infrastructure is similarly at risk. The Arbor Yard, which supports water system maintenance, could face up to 20% damage in the event of a flood. Water infrastructure assets like well sites and pump stations are expected to receive lower levels of damage, but their disruption could still impact essential services.

To address these vulnerabilities, the City has included Mitigation Action 2025.HMP.24, which calls for an assessment of drainage capacities throughout the City. This effort aims to identify areas of concern and prioritize improvements that will reduce flood risk and enhance stormwater management, ultimately protecting public facilities and minimizing future losses.

Table M.2 Flood Loss Estimate Table

ASSET NAME	REPLACEMENT VALUE	% DAMAGE	LOSS ESTIMATE
Lakewood City Hall	$8,041,422	20%	$1,616,284
The Centre	$4,355,000	20%	$871,000
George Nye Library	$2,362,000	20%	$472,400
Weingart Senior Center	$4,343,400	30%	$1,303,020
Burns Center	$6,694,500	30%	$2,008,350
Youth Center	$2,603,000	25%	$650,750
Mae Boyar Park Community Center	$2,127,200	30%	$638,160
Monte Verde Park Recreation Building	$1,353,000	30%	$405,900
Well Sites	$8,042,692	5%	$402,135
Pump Stations	$1,771,605	5%	$88,580

Vulnerability to People

Although the probability of significant flooding in the City is relatively low, vulnerable populations may still face serious consequences during a severe flood event. Residents with limited mobility, including older adults, individuals with disabilities, and those without access to personal transportation, may be less able to evacuate or respond effectively during flash flooding or prolonged storm events. Populations experiencing economic hardship may also be disproportionately affected, as they may lack the resources to prepare for, respond to, or recover from a flood. Renters and lower-income households may not have flood insurance, making it more difficult to replace belongings or repair damage. Additionally, individuals experiencing homelessness may be at acute risk during storms, especially if localized flooding occurs in underpasses, parks, or other areas where unsheltered residents may be living. Community facilities that provide critical support, such as the Weingart Senior Center, Youth Center, and local parks, could also be impacted by flooding, disrupting access to essential services, programs, and safe gathering spaces during emergencies.

To help reduce this risk, the City has identified Mitigation Action 2025.HMP.24, which involves assessing drainage capacities across the City. By identifying areas with inadequate stormwater infrastructure and prioritizing improvements, this action supports flood risk reduction efforts that benefit the whole community, including vulnerable populations.

M.7 National Flood Insurance Program Compliance

The National Flood Insurance Program (NFIP) is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The following table illustrates the City's participation in the program:

Table M.3 NFIP Participation

Agency	*CID*	*County*	*Init FHBM Identified*	*Init FIRM Identified*	*Curr Eff Map Date*	*Reg-Emer Date*
Lakewood, City of	060130#	Los Angeles	07/19/74	07/06/98	09/26/08	4/15/79

Floodplain Management

The City adopted its Floodplain Management Ordinance (Ordinance No. 98-5, May 26, 1998), which added Sections 8030–8037 to the City of Lakewood Municipal Code and formally incorporated the NFIP's minimum floodplain management criteria. The City is classified primarily as Zone X, indicating minimal flood hazard.

Floodplain management responsibilities are assigned to the Director of Community Development, who serves as the City's Floodplain Administrator (§8031.16, §8033.1). Duties include reviewing permit applications for development within mapped hazard areas, ensuring compliance with NFIP and state standards, maintaining required certifications and elevation records, and coordinating with FEMA, the California Department of Water Resources, and neighboring jurisdictions in the event of watercourse alterations (§8033.2).

In accordance with NFIP requirements, the City applies substantial improvement and substantial damage provisions as outlined in the Municipal Code. When a structure within a designated flood hazard area is repaired, reconstructed, or improved, the work must meet the City's floodplain management standards. These include elevating new or substantially improved residential structures above the base flood elevation, anchoring to prevent flotation or collapse, use of flood-resistant materials, and ensuring utilities and service facilities are designed to minimize flood damage (§8034.1–8034.2).For more information, floodplain management policies are listed in the City's Municipal Code, which supports the City's continued compliance with NFIP expectations.

Repetitive Loss/Severe Repetitive Loss Properties and Flood Recommendations

There were no properties identified as being repetitive loss properties, severe repetitive loss properties or assets impacted by regular flooding. This is consistent with the City's overall Zone X classification, which indicates areas of minimal flood risk. According to the FEMA website, areas of this designation are expected to have minimal flood incidents and are outside the 500-year

flood level. However, the absence of mapped high-risk zones does not eliminate the potential for localized flooding.

The City remains committed to mitigating flood risk, particularly in areas that may experience localized flooding during heavy rainfall. Mitigation Action 2025.HMP.24 calls for assessing drainage capacities throughout the City to identify areas of concern and prioritize improvements that will reduce flood risk and enhance stormwater management. In addition, Mitigation Action 2025.HMP.25 supports equitable access to public information by ensuring outreach materials, including flood preparedness information and related City and County resources, are available in multiple languages on City platforms. Together, these actions strengthen the City's ability to manage localized flooding while building community awareness and resilience. These efforts also reinforce the City's ongoing compliance with NFIP requirements by integrating infrastructure improvements with proactive community outreach. Infrastructure evaluations and drainage improvements may continue to be addressed through future planning initiatives or capital improvement projects as needs are identified.



Chapter 4

Mitigation Strategies

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4.1 Mitigation Goals and Objectives

To structure goals and objectives that produce appropriate mitigation actions, the hazard profiles and loss estimates were thoroughly reviewed to identify patterns in the location of potential hazard events and the vulnerability of the infrastructure identified within those locations. This information was used to develop clear goals to mitigate the effects of natural hazard events.

44 CFR §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

The mitigation goals provide guidelines for developing mitigation projects to provide prioritized hazard reduction. The goals are based on the findings of the Risk Assessment and input from the Hazard Mitigation Planning Committee (HMPC) and characterize long-term hazard reduction targets and the enhancement of current mitigation capabilities.



Table 4.1 includes the Plan goals and corresponding mitigation objectives. These strategies were developed and reviewed by the HMPC using knowledge of the local area (including high-hazard areas and sensitive populations), review of past efforts, findings of the Risk Assessment, and identification of mitigation projects.

Table 4.1 Overal Plan Goals and Objectives

PLAN GOALS	SUPPORTING GOAL OBJECTIVES
PROTECT LIFE & PROPERTY	***Objective 1.1:*** *Implement activities to protect lives, properties, future developments, and critical facilities by ensuring homes, businesses, and infrastructure and more resistant to hazards and meet building codes.* ***Objective 1.2:*** Encourage City departments to incorporate resiliency and hazard mitigation into the planning process of future projects and developments.

	Objective 1.3: Obtain and assess hazard assessment information to monitor high-hazard areas and encourage preventative measures for City assets as vulnerability changes. ***Objective 1.4:*** Ensure development in high-risk areas is protected by mitigation measures that provide for life safety.
IMRPOVE EMERGENCY MANAGEMENT CAPABILITIES AND POST- DISASTER RECOVERY	***Objective 2.1:*** Maintain an active presence in inter-agency collaboration and coordination with regional agencies, organizations, and the business community. ***Objective 2.2*****:** Better prepare City personnel to support emergency operations through improved educational exercises and collaboration with regional agencies, organizations, and the business community.
EXPLORE FUNDING SOURCES FOR MITIGATION ACTIONS	***Objective 3.1:*** Further explore both public and private funding options for action items that maximize mitigation, response, and recovery resources.
ENHANCE PUBLIC AWARENESS AND EDUCATION	***Objective 4.1:*** Enhance outreach programs to raise public awareness of hazard risks, particularly where it impacts vulnerable populations, and encourage the community to implement independent mitigation efforts. ***Objective 4.2:*** Expand and improve information dissemination on services, partnership opportunities, and outside funding resources to assist the community in independently implementing mitigation activities.
PROTECT THE ENVIRONMENT	***Objective 5.1*****:** Monitor new data of evolving weather patterns and implement improvement projects to strengthen resilience and mitigate future impacts of climate change while protecting the environment.

Following the development of the overall Plan goals and strategies, each hazard was reviewed to determine hazard-specific mitigation objectives. These objectives were developed based on the overall plan goals, hazard profiles, and hazard-specific objectives from the 2018 Plan, and were used to guide the establishment of mitigation action items. It should be noted that the HMPC

worked to better align its goals and objectives with the 2023 Hazard Mitigation Plan Guidance with the inlcusion of vulnerable populations. Since the goals and objectives listed above are meant to support the entire community, references to vulnerable popuations was not added. As a trade off, the HMPC demonstrated concern for vulnerable populations in the proposed mitigation actions in Table 4.2. Otherwise, the goals and objectives from the 2018 plan were reviewed and modified for the 2024 update with language that better aligned with current City efforts for improvement.

4.2 Identification of Mitigation Recommendations

44 CFR §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and

Mitigation actions are administrative and/or engineering project recommendations to reduce the City's vulnerability to the identified hazards. Vital City employees are required in the development of actions and projects that are designed to mitigate these hazards and solve problems cost-effectively, as well as ensure consistency with the City's long-term mitigation goals and capital improvements. During the fourth HMPC meeting, a team-based approach was used to brainstorm mitigation projects based on the identified hazards and associated loss estimates. In addition, FEMA's Local Mitigation Planning Handbook and the California Adaptation Planning Guide were used to identify actions to mitigate the effects of climate change.

The evaluation and prioritization of the mitigation actions were used as aids to produce a list of recommended mitigation actions to incorporate into the mitigation plan. Each of the mitigation recommendations listed in Table 4.2 fell into one or more of the following categories:

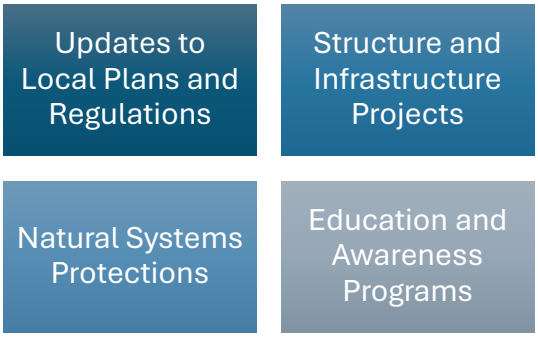


Table 4.2 provides an overview of the mitigation actions and other relevant information, in no specific order. Following the identification of mitigation actions, a Cost-Benefit Review was conducted in order to determine a prioritization of the items. Section 4.4 contains more information on the Cost-Benefit Review and the prioritization of the projects.

Table 4.2 Mitigation Action Identification

MITIGATION ACTIVITY	HAZARDS MITIGATED	MITIGATION ACTION CATEGORY	CORRESPONDING GOALS	RESPONSIBLE DEPARTMENT	POTENTIAL FUNDING SOURCES	ESTIMATED PROJECT COSTS	TIMEFRAME	PROTECTS NEW BUILDINGS	PROTECTS EXISTING BUIDILNGS
2025.HMP.01: Incorporate structural seismic strengthening into new and ongoing City structures and assets to ensure that facilities remain operational.	Earthquake	Structure and Infrastructure Projects	1,2	Public Works	CIP Fund, BRIC	$1-5 Million in Project Costs	Long	Y	Y
2025.HMP.02: Implement seismic studies to determine vulnerable locations throughout critical City facilities and implement structural improvements accordingly.	Earthquake	Structure and Infrastructure Projects	1,2	Public Works	General Fund, BRIC, ENH	$60 in Planning Costs	Long	Y	Y
2025.HMP.03: Increase public education efforts regarding earthquake preparedness by expanding existing online outreach through social media, newsletters, and website updates.	Earthquake	Education and Awareness Programs	1,5	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.04: Improve public outreach through multiple City platforms regarding air quality, focusing on vulnerable populations such as the elderly and very young, by providing clear guidance for protecting health during poor air quality events.	Air Quality	Education and Awareness Programs	1,5	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.05: Support public health efforts during disease outbreaks by distributing materials provided by public health agencies through multiple City platforms to ensure timely access to clear health protection guidance.	Disease Outbreak	Education and Awareness Programs	1,4	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N

2025.HMP.06: Increase outreach and training for preselected Medical Points of Distribution (MPOD) sites in the city by regularly conducting training sessions for city staff and local volunteers to ensure operational readiness and effective coordination during emergencies.	Disease Outbreak	Local Planning and Regulations/ Education and Awareness Programs	2	Public Safety Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.07: Conduct a study to assess the capacity of existing water lines and infrastructure, identifying areas where flow rates and water pressure can be improved to better support fire suppression efforts during urban fire events.	Urban Fire	Structure and Infrastructure Programs	1,2	Water Resources Department	General Fund/ Water Department Funds	$100,000	Long	N	Y
2025.HMP.08: Adjust the cycle of vegetation trimming in the City by identifying and prioritizing species that grow more aggressively, ensuring that trees and shrubs are regularly maintained to reduce the risk of windstorm damage.	Windstorm	Natural Systems Protections/ Local Planning and Regulation	1,5	Environmental Resources Division	General Fund	Staff Time	Short	Y	Y
2025.HMP.09: Develop and distribute recommendations for residents on how to protect their properties from windstorm damage, including recommended mitigation measures and best practices.	Windstorm	Education and Awareness Programs	4	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.10: Increase tree plantings around buildings to provide shade for parking lots and along public rights-of-way, prioritizing high-traffic areas and vulnerable populations, to reduce heat exposure and mitigate the urban heat island effect.	Extreme Heat	Natural Resource Protection/ Structure and Infrastructure Programs	1,5	Public Works	General Fund	Staff Time	Medium	N	N
2025.HMP.11: Develop and distribute educational materials through City platforms to raise awareness of the benefits of cool roofing,	Extreme Heat	Education and Outreach Programs	4	Communications Department	General Fund	Staff Time	Short	N	N

including its role in cooling buildings, reducing heat-related health risks, and improving overall energy efficiency.									
2025.HMP.12: Explore developing a process to ensure access to City pools during high heat events by advertising them as cooling options alongside cooling centers, and, if pool use is restricted, temporarily expand access to those who might not typically have access, and prioritize vulnerable populations if capacity limits are reached.	Extreme Heat	Local Planning and Regulations	1,3,5	Recreation and Community Services/ ERD	General Fund	Staff Time	Medium	N	N
2025.HMP.13: Establish and maintain a mass notification system for the City, ensuring it is ready to deliver timely alerts and services during emergencies by conducting regular system setup, testing, and staff training.	Dam Failure/ Multi-Hazard	Local Planning and Regulations/ Education and Awareness Programs	1,2	Public Safety Department	BRIC, EMGP, HMGP	Staff Time	Short	N	N
2025.HMP.14: Make active shooter training available in multiple languages, including English, by providing translated materials and conducting sessions in languages spoken by the Limited English Proficient (LEP) population within the City.	Adversarial Events	Education and Awareness Programs	1,4	Communications Department	Staff Time/ General Fund	Staff Time	Medium	N	N
2025.HMP.15: Conduct cybersecurity risk assessments of City systems to identify vulnerabilities and implement necessary measures and updates to protect against cyber threats.	Adversarial Events	Structure and Infrastructure Programs	1	Administrative Services	General Fund	$20,000	Medium	Y	Y
2025.HMP.16: Distribute outreach materials to residents on how to respond during power outages, including safety tips, emergency	Power Loss/ Multi- Hazard	Education and Awareness Programs	4	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N

contacts, and resources for maintaining essential services.									
2025.HMP.17: Coordinate with utility providers to establish a prioritization plan for power restoration to critical City facilities, ensuring rapid response during emergencies.	Power Loss	Local Planning and Regulations	2,3	Public Works/ Water Department	Staff Time/General Fund	Staff Time	Medium	N	N
2025.HMP.18: Assess the feasibility of expanding reclaimed water use and identify new locations on City properties for the installation of drought-tolerant landscaping to enhance water conservation and drought resilience.	Drought	Structure and Infrastructure Projects	1,3	Public Works/ Water Department	BRIC, HMGP, CDBG	$10 Million	Long	N	N
2025.HMP.19: Explore possible incentives for alternative landscaping and other water saving initiatives for additional areas.	Drought	Natural Resource Protection	3,5	Environmental Resources Division	General Fund	General Fund/ Roughly $5 Million per project	Medium	N	N
2025.HMP.20: Provide the public with updated information on the impacts of a release, including first response actions and community resources for relief, through accessible City platforms.	Hazardous Materials Release	Education and Awareness Programs	4	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.21: Organize and conduct awareness and training courses for City personnel, including courses from the Paradigm Pipeline Organization, to enhance preparedness and response capabilities for emergency situations.	Hazardous Materials Release	Education and Awareness Programs	2,4	Public Safety Department	Staff Time/ General Fund	$10,000 in Contractor Costs	Medium	N	N
2025.HMP.22: Conduct an updated commodity flow study to identify specific vulnerabilities in commercial transport routes, such as chokepoints or high-risk areas, and collaborate with regional agencies to develop contingency plans for	Hazardous Materials Release	Local Planning and Regulations/ Structure and Infrastructure Projects	1,2	Administration/ Public Works	Staff Time/General Fund	$75,000 in Planning Costs	Medium	N	N

mitigating disruptions that could affect public safety and businesses.									
2025.HMP.23: Expand coordination with Long beach Airport (and expand to other regional airports) to identify opportunities to reduce the vulnerability of residents to aviation incidents.	Transportation Incidents	Local Planning and Regulations/ Education and Awareness Program	2,4	Administration/ City Manager's Office	Staff Time/General Fund	Staff Time	Medium	N	N
2025.HMP.24: Assess drainage capacities throughout the City to identify areas of concern and prioritize improvements to reduce flood risk and enhance stormwater management.	Flood/Dam Failure	Structure and Infrastructure Programs	1	Public Works	FMA, BRIC, HMGP	$3 Million	Long	Y	Y
2025.HMP.25: Ensure public outreach materials, including City and County mental health resources, are available in multiple languages on City platforms to ensure equitable access to important information.	Multi- Hazard	Education and Awareness Programs	1,4	Communications Department	Staff Time/General Fund	Staff Time	Short	N	N
2025.HMP.26: Identify elderly care facilities that may require assistance during evacuation scenarios and develop contingency plans to secure housing and shelter for impacted residents.	Dam Failure/Multi-Hazard	Local Planning and Regulations	1,2,4	Community Development/ Recreation and Community Services	Staff Time/General Fund	Staff Time	Short	Y	Y
2025.HMP.27: Reevaluate and update evacuation routes to ensure they are accessible, effective, and safe for all residents during an emergency event and provide the updated routes to the public through City communication platforms.	Multi- Hazard	Local Planning and Regulations/ Education and Awareness Programs	1,3,4	Community Development	Staff Time/General Fund	$60,000	Short	Y	Y

Notes: 1. Values provided by the HMPC

2. Timeframe definitions are as follows.

a) Short: Task to be completed within 1-2 years

b) Medium Task to be completed within 3-5 years

c) Long: Task to be completed after the 5-year planning period

3. Additional Potential Grant Funding Resources are listed in Chapter 5

Mitigation Actions Not Included in the Hazard Mitigation Plan

During the Planning process, the HMPC proposed several ideas to improve resiliency throughout the City. All developed mitigation actions were inlcuded in the final Plan. There were no actions discussed which are not represented in the Mitigation Actions listed in Table 4.2.

4.3 Prioritization of Mitigation Recommendations

A simplified Benefit-Cost Review was applied to prioritize the mitigation recommendations for implementation. The priority for implementing mitigation recommendations depends upon the overall cost effectiveness of the recommendation when considering monetary and non-monetary costs and benefits associated with each action. Additionally, the following questions were considered when developing the Benefit-Cost Review:

- How many people will benefit from this action?
- How large of an area is impacted?
- How critical are the facilities that benefit from the action?
- Environmentally, does it make sense to do this project for the overall community?

Table 4.4 provides a detailed benefit-cost review for each mitigation recommendation, as well as a relative priority rank (High, Medium, and Low) based upon the judgment of the HMPC. The general category guidelines are listed below.

- **High** – Benefits are perceived to exceed costs without further study or evaluation
- **Medium** – Benefits are perceived to exceed costs, but may require further study or evaluation prior to implementation
- **Low** – Benefits and cost evaluations requires additional evaluation prior to implementation

It should be noted that the values for cost (cons) are estimates only.

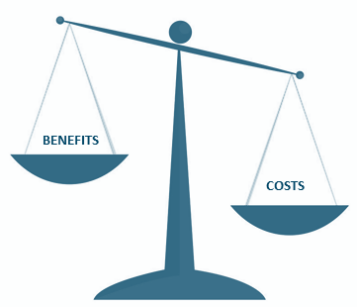


Table 4.3 Benefit-Cost Review Summary Table

MITIGATION ACTIVITY	BENEFITS	COSTS	PRIORITY
2025.HMP.01: Incorporate structural seismic strengthening into new and ongoing City structures and assets to ensure that facilities remain operational.	• Avoided physical damage • Reduced casualties/injuries • Avoided emergency management costs • Improved structureal reliability • Improved continuity for government when applied to ciritcal assets • Avoided emergency management costs	• $1-5 Million in Project Costs	Medium
2025.HMP.02: Implement seismic studies to determine vulnerable locations throughout critical City facilities and implement structural improvements accordingly.	• Avoided loss of function costs • Improved emergency management capability • Improved hazard understanding • Improved Structural Stability • Avoided casualties/injuries • Avoided Emergency Management Costs	• $60,000 in Planning Costs	Medium
2025.HMP.03: Increase public education efforts regarding earthquake preparedness by expanding existing online outreach through social media, newsletters, and website updates.	• Imrpoved coordination with the community • Improved commmunity understanding of hazard vulnerabilities • Reduced casualties/ injuries	• Staff Time	High
2025.HMP.04: Improve public outreach through multiple City platforms regarding air quality, focusing on vulnerable populations such as the elderly and very young, by providing clear guidance for protecting health during poor air quality events.	• Improved coordination with the community • Improved community understanding of hazard vulnerabilities • Reduced injuries	• Staff Time	High
2025.HMP.05: Support public health efforts during disease outbreaks by distributing materials provided by public health agencies through multiple City platforms to ensure timely access to clear health protection guidance.	• Improved coordination with the community • Improved community understanding of hazard vulnerabilities • Reduced injuries	• Staff Time	High
2025.HMP.06: Increase outreach and training for preselected Medical Points of Distribution (MPOD) sites in the city by regularly conducting training	• Improved coordination with the community	• Staff Time	High

sessions for city staff and local volunteers to ensure operational readiness and effective coordination during emergencies.	• Improved community understanding of hazard vulnerabilities • Reduced injuries		
2025.HMP.07: Conduct a study to assess the capacity of existing water lines and infrastructure, identifying areas where flow rates and water pressure can be improved to better support fire suppression efforts during urban fire events.	• Improved understanding of hazard vulnerability • Improved infrastructure • Improved water resiliency • Reduced physical damages • Reduced casualties/ injuries	• $100,000	Medium
2025.HMP.08: Adjust the cycle of vegetation trimming in the City by identifying and prioritizing species that grow more aggressively, ensuring that trees and shrubs are regularly maintained to reduce the risk of windstorm damage.	• Reduced physical damage • Avoided injuries	• Staff Time	High
2025.HMP.09: Develop and distribute recommendations for residents on how to protect their properties from windstorm damage, including recommended mitigation measures and best practices.	• Improved coordination with the community • Improved community understanding of hazard vulnerabilities • Reduced physical damage • Avoided injuries	• Staff Time • $20,000	Medium
2025.HMP.10: Increase tree plantings around buildings to provide shade for parking lots and along public rights-of-way, prioritizing high-traffic areas and vulnerable populations, to reduce heat exposure and mitigate the urban heat island effect.	• Reduced impacts of climate change • Reduced heat related injuries • Reduced energy consupmtion • Improved air quality	• Staff Time	High
2025.HMP.11: Develop and distribute educational materials through City platforms to raise awareness of the benefits of cool roofing, including its role in cooling buildings, reducing heat-related health risks, and improving overall energy efficiency.	• Reduced impacts of climate change • Reduced heat related injuries • Reduced energy consupmtion • Improved air quality	• Staff Time	High
2025.HMP.12: Explore developing a process to ensure access to City pools during high heat events by advertising them as cooling options alongside cooling centers, and, if pool use is restricted, temporarily expand access to those who might not typically have access, and prioritize vulnerable populations if capacity limits are reached.	• Reduced impacts of climate change • Reduced heat related injuries	• Staff Time	Medium

2025.HMP.13: Establish and maintain a mass notification system for the City, ensuring it is ready to deliver timely alerts and services during emergencies by conducting regular system setup, testing, and staff training.	• Improved coordination with the community • Reduced emergency management costs • Reduced casualties/ injuries	• Staff Time	High
2025.HMP.14: Make active shooter training available in multiple languages, including English, by providing translated materials and conducting sessions in languages spoken by the Limited English Proficient (LEP) population within the City.	• Improved community understanding of hazard vulnerabilities • Reduced emergency management costs • Reduced casualties/injuries	• Staff Time	High
2025.HMP.15: Conduct cybersecurity risk assessments of City systems to identify vulnerabilities and implement necessary measures and updates to protect against cyber threats.	• Improved understanding of hazard vulnerability • Avoided loss of function	• $20,000	Medium
2025.HMP.16: Distribute outreach materials to residents on how to respond during power outages, including safety tips, emergency contacts, and resources for maintaining essential services.	• Improved community understanding of hazard vulnerability • Avoided loss of function costs	• Staff Time	High
2025.HMP.17: Coordinate with utility providers to establish a prioritization plan for power restoration to critical City facilities, ensuring rapid response during emergencies.	• Avoided loss of function costs • Reduced community impact • Increased coordination with regional partners	• Staff Time	High
2025.HMP.18: Assess the feasibility of expanding reclaimed water use and identify new locations on City properties for the installation of drought-tolerant landscaping to enhance water conservation and drought resilience.	• Improved water resiliency • Reduced impacts of climate change • Avoided loss of function costs	• $10 million	Low
2025.HMP.19: Explore possible incentives for alternative landscaping and other water saving initiatives for additional areas.	• Improved water resilliency • Improved water source reliability	• General Fund/ Roughly $5 Million per project	Medium
2025.HMP.20: Provide the public with updated information on the impacts of a release, including first response actions and community resources for relief, through accessible City platforms.	• Improved community understanding of hazard vulnerabilities • Reduced emergency management costs • Reduced casualties/injuries	• Staff Time	High
2025.HMP.21: Organize and conduct awareness and training courses for City personnel, including courses from the Paradigm Pipeline Organization, to enhance preparedness and response capabilities for emergency situations.	• Improved understanding of hazards • Reduced Emegency Management costs • Reduced injuries	• $10k in Contractor Costs	Medium

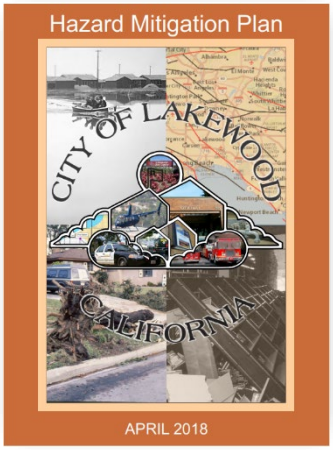
2025.HMP.22: Conduct an updated commodity flow study to identify specific vulnerabilities in commercial transport routes, such as chokepoints or high-risk areas, and collaborate with regional agencies to develop contingency plans for mitigating disruptions that could affect public safety and businesses.	• Improved understanding of hazards • Avoided loss of function • Reduced casualties/injuries • Improved coordination with regional agencies	• Staff Time	High
2025.HMP.23: Expand coordination with Long beach Airport (and expand to other regional airports) to identify opportunities to reduce the vulnerability of residents to aviation incidents.	• Avoided emergency managemest costs • Reduced casualties/injuries • Imrproved coordination with local airports	• Staff Time	High
2025.HMP.24: Assess drainage capacities throughout the City to identify areas of concern and prioritize improvements to reduce flood risk and enhance stormwater management.	• Avoided loss of function • Avoided environmental impact	• $3 Million	Low
2025.HMP.25: Ensure public outreach materials, including City and County mental health resources, are available in multiple languages on City platforms to ensure equitable access to important information.	• Improved community understanding of hazard vulnerabilities • Reduced emergency management costs • Reduced casualties/injuries	• Staff Time	High
2025.HMP.26: Identify elderly care facilities that may require assistance during evacuation scenarios and develop contingency plans to secure housing and shelter for impacted residents.	• Reduced community displacement with an emphasis for vulnerable populations • Reduced casualities/ injuries • Avoided emergency management costs	• Staff Time	High
2025.HMP.27: Reevaluate and update evacuation routes to ensure they are accessible, effective, and safe for all residents during an emergency event and provide the updated routes to the public through City communication platforms.	• Reduce community displacement with an emphasis for vulnerable populations • Reduced casualties/ injuries • Avoided emergency management costs	• $60,000	Medium

4.4 Implementation Strategy

Mitigation Actions classified as high-priority mitigation actions provide the most significant vulnerability reduction, as related to cost and probability, and are typically implemented before lower ranked improvements. The City, however, may find that under some circumstances that a mitigation action classified as low-priority mitigation actions may need to be implemented before a higher priority recommendation. The priority levels associated with each improvement are indicated on the “Mitigation Action Prioritization: Benefit-Cost Review” table in the previous section.

2018 Hazard Mitigation Plan Strategies

The HMPC reviewed the mitigation strategies and actions from the 2018 Hazard Mitigation Plan. The 2018 Plan outlined mitigation strategies scheduled for completion in the near future and additional projects for consideration. However, as many of these projects are contingent on the City receiving grant funding to implement, some of these have yet to be implemented.



The Hazard Mitigation Planning Committee (HMPC) for this update was composed entirely of new members, as staff turnover at the City meant very few of the previous participants remained involved. With fresh perspectives and an understanding of current challenges, the HMPC decided to take a more focused approach by streamlining the mitigation actions and setting achievable goals for this plan. To ensure greater clarity for future review, the new team focused on creating mitigation actions that were both specific and actionable, so that over the next five years, even with potential staff changes, future teams would easily understand and implement the strategies.

The HMPC opted to start fresh, creating a new list of actions that better align with today’s priorities rather than carrying over many of the past items. None of the actions from the 2018 Plan were carried over into this update, largely because they were either completed or considered ongoing efforts. These ongoing actions continue to be part of the city's standard mitigation activities, which are regularly addressed through established processes and do not require new, separate

implementation strategies. As such, these actions were not included as new items but remain integral to the City's continuous hazard mitigation efforts.

Table 4.4 on the following page provides an overview of mitigation strategies from the 2018 Plan and indicates which actions were completed since the last update. As previously noted, only some of the original mitigation actions received the funding necessary for implementation.

Table 4.4 Status Update of the 2018 Mitigation Strategies

MITIGATION ACTIVITY	HAZARDS MITIGATED	STATUS	NOTES
Conduct Risk Assessments for Important City buildings and infrastructure, develop, and implement mitigation measures as necessary.	Multi-Hazard	Ongoing	Assessments have been intitated at key locations, with future improvements contigent on available funding.
Identify and pursue funding opportunities to develop and implement local and City mitigation activities.	Multi-Hazard	Ongoing	The City is continually seeking grant opportunities and other funding sources to support mitigation projects.
Develop and/or maintain public and private sector partnerships to foster hazard mitigation activities.	Multi-Hazard	Ongoing	Partnerships with local business and organzations that support community-wide resillience are ongoing.
Supporting inter-agency communication improvements used by public safety that provides during disasters or other emergencies.	Multi-Hazard	Ongoing	Enhancing interoperability of public safety communication systems is an ongoing focus for coordination and response.
Secure important nonstructural components, such as communications and IT equipment, building electrical, mechanical, and HVAC equipment and building contents (file cabinets, bookcases, shelves) in City buildings to minimize damage, disruption, and potential life safety impacts.	Earthquake	Ongoing	Nonstructural retrofits (e.g., bracing furniture, securing equipment) are ongoing, particularly in facilities undergoing renovation or new construction.In the next 2 years, the City will be building electrical mechanical in the AC system.
Continue to enhance public education activities, including an earthquake preparedness segment for Lakewood City TV Channel 21, add earthquake preparedness materials to Lakewood Online and distribute materials by mail, at City Hall and Libraries, and at a booth at Lakewood's annual Pan American Festival.	Earthquake	Ongoing	Public outreach is currently conducted through City-sponsored programs, media contact, and emerngey preparedness campaigns, but is ongoing and can be improved upon.

Complete HAZUS Scenario Earthquake Loss Estimates for several of the earthquake events most likely to substantially impact Lakewood.	Earthquake	Removed	Removed from current plan due to budget limitations, but may be reconsidered if funding becomes available.
Encourage and facilitate retrofitting of vulnerable residential and commercial buildings, including low income and elderly housing.	Earthquake	Ongoing	The City is continously encouraging and facilitating retrfoitting by reviewing plans and conducting inspections.
Conduct seismic risk assessments for important City-owned buildings, bridges, water systems and wastewater collection system to identify vulnerabilities, prioritize retrofits, and facilitate retrofitting or replacement of vulnerable structures.	Earthquake	Ongoing	Preliminary efforts have been made; coordination with utility departments is needed to assess infrastructure systems
Develop better understanding of the level of risk posed by dam failures, including warning times, flood depths and velocities.	Flood	Ongoing	Risk modeling and planning support is being provided through federal and state partners to improve understanding of flood impacts
Evaluate and improve notification, evacuation and response planning for dam failures.	Flood	Ongoing	Continued coordination with public safety agencies is needed to refine evacuation and notification procedures.
Track and map localized flooding events to reduce property damage.	Flood	Removed	There have been no major flooding events in last 5 years. The last occurrence was in 2017 at City Hall. The City is monitoring localized flooding incidents continuously to inform future mitigation and maintenance priorities.
Evaluate critical city water and wastewater infrastructure such as motor control cabinets and pumps to minimize flood losses.	Flood	Ongoing	Additional coordination with utility departments is needed to evaluate vulnerabilities and plan for future improvements.
Ensure that future critical facilities are at high enough elevations to avoid damage from floods or dam failures.	Flood	Complete	Elevation and drainage considerations are integrated during site review and development of critical infrastructure.

Continue to encourage Southern California Edison to maintain vigorous tree trimming programs and encourage building owners to trim vegetation endangering service drops.	Windstorm	Complete	The City supports utility efforts and encourages residents to maintain private property to prevent service disruptions.
Gather, publicize, and distribute windstorm preparedness and mitigation brochures from FEMA, California Public Utilities Commission, County of Los Angeles Department of Public Works and Southern California Edison.	Windstorm	Ongoing	Educational materials are distributed at events and through public outreach campaigns to improve household-level preparedness, but need to be updated to reflect current information.
Create a City-wide database of windstorm damages, including service request codes and GIS layers.	Windstorm	Ongoing	Tracking systems exist but are not currently windstorm-specific; further development is needed to improve data availability
Continue to enhance Lakewood's existing water conservation measures and programs.	Drought	Ongoing	The City is continuously implementing conservation-oriented landscape and infrastructure projects. Water capture projects that were completed will use the water captured to water the parks.
Continue existing water transfer agreements with neighboring water utilities.	Drought	Ongoing	Existing agreements ensure regional water reliability and support ongoing drought preparedness efforts.
Evaluate options for increased use of recycled water.	Drought	Complete	Evaluations have been completed and incorporated into stormwater reuse and conservation projects
Continue to work with regional water agencies to improve conjunctive water management and urban runoff water management	Drought	Ongoing	Continued coordination is needed to align local efforts with regional water management strategies.



Chapter 5
Plan Maintenance

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5.1 Mitigation Progress Monitoring

§201.6(c)(4)(i): [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

The Mitigation Strategy section in the Hazard Mitigation Plan identifies mitigation actions that have been prioritized based on the loss estimates and the probability of each hazard, which will typically be implemented according to the priority rank. To thoroughly track hazard mitigation status, the City of Lakewood (City) must continuously monitor and document the progress of the implementation of mitigation actions. Though mitigation actions may be delegated to different departments within the City, the Director of Public Safety will have the responsibility of monitoring overall progress.

To facilitate this monitoring process, Table 5.7: "Action Item Implementation" was developed to provide a mechanism for monitoring the overall implementation progress. The table is designed to monitor mitigation actions according to project managers, project status, and project milestones. The table can be found at the end of this chapter.



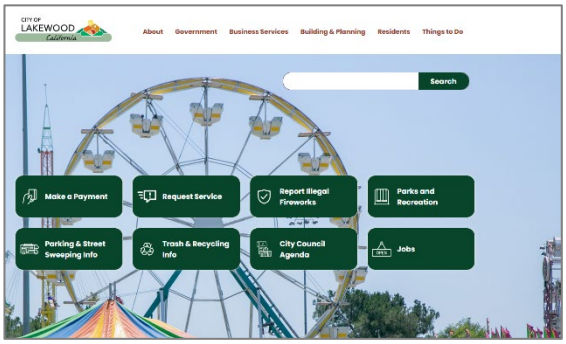
5.2 Planning Mechanisms

§201.6(c)(4)(ii): [The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The City maintains the following processes to incorporate mitigation strategies of the Hazard Mitigation Plan into planning mechanisms:

Website

The City's Hazard Mitigation Plan will be posted on the City's website to enable citizens to review and provide feedback regarding mitigation objectives and strategies. Feedback from residents can be incorporated during the annual review or five-year update of the Hazard Mitigation Plan and expand the Hazard Mitigation Planning Committee's (HMPC) understanding of the public's opinion on hazard vulnerability. In addition, the website can be used as a vehicle to maintain an ongoing conversation with the public regarding upcoming mitigation projects and provide an avenue for hazard education.



City Council

The City Council is responsible for approving projects, plans, and programs on a City-wide level. By providing mitigation planning concepts to the City Council, mitigation actions and projects will be incorporated into relevant planning efforts. Department heads can expand mitigation efforts by working with Council Members to encourage the inclusion of mitigation goals and objectives for any project or planning efforts which are reviewed by the City Council.

Public Works Department

The Public Works Department provides infrastructure and maintenance services to City assets and to the public. Hazard mitigation will be integrated into Public Works programs through its involvement in the HMPC. The Public Works Department has the ability to expand mitigation activities by implementing safety mechanisms throughout the City to maximize resiliency. Any project improving City-owned structures would likely be carried out or overseen by the Public Works department.

Comissions

To assist the City Council in reviewing prominent issues, the City has established the three (3) commissions listed:

- Community Safety Commission
- Planning and Environment Commission
- Recreation and Community Services Commission

Community Development Department

Lakewood's Community Development Department oversees planning, zoning, code enforcement, building safety, and housing programs. The Building and Planning Division is responsible for reviewing construction plans and various building inspection activities. The objective of this Division is to protect the public regarding building design and construction.

Assembly Bill (AB) 2140

Passed in 2006, AB 2140 compliance would allow the City to be considered for additional state cost-share on eligible Public Assistance. To be eligible, the City must have an approved Hazard Mitigation Plan and adopt that plan into the Safety Element of the City's general plan. Although currently the hazard mitigation plan has not been adopted into the City's Safety Element, doing so would allow the City to bring in more grant funding and reduce the administrative burden of implementing mitigation projects. The City intends to adopt the current plan into the City's Safety Element for future planning purposes.

Grant Funding

Grant Funding can be obtained through many different Federal, State, and specialty organizations. Searching for and obtaining additional funding for the City allows the City to implement improvement projects while limiting the burden of project costs. As part of the implementation strategy of this plan, obtaining grant funding will be crucial to the success of implementing large mitigation actions. Table 5.4 Grant Funding includes a list of some of the programs the City can explore to obtain supplemental funding to implement resiliency action.

Resource Tables

This section serves as a high-level capability assessment of the City's resources through which hazard mitigation objectives may be achieved. The following subsections attempt to document the Planning/Regulatory, Administrative/Technical, Fiscal, Grant funding, and Outreach/Partnership resources available to the City.

Table 5.1: Planning/Regulatory Tools Table

Regulatory Tool	Updated	Comments
General Plan	1996, Update In Progress	The City is currently in the process of updating its General Plan, which guides land use, safety, conservation, and economic development. While the comprehensive update is ongoing, the City adopted its 2021–2029 Housing Element in 2022,
Hazard Mitigation Plan	2018, Update in Progress	The Hazard Mitigation plan is the ultimate resource for hazard resiliency. Updated every 5 years with input from various neighboring communities and public stakeholders, the plan lays out a pathway for future resiliency efforts.
Emergency Operations Plan	2017, Update in Progress	The City's Emergency Operations Plan establishes the framework for coordinated response and recovery during emergencies. It identifies organizational responsibilities, communication protocols, and coordination mechanisms. The EOP complements the Hazard Mitigation Plan by providing operational guidance to reduce impacts from hazard events.
Urban Water Management Plan	2020	The City's Urban Water Management Plan outlines strategies for water supply reliability, conservation, and drought resilience. It identifies measures to ensure sustainable water management and supports mitigation efforts by addressing vulnerabilities related to water supply and infrastructure during hazard events.
City of Lakewood Building Codes – Article 8 of the Municipal Code	2025	The City has adopted the Los Angeles County Building, Plumbing, Electrical, Mechanical, Residential, Green and Existing Building Codes. The Building Code sets a standard for structural integrity throughout the City. Currently, the City enforces the Los Angeles County Building Codes; beginning January 1, 2026, the City will adopt the 2025 California Building Standards Code without the County's amendments. These updated provisions include enhanced flood-resilience measures, among other hazard-specific design standards. The City can use future code updates to further improve resilience.

Table 5.2: Administrative/Technical Tools Table

Regulatory Tool	Personnel/Resources
City Council	The City Council can review and approve mitigation propositions for implementation.
Public Safety Division	The Director of Public Safety is responsible for emergency preparedness and hazard mitigation planning. This is the division ultimately responsible for promoting the implementation of hazard mitigation objectives.
Community Development Department	The Community Development Department is responsible for all developments within the City. This department will be able to include considerations for local hazards in new projects. Per Section 8031.16 of the Lakewood Municipal Code, the Floodplain Administrator is the duly appointed and acting Director of Community Development, who oversees compliance with floodplain management regulations and supports mitigation efforts related to flood risk reduction.
Public Works Department	The Public Works Department is responsible for street improvements and overall City maintenance. This department can implement hazard mitigation activities as part of planned maintenance and City upgrades.

Water Resources Department	Manages the city's water utility and operates the city's reclaimed water system. This department can serve as a key resource for hazard mitigation planning by providing data on water infrastructure vulnerabilities, identifying areas at risk of service disruption, and supporting strategies to strengthen system resilience against hazards.
Administrative Services Department	Administration is a multi-faceted resource. The City may utilize experts in its many departments.
Los Angeles County Sheriff Department	The Los Angeles County Sheriff's Department provides law enforcement services to the City under contract, supporting public safety before, during, and after hazard events. The Department assists in emergency response coordination, evacuation operations, and dissemination of hazard-related information to the public. Its resources and personnel play a key role in implementing mitigation actions related to public safety and emergency communications.
Los Angeles County Fire Department	The Los Angeles County Fire Department provides fire protection, emergency medical response, and specialized rescue services for the City through a contractual agreement. The Department contributes technical expertise in fire prevention, hazardous materials management, and emergency response planning.

Table 5.3: Fiscal Tools Table

Regulatory Tool	**Available for Use**
General Fund	Yes, with approval
Capital Improvement Plan	Yes
Authority to impose taxes for specific purposes	Yes, with voter approval

Table 5.4 Grant Funding Tools Table

Grant Funding Tool	**Agency**	**Purpose**	**Contact**
Building Resilient Infrastructure and Communities	U.S. Department of Homeland Security, Federal Emergency Management Agency	To support states, local communities, tribes and territories in undertaking pre-disaster hazard mitigation projects and capability/capacity-building activities that reduce risks from natural hazards.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Hazard Mitigation Grant Program	U.S. Department of Homeland Security, Federal Emergency Management Agency	To prevent future losses of lives property due to disasters; to implement State of local hazard mitigation plans; to enable mitigation measures to be implemented during immediate recovery from a disaster; and to provide funding for previously identified mitigation measures to benefit the disaster area.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov

Flood Mitigation Assistance (FMA)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To help States and communities plan and carry out activities designed to reduce the risk of flood damage to structures insurable under the NFIP.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Emergency Management Performance Grants (EMPG)	U. S. Department of Homeland Security; Federal Emergency Management Agency	To encourage the development of comprehensive emergency management at the State and local level and to improve emergency management planning, preparedness, mitigation, response, and recovery capabilities.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Community Development Grant Program (CDBG)	U.S. Department of Housing and Urban Development	To develop viable urban communities by providing decent housing and a suitable living environment. Principally for low-to-moderate income individuals.	HUD 451 7th Street, S. W. Washington, DC 20410-7000 Phone: (202) 708-3587 www.hud.gov
Public Assistance Program (PA)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To provide supplemental assistance to States, local governments, and certain private nonprofit organizations to alleviate suffering and hardship resulting from major disasters or emergencies declared by the President. Under Section 406, Public Assistance funds may be used to mitigate the impact of future disasters.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Emergency Watershed Protection	U.S. Department of Agriculture, Natural Resource Conservation Service	To provide emergency technical and financial assistance to install or repair structures that reduce runoff and prevent soil erosion to safeguard life and property.	NRCS PO BOX 2890 Washington, DC 20013 Phone: (202) 720-3527 www.nrcs.usda.gov
Disaster Mitigation and Technical Assistance Grants	U.S. Department of Commerce, Economic Development Administration	To help States and localities to develop and /or implement a variety of disaster mitigation strategies.	EDA Herbert C. Hoover Building Washington, DC 20230 Phone: (800) 345-1222 www.eda.gov
Watershed Surveys and Planning	U.S. Department of Agriculture, Natural Resource Conservation Service	To provide planning assistance to Federal, State, and local agencies for the development of water coordination and related land resources programs in watersheds and river basins	NRCS PO Box 2890 Washington, DC 20013 Phone: (202) 720-3527 www.nrcs.usda.gov
National Earthquake Hazards Reduction Program (NEHRP)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To mitigate earthquake losses that can occur in many parts of the nation providing earth science data and assessments essential for warning of imminent damaging earthquakes, land-use planning, engineering design, and emergency preparedness decisions.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Engineering for Natural Hazards	National Science Foundation	Supports fundamental research that advances knowledge for understanding and mitigating the impact of natural hazards on constructed civil infrastructure	National Science Foundation Phone: (703) 292-7024 https://www.nsf.gov

Table 5.5 Outreach and Partnership Tools

Regulatory Tool	Available for Use
City Website	The City website is an open forum for providing hazard information and for accepting ongoing comments from the public. The City website will likely be the main avenue for maintaining an open dialogue with the public for hazard mitigation throughout the planning period
Mutual Aid Agreements	As part of expanding its resilience to the impacts of hazard events, the City will periodically review its current mutual aid agreements, identify gaps, and secure new agreements to expand its available mutual resources when necessary.
City Social Media	The City utilizes multiple social media platforms (Facebook, X, Instragram) to engage residents, share timely information, and promote hazard mitigation initiatives. These platforms provide a direct, interactive channel for communicating preparedness tips, promoting community events, and highlighting ongoing mitigation projects.
City Email Magazine	The City's weekly email magazine serves as an effective communication tool to reach residents directly with updates on mitigation projects, preparedness campaigns, and public safety information. It can also be used to highlight success stories and encourage community participation in hazard mitigation activities.

Building on Existing Capabilities

As part of the Plan update, potential improvements to the City's existing capabilities were discussed. The City is cognizant of the need to continually evaluate its efforts and take an active role in promoting resiliency within the City. The City currently utilizes its Public Safety Department to train its staff and reach out to the community regarding preventative and preparedness strategies for hazard events. The Capital Improvement Program (CIP) directs funding to improve infrastructure, and the City continually searches for grant opportunities to allow the City to accomplish additional improvements that address hazard mitigation efforts for public facilities. In addition to the City's current efforts, the following is a list of potential new initiatives that would improve the City's ability to promote resiliency.

- **Regulatory/Fiscal:** Enhance the CIP proposal procedure to include a Mitigation/Resiliency element to be considered for each project proposal. The intent is to consider how each CIP project might contribute to mitigation efforts, citing the HMP when proposed projects align with hazard mitigation planning efforts.
- **Administrative:** Expand Public Safety Department's programs to provide specialized natural disaster training and safety for City personnel and the public, as appropriate.
- **Grant Funding:** Expand search for grant funding specifically to assist with aging infrastructure improvements, water reliability, energy efficiency, and facility upgrades.
- **Outreach/Education:** Engage City commissions and committees and increase volunteer opportunities to work with the public to gain community participation in resiliency efforts and voluntary resilience projects for privately-owned properties.

Progress for Mitigation Incorporation

The sections above demonstrate the many resources available to the City for successful mitigation action implementation. The City has made meaningful progress in implementing mitigation strategies by leveraging existing resources and enhancing interdepartmental coordination. Since the previous planning cycle, the City completed efforts to ensure that future critical facilities are elevated to avoid flood or dam failure damage, supported Southern California Edison's tree-trimming programs to reduce windstorm-related outages, and evaluated the use of recycled water—now incorporated into local conservation and stormwater reuse projects. These completed actions reflect the City's ongoing commitment to integrating mitigation into planning and operations. Additional efforts, such as seismic risk assessments, interagency communication improvements, and public education campaigns, remain active and continue to build community resilience.

Available Planning Mechanisms to Incorporate Mitigation Requirements

The City uses the following local planning mechanisms for incorporating the mitigation requirements of the Hazard Mitigation Plan.

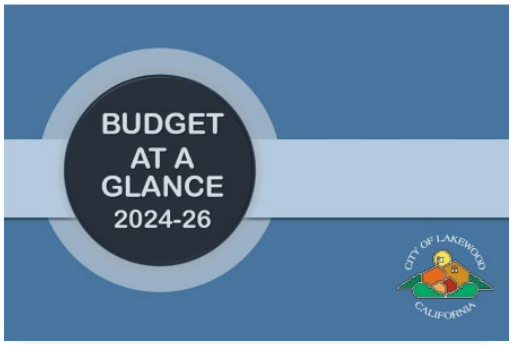
General Planning

The City is responsible for updating and incorporating mitigation actions and concepts into the General Plan. The General Plan is evaluated on a periodic basis, which includes a review of the policies and programs associated with land use and development, among other things. Mitigation actions from the Hazard Mitigation Plan will be reviewed during the update of the General Plan and incorporated as applicable. As part of this review, ordinances and codes will be reviewed to ensure they are consistent with the mitigation strategies and referred to the appropriate regulatory authority as needed.

Emergency Operations Plan

The City maintains an Emergency Operations Plan (EOP) that includes profiles and specific responses for earthquakes, flooding, windstorms, and drought that are mentioned in the Hazard Mitigation Plan. The City will incorporate the Risk Assessment into the EOP in addition to using emergency scenarios outlined in the report to flush out potential mitigation actions.

Capital Improvements Program



The City maintains a Capital Improvements Program (CIP) with projects that are budgeted for at least a five-year period. Engineering mitigation projects are included within the CIP. Additionally, the projects already included within the CIP are reviewed for mitigation improvements (e.g., areas prone to flooding are configured with mitigation elements, current seismic design criteria is applied to construction, facility locations are reviewed for special hazards, etc.).

Progress for Planning Mechanism Incorporation

The City was able to make progress from the previous Local Hazard Mitigation Plan by implementing several of the suggested mitigation actions. The previous LHMP also played a broader role in citywide planning, as it was incorporated into the City's 2021–2029 Housing Element to help identify environmental and hazard risks that could influence housing development

and land use decisions. Building on this integration, the current Plan update will provide an even stronger foundation for future planning efforts, ensuring that hazard mitigation strategies are aligned with housing, infrastructure, and community development goals. Under the direction of the City's Public Safety Manger, the Plan update will be able to be incorporated into future planning efforts.

5.3 Periodic Assessment Requirements

§201.6(c)(4)(i): [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, **evaluating**, and updating the mitigation plan within a five-year cycle.

Mitigation planning is an ongoing process, and as such, the Hazard Mitigation Plan should be treated as a living document that must grow and adapt in order to keep pace with changes within the City. Continuing from the 2018 Plan, an annual assessment will be completed to document any changes in site hazards (e.g., updated FIRM maps, contemporary seismic studies, etc.) or the installation and purchase of new equipment (e.g., back-up generators, emergency response equipment, etc.) to ensure they do not have any major effects on City's hazard vulnerabilities that would impact the conclusions or actions associated with the Hazard Mitigation Plan. In addition, these reviews will track the progress of proposed mitigation actions and the incorporation of mitigation planning in other City planning documents. As needed, these reviews can be used to promote mitigation action with the City or alter mitigation strategies within the plan, as appropriate. If any of the above-mentioned goals have not made progress, Plan objectives can be brought to department heads for approval. The criteria for progress will be evaluated by the completion of mitigation actions, references of this Plan in planning mechanisms, and the frequency with which public comments, particularly from representatives of vulnerable groups are obtained.

Prior to the fifth year of the revision cycle and after the third annual review, these annual observations will be evaluated to determine what changes should be implemented in the required Hazard Mitigation Plan Update. The results of the annual evaluations will be folded back into each phase of the planning process and should yield decisions on how to update each section of the Plan. The official Plan update is expected to begin one year prior to the five-year anniversary date.

The City's Director of Public Safety has the responsibility of implementing these annual and five-year requirements. During the annual review, if any updates are deemed minor, then the Management Analyst or designee will perform the updates. However, if more major updates are required, then the HMPC will be reconvened to discuss the effects on the Plan. For the fifth-year

revision, the entire HMPC will reconvene in order to use their expertise to update the Plan in its entirety.

In addition to these periodic requirements, any significant modification to the City's facilities should be considered with respect to a possible impact on the Hazard Mitigation Plan. All HMPC members are responsible for providing updates for the Plan to the Director of Public Safety, as necessary. As noted in the following section, the completed Hazard Mitigation Plan will be available on the City's website to allow the public to continue to be involved during these periodic reviews.

5.4 Update Requirements

The Emergency Management and Assistance regulations (44 CFR Part 201) state that it is the responsibility of local agencies (i.e., the City) to "at a minimum, review and, if necessary, update the local mitigation plan every five years from date of plan approval to continue program eligibility." As stated in Section 5.3, this responsibility lies with the Director of Public Safety. The evaluation procedures listed below will provide insight into the major changes that need to be included in the five-year update and resubmission to FEMA:

- Annual Hazard Mitigation Plan review with respect to changes in hazard vulnerability (e.g., additional hazards identified, natural hazard events, etc.)
- Annual Hazard Mitigation Plan review with respect to development of new facilities
- Five-year comprehensive update to address the findings of the annual reviews
- Re-submittal of the updated Hazard Mitigation Plan to CalOES/FEMA

Additionally, the risk assessment portion of the plan will be reviewed to determine if the information should be updated or modified. Each division/department responsible for the various implementation actions will report on:

- Status of their projects,
- Implementation processes,
- Any difficulties encountered,
- How coordination efforts are proceeding, and
- Strategies that should be revised.

Plan Update

The City's Hazard Mitigation Plan was last updated in 2018. During HMPC Meeting #2, the Plan goals were reviewed for consistency and applicability to the City, along with the goals from the 2023 California State Hazard Mitigation Plan and 2020 Los Angeles County All-Hazards Mitigation Plan. Table 5.6 illustrates the changes in the priorities of the Plan.

Table 5.6: Hazard Mitigation Plan Goals

2018 Plan Goals	Current Plan Goals
Reduce the Threat to Life and Safety/ Reduce the Threats to Lakewood Buildings, Facilities, and Infrastructure	Protect Life and Property
Enhance Emergency Response Capability, Emergency Planning and Post-Disaster Recovery	Imrpove Emergency Management Capabilities and Post- Disaster Recovery
Vigorously Seek Funding Sources for Mitigation Actions	Explore Funding Sources for Mitigation Actions
Increase Public Awareness of Natural Hazards and Enhance Education and Outreach Efforts	Enhance Public Awareness and Education
Incorporate Mitigation Planning into Natural Resource Management and Land Use Planning	Protect the Environment

As shown in Table 5.6, the overall intent of the Plan goals remains consistent with the 2018 LHMP; however, the goals have been refined for clarity and focus. For example, "Reduce the Threat to Life and Safety and "Reduce the Threat to Lakewood Buildings, Facilities, and Infrastructures" was updated to "Protect Life and Property," and "Increase Public Awareness of Natural Hazards" was revised to "Enhance Public Awareness and Education." Details of the Plan goals and objectives can be found in Chapter 4 of this Plan.

Continued Public Involvement

To facilitate ongoing public input, the completed and adopted Hazard Mitigation Plan will be posted on the City's website and social media outlets to allow the public to remain engaged and

provide feedback. Additionally, the City's social media outlets and weekly email magazine will be used to inform the public on mitigation action implementation, including the progress and completion of projects. These outreach platforms also provide an opportunity to highlight the City's "wins", emphasizing how mitigation efforts protect public safety, reduce long-term recovery costs, and demonstrate responsible use of public funds. The website will include a link to a contact form allowing the public to submit comments, which may be addressed by the City if deemed appropriate. When updating the Hazard Mitigation Plan, the City will solicit participation from HMPC participants to discuss any issues that need to be addressed in the Hazard Mitigation Plan update. Public participation will be solicited through public notices and advertised on the website.

The goal of outreach regarding update meetings is to solicit public involvement in the HMPC, which brainstorms the hazards facing the City and discusses ways to mitigate those hazards. The public was encouraged to participate in the hazard mitigation process through the release of a public survey and discussions at City events. Results from the survey highlighted the hazards that were of most concern to the community. The City can use the information from the survey results when deciding which mitigation action to implement. It can generally be assumed that actions reducing risk for the top-rated hazards will be well received by the community. More detailed information regarding the survey results can be found in Chapter 1 and Appendix D.



If Plan revisions are needed, City will request involvement from vulnerable groups within the City. It is anticipated that public announcements via the website will be supplemented by targeted outreach materials—such as letters and surveys—that City representatives will deliver to representatives of vulnerable communities. This will guarantee that outreach efforts directed towards obtaining the involvement of vulnerable populations are more extensive.

Table 5.7: Action Item Implementation

Action ID	Action Description	Responsible Department	Completion Timeframe	Status	Details/Status Summary
2025.HMP.01	Incorporate structural seismic strengthening into new and ongoing City structures and assets to ensure that facilities remain operational	Public Works	Long	Open	
2025.HMP.02	Implement seismic studies to determine vulnerable locations throughout critical City facilities and implement structural improvements accordingly	Public Works	Long	Open	
2025.HMP.03	Increase public education efforts regarding earthquake preparedness by expanding existing online outreach through social media, newsletters, and website updates	Communications Department	Short	Open	
2025.HMP.04	Improve public outreach through multiple City platforms regarding air quality, focusing on vulnerable populations such as the elderly and very young, by providing clear guidance for protecting health during poor air quality events	Communications Department	Short	Open	
2025.HMP.05	Support public health efforts during disease outbreaks by distributing materials provided by public health agencies through multiple City platforms to ensure timely access to clear health protection guidance	Communications Department	Short	Open	
2025.HMP.06	Increase outreach and training for preselected Medical Points of Distribution (MPOD) sites in the city by regularly conducting training sessions for city staff and local volunteers to ensure operational readiness and effective coordination during emergencies	Public Safety Department	Short	Open	
2025.HMP.07	Conduct a study to assess the capacity of existing water lines and infrastructure, identifying areas where flow rates and water pressure can be improved to better support fire suppression efforts during urban fire events	Water Resources Department	Long	Open	
2025.HMP.08	Adjust the cycle of vegetation trimming in the City by identifying and prioritizing species that grow more aggressively, ensuring that trees and shrubs are regularly maintained to reduce the risk of windstorm damage	Environmental Resources Division	Short	Open	
2025.HMP.09	Develop and distribute recommendations for residents on how to protect their properties from windstorm damage, including recommended mitigation measures and best practices	Communications Department	Short	Open	
2025.HMP.10	Increase tree plantings around buildings to provide shade for parking lots and along public rights-of-way, prioritizing high-traffic areas and vulnerable populations, to reduce heat exposure and mitigate the urban heat island effect	Public Works	Medium	Open	
2025.HMP.11	Develop and distribute educational materials through City platforms to raise awareness of the benefits of cool roofing, including its role in cooling buildings, reducing heat-related health risks, and improving overall energy efficiency	Communications Department	Short	Open	

2025.HMP.12	Explore developing a process to ensure access to City pools during high heat events by advertising them as cooling options alongside cooling centers, and, if pool use is restricted, temporarily expand access to those who might not typically have access, and prioritize vulnerable populations if capacity limits are reached	Recreation and Community Services/ ERD	Medium	Open	
2025.HMP.13	Establish and maintain a mass notification system for the City, ensuring it is ready to deliver timely alerts and services during emergencies by conducting regular system setup, testing, and staff training	Public Safety Department	Short	Open	
2025.HMP.14	Make active shooter training available in multiple languages, including English, by providing translated materials and conducting sessions in languages spoken by the Limited English Proficient (LEP) population within the City	Communications Department	Medium	Open	
2025.HMP.15	Conduct cybersecurity risk assessments of City systems to identify vulnerabilities and implement necessary measures and updates to protect against cyber threats.	Administrative Services	Medium	Open	
2025.HMP.16	Distribute outreach materials to residents on how to respond during power outages, including safety tips, emergency contacts, and resources for maintaining essential services	Communications Department	Short	Open	
2025.HMP.17	Coordinate with utility providers to establish a prioritization plan for power restoration to critical City facilities, ensuring rapid response during emergencies	Public Works/ Water Department	Medium	Open	
2025.HMP.18	Assess the feasibility of expanding reclaimed water use and identify new locations on City properties for the installation of drought-tolerant landscaping to enhance water conservation and drought resilience	Public Works/ Water Department	Long	Open	
2025.HMP.19	Explore possible incentives for alternative landscaping and other water saving initiatives for additional areas	Environmental Resources Division	Medium	Open	
2025.HMP.20	Provide the public with updated information on the impacts of a release, including first response actions and community resources for relief, through accessible City platforms	Communications Department	Short	Open	
2025.HMP.21	Organize and conduct awareness and training courses for City personnel, including courses from the Paradigm Pipeline Organization, to enhance preparedness and response capabilities for emergency situations	Public Safety Department	Medium	Open	
2025.HMP.22	Conduct an updated commodity flow study to identify specific vulnerabilities in commercial transport routes, such as chokepoints or high-risk areas, and collaborate with regional agencies to develop contingency plans for mitigating disruptions that could affect public safety and businesses	Administration/ Public Works	Medium	Open	
2025.HMP.23	Expand coordination with Long beach Airport (and expand to other regional airports) to identify opportunities to reduce the vulnerability of residents to aviation incidents	Administration/ City Manager’s Office	Medium	Open	
2025.HMP.24	Assess drainage capacities throughout the City to identify areas of concern and prioritize improvements to reduce flood risk and enhance stormwater management	Public Works	Long	Open	

2025.HMP.25	Ensure public outreach materials, including City and County mental health resources, are available in multiple languages on City platforms to ensure equitable access to important information	Communications Department	Short	Open	
2025.HMP.26	Identify elderly care facilities that may require assistance during evacuation scenarios and develop contingency plans to secure housing and shelter for impacted residents	Community Development/ Recreation and Community Services	Short	Open	
2025.HMP.27	Reevaluate and update evacuation routes to ensure they are accessible, effective, and safe for all residents during an emergency event and provide the updated routes to the public through City communication platforms	Community Development	Short	Open	

ANNEX A. GLOSSARY

Active fault - For implementation of Alquist-Priolo Earthquake Fault Zoning Act (APEFZA) requirements, an active fault is one that shows evidence of, or is suspected of having experienced surface displacement within the last 11,000 years. APEFZA classification is designed for land use management of surface rupture hazards. A more general definition (National Academy of Science, 1988), states "a fault that on the basis of historical, seismological, or geological evidence has the finite probability of producing an earthquake" (see potentially active fault).

Aftershocks - Minor earthquakes following a greater one and originating at or near the same place.

Asset - Any man-made or natural feature that has value, including, but not limited to people, buildings, infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks.

A zone - Under the National Flood Insurance Program, area subject to inundation by the 100-year flood where wave action does not occur or where waves are less than 3 feet high, designated Zone A, AE, A1-A30, A0, AH, or AR on a Flood Insurance Rate Map (FIRM).

Base flood - Flood that has a 1 percent probability of being equaled or exceeded in any given year. Also known as the 100-year flood.

Bedrock - The solid rock that underlies loose material, such as soil, sand, clay, or gravel.

Contour - A line of equal ground elevation on a topographic (contour) map.

Critical facility - Facilities that are critical to the health and welfare of the population and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, and hospitals.

Debris - (Seismic) The scattered remains of something broken or destroyed; ruins; rubble; fragments. (Flooding, Coastal) Solid objects or masses carried by or floating on the surface of moving water.

Debris flow - A saturated, rapidly moving saturated earth flow with 50 percent rock fragments coarser than 2 mm in size which can occur on natural and graded slopes.

Duration - How long a hazard event lasts.

Earthquake - Vibratory motion propagating within the Earth or along its surface caused by the abrupt release of strain from elastically deformed rock by displacement along a fault.

Epicenter - The point at the Earth's surface directly above where an earthquake originated.

Erosion - Under the National Flood Insurance Program, the process of the gradual wearing away of landmasses. In general, erosion involves the detachment and movement of soil and rock fragments, during a flood or storm or over a period of years, through the action of wind, water, or other geologic processes.

Essential facility - Elements that are important to ensure a full recovery of a community or state following a hazard event. These would include: government functions, major employers, banks, schools, and certain commercial establishments, such as grocery stores, hardware stores, and gas stations.

Extent - The size of an area affected by a hazard or hazard event.

Fault - A fracture in the continuity of a rock formation caused by a shifting or dislodging of the earth's crust, in which adjacent surfaces are differentially displaced parallel to the plane of fracture.

Fault slip rate - The average long-term movement of a fault (measured in cm/year or mm/year) as determined from geologic evidence.

Federal Emergency Management Agency (FEMA) - Independent agency created in 1978 to provide a single point of accountability for all Federal activities related to disaster mitigation and emergency preparedness, response and recovery.

Flash flood - A flood event occurring with little or no warning where water levels rise at an extremely fast rate.

Flood - A general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of inland or tidal waters, (2) the unusual and rapid accumulation or runoff of surface waters from any source, or (3) mudflows or the sudden collapse of shoreline land.

Floodplain - Any land area, including watercourse, susceptible to partial or complete inundation by water from any source.

Frequency - A measure of how often events of a particular magnitude are expected to occur. Frequency describes how often a hazard of a specific magnitude, duration, and/or extent typically occurs, on average. Statistically, a hazard with a 100-year recurrence interval is expected to occur once every 100 years on average and would have a 1 percent chance – its probability – of happening in any given year. The reliability of this information varies depending on the kind of hazard being considered.

Geographic Information Systems (GIS) - A computer software application that relates physical features on the Earth to a database to be used for mapping and analysis.

Ground motion - The vibration or shaking of the ground during an earthquake. When a fault ruptures, seismic waves radiate, causing the ground to vibrate. The severity of the vibration increases with the amount of energy released and decreases with distance from the causative fault or epicenter, but soft soils can further amplify ground motions.

Ground rupture - Displacement of the earth's surface as a result of fault movement associated with an earthquake.

Hailstorm – Storm associated with spherical balls of ice. Hail is a product of thunderstorms or intense showers. It is generally white and translucent, consisting of liquid or snow particles encased with layers of ice. Hail is formed within the higher reaches of a well-developed thunderstorm. When hailstones become too heavy to be caught in an updraft back into the clouds of the thunderstorm (hailstones can be caught in numerous updrafts adding a coating of ice to the original frozen droplet of rain each time), they fall as hail and a hailstorm ensues.

Hazard - A source of potential danger or adverse condition. Hazards in this how-to series will include naturally occurring events such as floods, earthquakes, tornadoes, tsunami, coastal storms, landslides, and wildfires that strike populated areas. A natural event is a hazard when it has the potential to harm people or property.

Hazard event - A specific occurrence of a particular type of hazard.

Hazard identification - The process of identifying hazards that threaten an area.

Hazard mitigation - Sustained actions taken to reduce or eliminate long-term risk from hazards and their effects.

Hazard Mitigation Grant Program (HMGP) – Authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, HMGP is administered by FEMA and provides grants to states, tribes, and local governments to implement hazard

mitigation actions after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as a community recovers from a disaster.

Hazard Mitigation Plan – A collaborative document in which hazards affecting the community are identified, vulnerability to hazards assessed, and consensus reached on how to minimize or eliminate the effects of these hazards.

Hazard profile - A description of the physical characteristics of hazards and a determination of various descriptors including magnitude, duration, frequency, probability, and extent. In most cases, a community can most easily use these descriptors when they are recorded and displayed as maps.

Hazardous Material Facilities – Facilities housing industrial and hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

HAZUS (Hazards U.S.) - A GIS-based nationally standardized earthquake loss estimation tool developed by FEMA.

Hurricane - An intense tropical cyclone, formed in the atmosphere over warm ocean areas, in which wind speeds reach 74-miles-per-hour or more and blow in a large spiral around a relatively calm center or "eye." Hurricanes develop over the north Atlantic Ocean, northeast Pacific Ocean, or the south Pacific Ocean east of 160°E longitude. Hurricane circulation is counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.

Hydrology - The science of dealing with the waters of the earth. A flood discharge is developed by a hydrologic study.

Infrastructure - Refers to the public services of a community that have a direct impact on the quality of life. Infrastructure includes communication technology such as phone lines or Internet access, vital services such as public water supplies and sewer treatment facilities, and includes an area's transportation system such as airports, heliports; highways, bridges, tunnels, roadbeds, overpasses, railways, bridges, rail yards, depots; and waterways, canals, locks, seaports, ferries, harbors, drydocks, piers and regional dams.

Landslide - A general term covering a wide variety of mass-movement landforms and processes involving the downslope transport, under gravitational influence, of soil and rock material en masse.

Liquefaction - Changing of soils (unconsolidated alluvium) from a solid state to weaker state unable to support structures; where the material behaves similar to a liquid as a consequence of earthquake shaking. The transformation of cohesionless soils from a solid or liquid state as a result of increased pore pressure and reduced effective stress.

Magnitude - A measure of the strength of a hazard event. The magnitude (also referred to as severity) of a given hazard event is usually determined using technical measures specific to the hazard.

Mitigation plan - A systematic evaluation of the nature and extent of vulnerability to the effects of natural hazards typically present in the state and includes a description of actions to minimize future vulnerability to hazards.

Nor'easter - An extra-tropical cyclone producing gale-force winds and precipitation in the form of heavy snow or rain.

Peak Ground Acceleration (PGA) - The greatest amplitude of acceleration measured for a single frequency on an earthquake accelerogram. The maximum horizontal ground motion generated by an earthquake. The measure of this motion is the acceleration of gravity (equal to 32 feet per second squared, or 980 centimeter per second squared), and generally expressed as a percentage of gravity.

Potentially active fault - A fault showing evidence of movement within the last 1.6 million years (750,000 years according to the U.S. Geological Survey) but before about 11,000 years ago, and that is capable of generating damaging earthquakes.

Probability - A statistical measure of the likelihood that a hazard event will occur.

Replacement value - The cost of rebuilding a structure. This is usually expressed in terms of cost per square foot and reflects the present-day cost of labor and materials to construct a building of a particular size, type and quality.

Retrofit - Any change made to an existing structure to reduce or eliminate damage to that structure from flooding, erosion, high winds, earthquakes, or other hazards

Richter scale - A numerical scale of earthquake magnitude devised by seismologist C.F. Richter in 1935. Seismologists no longer use this magnitude scale because of limitations in how it measures large earthquakes and prefer instead to use moment magnitude as a measure of the energy released during an earthquake.

Risk - The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event resulting in an adverse

condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate or low likelihood of sustaining damage above a particular threshold due to a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Seismicity - Describes the likelihood of an area being subject to earthquakes.

Tectonic plate - Torsionally rigid, thin segments of the earth's lithosphere that may be assumed to move horizontally and adjoin other plates. It is the friction between plate boundaries that cause seismic activity.

Topographic - Characterizes maps that show natural features and indicate the physical shape of the land using contour lines. These maps may also include manmade features.

Tornado - A violently rotating column of air extending from a thunderstorm to the ground.

Tsunami - Great sea wave produced by a submarine earthquake, landslide, or volcanic eruption.

Vulnerability - Describes how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power – if an electric substation is flooded, it will affect not only the substation itself, but a number of businesses as well. Often, indirect effects can be much more widespread and damaging than direct ones.

Vulnerability assessment - The extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability assessment should address impacts of hazard events on the existing and future built environment.

Wildfire - An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

Zone - A geographical area shown on a Flood Insurance Rate Map.

100-year flood – A flood that has a 1-percent chance of being equaled or exceeded in any given year. This flood event is also referred to as the base flood. The term "100-year flood" can be misleading; it is not the flood that will occur once every 100 years. Rather, it is the flood elevation that has a 1- percent chance of being equaled or exceeded each year. Therefore, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most federal and state

agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management to determine the need for flood insurance.

500-year flood – A flood that has a 0.2-percent chance of being equaled or exceeded in any one year.

ANNEX B. REGULATIONS

The Disaster Mitigation Act of 2000 (P.L. 106-390) facilitates a new and revitalized approach to mitigation planning. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions (Section 409) and replacing them with a new set of mitigation plan requirements (Section 322). This new section emphasizes the need for state, Tribal, and local entities to closely coordinate mitigation planning and implementation efforts. The following pages provide a description of the Disaster Mitigation Act of 2000, as well as the Interim Final Rule for mitigation planning.

DISASTER MITIGATION ACT OF 2000

Public Law 106–390
106th Congress

An Act

Oct. 30, 2000
[H.R. 707]

To amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to authorize a program for predisaster mitigation, to streamline the administration of disaster relief, to control the Federal costs of disaster assistance, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Disaster Mitigation Act of 2000.

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

42 USC 5121 note.

(a) SHORT TITLE.—This Act may be cited as the "Disaster Mitigation Act of 2000".

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—PREDISASTER HAZARD MITIGATION

Sec. 101. Findings and purpose.
Sec. 102. Predisaster hazard mitigation.
Sec. 103. Interagency task force.
Sec. 104. Mitigation planning; minimum standards for public and private structures.

TITLE II—STREAMLINING AND COST REDUCTION

Sec. 201. Technical amendments.
Sec. 202. Management costs.
Sec. 203. Public notice, comment, and consultation requirements.
Sec. 204. State administration of hazard mitigation grant program.
Sec. 205. Assistance to repair, restore, reconstruct, or replace damaged facilities.
Sec. 206. Federal assistance to individuals and households.
Sec. 207. Community disaster loans.
Sec. 208. Report on State management of small disasters initiative.
Sec. 209. Study regarding cost reduction.

TITLE III—MISCELLANEOUS

Sec. 301. Technical correction of short title.
Sec. 302. Definitions.
Sec. 303. Fire management assistance.
Sec. 304. Disaster grant closeout procedures.
Sec. 305. Public safety officer benefits for certain Federal and State employees.
Sec. 306. Buy American.
Sec. 307. Treatment of certain real property.
Sec. 308. Study of participation by Indian tribes in emergency management.

TITLE I—PREDISASTER HAZARD MITIGATION

42 USC 5133 note.

SEC. 101. FINDINGS AND PURPOSE.

(a) FINDINGS.—Congress finds that—

(1) natural disasters, including earthquakes, tsunamis, tornadoes, hurricanes, flooding, and wildfires, pose great danger to human life and to property throughout the United States;

(2) greater emphasis needs to be placed on—

(A) identifying and assessing the risks to States and local governments (including Indian tribes) from natural disasters;

(B) implementing adequate measures to reduce losses from natural disasters; and

(C) ensuring that the critical services and facilities of communities will continue to function after a natural disaster;

(3) expenditures for postdisaster assistance are increasing without commensurate reductions in the likelihood of future losses from natural disasters;

(4) in the expenditure of Federal funds under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), high priority should be given to mitigation of hazards at the local level; and

(5) with a unified effort of economic incentives, awareness and education, technical assistance, and demonstrated Federal support, States and local governments (including Indian tribes) will be able to—

(A) form effective community-based partnerships for hazard mitigation purposes;

(B) implement effective hazard mitigation measures that reduce the potential damage from natural disasters;

(C) ensure continued functionality of critical services;

(D) leverage additional non-Federal resources in meeting natural disaster resistance goals; and

(E) make commitments to long-term hazard mitigation efforts to be applied to new and existing structures.

(b) PURPOSE.—The purpose of this title is to establish a national disaster hazard mitigation program—

(1) to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and

(2) to provide a source of predisaster hazard mitigation funding that will assist States and local governments (including Indian tribes) in implementing effective hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster.

SEC. 102. PREDISASTER HAZARD MITIGATION.

(a) IN GENERAL.—Title II of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5131 et seq.) is amended by adding at the end the following:

"SEC. 203. PREDISASTER HAZARD MITIGATION.

President. 42 USC 5133.

"(a) DEFINITION OF SMALL IMPOVERISHED COMMUNITY.—In this section, the term 'small impoverished community' means a community of 3,000 or fewer individuals that is economically disadvantaged, as determined by the State in which the community is located and based on criteria established by the President.

"(b) ESTABLISHMENT OF PROGRAM.—The President may establish a program to provide technical and financial assistance to States and local governments to assist in the implementation of

predisaster hazard mitigation measures that are cost-effective and are designed to reduce injuries, loss of life, and damage and destruction of property, including damage to critical services and facilities under the jurisdiction of the States or local governments.

"(c) APPROVAL BY PRESIDENT.—If the President determines that a State or local government has identified natural disaster hazards in areas under its jurisdiction and has demonstrated the ability to form effective public-private natural disaster hazard mitigation partnerships, the President, using amounts in the National Predisaster Mitigation Fund established under subsection (i) (referred to in this section as the 'Fund'), may provide technical and financial assistance to the State or local government to be used in accordance with subsection (e).

"(d) STATE RECOMMENDATIONS.—

"(1) IN GENERAL.—

"(A) RECOMMENDATIONS.—The Governor of each State may recommend to the President not fewer than five local governments to receive assistance under this section.

"(B) DEADLINE FOR SUBMISSION.—The recommendations under subparagraph (A) shall be submitted to the President not later than October 1, 2001, and each October 1st thereafter or such later date in the year as the President may establish.

"(C) CRITERIA.—In making recommendations under subparagraph (A), a Governor shall consider the criteria specified in subsection (g).

"(2) USE.—

President.

"(A) IN GENERAL.—Except as provided in subparagraph (B), in providing assistance to local governments under this section, the President shall select from local governments recommended by the Governors under this subsection.

"(B) EXTRAORDINARY CIRCUMSTANCES.—In providing assistance to local governments under this section, the President may select a local government that has not been recommended by a Governor under this subsection if the President determines that extraordinary circumstances justify the selection and that making the selection will further the purpose of this section.

"(3) EFFECT OF FAILURE TO NOMINATE.—If a Governor of a State fails to submit recommendations under this subsection in a timely manner, the President may select, subject to the criteria specified in subsection (g), any local governments of the State to receive assistance under this section.

"(e) USES OF TECHNICAL AND FINANCIAL ASSISTANCE.—

"(1) IN GENERAL.—Technical and financial assistance provided under this section—

"(A) shall be used by States and local governments principally to implement predisaster hazard mitigation measures that are cost-effective and are described in proposals approved by the President under this section; and

"(B) may be used—

"(i) to support effective public-private natural disaster hazard mitigation partnerships;

"(ii) to improve the assessment of a community's vulnerability to natural hazards; or

"(iii) to establish hazard mitigation priorities, and an appropriate hazard mitigation plan, for a community.

"(2) DISSEMINATION.—A State or local government may use not more than 10 percent of the financial assistance received by the State or local government under this section for a fiscal year to fund activities to disseminate information regarding cost-effective mitigation technologies.

"(f) ALLOCATION OF FUNDS.—The amount of financial assistance made available to a State (including amounts made available to local governments of the State) under this section for a fiscal year—

"(1) shall be not less than the lesser of—

"(A) $500,000; or

"(B) the amount that is equal to 1.0 percent of the total funds appropriated to carry out this section for the fiscal year;

"(2) shall not exceed 15 percent of the total funds described in paragraph (1)(B); and

"(3) shall be subject to the criteria specified in subsection (g).

"(g) CRITERIA FOR ASSISTANCE AWARDS.—In determining whether to provide technical and financial assistance to a State or local government under this section, the President shall take into account—

"(1) the extent and nature of the hazards to be mitigated;

"(2) the degree of commitment of the State or local government to reduce damages from future natural disasters;

"(3) the degree of commitment by the State or local government to support ongoing non-Federal support for the hazard mitigation measures to be carried out using the technical and financial assistance;

"(4) the extent to which the hazard mitigation measures to be carried out using the technical and financial assistance contribute to the mitigation goals and priorities established by the State;

"(5) the extent to which the technical and financial assistance is consistent with other assistance provided under this Act;

"(6) the extent to which prioritized, cost-effective mitigation activities that produce meaningful and definable outcomes are clearly identified;

"(7) if the State or local government has submitted a mitigation plan under section 322, the extent to which the activities identified under paragraph (6) are consistent with the mitigation plan;

"(8) the opportunity to fund activities that maximize net benefits to society;

"(9) the extent to which assistance will fund mitigation activities in small impoverished communities; and

"(10) such other criteria as the President establishes in consultation with State and local governments. President.

"(h) FEDERAL SHARE.—

"(1) IN GENERAL.—Financial assistance provided under this section may contribute up to 75 percent of the total cost of mitigation activities approved by the President.

"(2) SMALL IMPOVERISHED COMMUNITIES.—Notwithstanding paragraph (1), the President may contribute up to 90 percent of the total cost of a mitigation activity carried out in a small impoverished community.

"(i) NATIONAL PREDISASTER MITIGATION FUND.—

"(1) ESTABLISHMENT.—The President may establish in the Treasury of the United States a fund to be known as the 'National Predisaster Mitigation Fund', to be used in carrying out this section.

"(2) TRANSFERS TO FUND.—There shall be deposited in the Fund—

"(A) amounts appropriated to carry out this section, which shall remain available until expended; and

"(B) sums available from gifts, bequests, or donations of services or property received by the President for the purpose of predisaster hazard mitigation.

"(3) EXPENDITURES FROM FUND.—Upon request by the President, the Secretary of the Treasury shall transfer from the Fund to the President such amounts as the President determines are necessary to provide technical and financial assistance under this section.

"(4) INVESTMENT OF AMOUNTS.—

"(A) IN GENERAL.—The Secretary of the Treasury shall invest such portion of the Fund as is not, in the judgment of the Secretary of the Treasury, required to meet current withdrawals. Investments may be made only in interest-bearing obligations of the United States.

"(B) ACQUISITION OF OBLIGATIONS.—For the purpose of investments under subparagraph (A), obligations may be acquired—

"(i) on original issue at the issue price; or

"(ii) by purchase of outstanding obligations at the market price.

"(C) SALE OF OBLIGATIONS.—Any obligation acquired by the Fund may be sold by the Secretary of the Treasury at the market price.

"(D) CREDITS TO FUND.—The interest on, and the proceeds from the sale or redemption of, any obligations held in the Fund shall be credited to and form a part of the Fund.

"(E) TRANSFERS OF AMOUNTS.—

"(i) IN GENERAL.—The amounts required to be transferred to the Fund under this subsection shall be transferred at least monthly from the general fund of the Treasury to the Fund on the basis of estimates made by the Secretary of the Treasury.

"(ii) ADJUSTMENTS.—Proper adjustment shall be made in amounts subsequently transferred to the extent prior estimates were in excess of or less than the amounts required to be transferred.

"(j) LIMITATION ON TOTAL AMOUNT OF FINANCIAL ASSISTANCE.—The President shall not provide financial assistance under this section in an amount greater than the amount available in the Fund.

"(k) MULTIHAZARD ADVISORY MAPS.—

"(1) DEFINITION OF MULTIHAZARD ADVISORY MAP.—In this subsection, the term 'multihazard advisory map' means a map

on which hazard data concerning each type of natural disaster is identified simultaneously for the purpose of showing areas of hazard overlap.

"(2) DEVELOPMENT OF MAPS.—In consultation with States, local governments, and appropriate Federal agencies, the President shall develop multihazard advisory maps for areas, in not fewer than five States, that are subject to commonly recurring natural hazards (including flooding, hurricanes and severe winds, and seismic events). President.

"(3) USE OF TECHNOLOGY.—In developing multihazard advisory maps under this subsection, the President shall use, to the maximum extent practicable, the most cost-effective and efficient technology available.

"(4) USE OF MAPS.—

"(A) ADVISORY NATURE.—The multihazard advisory maps shall be considered to be advisory and shall not require the development of any new policy by, or impose any new policy on, any government or private entity.

"(B) AVAILABILITY OF MAPS.—The multihazard advisory maps shall be made available to the appropriate State and local governments for the purposes of—

"(i) informing the general public about the risks of natural hazards in the areas described in paragraph (2);

"(ii) supporting the activities described in subsection (e); and

"(iii) other public uses.

"(l) REPORT ON FEDERAL AND STATE ADMINISTRATION.—Not later than 18 months after the date of the enactment of this section, the President, in consultation with State and local governments, shall submit to Congress a report evaluating efforts to implement this section and recommending a process for transferring greater authority and responsibility for administering the assistance program established under this section to capable States. Deadline.

"(m) TERMINATION OF AUTHORITY.—The authority provided by this section terminates December 31, 2003.".

(b) CONFORMING AMENDMENT.—Title II of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5131 et seq.) is amended by striking the title heading and inserting the following:

"TITLE II—DISASTER PREPAREDNESS AND MITIGATION ASSISTANCE".

SEC. 103. INTERAGENCY TASK FORCE.

Title II of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5131 et seq.) (as amended by section 102(a)) is amended by adding at the end the following:

"SEC. 204. INTERAGENCY TASK FORCE. 42 USC 5134.

"(a) IN GENERAL.—The President shall establish a Federal interagency task force for the purpose of coordinating the implementation of predisaster hazard mitigation programs administered by the Federal Government.

"(b) CHAIRPERSON.—The Director of the Federal Emergency Management Agency shall serve as the chairperson of the task force.

"(c) MEMBERSHIP.—The membership of the task force shall include representatives of—

"(1) relevant Federal agencies;

"(2) State and local government organizations (including Indian tribes); and

"(3) the American Red Cross.".

SEC. 104. MITIGATION PLANNING; MINIMUM STANDARDS FOR PUBLIC AND PRIVATE STRUCTURES.

(a) IN GENERAL.—Title III of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5141 et seq.) is amended by adding at the end the following:

42 USC 5165.

"SEC. 322. MITIGATION PLANNING.

"(a) REQUIREMENT OF MITIGATION PLAN.—As a condition of receipt of an increased Federal share for hazard mitigation measures under subsection (e), a State, local, or tribal government shall develop and submit for approval to the President a mitigation plan that outlines processes for identifying the natural hazards, risks, and vulnerabilities of the area under the jurisdiction of the government.

"(b) LOCAL AND TRIBAL PLANS.—Each mitigation plan developed by a local or tribal government shall—

"(1) describe actions to mitigate hazards, risks, and vulnerabilities identified under the plan; and

"(2) establish a strategy to implement those actions.

"(c) STATE PLANS.—The State process of development of a mitigation plan under this section shall—

"(1) identify the natural hazards, risks, and vulnerabilities of areas in the State;

"(2) support development of local mitigation plans;

"(3) provide for technical assistance to local and tribal governments for mitigation planning; and

"(4) identify and prioritize mitigation actions that the State will support, as resources become available.

"(d) FUNDING.—

"(1) IN GENERAL.—Federal contributions under section 404 may be used to fund the development and updating of mitigation plans under this section.

"(2) MAXIMUM FEDERAL CONTRIBUTION.—With respect to any mitigation plan, a State, local, or tribal government may use an amount of Federal contributions under section 404 not to exceed 7 percent of the amount of such contributions available to the government as of a date determined by the government.

"(e) INCREASED FEDERAL SHARE FOR HAZARD MITIGATION MEASURES.—

"(1) IN GENERAL.—If, at the time of the declaration of a major disaster, a State has in effect an approved mitigation plan under this section, the President may increase to 20 percent, with respect to the major disaster, the maximum percentage specified in the last sentence of section 404(a).

President.

"(2) FACTORS FOR CONSIDERATION.—In determining whether to increase the maximum percentage under paragraph (1), the President shall consider whether the State has established—

"(A) eligibility criteria for property acquisition and other types of mitigation measures;

"(B) requirements for cost effectiveness that are related to the eligibility criteria;

"(C) a system of priorities that is related to the eligibility criteria; and

"(D) a process by which an assessment of the effectiveness of a mitigation action may be carried out after the mitigation action is complete.

"SEC. 323. MINIMUM STANDARDS FOR PUBLIC AND PRIVATE STRUCTURES. 42 USC 5165a.

"(a) IN GENERAL.—As a condition of receipt of a disaster loan or grant under this Act—

"(1) the recipient shall carry out any repair or construction to be financed with the loan or grant in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications, and standards; and

"(2) the President may require safe land use and construction practices, after adequate consultation with appropriate State and local government officials.

"(b) EVIDENCE OF COMPLIANCE.—A recipient of a disaster loan or grant under this Act shall provide such evidence of compliance with this section as the President may require by regulation.".

(b) LOSSES FROM STRAIGHT LINE WINDS.—The President shall increase the maximum percentage specified in the last sentence of section 404(a) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170c(a)) from 15 percent to 20 percent with respect to any major disaster that is in the State of Minnesota and for which assistance is being provided as of the date of the enactment of this Act, except that additional assistance provided under this subsection shall not exceed $6,000,000. The mitigation measures assisted under this subsection shall be related to losses in the State of Minnesota from straight line winds. President.

(c) CONFORMING AMENDMENTS.—

(1) Section 404(a) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170c(a)) is amended—

(A) in the second sentence, by striking "section 409" and inserting "section 322"; and

(B) in the third sentence, by striking "The total" and inserting "Subject to section 322, the total".

(2) Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5176) is repealed.

TITLE II—STREAMLINING AND COST REDUCTION

SEC. 201. TECHNICAL AMENDMENTS.

Section 311 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5154) is amended in subsections (a)(1), (b), and (c) by striking "section 803 of the Public Works and Economic Development Act of 1965" each place it appears

and inserting "section 209(c)(2) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3149(c)(2))".

SEC. 202. MANAGEMENT COSTS.

(a) IN GENERAL.—Title III of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5141 et seq.) (as amended by section 104(a)) is amended by adding at the end the following:

42 USC 5165b.

"SEC. 324. MANAGEMENT COSTS.

"(a) DEFINITION OF MANAGEMENT COST.—In this section, the term 'management cost' includes any indirect cost, any administrative expense, and any other expense not directly chargeable to a specific project under a major disaster, emergency, or disaster preparedness or mitigation activity or measure.

Regulations.

"(b) ESTABLISHMENT OF MANAGEMENT COST RATES.—Notwithstanding any other provision of law (including any administrative rule or guidance), the President shall by regulation establish management cost rates, for grantees and subgrantees, that shall be used to determine contributions under this Act for management costs.

Deadline.

"(c) REVIEW.—The President shall review the management cost rates established under subsection (b) not later than 3 years after the date of establishment of the rates and periodically thereafter.".

42 USC 5165b note.

(b) APPLICABILITY.—

(1) IN GENERAL.—Subject to paragraph (2), subsections (a) and (b) of section 324 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (as added by subsection (a)) shall apply to major disasters declared under that Act on or after the date of the enactment of this Act.

(2) INTERIM AUTHORITY.—Until the date on which the President establishes the management cost rates under section 324 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (as added by subsection (a)), section 406(f) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172(f)) (as in effect on the day before the date of the enactment of this Act) shall be used to establish management cost rates.

SEC. 203. PUBLIC NOTICE, COMMENT, AND CONSULTATION REQUIREMENTS.

Title III of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5141 et seq.) (as amended by section 202(a)) is amended by adding at the end the following:

42 USC 5165c.

"SEC. 325. PUBLIC NOTICE, COMMENT, AND CONSULTATION REQUIREMENTS.

"(a) PUBLIC NOTICE AND COMMENT CONCERNING NEW OR MODIFIED POLICIES.—

President.

"(1) IN GENERAL.—The President shall provide for public notice and opportunity for comment before adopting any new or modified policy that—

"(A) governs implementation of the public assistance program administered by the Federal Emergency Management Agency under this Act; and

"(B) could result in a significant reduction of assistance under the program.

"(2) APPLICATION.—Any policy adopted under paragraph (1) shall apply only to a major disaster or emergency declared on or after the date on which the policy is adopted.

"(b) CONSULTATION CONCERNING INTERIM POLICIES.—

"(1) IN GENERAL.—Before adopting any interim policy under the public assistance program to address specific conditions that relate to a major disaster or emergency that has been declared under this Act, the President, to the maximum extent practicable, shall solicit the views and recommendations of grantees and subgrantees with respect to the major disaster or emergency concerning the potential interim policy, if the interim policy is likely—

"(A) to result in a significant reduction of assistance to applicants for the assistance with respect to the major disaster or emergency; or

"(B) to change the terms of a written agreement to which the Federal Government is a party concerning the declaration of the major disaster or emergency.

"(2) NO LEGAL RIGHT OF ACTION.—Nothing in this subsection confers a legal right of action on any party.

"(c) PUBLIC ACCESS.—The President shall promote public access to policies governing the implementation of the public assistance program.". President.

SEC. 204. STATE ADMINISTRATION OF HAZARD MITIGATION GRANT PROGRAM.

Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170c) is amended by adding at the end the following:

"(c) PROGRAM ADMINISTRATION BY STATES.—

"(1) IN GENERAL.—A State desiring to administer the hazard mitigation grant program established by this section with respect to hazard mitigation assistance in the State may submit to the President an application for the delegation of the authority to administer the program.

"(2) CRITERIA.—The President, in consultation and coordination with States and local governments, shall establish criteria for the approval of applications submitted under paragraph (1). The criteria shall include, at a minimum—

"(A) the demonstrated ability of the State to manage the grant program under this section;

"(B) there being in effect an approved mitigation plan under section 322; and

"(C) a demonstrated commitment to mitigation activities.

"(3) APPROVAL.—The President shall approve an application submitted under paragraph (1) that meets the criteria established under paragraph (2). President.

"(4) WITHDRAWAL OF APPROVAL.—If, after approving an application of a State submitted under paragraph (1), the President determines that the State is not administering the hazard mitigation grant program established by this section in a manner satisfactory to the President, the President shall withdraw the approval.

"(5) AUDITS.—The President shall provide for periodic audits of the hazard mitigation grant programs administered by States under this subsection.". President.

SEC. 205. ASSISTANCE TO REPAIR, RESTORE, RECONSTRUCT, OR REPLACE DAMAGED FACILITIES.

(a) CONTRIBUTIONS.—Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172) is amended by striking subsection (a) and inserting the following:

"(a) CONTRIBUTIONS.—

"(1) IN GENERAL.—The President may make contributions—

"(A) to a State or local government for the repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster and for associated expenses incurred by the government; and

"(B) subject to paragraph (3), to a person that owns or operates a private nonprofit facility damaged or destroyed by a major disaster for the repair, restoration, reconstruction, or replacement of the facility and for associated expenses incurred by the person.

"(2) ASSOCIATED EXPENSES.—For the purposes of this section, associated expenses shall include—

"(A) the costs of mobilizing and employing the National Guard for performance of eligible work;

"(B) the costs of using prison labor to perform eligible work, including wages actually paid, transportation to a worksite, and extraordinary costs of guards, food, and lodging; and

"(C) base and overtime wages for the employees and extra hires of a State, local government, or person described in paragraph (1) that perform eligible work, plus fringe benefits on such wages to the extent that such benefits were being paid before the major disaster.

"(3) CONDITIONS FOR ASSISTANCE TO PRIVATE NONPROFIT FACILITIES.—

"(A) IN GENERAL.—The President may make contributions to a private nonprofit facility under paragraph (1)(B) only if—

"(i) the facility provides critical services (as defined by the President) in the event of a major disaster; or

"(ii) the owner or operator of the facility—

"(I) has applied for a disaster loan under section 7(b) of the Small Business Act (15 U.S.C. 636(b)); and

"(II)(aa) has been determined to be ineligible for such a loan; or

"(bb) has obtained such a loan in the maximum amount for which the Small Business Administration determines the facility is eligible.

"(B) DEFINITION OF CRITICAL SERVICES.—In this paragraph, the term 'critical services' includes power, water (including water provided by an irrigation organization or facility), sewer, wastewater treatment, communications, and emergency medical care.

"(4) NOTIFICATION TO CONGRESS.—Before making any contribution under this section in an amount greater than $20,000,000, the President shall notify—

"(A) the Committee on Environment and Public Works of the Senate;

"(B) the Committee on Transportation and Infrastructure of the House of Representatives;

"(C) the Committee on Appropriations of the Senate; and

"(D) the Committee on Appropriations of the House of Representatives.".

(b) FEDERAL SHARE.—Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172) is amended by striking subsection (b) and inserting the following:

"(b) FEDERAL SHARE.—

"(1) MINIMUM FEDERAL SHARE.—Except as provided in paragraph (2), the Federal share of assistance under this section shall be not less than 75 percent of the eligible cost of repair, restoration, reconstruction, or replacement carried out under this section.

"(2) REDUCED FEDERAL SHARE.—The President shall promulgate regulations to reduce the Federal share of assistance under this section to not less than 25 percent in the case of the repair, restoration, reconstruction, or replacement of any eligible public facility or private nonprofit facility following an event associated with a major disaster— President. Regulations.

"(A) that has been damaged, on more than one occasion within the preceding 10-year period, by the same type of event; and

"(B) the owner of which has failed to implement appropriate mitigation measures to address the hazard that caused the damage to the facility.".

(c) LARGE IN-LIEU CONTRIBUTIONS.—Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172) is amended by striking subsection (c) and inserting the following:

"(c) LARGE IN-LIEU CONTRIBUTIONS.—

"(1) FOR PUBLIC FACILITIES.—

"(A) IN GENERAL.—In any case in which a State or local government determines that the public welfare would not best be served by repairing, restoring, reconstructing, or replacing any public facility owned or controlled by the State or local government, the State or local government may elect to receive, in lieu of a contribution under subsection (a)(1)(A), a contribution in an amount equal to 75 percent of the Federal share of the Federal estimate of the cost of repairing, restoring, reconstructing, or replacing the facility and of management expenses.

"(B) AREAS WITH UNSTABLE SOIL.—In any case in which a State or local government determines that the public welfare would not best be served by repairing, restoring, reconstructing, or replacing any public facility owned or controlled by the State or local government because soil instability in the disaster area makes repair, restoration, reconstruction, or replacement infeasible, the State or local government may elect to receive, in lieu of a contribution under subsection (a)(1)(A), a contribution in an amount equal to 90 percent of the Federal share of the Federal estimate of the cost of repairing, restoring, reconstructing, or replacing the facility and of management expenses.

"(C) USE OF FUNDS.—Funds contributed to a State or local government under this paragraph may be used—

"(i) to repair, restore, or expand other selected public facilities;

"(ii) to construct new facilities; or

"(iii) to fund hazard mitigation measures that the State or local government determines to be necessary to meet a need for governmental services and functions in the area affected by the major disaster.

"(D) LIMITATIONS.—Funds made available to a State or local government under this paragraph may not be used for—

"(i) any public facility located in a regulatory floodway (as defined in section 59.1 of title 44, Code of Federal Regulations (or a successor regulation)); or

"(ii) any uninsured public facility located in a special flood hazard area identified by the Director of the Federal Emergency Management Agency under the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.).

"(2) FOR PRIVATE NONPROFIT FACILITIES.—

"(A) IN GENERAL.—In any case in which a person that owns or operates a private nonprofit facility determines that the public welfare would not best be served by repairing, restoring, reconstructing, or replacing the facility, the person may elect to receive, in lieu of a contribution under subsection (a)(1)(B), a contribution in an amount equal to 75 percent of the Federal share of the Federal estimate of the cost of repairing, restoring, reconstructing, or replacing the facility and of management expenses.

"(B) USE OF FUNDS.—Funds contributed to a person under this paragraph may be used—

"(i) to repair, restore, or expand other selected private nonprofit facilities owned or operated by the person;

"(ii) to construct new private nonprofit facilities to be owned or operated by the person; or

"(iii) to fund hazard mitigation measures that the person determines to be necessary to meet a need for the person's services and functions in the area affected by the major disaster.

"(C) LIMITATIONS.—Funds made available to a person under this paragraph may not be used for—

"(i) any private nonprofit facility located in a regulatory floodway (as defined in section 59.1 of title 44, Code of Federal Regulations (or a successor regulation)); or

"(ii) any uninsured private nonprofit facility located in a special flood hazard area identified by the Director of the Federal Emergency Management Agency under the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.).".

(d) ELIGIBLE COST.—

(1) IN GENERAL.—Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172) is amended by striking subsection (e) and inserting the following:

"(e) ELIGIBLE COST.—

"(1) DETERMINATION.—

"(A) IN GENERAL.—For the purposes of this section, the President shall estimate the eligible cost of repairing, restoring, reconstructing, or replacing a public facility or private nonprofit facility—

"(i) on the basis of the design of the facility as the facility existed immediately before the major disaster; and

"(ii) in conformity with codes, specifications, and standards (including floodplain management and hazard mitigation criteria required by the President or under the Coastal Barrier Resources Act (16 U.S.C. 3501 et seq.)) applicable at the time at which the disaster occurred.

"(B) COST ESTIMATION PROCEDURES.—

"(i) IN GENERAL.—Subject to paragraph (2), the President shall use the cost estimation procedures established under paragraph (3) to determine the eligible cost under this subsection.

"(ii) APPLICABILITY.—The procedures specified in this paragraph and paragraph (2) shall apply only to projects the eligible cost of which is equal to or greater than the amount specified in section 422.

"(2) MODIFICATION OF ELIGIBLE COST.—

"(A) ACTUAL COST GREATER THAN CEILING PERCENTAGE OF ESTIMATED COST.—In any case in which the actual cost of repairing, restoring, reconstructing, or replacing a facility under this section is greater than the ceiling percentage established under paragraph (3) of the cost estimated under paragraph (1), the President may determine that the eligible cost includes a portion of the actual cost of the repair, restoration, reconstruction, or replacement that exceeds the cost estimated under paragraph (1).

"(B) ACTUAL COST LESS THAN ESTIMATED COST.—

"(i) GREATER THAN OR EQUAL TO FLOOR PERCENTAGE OF ESTIMATED COST.—In any case in which the actual cost of repairing, restoring, reconstructing, or replacing a facility under this section is less than 100 percent of the cost estimated under paragraph (1), but is greater than or equal to the floor percentage established under paragraph (3) of the cost estimated under paragraph (1), the State or local government or person receiving funds under this section shall use the excess funds to carry out cost-effective activities that reduce the risk of future damage, hardship, or suffering from a major disaster.

"(ii) LESS THAN FLOOR PERCENTAGE OF ESTIMATED COST.—In any case in which the actual cost of repairing, restoring, reconstructing, or replacing a facility under this section is less than the floor percentage established under paragraph (3) of the cost estimated under paragraph (1), the State or local government or person receiving assistance under this section shall reimburse the President in the amount of the difference.

"(C) NO EFFECT ON APPEALS PROCESS.—Nothing in this paragraph affects any right of appeal under section 423.

"(3) EXPERT PANEL.—

"(A) ESTABLISHMENT.—Not later than 18 months after the date of the enactment of this paragraph, the President, acting through the Director of the Federal Emergency Management Agency, shall establish an expert panel, which shall include representatives from the construction industry and State and local government.

"(B) DUTIES.—The expert panel shall develop recommendations concerning—

"(i) procedures for estimating the cost of repairing, restoring, reconstructing, or replacing a facility consistent with industry practices; and

"(ii) the ceiling and floor percentages referred to in paragraph (2).

President. "(C) REGULATIONS.—Taking into account the recommendations of the expert panel under subparagraph (B), the President shall promulgate regulations that establish—

"(i) cost estimation procedures described in subparagraph (B)(i); and

"(ii) the ceiling and floor percentages referred to in paragraph (2).

Deadline. "(D) REVIEW BY PRESIDENT.—Not later than 2 years after the date of promulgation of regulations under subparagraph (C) and periodically thereafter, the President shall review the cost estimation procedures and the ceiling and floor percentages established under this paragraph.

Deadline. "(E) REPORT TO CONGRESS.—Not later than 1 year after the date of promulgation of regulations under subparagraph (C), 3 years after that date, and at the end of each 2-year period thereafter, the expert panel shall submit to Congress a report on the appropriateness of the cost estimation procedures.

"(4) SPECIAL RULE.—In any case in which the facility being repaired, restored, reconstructed, or replaced under this section was under construction on the date of the major disaster, the cost of repairing, restoring, reconstructing, or replacing the facility shall include, for the purposes of this section, only those costs that, under the contract for the construction, are the owner's responsibility and not the contractor's responsibility.".

42 USC 5172 note. (2) EFFECTIVE DATE.—The amendment made by paragraph (1) takes effect on the date of the enactment of this Act and applies to funds appropriated after the date of the enactment of this Act, except that paragraph (1) of section 406(e) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (as amended by paragraph (1)) takes effect on the date on which the cost estimation procedures established under paragraph (3) of that section take effect.

(e) CONFORMING AMENDMENT.—Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172) is amended by striking subsection (f).

SEC. 206. FEDERAL ASSISTANCE TO INDIVIDUALS AND HOUSEHOLDS.

(a) IN GENERAL.—Section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174) is amended to read as follows:

"SEC. 408. FEDERAL ASSISTANCE TO INDIVIDUALS AND HOUSEHOLDS.

"(a) IN GENERAL.—

"(1) PROVISION OF ASSISTANCE.—In accordance with this section, the President, in consultation with the Governor of a State, may provide financial assistance, and, if necessary, direct services, to individuals and households in the State who, as a direct result of a major disaster, have necessary expenses and serious needs in cases in which the individuals and households are unable to meet such expenses or needs through other means.

"(2) RELATIONSHIP TO OTHER ASSISTANCE.—Under paragraph (1), an individual or household shall not be denied assistance under paragraph (1), (3), or (4) of subsection (c) solely on the basis that the individual or household has not applied for or received any loan or other financial assistance from the Small Business Administration or any other Federal agency.

"(b) HOUSING ASSISTANCE.—

"(1) ELIGIBILITY.—The President may provide financial or other assistance under this section to individuals and households to respond to the disaster-related housing needs of individuals and households who are displaced from their predisaster primary residences or whose predisaster primary residences are rendered uninhabitable as a result of damage caused by a major disaster.

"(2) DETERMINATION OF APPROPRIATE TYPES OF ASSISTANCE.—

"(A) IN GENERAL.—The President shall determine appropriate types of housing assistance to be provided under this section to individuals and households described in subsection (a)(1) based on considerations of cost effectiveness, convenience to the individuals and households, and such other factors as the President may consider appropriate. President.

"(B) MULTIPLE TYPES OF ASSISTANCE.—One or more types of housing assistance may be made available under this section, based on the suitability and availability of the types of assistance, to meet the needs of individuals and households in the particular disaster situation.

"(c) TYPES OF HOUSING ASSISTANCE.—

"(1) TEMPORARY HOUSING.—

"(A) FINANCIAL ASSISTANCE.—

"(i) IN GENERAL.—The President may provide financial assistance to individuals or households to rent alternate housing accommodations, existing rental units, manufactured housing, recreational vehicles, or other readily fabricated dwellings.

"(ii) AMOUNT.—The amount of assistance under clause (i) shall be based on the fair market rent for the accommodation provided plus the cost of any transportation, utility hookups, or unit installation not provided directly by the President.

"(B) DIRECT ASSISTANCE.—

"(i) IN GENERAL.—The President may provide temporary housing units, acquired by purchase or lease, directly to individuals or households who, because of a lack of available housing resources, would be unable

to make use of the assistance provided under subparagraph (A).

"(ii) PERIOD OF ASSISTANCE.—The President may not provide direct assistance under clause (i) with respect to a major disaster after the end of the 18-month period beginning on the date of the declaration of the major disaster by the President, except that the President may extend that period if the President determines that due to extraordinary circumstances an extension would be in the public interest.

"(iii) COLLECTION OF RENTAL CHARGES.—After the end of the 18-month period referred to in clause (ii), the President may charge fair market rent for each temporary housing unit provided.

"(2) REPAIRS.—

"(A) IN GENERAL.—The President may provide financial assistance for—

"(i) the repair of owner-occupied private residences, utilities, and residential infrastructure (such as a private access route) damaged by a major disaster to a safe and sanitary living or functioning condition; and

"(ii) eligible hazard mitigation measures that reduce the likelihood of future damage to such residences, utilities, or infrastructure.

"(B) RELATIONSHIP TO OTHER ASSISTANCE.—A recipient of assistance provided under this paragraph shall not be required to show that the assistance can be met through other means, except insurance proceeds.

"(C) MAXIMUM AMOUNT OF ASSISTANCE.—The amount of assistance provided to a household under this paragraph shall not exceed $5,000, as adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the Department of Labor.

"(3) REPLACEMENT.—

"(A) IN GENERAL.—The President may provide financial assistance for the replacement of owner-occupied private residences damaged by a major disaster.

"(B) MAXIMUM AMOUNT OF ASSISTANCE.—The amount of assistance provided to a household under this paragraph shall not exceed $10,000, as adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the Department of Labor.

"(C) APPLICABILITY OF FLOOD INSURANCE REQUIREMENT.—With respect to assistance provided under this paragraph, the President may not waive any provision of Federal law requiring the purchase of flood insurance as a condition of the receipt of Federal disaster assistance.

"(4) PERMANENT HOUSING CONSTRUCTION.—The President may provide financial assistance or direct assistance to individuals or households to construct permanent housing in insular areas outside the continental United States and in other remote locations in cases in which—

"(A) no alternative housing resources are available; and

"(B) the types of temporary housing assistance described in paragraph (1) are unavailable, infeasible, or not cost-effective.

"(d) TERMS AND CONDITIONS RELATING TO HOUSING ASSISTANCE.—

"(1) SITES.—

"(A) IN GENERAL.—Any readily fabricated dwelling provided under this section shall, whenever practicable, be located on a site that—

"(i) is complete with utilities; and

"(ii) is provided by the State or local government, by the owner of the site, or by the occupant who was displaced by the major disaster.

"(B) SITES PROVIDED BY THE PRESIDENT.—A readily fabricated dwelling may be located on a site provided by the President if the President determines that such a site would be more economical or accessible.

"(2) DISPOSAL OF UNITS.—

"(A) SALE TO OCCUPANTS.—

"(i) IN GENERAL.—Notwithstanding any other provision of law, a temporary housing unit purchased under this section by the President for the purpose of housing disaster victims may be sold directly to the individual or household who is occupying the unit if the individual or household lacks permanent housing.

"(ii) SALE PRICE.—A sale of a temporary housing unit under clause (i) shall be at a price that is fair and equitable.

"(iii) DEPOSIT OF PROCEEDS.—Notwithstanding any other provision of law, the proceeds of a sale under clause (i) shall be deposited in the appropriate Disaster Relief Fund account.

"(iv) HAZARD AND FLOOD INSURANCE.—A sale of a temporary housing unit under clause (i) shall be made on the condition that the individual or household purchasing the housing unit agrees to obtain and maintain hazard and flood insurance on the housing unit.

"(v) USE OF GSA SERVICES.—The President may use the services of the General Services Administration to accomplish a sale under clause (i).

"(B) OTHER METHODS OF DISPOSAL.—If not disposed of under subparagraph (A), a temporary housing unit purchased under this section by the President for the purpose of housing disaster victims—

"(i) may be sold to any person; or

"(ii) may be sold, transferred, donated, or otherwise made available directly to a State or other governmental entity or to a voluntary organization for the sole purpose of providing temporary housing to disaster victims in major disasters and emergencies if, as a condition of the sale, transfer, or donation, the State, other governmental agency, or voluntary organization agrees—

"(I) to comply with the nondiscrimination provisions of section 308; and

"(II) to obtain and maintain hazard and flood insurance on the housing unit.

"(e) FINANCIAL ASSISTANCE TO ADDRESS OTHER NEEDS.—

"(1) MEDICAL, DENTAL, AND FUNERAL EXPENSES.—The President, in consultation with the Governor of a State, may provide financial assistance under this section to an individual or household in the State who is adversely affected by a major disaster to meet disaster-related medical, dental, and funeral expenses.

"(2) PERSONAL PROPERTY, TRANSPORTATION, AND OTHER EXPENSES.—The President, in consultation with the Governor of a State, may provide financial assistance under this section to an individual or household described in paragraph (1) to address personal property, transportation, and other necessary expenses or serious needs resulting from the major disaster.

"(f) STATE ROLE.—

"(1) FINANCIAL ASSISTANCE TO ADDRESS OTHER NEEDS.—

"(A) GRANT TO STATE.—Subject to subsection (g), a Governor may request a grant from the President to provide financial assistance to individuals and households in the State under subsection (e).

"(B) ADMINISTRATIVE COSTS.—A State that receives a grant under subparagraph (A) may expend not more than 5 percent of the amount of the grant for the administrative costs of providing financial assistance to individuals and households in the State under subsection (e).

"(2) ACCESS TO RECORDS.—In providing assistance to individuals and households under this section, the President shall provide for the substantial and ongoing involvement of the States in which the individuals and households are located, including by providing to the States access to the electronic records of individuals and households receiving assistance under this section in order for the States to make available any additional State and local assistance to the individuals and households.

"(g) COST SHARING.—

"(1) FEDERAL SHARE.—Except as provided in paragraph (2), the Federal share of the costs eligible to be paid using assistance provided under this section shall be 100 percent.

"(2) FINANCIAL ASSISTANCE TO ADDRESS OTHER NEEDS.—In the case of financial assistance provided under subsection (e)—

"(A) the Federal share shall be 75 percent; and

"(B) the non-Federal share shall be paid from funds made available by the State.

"(h) MAXIMUM AMOUNT OF ASSISTANCE.—

"(1) IN GENERAL.—No individual or household shall receive financial assistance greater than $25,000 under this section with respect to a single major disaster.

"(2) ADJUSTMENT OF LIMIT.—The limit established under paragraph (1) shall be adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the Department of Labor.

President. "(i) RULES AND REGULATIONS.—The President shall prescribe rules and regulations to carry out this section, including criteria, standards, and procedures for determining eligibility for assistance.".

(b) CONFORMING AMENDMENT.—Section 502(a)(6) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5192(a)(6)) is amended by striking "temporary housing".

(c) ELIMINATION OF INDIVIDUAL AND FAMILY GRANT PROGRAMS.—Section 411 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5178) is repealed.

(d) EFFECTIVE DATE.—The amendments made by this section take effect 18 months after the date of the enactment of this Act. 42 USC 5174 note.

SEC. 207. COMMUNITY DISASTER LOANS.

Section 417 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5184) is amended—

(1) by striking "(a) The President" and inserting the following:

"(a) IN GENERAL.—The President";

(2) by striking "The amount" and inserting the following:

"(b) AMOUNT.—The amount";

(3) by striking "Repayment" and inserting the following:

"(c) REPAYMENT.—

"(1) CANCELLATION.—Repayment";

(4) by striking "(b) Any loans" and inserting the following:

"(d) EFFECT ON OTHER ASSISTANCE.—Any loans";

(5) in subsection (b) (as designated by paragraph (2))—

(A) by striking "and shall" and inserting "shall"; and

(B) by inserting before the period at the end the following: ", and shall not exceed $5,000,000"; and

(6) in subsection (c) (as designated by paragraph (3)), by adding at the end the following:

"(2) CONDITION ON CONTINUING ELIGIBILITY.—A local government shall not be eligible for further assistance under this section during any period in which the local government is in arrears with respect to a required repayment of a loan under this section.".

SEC. 208. REPORT ON STATE MANAGEMENT OF SMALL DISASTERS INITIATIVE. 42 USC 5121 note.

Not later than 3 years after the date of the enactment of this Act, the President shall submit to Congress a report describing the results of the State Management of Small Disasters Initiative, including— Deadline.

(1) identification of any administrative or financial benefits of the initiative; and

(2) recommendations concerning the conditions, if any, under which States should be allowed the option to administer parts of the assistance program under section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5172).

SEC. 209. STUDY REGARDING COST REDUCTION. 42 USC 5121 note.

Not later than 3 years after the date of the enactment of this Act, the Director of the Congressional Budget Office shall complete a study estimating the reduction in Federal disaster assistance that has resulted and is likely to result from the enactment of this Act. Deadline.

TITLE III—MISCELLANEOUS

SEC. 301. TECHNICAL CORRECTION OF SHORT TITLE.

The first section of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 note) is amended to read as follows:

"SECTION 1. SHORT TITLE.

"This Act may be cited as the 'Robert T. Stafford Disaster Relief and Emergency Assistance Act'.".

SEC. 302. DEFINITIONS.

Section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122) is amended—

(1) in each of paragraphs (3) and (4), by striking "the Northern" and all that follows through "Pacific Islands" and inserting "and the Commonwealth of the Northern Mariana Islands";

(2) by striking paragraph (6) and inserting the following:

"(6) LOCAL GOVERNMENT.—The term 'local government' means—

"(A) a county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government;

"(B) an Indian tribe or authorized tribal organization, or Alaska Native village or organization; and

"(C) a rural community, unincorporated town or village, or other public entity, for which an application for assistance is made by a State or political subdivision of a State."; and

(3) in paragraph (9), by inserting "irrigation," after "utility,".

SEC. 303. FIRE MANAGEMENT ASSISTANCE.

(a) IN GENERAL.—Section 420 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5187) is amended to read as follows:

"SEC. 420. FIRE MANAGEMENT ASSISTANCE.

"(a) IN GENERAL.—The President is authorized to provide assistance, including grants, equipment, supplies, and personnel, to any State or local government for the mitigation, management, and control of any fire on public or private forest land or grassland that threatens such destruction as would constitute a major disaster.

President.

"(b) COORDINATION WITH STATE AND TRIBAL DEPARTMENTS OF FORESTRY.—In providing assistance under this section, the President shall coordinate with State and tribal departments of forestry.

"(c) ESSENTIAL ASSISTANCE.—In providing assistance under this section, the President may use the authority provided under section 403.

"(d) RULES AND REGULATIONS.—The President shall prescribe such rules and regulations as are necessary to carry out this section.". President.

(b) EFFECTIVE DATE.—The amendment made by subsection (a) takes effect 1 year after the date of the enactment of this Act. 42 USC 5187 note.

SEC. 304. DISASTER GRANT CLOSEOUT PROCEDURES. 42 USC 5205.

Title VII of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5101 et seq.) is amended by adding at the end the following:

"SEC. 705. DISASTER GRANT CLOSEOUT PROCEDURES.

"(a) STATUTE OF LIMITATIONS.—

"(1) IN GENERAL.—Except as provided in paragraph (2), no administrative action to recover any payment made to a State or local government for disaster or emergency assistance under this Act shall be initiated in any forum after the date that is 3 years after the date of transmission of the final expenditure report for the disaster or emergency.

"(2) FRAUD EXCEPTION.—The limitation under paragraph (1) shall apply unless there is evidence of civil or criminal fraud.

"(b) REBUTTAL OF PRESUMPTION OF RECORD MAINTENANCE.—

"(1) IN GENERAL.—In any dispute arising under this section after the date that is 3 years after the date of transmission of the final expenditure report for the disaster or emergency, there shall be a presumption that accounting records were maintained that adequately identify the source and application of funds provided for financially assisted activities.

"(2) AFFIRMATIVE EVIDENCE.—The presumption described in paragraph (1) may be rebutted only on production of affirmative evidence that the State or local government did not maintain documentation described in that paragraph.

"(3) INABILITY TO PRODUCE DOCUMENTATION.—The inability of the Federal, State, or local government to produce source documentation supporting expenditure reports later than 3 years after the date of transmission of the final expenditure report shall not constitute evidence to rebut the presumption described in paragraph (1).

"(4) RIGHT OF ACCESS.—The period during which the Federal, State, or local government has the right to access source documentation shall not be limited to the required 3-year retention period referred to in paragraph (3), but shall last as long as the records are maintained.

"(c) BINDING NATURE OF GRANT REQUIREMENTS.—A State or local government shall not be liable for reimbursement or any other penalty for any payment made under this Act if—

"(1) the payment was authorized by an approved agreement specifying the costs;

"(2) the costs were reasonable; and

"(3) the purpose of the grant was accomplished.".

SEC. 305. PUBLIC SAFETY OFFICER BENEFITS FOR CERTAIN FEDERAL AND STATE EMPLOYEES.

(a) IN GENERAL.—Section 1204 of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. 3796b) is amended by striking paragraph (7) and inserting the following:

"(7) 'public safety officer' means—

"(A) an individual serving a public agency in an official capacity, with or without compensation, as a law enforcement officer, as a firefighter, or as a member of a rescue squad or ambulance crew;

"(B) an employee of the Federal Emergency Management Agency who is performing official duties of the Agency in an area, if those official duties—

"(i) are related to a major disaster or emergency that has been, or is later, declared to exist with respect to the area under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.); and

"(ii) are determined by the Director of the Federal Emergency Management Agency to be hazardous duties; or

"(C) an employee of a State, local, or tribal emergency management or civil defense agency who is performing official duties in cooperation with the Federal Emergency Management Agency in an area, if those official duties—

"(i) are related to a major disaster or emergency that has been, or is later, declared to exist with respect to the area under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.); and

"(ii) are determined by the head of the agency to be hazardous duties.".

42 USC 3796b note.

(b) EFFECTIVE DATE.—The amendment made by subsection (a) applies only to employees described in subparagraphs (B) and (C) of section 1204(7) of the Omnibus Crime Control and Safe Streets Act of 1968 (as amended by subsection (a)) who are injured or who die in the line of duty on or after the date of the enactment of this Act.

42 USC 5206.

SEC. 306. BUY AMERICAN.

(a) COMPLIANCE WITH BUY AMERICAN ACT.—No funds authorized to be appropriated under this Act or any amendment made by this Act may be expended by an entity unless the entity, in expending the funds, complies with the Buy American Act (41 U.S.C. 10a et seq.).

(b) DEBARMENT OF PERSONS CONVICTED OF FRAUDULENT USE OF "MADE IN AMERICA" LABELS.—

Deadline.

(1) IN GENERAL.—If the Director of the Federal Emergency Management Agency determines that a person has been convicted of intentionally affixing a label bearing a "Made in America" inscription to any product sold in or shipped to the United States that is not made in America, the Director shall determine, not later than 90 days after determining that the person has been so convicted, whether the person should be debarred from contracting under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.).

(2) DEFINITION OF DEBAR.—In this subsection, the term "debar" has the meaning given the term in section 2393(c) of title 10, United States Code.

SEC. 307. TREATMENT OF CERTAIN REAL PROPERTY.

(a) IN GENERAL.—Notwithstanding the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), the Flood Disaster

Protection Act of 1973 (42 U.S.C. 4002 et seq.), or any other provision of law, or any flood risk zone identified, delineated, or established under any such law (by flood insurance rate map or otherwise), the real property described in subsection (b) shall not be considered to be, or to have been, located in any area having special flood hazards (including any floodway or floodplain).

(b) REAL PROPERTY.—The real property described in this subsection is all land and improvements on the land located in the Maple Terrace Subdivisions in the City of Sycamore, DeKalb County, Illinois, including—

(1) Maple Terrace Phase I;
(2) Maple Terrace Phase II;
(3) Maple Terrace Phase III Unit 1;
(4) Maple Terrace Phase III Unit 2;
(5) Maple Terrace Phase III Unit 3;
(6) Maple Terrace Phase IV Unit 1;
(7) Maple Terrace Phase IV Unit 2; and
(8) Maple Terrace Phase IV Unit 3.

(c) REVISION OF FLOOD INSURANCE RATE LOT MAPS.—As soon as practicable after the date of the enactment of this Act, the Director of the Federal Emergency Management Agency shall revise the appropriate flood insurance rate lot maps of the agency to reflect the treatment under subsection (a) of the real property described in subsection (b).

SEC. 308. STUDY OF PARTICIPATION BY INDIAN TRIBES IN EMERGENCY MANAGEMENT.

42 USC 5121 note.

(a) DEFINITION OF INDIAN TRIBE.—In this section, the term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(b) STUDY.—

(1) IN GENERAL.—The Director of the Federal Emergency Management Agency shall conduct a study of participation by Indian tribes in emergency management.

(2) REQUIRED ELEMENTS.—The study shall—

(A) survey participation by Indian tribes in training, predisaster and postdisaster mitigation, disaster preparedness, and disaster recovery programs at the Federal and State levels; and

(B) review and assess the capacity of Indian tribes to participate in cost-shared emergency management programs and to participate in the management of the programs.

(3) CONSULTATION.—In conducting the study, the Director shall consult with Indian tribes.

(c) REPORT.—Not later than 1 year after the date of the enactment of this Act, the Director shall submit a report on the study under subsection (b) to— Deadline.

(1) the Committee on Environment and Public Works of the Senate;

(2) the Committee on Transportation and Infrastructure of the House of Representatives;

(3) the Committee on Appropriations of the Senate; and

(4) the Committee on Appropriations of the House of Representatives.

Approved October 30, 2000.

LEGISLATIVE HISTORY—H.R. 707 (S. 1691):

HOUSE REPORTS: No. 106–40 (Comm. on Transportation and Infrastructure).
SENATE REPORTS: No. 106–295 accompanying S. 1691 (Comm. on Environment and Public Works).
CONGRESSIONAL RECORD:
Vol. 145 (1999): Mar. 4, considered and passed House.
Vol. 146 (2000): July 19, considered and passed Senate, amended.
Oct. 3, House concurred in Senate amendment with an amendment.
Oct. 5, Senate concurred in House amendment with an amendment.
Oct. 10, House concurred in Senate amendment.

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ANNEX B. REGULATIONS

The Disaster Mitigation Act of 2000 (P.L. 106-390) facilitates a new and revitalized approach to mitigation planning. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions (Section 409) and replacing them with a new set of mitigation plan requirements (Section 322). This new section emphasizes the need for state, Tribal, and local entities to closely coordinate mitigation planning and implementation efforts. The following pages provide a description of the Disaster Mitigation Act of 2000, as well as the Interim Final Rule for mitigation planning.



Federal Register

Tuesday,

February 26, 2002

Part III

Federal Emergency Management Agency

44 CFR Parts 201 and 206

Hazard Mitigation Planning and Hazard Mitigation Grant Program; Interim Final Rule

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Parts 201 and 206

RIN 3067–AD22

Hazard Mitigation Planning and Hazard Mitigation Grant Program

AGENCY: Federal Emergency Management Agency.

ACTION: Interim final rule.

SUMMARY: This rule addresses State mitigation planning, identifies new local mitigation planning requirements, authorizes Hazard Mitigation Grant Program (HMGP) funds for planning activities, and increases the amount of HMGP funds available to States that develop a comprehensive, enhanced mitigation plan. This rule also requires that repairs or construction funded by a disaster loan or grant must be carried out in accordance with applicable standards and says that FEMA may require safe land use and construction practices as a condition of grantees receiving disaster assistance under the Stafford Act.

DATES: *Effective Date:* February 26, 2002.

Comment Date: We will accept written comments through April 29, 2002.

ADDRESSES: Please send written comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., room 840, Washington, DC 20472, (facsimile) 202–646–4536, or (email) *rules@fema.gov.*

FOR FURTHER INFORMATION CONTACT: Margaret E. Lawless, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC, 20472, 202–646–3027, (facsimile) 202–646–3104, or (email) *margaret.lawless@fema.gov.*

SUPPLEMENTARY INFORMATION:

Introduction

Throughout the preamble and the rule the terms ''we'', ''our'' and ''us'' refer to FEMA.

Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C. 5165, enacted under § 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106–390, provides new and revitalized approaches to mitigation planning. This section: (1) Continues the requirement for a Standard State Mitigation plan as a condition of disaster assistance; (2) provides for States to receive an increased percentage of HMGP funds (from 15 to 20 percent of the total estimated eligible Federal assistance) if, at the time of the declaration of a major disaster, they have in effect a FEMA-approved Enhanced State Mitigation Plan that meets the factors listed in this rule; (3) establishes a new requirement for local mitigation plans; and (4) authorizes up to 7 percent of the HMGP funds available to a State to be used for development of State, tribal, and local mitigation plans. We will give Indian tribal governments the opportunity to fulfill the requirements of § 322 either as a grantee or a subgrantee. An Indian tribal government may choose to apply for HMGP funding directly to us and would then serve as a grantee, meeting the State level responsibilities, or it may apply through the State, meeting the local government or subgrantee responsibilities.

Section 322, in concert with other sections of the Act, provides a significant opportunity to reduce the Nation's disaster losses through mitigation planning. In addition, implementation of planned, pre-identified, cost-effective mitigation measures will streamline the disaster recovery process. The Act provides a framework for linking pre- and post-disaster mitigation planning and initiatives with public and private interests to ensure an integrated, comprehensive approach to disaster loss reduction. The language in the Act, taken as a whole, emphasizes the importance of strong State and local planning processes and comprehensive program management at the State level. The new planning criteria also support State administration of the HMGP, and contemplate a significant State commitment to mitigation activities, comprehensive State mitigation planning, and strong program management.

The planning process also provides a link between State and local mitigation programs. Both State level and local plans should address strategies for incorporating post-disaster early mitigation implementation strategies and sustainable recovery actions. We also recognize that governments are involved in a range of planning activities and that mitigation plans may be linked to or reference hazardous materials and other non-natural hazard plans. Improved mitigation planning will result in a better understanding of risks and vulnerabilities, as well as to expedite implementation of measures and activities to reduce those risks, both pre- and post-disaster.

Section 409 of the Stafford Act, 42 U.S.C. 5176, which required mitigation plans and the use of minimum codes and standards, was repealed by the DMA 2000. These issues are now addressed in two separate sections of the law: mitigation planning is in section 322 of the Act, and minimum codes and standards are in section 323 of the Act. We previously implemented section 409 through 44 CFR Part 206, Subpart M. Since current law now distinguishes the planning from the codes and standards in separate sections, we will address them in different sections of the CFR. We address the new planning regulations in Part 201 to reflect the broader relevance of planning to all FEMA mitigation programs, while the minimum standards remain in Part 206, Federal Disaster Assistance, Subpart M. The regulations implementing the Hazard Mitigation Grant Program are in Part 206, Subpart N. This rule also contains changes to Subpart N, to reflect the new planning criteria identified in section 322 of the Act.

The administration is considering changes to FEMA's mitigation programs in the President's Budget for FY 2003. However, States and localities still would be required to have plans in effect, which meet the minimum requirements under this rule, as a condition of receiving mitigation assistance after November 1, 2003.

Implementation Strategy. States must have an approved hazard mitigation plan in order to receive Stafford Act assistance, excluding assistance provided pursuant to emergency provisions. These regulations provide criteria for the new two-tiered State mitigation plan process: Standard State Mitigation Plans, which allow a State to receive HMGP funding based on 15 percent of the total estimated eligible Stafford Act disaster assistance, and Enhanced State Mitigation Plans, which allow a State to receive HMGP funds based on 20 percent of the total estimated eligible Stafford Act disaster assistance. Enhanced State Mitigation Plans must demonstrate that the State has developed a comprehensive mitigation program, that it effectively uses available mitigation funding, and that it is capable of managing the increased funding. All State Mitigations Plans must be reviewed, revised, and re-approved by FEMA every three years. An important requirement of the legislation is that we must approve a completed enhanced plan *before* a disaster declaration, in order for the State to be eligible for the increased funding.

We will no longer require States to revise their mitigation plan after every disaster declaration, as under former

section 409 of the Act, 42 U.S.C. 5176. We recommend, however, that States consider revising their plan if a disaster or other circumstances significantly affect its mitigation priorities. States with existing mitigation plans, approved under former section 409, will continue to be eligible for the 15 percent HMGP funding until November 1, 2003, when all State mitigation plans must meet the requirements of these regulations. If State plans are not revised and approved to meet the Standard State Mitigation Plan requirements by that time, they will be ineligible for Stafford Act assistance, excluding emergency assistance.

Indian tribal governments may choose to apply directly to us for HMGP funding, and would therefore be responsible for having an approved State level mitigation plan, and would act as the grantee. If an Indian tribal government chooses to apply for HMGP grants through the State, they would be responsible for having an approved local level mitigation plan, and would serve as a subgrantee accountable to the State as grantee.

This rule also establishes local planning criteria so that these jurisdictions can actively begin the hazard mitigation planning process. This requirement is to encourage the development of comprehensive mitigation plans before disaster events. Section 322 requires local governments to have an approved local mitigation plan to be eligible to receive an HMGP project grant; however, this requirement will not fully take effect until November 1, 2003. FEMA Regional Directors may grant an exception to this requirement in extenuating circumstances. Until November 1, 2003, local governments will be able to receive HMGP project grant funds and may prepare a mitigation plan concurrently with implementation of their project grant. We anticipate that the Predisaster Mitigation program authorized by section 203 of the Act, 42 U.S.C. 5133, will also support this local mitigation planning by making funds available for the development of comprehensive local mitigation plans. Managing States that we approve under new criteria established under section 404 of the Act, 42 U.S.C. 5170c(c), as amended by section 204 of DMA 2000 will have approval authority for local mitigation plans. This provision does not apply to States that we approved under the Managing State program in effect before enactment of DMA 2000.

Our goal is for State and local governments to develop comprehensive and integrated plans that are coordinated through appropriate State, local, and regional agencies, as well as non-governmental interest groups. To the extent feasible and practicable, we would also like to consolidate the planning requirements for different FEMA mitigation programs. This will ensure that one local plan will meet the minimum requirements for all of the different FEMA mitigation programs, such as the Flood Mitigation Assistance Program (authorized by sections 553 and 554 of the National Flood Insurance Reform Act of 1994, 42 U.S.C. 4104c and 42 U.S.C. 4104d), the Community Rating System (authorized by section 541 of the National Flood Insurance Reform Act of 1994, 42 U.S.C. 4022), the Pre-Disaster Mitigation Program (authorized by section 203 of the Stafford Act), the Hazard Mitigation Grant Program (authorized by section 404 of the Stafford Act), and the mitigation activities that are based upon the provisions of section 323 and subsections 406(b) and (e) of the Stafford Act. The mitigation plans may also serve to integrate documents and plans produced under other emergency management programs. State level plans should identify overall goals and priorities, incorporating the more specific local risk assessments, when available, and including projects identified through the local planning process.

Under section 322(d), up to 7 percent of the available HMGP funds may now be used for planning, and we encourage States to use these funds for local plan development. In a memorandum to FEMA Regional Directors dated December 21, 2000, we announced that this provision of section 322 was effective for disasters declared on or after October 30, 2000, the date on which the Disaster Mitigation Act of 2000 became law. Regional Directors are encouraging States to make these funds immediately available to local and Indian tribal governments, although the funds can be used for plan development and review at the State level as well.

As discussed earlier in this Supplementary Information, subsection 323(a) of the Stafford Act, 42 U.S.C. 5166(a), requires as a precondition to receiving disaster assistance under the Act that State and local governments, as well as eligible private nonprofit entities, must agree to carry out repair and reconstruction activities ''in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications, and standards.'' In addition, that subsection authorizes the President (FEMA, by virtue of Executive Order 12148, as amended) to ''require safe land use and construction practices, after adequate consultation with appropriate State and local officials'' in the course of the use of Federal disaster assistance by eligible applicants to repair and restore disaster-damaged facilities.

At the same time that we implement the planning mandates of section 322 of the Stafford Act, we are also implementing the Minimum Standards for Public and Private Structures provision of section 323 of the Act. This rule appears at Subpart M of Part 206 of Title 44 of the Code of Federal Regulations. As mentioned earlier, the section 322 planning regulations are in Part 201, while Part 206, Subpart M includes only the minimum codes and standards regulations mandated in § 323. The rule to implement § 323 of the Act reinforces the link between pre-disaster planning, building and construction standards, and post-disaster reconstruction efforts.

We encourage comments on this interim final rule, and we will make every effort to involve all interested parties prior to the development of the Final Rule.

Justification for Interim Final Rule

In general, FEMA publishes a rule for public comment before issuing a final rule, under the Administrative Procedure Act, 5 U.S.C. 533 and 44 CFR 1.12. The Administrative Procedure Act, however, provides an exception from that general rule where the agency for good cause finds the procedures for comment and response contrary to public interest. Section 322 of the Stafford Act allows States to receive increased post-disaster grant funding for projects designed to reduce future disaster losses. States will only be eligible for these increased funds if they have a FEMA-approved Enhanced State Mitigation Plan.

This interim final rule provides the criteria for development and approval of these plans, as well as criteria for local mitigation plans required by this legislation. In order for State and local governments to be positioned to receive these mitigation funds as soon as possible, these regulations must be in effect. The public benefit of this rule will be to assist States and communities assess their risks and identify activities to strengthen the larger community and the built environment in order to become less susceptible to disasters. Planning serves as the vital foundation to saving lives and protecting properties, having integrated plans in place can serve to both streamline recovery efforts and lessen potential future damages. Therefore, we believe it is contrary to the public interest to delay

the benefits of this rule. In accordance with the Administrative Procedure Act, 5 U.S.C. 553(d)(3), we find that there is good cause for the interim final rule to take effect immediately upon publication in the **Federal Register** in order to meet the needs of States and communities by identifying criteria for mitigation plans in order to reduce risks nationwide, establish criteria for minimum codes and standards in post-disaster reconstruction, and to allow States to adjust their mitigation plans to receive the increase in mitigation funding.

In addition, we believe that, under the circumstances, delaying the effective date of this rule until after the comment period would not further the public interest. Prior to this rulemaking, FEMA hosted a meeting where interested parties provided comments and suggestions on how we could implement these planning requirements. Participants in this meeting included representatives from the National Emergency Management Association, the Association of State Floodplain Managers, the National Governors' Association, the International Association of Emergency Managers, the National Association of Development Organizations, the American Public Works Association, the National League of Cities, the National Association of Counties, the National Conference of State Legislatures, the International City/County Management Association, and the Bureau of Indian Affairs. We took comments and suggestions provided at this meeting into account in developing this interim final rule. Therefore, we find that prior notice and comment on this rule would not further the public interest. We actively encourage and solicit comments on this interim final rule from interested parties, and we will consider them in preparing the final rule. For these reasons, we believe we have good cause to publish an interim final rule.

National Environmental Policy Act

44 CFR 10.8(d)(2)(ii) excludes this rule from the preparation of an environmental assessment or environmental impact statement, where the rule relates to actions that qualify for categorical exclusion under 44 CFR 10.8(d)(2)(iii), such as the development of plans under this section.

Executive Order 12866, Regulatory Planning and Review

We have prepared and reviewed this rule under the provisions of E.O. 12866, Regulatory Planning and Review. Under Executive Order 12866, 58 FR 51735, October 4, 1993, a significant regulatory action is subject to OMB review and the requirements of the Executive Order. The Executive Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The purpose of this rule is to implement section 322 of the Stafford Act which addresses mitigation planning at the State, tribal, and local levels, identifies new local planning requirements, allows Hazard Mitigation Grant Program (HMGP) funds for planning activities, and increases the amount of HMGP funds available to States that develop a comprehensive, enhanced mitigation plan. The rule identifies local mitigation planning requirements before approval of project grants, and requires our approval of an Enhanced State Mitigation plan as a condition for increased mitigation funding. The rule also implements section 323 of the Stafford Act, which requires that repairs or construction funded by disaster loans or grants must comply with applicable standards and safe land use and construction practices. As such the rule itself will not have an effect on the economy of more than $100,000,000.

Therefore, this rule is a significant regulatory action and is not an economically significant rule under Executive Order 12866. The Office of Management and Budget (OMB) has reviewed this rule under Executive Order 12866.

Executive Order 12898, Environmental Justice

Under Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, February 16, 1994, we incorporate environmental justice into our policies and programs. The Executive Order requires each Federal agency to conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that those programs, policies, and activities do not have the effect of excluding persons from participation in our programs, denying persons the benefits of our programs, or subjecting persons to discrimination because of their race, color, or national origin.

No action that we can anticipate under the final rule will have a disproportionately high or adverse human health and environmental effect on any segment of the population. Section 322 focuses specifically on mitigation planning to: Identify the natural hazards, risks, and vulnerabilities of areas in States, localities, and tribal areas; support development of local mitigation plans; provide for technical assistance to local and tribal governments for mitigation planning; and identify and prioritize mitigation actions that the State will support, as resources become available. Section 323 requires compliance with applicable codes and standards in repair and construction, and use of safe land use and construction standards. Accordingly, the requirements of Executive Order 12898 do not apply to this interim final rule.

Paperwork Reduction Act of 1995

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) and concurrent with the publication of this interim final rule, we have submitted a request for review and approval of a new collection of information, which is contained in this interim final rule. Under the Paperwork Reduction Act of 1995, a person may not be penalized for failing to comply with an information collection that does not display a currently valid Office of Management and Budget (OMB) control number. The request was submitted to OMB for approval under the emergency processing procedures in OMB regulation 5 CFR 1320.1. OMB has approved this collection of information for use through August 31, 2002, under OMB Number 3067–0297.

We expect to follow this emergency request with a request for OMB approval to continue the use of the collection of information for a term of three years. The request will be processed under OMB's normal clearance procedures in accordance with provisions of OMB regulation 5 CFR 1320.10. To help us with the timely processing of the emergency and normal clearance submissions to OMB, we invite the general public to comment on the collection of information. This notice and request for comments complies with the provisions of the Paperwork

Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)).

Collection of Information

Title: State/Local/Tribal Hazard Mitigation Plans under Section 322 of the Disaster Mitigation Act of 2000.

Abstract: Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistant Act, as amended by Section 104 of the Disaster Mitigation Act of 2000, provides new and revitalized approaches to mitigation planning. To obtain Federal assistance, new planning provisions require that each state, local, and tribal government prepare a hazard mitigation plan to include sections that describe the planning process, an assessment of the risks, a mitigation strategy, and identification of the plan maintenance and updating process. The Act provides a framework for linking pre- and post-disaster mitigation planning and initiatives with public and private interests to ensure an integrated, comprehensive approach to disaster loss reduction. Under Section 322 there is a two-tiered State mitigation plan process. State mitigation plans must be reviewed, revised, and submitted to us every 3 years.

(1) A *Standard State Mitigation Plan* must be approved by us in order for States to be eligible to receive Hazard Mitigation Grant Program (HGMP) funding based on 15 percent of the total estimated eligible Federal disaster assistance. This plan demonstrates the State's goals, priorities, and commitment to reduce risks from natural hazards and serves as a guide for State and local decision makers as they commit resources to reducing the effects of natural hazards.

(2) An *Enhanced State Mitigation Plan* must be approved by us for a State to be eligible to receive HMGP funds based on 20 percent of the total estimated eligible Federal disaster assistance. This plan must be approved by us within the 3 years prior to the current major disaster declaration. It must demonstrate that a State has developed a comprehensive mitigation program, is effectively using available mitigation funding, and is capable of managing the increased funding.

To be eligible to receive HMGP project grants, *local governments* must develop Local Mitigation Plans that include a risk assessment and mitigation strategy to reduce potential losses and target resources. Plans must be reviewed, revised, and submitted to us for approval every 5 years.

To receive HMGP project grants, *tribal governments* may apply as a grantee or subgrantee, and will be required to meet the planning requirements of a State or local government.

Estimated Total Annual Burden:

Type of collection/forms	No. of respondents	Hours per response	Annual burden hours
Update state or tribal mitigation plans (standard state mitigation plans)	18	320	5,760
State review of local plans	500 local plans	8	4,000
States develop Enhanced State Mitigation Plans	7	100	700
Local or tribal governments develop mitigation plans	500 local plans	300	150,000
Total burden			160,460

Comments: We are soliciting written comments to: (a) Evaluate whether the proposed data collection is necessary for the proper performance of the agency, including whether the information shall have practical utility; (b) evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) obtain recommendations to enhance the quality, utility, and clarity of the information to be collected; and (d) evaluate the extent to which automated, electronic, mechanical, or other technological collection techniques may further reduce the respondents' burden. FEMA will accept comments through April 29, 2002.

Addressee: Interested persons should submit written comments to Muriel B. Anderson, Chief, Records Management Section, Program Services and Systems Branch, Facilities Management and Services Division, Administration and Resource Planning Directorate, Federal Emergency Management Agency, 500 C Street, Street, SW., Washington, DC 20472.

FOR FURTHER INFORMATION CONTACT: You may obtain copies of the OMB paperwork clearance package by contacting Ms. Anderson at (202) 646–2625 (voice), (202) 646–3347 (facsimile), or by e-mail at *muriel.anderson@fema.gov.*

Executive Order 13132, Federalism

Executive Order 13132, Federalism, dated August 4, 1999, sets forth principles and criteria that agencies must adhere to in formulating and implementing policies that have federalism implications, that is, regulations that have substantial direct effects on the States, or on the distribution of power and responsibilities among the various levels of government. Federal agencies must closely examine the statutory authority supporting any action that would limit the policymaking discretion of the States, and to the extent practicable, must consult with State and local officials before implementing any such action.

We have reviewed this rule under E.O.13132 and have concluded that the rule does not have federalism implications as defined by the Executive Order. We have determined that the rule does not significantly affect the rights, roles, and responsibilities of States, and involves no preemption of State law nor does it limit State policymaking discretion.

However, we have consulted with State and local officials. In order to assist us in the development of this rule, we hosted a meeting to allow interested parties an opportunity to provide their perspectives on the legislation and options for implementation of § 322. Stakeholders who attended the meeting included representatives from the National Emergency Management Association, the Association of State Floodplain Managers, the National Governors' Association, the International Association of Emergency Managers, the National Association of Development Organizations, the American Public Works Association, the National League of Cities, the National Association of Counties, the National Conference of State Legislatures, the International City/County Management Association, and the Bureau of Indian Affairs. We received valuable input from all parties at the meeting, which we took into account in the development of this rule. Additionally, we actively encourage and solicit comments on this interim final rule from interested parties, and we will

consider them in preparing the final rule.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

We have reviewed this interim final rule under Executive Order 13175, which became effective on February 6, 2001. Under the Hazard Mitigation Grant Program (HMGP), Indian tribal governments will have the option to apply for grants directly to us and to serve as ''grantee'', carrying out ''State'' roles. If they choose this option, tribal governments may submit either a State-level Standard Mitigation Plan for the 15 percent HMGP funding or a State-level Enhanced Mitigation Plan for 20 percent HMGP funding. In either case, Indian tribal governments would be able to spend up to 7 percent of those funds on planning. Before developing this rule, we met with representatives from State and local governments and the Bureau of Indian Affairs, to discuss the new planning opportunities and requirements of § 322 of the Stafford Act. We received valuable input from all parties, which helped us to develop this interim final rule.

In reviewing the interim final rule, we find that it does not have ''tribal implications'' as defined in Executive Order 13175 because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Moreover, the interim final rule does not impose substantial direct compliance costs on tribal governments, nor does it preempt tribal law, impair treaty rights or limit the self-governing powers of tribal governments.

Congressional Review of Agency Rulemaking

We have sent this interim final rule to the Congress and to the General Accounting Office under the Congressional Review of Agency Rulemaking Act, Public Law 104–121. The rule is a not ''major rule'' within the meaning of that Act. It is an administrative action in support of normal day-to-day mitigation planning activities required by section 322 and compliance under section 323 of the Stafford Act, as enacted in DMA 2000.

The rule will not result in a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions. It will not have ''significant adverse effects'' on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises. This final rule is subject to the information collection requirements of the Paperwork Reduction Act, and OMB has assigned Control No. 3067–0297. The rule is not an unfunded Federal mandate within the meaning of the Unfunded Mandates Reform Act of 1995, Public Law 104–4, and any enforceable duties that we impose are a condition of Federal assistance or a duty arising from participation in a voluntary Federal program.

List of Subjects in 44 CFR Part 201 and Part 206

Administrative practice and procedure, Disaster assistance, Grant programs, Mitigation planning, Reporting and recordkeeping requirements.

Accordingly, Amend 44 CFR, Subchapter D—Disaster Assistance, as follows:

1. Add Part 201 to read as follows:

PART 201—MITIGATION PLANNING

Sec.

201.1 Purpose.
201.2 Definitions.
201.3 Responsibilities.
201.4 Standard State Mitigation Plans.
201.5 Enhanced State Mitigation Plans.
201.6 Local Mitigation Plans.

Authority: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 54 FR 12571, 3 CFR, 1989 Comp., p. 214.

§ 201.1 Purpose.

(a) The purpose of this part is to provide information on the polices and procedures for mitigation planning as required by the provisions of section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

§ 201.2 Definitions.

Grantee means the government to which a grant is awarded, which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. Generally, the State is the grantee. However, after a declaration, an Indian tribal government may choose to be a grantee, or may act as a subgrantee under the State. An Indian tribal government acting as grantee will assume the responsibilities of a ''state'', as described in this part, for the purposes of administering the grant.

Hazard mitigation means any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

Hazard Mitigation Grant Program means the program authorized under section 404 of the Stafford Act, 42 U.S.C 5170c and implemented at 44 CFR Part 206, Subpart N, which authorizes funding for certain mitigation measures identified through the evaluation of natural hazards conducted under section 322 of the Stafford Act 42 U.S.C 5165.

Indian tribal government means any Federally recognized governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Local government is any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Managing State means a State to which FEMA has delegated the authority to administer and manage the HMGP under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c). FEMA may also delegate authority to tribal governments to administer and manage the HMGP as a Managing State.

Regional Director is a director of a regional office of FEMA, or his/her designated representative.

Small and impoverished communities means a community of 3,000 or fewer individuals that is identified by the State as a rural community, and is not a remote area within the corporate boundaries of a larger city; is economically disadvantaged, by having an average per capita annual income of residents not exceeding 80 percent of national, per capita income, based on

best available data; the local unemployment rate exceeds by one percentage point or more, the most recently reported, average yearly national unemployment rate; and any other factors identified in the State Plan in which the community is located.

The Stafford Act refers to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93–288, as amended (42 U.S.C. 5121–5206).

State is any State of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

State Hazard Mitigation Officer is the official representative of State government who is the primary point of contact with FEMA, other Federal agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.

Subgrantee means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private non-profit organizations, or Indian tribal government. Indian tribal governments acting as a subgrantee are accountable to the State grantee.

§ 201.3 Responsibilities.

(a) *General.* This section identifies the key responsibilities of FEMA, States, and local/tribal governments in carrying out section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) *FEMA.* The key responsibilities of the Regional Director are to:

(1) Oversee all FEMA related pre- and post-disaster hazard mitigation programs and activities;

(2) Provide technical assistance and training to State, local, and Indian tribal governments regarding the mitigation planning process;

(3) Review and approve all Standard and Enhanced State Mitigation Plans;

(4) Review and approve all local mitigation plans, unless that authority has been delegated to the State in accordance with § 201.6(d);

(5) Conduct reviews, at least once every three years, of State mitigation activities, plans, and programs to ensure that mitigation commitments are fulfilled, and when necessary, take action, including recovery of funds or denial of future funds, if mitigation commitments are not fulfilled.

(c) *State.* The key responsibilities of the State are to coordinate all State and local activities relating to hazard evaluation and mitigation and to:

(1) Prepare and submit to FEMA a Standard State Mitigation Plan following the criteria established in § 201.4 as a condition of receiving Stafford Act assistance (except emergency assistance).

(2) In order to be considered for the 20 percent HMGP funding, prepare and submit an Enhanced State Mitigation Plan in accordance with § 201.5, which must be reviewed and updated, if necessary, every three years from the date of the approval of the previous plan.

(3) At a minimum, review and, if necessary, update the Standard State Mitigation Plan by November 1, 2003 and every three years from the date of the approval of the previous plan in order to continue program eligibility.

(4) Make available the use of up to the 7 percent of HMGP funding for planning in accordance with § 206.434.

(5) Provide technical assistance and training to local governments to assist them in applying for HMGP planning grants, and in developing local mitigation plans.

(6) For Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c), review and approve local mitigation plans in accordance with § 201.6(d).

(d) *Local governments.* The key responsibilities of local governments are to:

(1) Prepare and adopt a jurisdiction-wide natural hazard mitigation plan as a condition of receiving project grant funds under the HMGP, in accordance with § 201.6.

(2) At a minimum, review and, if necessary, update the local mitigation plan every five years from date of plan approval to continue program eligibility.

(e) *Indian tribal governments.* Indian tribal governments will be given the option of applying directly to us for Hazard Mitigation Grant Program funding, or they may choose to apply through the State. If they apply directly to us, they will assume the responsibilities of the State, or grantee, and if they apply through the State, they will assume the responsibilities of the local government, or subgrantee.

§ 201.4 Standard State Mitigation Plans.

(a) *Plan requirement.* By November 1, 2003, States must have an approved Standard State Mitigation plan meeting the requirements of this section, in order to receive assistance under the Stafford Act, although assistance authorized under disasters declared prior to November 1, 2003 will continue to be made available. In any case, emergency assistance provided under 42 U.S.C. 5170a, 5170b, 5173, 5174, 5177, 5179, 5180, 5182, 5183, 5184, 5192 will not be affected. The mitigation plan is the demonstration of the State's commitment to reduce risks from natural hazards and serves as a guide for State decision makers as they commit resources to reducing the effects of natural hazards. States may choose to include the requirements of the HMGP Administrative Plan in their mitigation plan.

(b) *Planning process.* An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

(c) *Plan content.* To be effective the plan must include the following elements:

(1) Description of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

(2) *Risk assessments* that provide the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments. The risk assessment shall include the following:

(i) An overview of the type and location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate;

(ii) An overview and analysis of the State's vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments as well as the State risk assessment. The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned critical or operated facilities located in the

identified hazard areas shall also be addressed;

(iii) An overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State shall estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

(3) A *Mitigation Strategy* that provides the State's blueprint for reducing the losses identified in the risk assessment. This section shall include:

(i) A description of State goals to guide the selection of activities to mitigate and reduce potential losses.

(ii) A discussion of the State's pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; a discussion of State funding capabilities for hazard mitigation projects; and a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

(iii) An identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.

(iv) Identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

(4) A section on the *Coordination of Local Mitigation Planning* that includes the following:

(i) A description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

(ii) A description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

(iii) Criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.

(5) A *Plan Maintenance Process* that includes:

(i) An established method and schedule for monitoring, evaluating, and updating the plan.

(ii) A system for monitoring implementation of mitigation measures and project closeouts.

(iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.

(6) A *Plan Adoption Process.* The plan must be formally adopted by the State prior to submittal to us for final review and approval.

(7) *Assurances.* The plan must include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). The State will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

(d) *Review and updates.* Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible. We also encourage a State to review its plan in the post-disaster timeframe to reflect changing priorities, but it is not required.

§ 201.5 Enhanced State Mitigation Plans.

(a) A State with a FEMA approved Enhanced State Mitigation Plan at the time of a disaster declaration is eligible to receive increased funds under the HMGP, based on twenty percent of the total estimated eligible Stafford Act disaster assistance. The Enhanced State Mitigation Plan must demonstrate that a State has developed a comprehensive mitigation program, that the State effectively uses available mitigation funding, and that it is capable of managing the increased funding. In order for the State to be eligible for the 20 percent HMGP funding, FEMA must have approved the plan within three years prior to the disaster declaration.

(b) Enhanced State Mitigation Plans must include all elements of the Standard State Mitigation Plan identified in § 201.4, as well as document the following:

(1) Demonstration that the plan is integrated to the extent practicable with other State and/or regional planning initiatives (comprehensive, growth management, economic development, capital improvement, land development, and/or emergency management plans) and FEMA mitigation programs and initiatives that provide guidance to State and regional agencies.

(2) Documentation of the State's project implementation capability, identifying and demonstrating the ability to implement the plan, including:

(i) Established eligibility criteria for multi-hazard mitigation measures.

(ii) A system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular A–94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, and to rank the measures according to the State's eligibility criteria.

(iii) Demonstration that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following:

(A) Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;

(B) Preparing and submitting accurate environmental reviews and benefit-cost analyses;

(C) Submitting complete and accurate quarterly progress and financial reports on time; and

(D) Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.

(iv) A system and strategy by which the State will conduct an assessment of the completed mitigation actions and include a record of the effectiveness (actual cost avoidance) of each mitigation action.

(3) Demonstration that the State effectively uses existing mitigation programs to achieve its mitigation goals.

(4) Demonstration that the State is committed to a comprehensive state mitigation program, which might include any of the following:

(i) A commitment to support local mitigation planning by providing workshops and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and Floodplain Management certifications.

(ii) A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private

partnerships, and/or other executive actions that promote hazard mitigation.

(iii) The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.

(iv) To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.

(v) A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations.

(vi) A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.

(c) *Review and updates.* (1) A State must review and revise its plan to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities, and resubmit it for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(2) In order for a State to be eligible for the 20 percent HMGP funding, the Enhanced State Mitigation plan must be approved by FEMA within the three years prior to the current major disaster declaration.

§ 201.6 Local Mitigation Plans.

The local mitigation plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards. Local plans will also serve as the basis for the State to provide technical assistance and to prioritize project funding.

(a) *Plan requirement.* (1) For disasters declared after November 1, 2003, a local government must have a mitigation plan approved pursuant to this section in order to receive HMGP project grants. Until November 1, 2003, local mitigation plans may be developed concurrent with the implementation of the project grant.

(2) Regional Directors may grant an exception to the plan requirement in extraordinary circumstances, such as in a small and impoverished community, when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after notice of grant's termination will not be reimbursed by FEMA.

(3) Multi-jurisdictional plans (e.g. watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.

(b) *Planning process.* An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;

(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

(c) *Plan content.* The plan shall include the following:

(1) Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

(2) A *risk assessment* that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment shall include:

(i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

(ii) A description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. The plan should describe vulnerability in terms of:

(A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;

(B) An estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate;

(C) Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

(iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

(3) *A mitigation strategy* that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

(i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

(ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

(iii) An action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

(iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

(4) A *plan maintenance process* that includes:

(i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

(ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

(iii) Discussion on how the community will continue public participation in the plan maintenance process.

(5) *Documentation* that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

(d) *Plan review.* (1) Plans must be submitted to the State Hazard Mitigation Officer for initial review and coordination. The State will then send the plan to the appropriate FEMA Regional Office for formal review and approval.

(2) The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(3) Plans must be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for HMGP project grant funding.

(4) Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c) will be delegated approval authority for local mitigation plans, and the review will be based on the criteria in this part. Managing States will review the plans within 45 days of receipt of the plans, whenever possible, and provide a copy of the approved plans to the Regional Office.

PART 206—FEDERAL DISASTER ASSISTANCE FOR DISASTERS DECLARED ON OR AFTER NOVEMBER 23, 1988

2. The authority citation for part 206 is revised to read as follows:

Authority: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 54 FR 12571, 3 CFR, 1989 Comp., p. 214.

2a. Revise Part 206, Subpart M to read as follows:

Subpart M—Minimum Standards

Sec.
206.400 General.
206.401 Local standards.
206.402 Compliance.

§ 206.400 General.

(a) As a condition of the receipt of any disaster assistance under the Stafford Act, the applicant shall carry out any repair or construction to be financed with the disaster assistance in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications and standards.

(b) Applicable codes, specifications, and standards shall include any disaster resistant building code that meets the minimum requirements of the National Flood Insurance Program (NFIP) as well as being substantially equivalent to the recommended provisions of the National Earthquake Hazards Reduction Program (NEHRP). In addition, the applicant shall comply with any requirements necessary in regards to Executive Order 11988, Floodplain Management, Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, and any other applicable Executive orders.

(c) In situations where there are no locally applicable standards of safety, decency and sanitation, or where there are no applicable local codes, specifications and standards governing repair or construction activities, or where the Regional Director determines that otherwise applicable codes, specifications, and standards are inadequate, then the Regional Director may, after consultation with appropriate State and local officials, require the use of nationally applicable codes, specifications, and standards, as well as safe land use and construction practices in the course of repair or construction activities.

(d) The mitigation planning process that is mandated by section 322 of the Stafford Act and 44 CFR part 201 can assist State and local governments in determining where codes, specifications, and standards are inadequate, and may need to be upgraded.

§ 206.401 Local standards.

The cost of repairing or constructing a facility in conformity with minimum codes, specifications and standards may be eligible for reimbursement under section 406 of the Stafford Act, as long as such codes, specifications and standards meet the criteria that are listed at 44 CFR 206.226(b).

§ 206.402 Compliance.

A recipient of disaster assistance under the Stafford Act must document for the Regional Director its compliance with this subpart following the completion of any repair or construction activities.

Subpart N—Hazard Mitigation Grant Program

3. Revise § 206.431 to read as follows:

§ 206.431 Definitions.

Activity means any mitigation measure, project, or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters.

Applicant means a State agency, local government, Indian tribal government, or eligible private nonprofit organization, submitting an application to the grantee for assistance under the HMGP.

Enhanced State Mitigation Plan is the hazard mitigation plan approved under 44 CFR part 201 as a condition of receiving increased funding under the HMGP.

Grant application means the request to FEMA for HMGP funding, as outlined in § 206.436, by a State or tribal government that will act as grantee.

Grant award means total of Federal and non-Federal contributions to complete the approved scope of work.

Grantee means the government to which a grant is awarded and which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. Generally, the State is the grantee. However, an Indian tribal government may choose to be a grantee, or it may act as a subgrantee under the State. An Indian tribal government acting as a grantee will assume the responsibilities of a ''state'', under this subpart, for the purposes of administering the grant.

Indian tribal government means any Federally recognized governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Local Mitigation Plan is the hazard mitigation plan required of a local or Indian tribal government acting as a subgrantee as a condition of receiving a project subgrant under the HMGP as outlined in 44 CFR 201.6.

Standard State Mitigation Plan is the hazard mitigation plan approved under 44 CFR part 201, as a condition of receiving Stafford Act assistance as outlined in § 201.4.

State Administrative Plan for the Hazard Mitigation Grant Program means the plan developed by the State to describe the procedures for administration of the HMGP.

Subgrant means an award of financial assistance under a grant by a grantee to an eligible subgrantee.

Subgrant application means the request to the grantee for HMGP funding by the eligible subgrantee, as outlined in § 206.436.

Subgrantee means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private non-profit organizations, or Indian tribal government as outlined in § 206.433.

Indian tribal governments acting as a subgrantee are accountable to the State grantee.

4. Revise § 206.432(b) to read as follows:

§ 206.432 Federal grant assistance.

* * * * *

(b) *Amounts of assistance.* The total of Federal assistance under this subpart shall not exceed either 15 or 20 percent of the total estimated Federal assistance (excluding administrative costs) provided for a major disaster under 42 U.S.C. 5170b, 5172, 5173, 5174, 5177, 5178, 5183, and 5201 as follows:

(1) *Fifteen (15) percent.* Effective November 1, 2003, a State with an approved Standard State Mitigation Plan, which meets the requirements outlined in 44 CFR 201.4, shall be eligible for assistance under the HMGP not to exceed 15 percent of the total estimated Federal assistance described in this paragraph. Until that date, existing, approved State Mitigation Plans will be accepted.

(2) *Twenty (20) percent.* A State with an approved Enhanced State Mitigation Plan, in effect prior to the disaster declaration, which meets the requirements outlined in 44 CFR 201.5 shall be eligible for assistance under the HMGP not to exceed 20 percent of the total estimated Federal assistance described in this paragraph.

(3) The estimates of Federal assistance under this paragraph (b) shall be based on the Regional Director's estimate of all eligible costs, actual grants, and appropriate mission assignments.

* * * * *

5. Section 206.434 is amended by redesignating paragraphs (b) through (g) as paragraphs (c) through (h), respectively; adding a new paragraph (b); revising redesignated paragraphs (c) introductory text and (c)(1); and revising redesignated paragraph (d) to read as follows:

§ 206.434 Eligibility.

* * * * *

(b) *Plan requirement.* (1) For all disasters declared on or after November 1, 2003, local and tribal government applicants for subgrants, must have an approved local mitigation plan in accordance with 44 CFR 201.6 prior to receipt of HMGP subgrant funding. Until November 1, 2003, local mitigation plans may be developed concurrent with the implementation of subgrants.

(2) Regional Directors may grant an exception to this requirement in extraordinary circumstances, such as in a small and impoverished community when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after notice of grant's termination will not be reimbursed by FEMA.

(c) *Minimum project criteria.* To be eligible for the Hazard Mitigation Grant Program, a project must:

(1) Be in conformance with the State Mitigation Plan and Local Mitigation Plan approved under 44 CFR part 201;

* * * * *

(d) *Eligible activities.* (1) *Planning.* Up to 7% of the State's HMGP grant may be used to develop State, tribal and/or local mitigation plans to meet the planning criteria outlined in 44 CFR part 201.

(2) *Types of projects.* Projects may be of any nature that will result in protection to public or private property. Eligible projects include, but are not limited to:

(i) Structural hazard control or protection projects;

(ii) Construction activities that will result in protection from hazards;

(iii) Retrofitting of facilities;

(iv) Property acquisition or relocation, as defined in paragraph (e) of this section;

(v) Development of State or local mitigation standards;

(vi) Development of comprehensive mitigation programs with implementation as an essential component;

(vii) Development or improvement of warning systems.

* * * * *

6. Revise § 206.435(a) to read as follows:

§ 206.435 Project identificaiton and selection criteria.

(a) *Identification.* It is the State's responsibility to identify and select eligible hazard mitigation projects. All funded projects must be consistent with the State Mitigation Plan. Hazard Mitigation projects shall be identified and prioritized through the State, Indian tribal, and local planning process.

* * * * *

7. Revise § 206.436 to read as follows:

§ 206.436 Application procedures.

(a) *General.* This section describes the procedures to be used by the grantee in submitting an application for HMGP funding. Under the HMGP, the State or Indian tribal government is the grantee and is responsible for processing subgrants to applicants in accordance with 44 CFR part 13 and this part 206. Subgrantees are accountable to the grantee.

(b) *Governor's Authorized Representative.* The Governor's Authorized Representative serves as the grant administrator for all funds provided under the Hazard Mitigation Grant Program. The Governor's Authorized Representative's responsibilities as they pertain to procedures outlined in this section include providing technical advice and assistance to eligible subgrantees, and ensuring that all potential applicants are aware of assistance available and submission of those documents necessary for grant award.

(c) *Hazard mitigation application.* Upon identification of mitigation measures, the State (Governor's Authorized Representative) will submit its Hazard Mitigation Grant Program application to the FEMA Regional Director. The application will identify one or more mitigation measures for which funding is requested. The application must include a Standard Form (SF) 424, Application for Federal Assistance, SF 424D, Assurances for Construction Programs, if appropriate, and an narrative statement. The narrative statement will contain any pertinent project management information not included in the State's administrative plan for Hazard Mitigation. The narrative statement will also serve to identify the specific mitigation measures for which funding is requested. Information required for each mitigation measure shall include the following:

(1) Name of the subgrantee, if any;

(2) State or local contact for the measure;

(3) Location of the project;

(4) Description of the measure;

(5) Cost estimate for the measure;

(6) Analysis of the measure's cost-effectiveness and substantial risk reduction, consistent with § 206.434(c);

(7) Work schedule;

(8) Justification for selection;

(9) Alternatives considered;

(10) Environmental information consistent with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Considerations.

(d) *Application submission time limit.* The State's application may be amended as the State identifies and selects local project applications to be funded. The State must submit all local HMGP applications and funding requests for the purpose of identifying new projects to the Regional Director within 12 months of the date of disaster declaration.

(e) *Extensions.* The State may request the Regional Director to extend the application time limit by 30 to 90 day

increments, not to exceed a total of 180 days. The grantee must include a justification in its request.

(f) *FEMA approval.* The application and supplement(s) will be submitted to the FEMA Regional Director for approval. FEMA has final approval authority for funding of all projects.

(g) *Indian tribal grantees.* Indian tribal governments may submit a SF 424 directly to the Regional Director.

Subpart H—Public Assistance Eligibility

* * * * *

8. Revise § 206.220 to read as follows:

§ 206.220 General.

This subpart provides policies and procedures for determinations of eligibility of applicants for public assistance, eligibility of work, and eligibility of costs for assistance under sections 402, 403, 406, 407, 418, 419, 421(d), 502, and 503 of the Stafford Act. Assistance under this subpart must also conform to requirements of 44 CFR part 201, Mitigation Planning, and 44 CFR part 206, subparts G—Public Assistance Project Administration, I—Public Assistance Insurance Requirements, J—Coastal Barrier Resources Act, and M—Minimum Standards. Regulations under 44 CFR part 9—Floodplain Management and 44 CFR part 10—Environmental Considerations, also apply to this assistance.

9. Section 206.226 is amended by redesignating paragraphs

(b) through (j) as paragraphs (c) through (k), respectively; adding a new paragraph (b); and revising redesignated paragraph (g)(5) to read as follows:

§ 206.226 Restoration of damaged facilities.

* * * * *

(b) *Mitigation planning.* In order to receive assistance under this section, as of November 1, 2003, the State must have in place a FEMA approved State Mitigation Plan in accordance with 44 CFR part 201.

* * * * *

(g) * * *

(5) If relocation of a facility is not feasible or cost effective, the Regional Director shall disapprove Federal funding for the original location when he/she determines in accordance with 44 CFR parts 9, 10, 201, or subpart M of this part 206, that restoration in the original location is not allowed. In such cases, an alternative project may be applied for.

* * * * *

Dated: February 19, 2002.

Michael D. Brown,

General Counsel.

[FR Doc. 02–4321 Filed 2–25–02; 8:45 am]

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ANNEX C. HAZARD ANALYSIS

The City of Lakewood (City) hazard identification and ranking was obtained primarily from Hazard Identification exercise. The Hazard Identification exercise was conducted as a participatory Hazard Mitigation Planning Committee (HMPC) exercise to identify the potential hazards within the City. The exercise was facilitated utilizing an automated interactive software spreadsheet program that asked specific questions on potential hazards and then rates them accordingly. These questions guided the team in the correct facilitation and application of the program. The following spreadsheet summarizes the Hazard Identification exercise risk ranking results, including the descriptions of each hazard factor, and provides the specific descriptor choices for each risk factor and description. Additionally, a risk ranking matrix is provided to designate the overall ranking score and categorization of each hazard.

Hazard Identification and Risk Ranking



Each hazard profile included a profile ranking of the hazard (ranging from low risk to high risk). The HMPC determined this initial profile ranking based on all the hazard identification and profile research summarized and group discussion and evaluation of all of the data, including numerical rankings (1-5) of the following criteria:

- **Consequence/Severity** – How wide spread is the impact area?
- **Secondary Effects** – Could the event trigger another event and separate response?
- **Probability/Frequency** – Historical view of how often this type of event occurs locally and projected recurrence intervals.
- **Warning/Onset** – Advance warning of the event, or none.
- **Duration** – Length of elapsed time where response resources are active.
- **Recovery** – Length of time until lives and property return to normal.

Table C.1 Risk Factors for Hazard Identification

RISK FACTOR	DESCRIPTION	DESCRIPTORS	VALUE
PROBABILITY/ FREQUENCY	Prediction of how often a hazard will occur in the future.	Rare event - occurs less than once every 50 years	1
		Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
		Regular event - occurs between once a year and once every 7 years	3
		Frequent event - occurs more than once a year	4
CONSEQUENCE/SEVERITY	Physical Damage - structures and lifelines Economic Impact – loss of function for power, water, sanitation, roads, etc., as applicable	No damage	1
		Minor/slight damage to buildings and structures, no loss of lifelines	2
		Moderate building damage, minor loss of lifelines (less than 12 hours)	3
		Moderate building damage, lifeline loss (less than 24 hours)	4
		Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
VULNERABILITY	Impact Area - area impacted by a hazard event, Secondary Impacts - Capability of triggering additional hazards Onset - Period of time between initial recognition of an approaching hazard and when the hazard begins to impact the community	No physical damage, no secondary impacts	1
		Localized damage area	2
		Localized damage area, minor secondary impacts, delayed hazard onset	3
		Moderate damage area, moderate secondary impacts, moderate warning time	4
		Widespread damage area, significant secondary impacts, no warning time	5

Each profile includes a ranking of the hazard. The hazard rankings were determined by assigning each hazard the appropriate risk factors as described above. The risk factors were then used with a hazard ranking matrix to determine the final hazard score. The following table provides the matrix used for determining each hazard's score.

Table C.2 Risk Rank Matrix

PROBABILITY/ FREQUENCY DESCRIPTION	RISK RANKING MATRIX
Rare Event: Occurs less than once every 50 years	Probability/Frequency Value = 1; Vulnerability (rows) × Consequence/Severity (columns)
Infrequent Event: Occurs between once every 8 years and once every 50 years (inclusive)	Probability/Frequency Value = 2; Vulnerability (rows) × Consequence/Severity (columns)
Regular Event: Occurs between once a year and once every 7 years	Probability/Frequency Value = 3; Vulnerability (rows) × **Consequence/Severity** (columns)

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	2	4	6	8	10
2	4	8	12	16	20
3	6	12	18	24	30
4	8	16	24	32	40
5	10	20	30	40	50

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	3	6	9	12	15
2	6	12	18	24	30
3	9	18	27	36	45
4	12	24	36	48	60
5	15	30	45	60	75

The hazard scores from the Hazard Ranking Matrix were compared to the hazard rank criteria to finally categorize each hazard with a hazard ranking. The table below provides the value determinations for each hazard ranking.

Table C.3 Risk Rank Categorization

High Hazard	**50-100**
Moderately High Hazard	**25-49**
Moderate Hazard	**15-24**
Moderately Low Hazard	**5-14**
Low Hazard	**1-4**

The hazard ranking worksheets are provided in the following pages.

Table C.4 Hazard Identification and Risk Ranking

	Rank Factors	Hazard Factor Description	Rank
EARTHQUAKE	**Probability**	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Consequence	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Vulnerability	Widespread damage area, significant secondary impacts, no warning time	5
	Risk	High	**50**
	Comments	Includes landslide and subsidence as potential secondary impacts	
	Rank Factors	**Hazard Factor Description**	**Rank**
AIR QUALITY	**Probability**	Frequent event - occurs more than once a year	4
	Vulnerability	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability	2
	Consequence	Widespread damage area, significant secondary impacts, no warning time	5
	Risk	Moderately High	**40**
	Comments	The team noted that this is a regular event. This terms captures both smoke from wildfires and volcanic eruptions. The team noted that per the census information, the children/elderly make up about 20% of the population and are likely to be impacted to a greater extent.	

	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
DISEASE OUTBREAK	**Probability**	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Consequence	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Vulnerability	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderately High	**30**
	Comments	The team discussed recent Covid-19 Pandemic as well as West- Nile Virus.	

	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
URBAN FIRE	**Probability**	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Consequence	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Vulnerability	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderately High	**30**
	Comments	The team noted that the City is primarily built out with not much open space. Additionally, the team noted that fire from Paramount Petroleum would cause significant damage. The facility is located on the other side of the border and therefore not captured in City maps.	

	Rank Factors	Hazard Factor Description	Rank
WINDSTORM	**Probability**	Regular event - occurs between once a year and once every 7 years	3
	Consequence	Moderate building damage, minor loss of lifelines (less than 12 hours), lost time injury but no disability	3
	Vulnerability	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderately High	**27**
	Comments	The team mentioned a recent mini tornado in Montebello as well as one in Lakewood in 2023/2024 New Years.	

	Rank Factors	Hazard Factor Description	Rank
EXTREME HEAT	**Probability**	Regular event - occurs between once a year and once every 7 years	3
	Vulnerability	Moderate building damage, minor loss of lifelines (less than 12 hours), lost time injury but no disability	3
	Consequence	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderately High	**27**
	Comments	Previously Extreme Temperatures, but renamed to Extreme Heat as city is not prone to freezing temperatures. The team mentioned the potential for a higher demand from fire and medical assistance during High Heat Events. The hazard profile will include brown outs and Public Safety Power Shutoffs. Additionally, the team noted that low income areas may be impacted if they do not have AC units.	

DAM FAILURE	**RANK FACTORS**	**HAZARD FACTOR DESCRIPTION**	**RANK**
	Probability	Rare event - occurs less than once every 50 years	1
	Consequence	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Vulnerability	Widespread damage area, significant secondary impacts, no warning time	5
	Risk	Moderately High	**25**
	Comments	The team noted that Whittier Narrows Dam is the main hazard and there is concern that the spillways are not sufficient to handle overflow. Past incident: 1960's dam failure near Culver City was discussed.	
ADVERSARIAL EVENTS	**RANK FACTORS**	**HAZARD FACTOR DESCRIPTION**	**RANK**
	Probability	Rare event - occurs less than once every 50 years	1
	Vulnerability	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Consequence	Widespread damage area, significant secondary impacts, no warning time	5
	Risk	Moderately High	**25**
	Comments	The team identified the mall as a potential target because of the high traffic and potential impact to the community. Additionally, the team discussed civil unrest following George Floyd protests (incident in May/June of 2020)	

	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
TRANSPORTATION INCIDENT	**Probability**	Rare event - occurs less than once every 50 years	2
	Vulnerability	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability	4
	Consequence	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderately Low	**24**
	Comments	The team noted that the 605/91/405/710 are corridors for accidents. Additionally, the team discussed Oil and Gas pipelines that run through the City/ Fuel Storage on the west border with Long Beach/Alameda Generating Station (Alameda Stream) pipelines. The team suggested looking at aircraft incidents as the Long Beach Airport is on the border. **Note:** This hazard was previously ranked with a frequency of 1 (rare event that occurs less than once every 50 years). However, it was revised to a frequency of 2 to reflect updated considerations, including the 40th anniversary of the 1986 Cerritos Air Disaster and the 2025 aircraft incident in San Diego. These events suggest that the likelihood of similar incidents may be higher than originally assessed. This revision was made in response to comments and input from City Council members.	

	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
POWER LOSS	**Probability**	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Consequence	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability	4
	Vulnerability	Localized damage area	2
	Risk	Moderate	**16**
	Comments	The team mentioned that solar flares are capable of knocking out the power grid. Many AC units running simultaneously can potentially blow the transformer. Additionally, large transmission lines run through the City which may put the City at increased risk for fire. The team mentioned that there was one PSPS due to high winds in the past couple of years.	

DROUGHT	**RANK FACTORS**	**HAZARD FACTOR DESCRIPTION**	**RANK**
	Probability	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Vulnerability	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability	2
	Consequence	Moderate damage area, moderate secondary impacts, moderate warning time	4
	Risk	Moderate	**16**
	Comments	The team noted that the City is on hydroelectric system which has financial impact on the City when water supplies are low and biggest impact from drought was financial. Additionally, all landscape watering cut off during 2007-2012 drought.	

HAZARDOUS MATERIALS RELEASE	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
	Probability	Rare event - occurs less than once every 50 years	1
	Consequence	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Vulnerability	Localized damage area, minor secondary impacts, delayed hazard onset	3
	Risk	Moderate	**15**
	Comments	The team mentioned pipelines running through the City as the main hazard. One of the rail lines transports chlorine. New gas line on Del Amo.	

	RANK FACTORS	HAZARD FACTOR DESCRIPTION	RANK
FLOOD	**Probability**	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	Consequence	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability	2
	Vulnerability	Localized damage area	2
	Risk	Moderately Low	**8**
	Comments	This hazard includes intense precipitation. It is meant to capture the natural hazard of heavy rainfall. The team noted that although there have been heavy rain events, there has been no damage to the City. Will include atmospheric rivers in this hazard profile.	

ANNEX D. PUBLIC PARTICIPATION AND PLANNING PROCESS

Public participation is a crucial component of the Hazard Mitigation Planning process, ensuring that the voices of all community members, including those from vulnerable populations, are incorporated into the development of effective mitigation strategies. For the City of Lakewood (City), the planning team prioritized inclusive outreach through a variety of engagement methods.

To ensure a well-rounded outreach effort, the City utilized a combination of digital, in-person, and formal presentation methods to engage residents throughout the hazard mitigation planning process. Outreach activities were intentionally designed to meet people where they are—both physically and in terms of how they consume information. This approach helped the planning team connect with a broader cross-section of the community, including families, older adults, working professionals, and individuals who may be more difficult to reach through traditional communications.

A public survey was launched and hosted on the City's website, offering a convenient and accessible way for residents to share their perspectives on local hazards and preparedness. The survey was promoted across City communication platforms to maximize visibility and encourage participation.

In-person outreach was conducted at the City's farmers market and at the Palms Park Community Center, two highly frequented locations that attract a wide demographic mix. At these locations, planning team members operated outreach booths to distribute materials, explain the hazard mitigation planning process, and collect feedback from passersby. Recognizing the importance of reaching vulnerable populations, the team also conducted direct outreach at the Weingart Senior Center, a popular facility for older adults in the community. This ensured that voices from a population that may face increased risk during emergencies were heard and included in the planning process. Additionally, a public workshop was hosted to provide a more structured opportunity for community members to learn about hazard risks, ask questions, and provide input. Approximately 15 individuals attended the workshop, which included a presentation and interactive discussion. To further promote transparency and



participation, the planning team presented updates to the Planning and Environment Commission and made the full draft plan publicly available on the City's website.

These efforts culminated in a formal presentation of the Draft Hazard Mitigation Plan to the City Council, creating additional visibility for the project and allowing for final comments and questions from both the public and City leaders. By using multiple channels and tailoring outreach strategies to different audiences, the City was able to generate broad engagement in the planning process.

Survey Content and Responses

This section includes the survey questions followed by the responses received. Over a period of several weeks, the City received 125 responses from the public through the online survey. Those responses were tabulated and listed below.

1. **In the past five years, have you or someone in your household experienced a disaster such as an Earthquake, Urban Fire, Windstorm, Civil Unrest, or Hazardous Materials Release?**

Answer Choices	*Responses*	*Number Count*
Yes	36%	45
No	64%	80
Total	**100%**	**125**

2. **If yes, which of these disasters have you or someone in your household experienced? (Click all that apply)**

Answer Choices	*Responses*	*Number Count*
Earthquake	59.18%	29
Air Quality Issues	61.22%	30
Disease Outbreak	55.10%	27
Urban Fire	8.16%	4

Answer Choices	*Responses*	*Number Count*
Windstorm	26.53%	13
Extreme Heat	40.82%	20
Dam Failure	0%	0
Adversarial Events	8.16%	4
Power Loss	38.78%	19
Drought	30.61%	15
Hazardous Materials Release	0%	0
Transportation Incident	2.04%	1
Flood	0%	0

3. How concerned are you about the following disasters affecting the City of Lakewood?

	Completely Unconcerned	*Moderately Unconcerned*	*Concerned–*	*Moderately Concerned*	*Extremely Concerned*	*Total*
Earthquake	1.57% 2	7.87% 10	32.28% 41	37.80% 48	20.47% 26	127

	Completely Unconcerned	Moderately Unconcerned	Concerned–	Moderately Concerned	Extremely Concerned	Total
	3.23%	17.74%	29.84%	28.23%	20.97%	
Air Quality Issues	4	22	37	35	26	124
	8.73%	26.19%	36.51%	16.67%	11.90%	
Disease Outbreak	11	33	46	21	15	126
	10.40%	30.40%	29.60%	19.20%	10.40%	
Urban Fire	13	38	37	24	13	125
	8.80%	37.60%	26.40%	22.40%	4.80%	
Windstorm	11	47	33	28	6	125
	9.60%	26.40%	23.20%	26.40%	14.40%	
Extreme Temperatures	12	33	29	33	18	125
	45.24%	28.57%	15.87%	4.76%	5.56%	
Dam Failure	57	36	20	6	7	126
	12.20%	25.20%	38.21%	15.45%	8.94%	
Adversarial Events	15	31	47	19	11	123
	2.36%	20.47%	29.13%	32.28%	15.75%	
Power Loss	3	26	37	41	20	127
	3.97%	19.84%	30.95%	22.22%	23.02%	

	Completely Unconcerned	*Moderately Unconcerned*	*Concerned–*	*Moderately Concerned*	*Extremely Concerned*	*Total*
Drought	5	25	39	28	29	126
Hazardous Materials Release	12.10% 15	24.19% 30	35.48% 44	15.32% 19	12.90% 16	124
Mass Transportation Incident	20.33% 25	43.09% 53	27.64% 34	5.69% 7	3.25% 4	123
Flood	20.63% 26	33.33% 42	25.40% 32	12.70% 16	7.94% 10	126

4. Have you ever received or requested information on ways to make your family and/or home safer from local hazards?

Answer Choices	*Responses*	*Number Count*
Yes	46.09%	59
No	53.91%	69
Total	**100%**	**128**

5. How recently did you receive this information?

Answer Choices	*Responses*	*Number Count*
None of the Above	35.78%	39
Within the Last 6 months	22.02%	24
Between 6 and 12 Months Ago	5.50%	6
Between 1 and 2 Years Ago	9.17%	10
Between 2 and 5 Years Ago	6.42%	7
5 Years Ago or More	7.34%	8
I Don't Remember	13.76%	15
Total	**100%**	**128**

6. From whom did you last receive this information?

Answer Choices	*Responses*	*Number Count*
News Media	22.58%	21
Government Agency	26.88%	25

Answer Choices	*Responses*	*Number Count*
Insurance Agent or Company	9.68%	9
Utility Company	20.43%	19
American Red Cross	9.68%	9
Other Non-Profit Organization	6.45%	6
Web Search	12.90%	12
Unsure	29.03%	27
Other (Responses include: Public Libraries, Lakewood CERT, Lakewood Survive for 7 Workshop, Emergency Fair, City of Lakewood Facebook, City Newsletters, Marathon Petroleum, Local Realtors)	23.66%	22

7. What are the best ways for you to receive information about making your home and family safer from local disasters? (Please check all that apply)

Answer Choices	*Responses*	*Number Count*
Newspaper Stories	17.97%	23
Newspaper Ads	1.56%	2

Answer Choices	*Responses*	*Number Count*
Television News	27.34%	35
Television Ads	7.81%	10
Radio News	14.06%	18
Radio Ads	3.91%	5
Schools	9.38%	12
Outdoor Advertisements (Billboards, etc.)	10.16%	13
Books	0.78%	1
Mail	64.84%	83
Fire Department/Resue	17.19%	22
Internet Search	41.41%	53
Fact Sheet or Brochure available at City Facility or Event	45.31%	58
Chamber of Commerce	7.81%	10
Public Workshop/Meeting	26.69%	38

Answer Choices	*Responses*	*Number Count*
Magazine	3.91%	5
Social Media	46.09%	59
Other (Responses include Email, Online Newsletter, E-Magazine)	10.16%	13

8. What steps, if any, have you or someone in your household taken to prepare for a disaster? (Check all that apply)

Answer Choices	*Responses*	*Number Count*
Food	67.48%	83
Water	77.24%	95
Flashlight	92.68%	114
Batteries	83.74%	103
Battery Powered Radio	43.09%	53
Medical Supplies (First Aid Kit)	74.80%	92
Fire Extinguisher	67.48%	83
Mosit Towelettes, Garbage Bags, and Plastic Ties for Personal Sanitation	60.16%	74

Answer Choices	*Responses*	*Number Count*
Dust Mask or Cotton T-Shirt (For Air Filtering)	55.28%	68
Plastic Sheeting and Duct Tape (To Shelter in Place)	18.70%	23
Wrench or Pliers to Shut Off Utilities	60.16%	74
Clothing	46.34%	57
Sleeping bag or Warm Blanket for Each Person	48.78%	60
Prescription Medications	50.41%	62
Important Family Documents (Copies of Insurance Policies, ID, and Bank Account Records)	48.78%	60
Other (Responses include: Money, Firearm, Portable Toilet, Pet Supplies Kit, Handheld Water Purifier, Camping Equipment, Maps, Phone Chargers)	6.50%	8

9. Our household has: (Check all that apply)

Answer Choices	*Responses*	*Number Count*
Smoke Detection in Each Room of the House	84.75%	100
Received First Aid/ CPR Training	48.31%	57

Made a Fire Escape Plan	26.27%	31
Developed a Reconnection Plan (Where to Go and Who to Call After a Disaster)	21.19%	25
Discussed Utility Shutoffs	29.66%	35
	7.63%	9

10. How long have you lived in the City of Lakewood?

Answer Choices	***Number Count***
Under 1 Year	1
1 to 2 Years	3
3 to 4 Years	10
5 to 10 Years	13
11 to 20 Years	24
21 to 30 Years	26
31 to 40 Years	20
41 to 50 Years	7
More than 50 Years	20

Inferences

The results of the public survey served three main purposes. It created a profile of the group of responders, provided insight regarding the methods the public would like to receive safety information, and, lastly, it provided the Hazard Mitigation Planning Committee (HMPC) with the public's opinion of the hazard ranking. Conclusions drawn from the collected responses for each of these areas are discussed in more detail in the following subsections

Participant Profile

The public survey responses collected during the Plan update process offer important insights into the community's awareness of local hazards, preparedness behaviors, and communication preferences. A significant portion of respondents reported having lived in City for over a decade, with many residents indicating more than 20, 30, or even 50 years in the city. This suggests a community with deep roots and long-standing familiarity with local conditions. These long-term residents likely bring historical knowledge of past hazard events and a personal investment in the city's future safety and resilience.

A notable number of respondents indicated that they, or someone in their household, had experienced a disaster in the last five years. While these experiences varied, many respondents mentioned exposure to earthquakes, air quality issues, and disease outbreaks. These experiences may have shaped residents' views on hazard severity, reinforcing the importance of including both high-impact and frequently occurring events in the LHMP. While some hazards like dam failure or flooding were less commonly experienced or cited as concerns, the City considered balancing the potential need for increased public education with the likelihood for a dam failure or flood incident.

The community's concern about hazards also reflects recent events and environmental changes. Earthquakes remain on top of the mind for many, likely due to the region's history and the ongoing possibility of a major seismic event. Concerns about air quality and disease outbreaks are consistent with recent wildfire seasons and the COVID-19 pandemic, both of which had widespread, tangible impacts. Other concerns, such as power loss and drought, indicate an awareness of how infrastructure and climate conditions can disrupt daily life. On the other hand, the relatively low concern for transportation-related incidents or dam failure may suggest that since these hazards don't generally impact the public directly, they may be perceived as less hazardous to the community.

In terms of personal preparedness, most households reported having essential supplies like flashlights, water, food, and medical kits. This indicates a general awareness of the need to be self-sufficient during an emergency. However, fewer respondents had taken planning steps such as creating family communication strategies or fire escape plans. This points to opportunities for the City to expand training. Residents may be ready for short-term disruptions, but not necessarily for the more complex realities of extended disasters. The fact that fewer households had engaged in CPR or first aid training also suggests a potential vulnerability in immediate response capacity within the community.

Overall, the survey results illustrate a community that is engaged and aware, with a strong foundation of preparedness but also areas where further education and outreach could increase resilience. This feedback helped shape how the City can communicate risk, prioritize mitigation strategies, and strengthen partnerships with the public in future hazard planning efforts.

Methods for Successful Outreach

Public education and outreach are essential components of hazard mitigation, as they help build community awareness, encourage preparedness behaviors, and reduce the impacts of future hazard events. Although the City has existing outreach efforts in place, the HMPC sought to better understand how residents prefer to receive emergency preparedness information. By gathering this feedback, the HMPC aimed to improve future outreach strategies by aligning them more closely with community preferences and behaviors.

As reported in the survey, less than half of respondents stated that they had recently received emergency preparedness information. However, a significantly larger number of residents indicated that they had taken at least some steps to prepare for an emergency, such as keeping flashlights, food, water, or medical supplies in their homes. This discrepancy suggests that many residents are proactive about preparedness even when they are not familiar with the City's information outlets. This reveals that the participating group is generally aware of the need for personal readiness, even if information is not widely or frequently disseminated.



When asked about how they would like to receive emergency information, respondents indicated a preference for a combination of traditional and digital methods. Direct mail

remains highly trusted among residents, while online resources, including social media and internet searches, were also cited as common sources. The popularity of brochures and flyers distributed at public events or City facilities indicates a continued appreciation for printed materials that are locally available. The HMPC acknowledged that while digital tools offer quick and broad reach, tangible distribution methods continue to play an important role in reaching a diverse audience. These insights suggest that the most successful outreach campaigns will be those that utilize multiple channels and are accessible.

Based on feedback received during the event held at the Senior Center, the City recognizes the unique communication needs of residents aged 65 and older. Many attendees expressed a preference for receiving informational handouts prior to the meeting to allow time for review and thoughtful response. In response, the City is considering adopting a two-step outreach process for the senior population by holding two separate events approximately two weeks apart. The first would be to present information and the second to gather feedback. This approach is intended to provide seniors with ample time to absorb the materials and prepare their input, promoting more meaningful engagement and better inclusion of this important demographic in the planning process.

An interesting consideration was noted regarding the popularity of the City website as an outreach method. While this platform received strong support from survey participants, it is important to note that the survey itself was advertised on the City website. As such, this result may reflect a response bias, with participants already familiar with the website being more likely to take the survey and select that option. Still, the volume of participation in the survey suggests that the City website is an effective and relevant communication tool. As such, the HMPC recommends continued and increased use of the City website for sharing preparedness information, while also expanding outreach efforts through other widely trusted sources.

Other outreach channels that received strong support from residents included internet resources, traditional mail, and information directly from trusted authorities such as the Fire Department. The HMPC concluded that these methods should be prioritized in future outreach efforts. As the City moves forward with the implementation of mitigation strategies, it will continue to explore how best to integrate these preferences into public awareness campaigns.

Hazard Profiling

To fulfill FEMA's requirement to include the public in the planning process, the survey participants were asked to rank the hazards identified in the first HMPC meeting. The participants ranked the hazards based on their level of concern. The results were tallied and organized greatest to least to create a public hazard ranking. The list created by the HMPC and the public ranking were reviewed side by side as shown below.

HMPC Hazard Ranking	***Survey Participant Hazard Rankin***
Earthquake	Earthquake
Air Quality	Air Quality
Disease Outbreak	Drought
Urban Fire	Urban Fire
Windstorm	Windstorm
Extreme Heat	Extreme Heat
Dam Failure	Disease Outbreak
Adversarial Events	Power Loss
Power Loss	Adversarial Events
Drought	Hazardous Materials Release
Hazardous Materials Release	Transportation Incident
Transportation Incident	Flood
Flood	Dam Failure

The HMPC reviewed the hazard rankings provided by both the public survey participants and found that, overall, the two lists were very similar. Earthquake and air quality were top concerns for both groups, and while there were slight differences in the ordering of some hazards, no hazard was ranked significantly higher or lower by one group compared to the other. These small variations likely reflect differences in perspective. The HMPC came

to the conclusion that survey participants tended to prioritize hazards with direct, personal impacts, such as air quality and power loss, while the HMPC focused more on hazards with broader implications for citywide operations and infrastructure, such as dam failure and hazardous materials release. The HMPC acknowledged that public perceptions are often shaped by recent experiences or media coverage, whereas its own rankings were informed by technical data, past events, and thorough risk assessments. With these two items in mind- the strong alignment between rankings and the unique insight provided by the public- the HMPC agreed to use the public's input as a guide for identifying which mitigation actions would likely be well received by the community. The HMPC assumed that when the City implements mitigation measures addressing hazards that present the highest level of public concern, those actions will help reduce anxiety surrounding those risks and be viewed positively by residents. As such, the HMPC intends for the City to continue referencing this feedback as a way to meaningfully incorporate public opinion into future mitigation planning and implementation efforts.

Potential Hazard Mitigation Planning Committee Participants

The following list outlines potential HMPC participants that were invited to participate in the Plan update. Documentation of invitations to be included during the plan update process can be found at the end of this Annex.

1. City of Lakewood Public Works
2. City of Lakewood Public Safety
3. City of Lakewood Water Resources
4. City of Lakewood Admin. Services
5. City of Lakewood Planning Division
6. City of Lakewood Planning and Environment Commission
7. SoCal Edison
8. Golden State Water Company
9. Tenet Health
10. Macerich Commercial Real Estate
11. Care Solace Mental Health Care
12. Paramount Unified School District
13. ABC Unified School District
14. Bellflower Unified School District
15. Long Beach Unified School District
16. American Red Cross
17. YMCA
18. City of Bellflower
19. City of Paramount
20. City of Signal Hill
21. City of Los Alamitos
22. City of Cypress
23. City of Artesia
24. City of Cerritos
25. City of Long Beach

Planning Process

The following sections provide additional information and supporting documentation about the planning process implemented by the Hazard Mitigation Planning Committee to update the Hazard Mitigation Plan. For descriptions of the content of each Hazard Mitigation Planning Committee meeting, please refer to Chapter 1.

City of Lakewood's Local Hazard Mitigation Plan Update

What is an LHMP?

An LHMP is a plan that seeks to enhance the resilience of communities, reducing their vulnerability to damage, loss, or disruption from natural or human-caused hazards. The planning process includes assessing the risk of hazards that pose a risk to the community, identifying vulnerabilities within the community, documenting the resources for risk reduction, and identifying and developing mitigation strategies that will improve the City's resiliency. The resulting document, the LHMP, serves as a municipality's guide for enhancing community resilience.

Scan me!

Why Have an LHMP?

The update of the City's LHMP will not only ensure that the City is eligible to receive FEMA hazard mitigation funds but will also lead the City in developing a safer, more sustainable community. While the City cannot entirely eliminate natural and human-caused risks to the community, the LHMP aims to enhance community safety. By conducting a thorough evaluation of potential threats and crafting a unified approach to address them, the LHMP fosters better coordination and collaboration among the City, public agencies, businesses, service providers, and residents. Together, these efforts strive to minimize the impacts of both natural and human-induced hazards on the community.

What Hazards Will the LHMP Protect Against?

Earthquake	Air Quality	Disease Outbreak	Urban Fire	Windstorm	Extreme Temperatures	Dam Failure
Adversarial Events	Power Loss	Drought	HazMat Release	Transportation Incident	Flood	Climate Change

Why Get Involved?

Your engagement in the planning process is vital as it brings diverse perspectives and experiences to the table. As community members, you have unique insights into local hazards and vulnerabilities based on your lived experiences and observations. Your input helps us identify risks more comprehensively and develop targeted strategies that address the specific needs of our community. Together, we can develop a hazard mitigation plan that reflects the collective wisdom and resilience of our community, better preparing us to address future challenges and protect the well-being of all our residents.

City of Lakewood's Local Hazard Mitigation Plan Update

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Scan me!

What Hazards Will the LHMP Protect Against?

Earthquake	Air Quality	Disease Outbreak	Urban Fire	Windstorm	Extreme Temperatures	Dam Failure
Adversarial Events	Power Loss	Drought	HazMat Release	Transportation Incident	Flood	Climate Change

How You Can Get Involved:

Join us during public meetings and workshops! Share your experiences and insights with us through the online survey located here:

Scan me!

Help us reach more people!

Encourage your friends, family, and neighbors to get involved in the planning process.

To learn more about upcoming events, access resources, or get involved, refer to the City's website for the latest information and updates.

Local Hazard Mitigation Plan Update

What is a Local Hazard Mitigation Plan (LHMP)?

An LHMP is a plan that seeks to enhance the resilience of communities, reducing their vulnerability to damage, loss, or disruption from natural or human-caused hazards. The planning process includes assessing the risk of hazards that pose a risk to the community, identifying vulnerabilities within the community, documenting the resources for risk reduction, and identifying and developing mitigation strategies that will improve the City's resiliency.

Why is Lakewood Updating the LHMP?

The update of the LHMP not only leads the City in developing a safer, more sustainable community for its residents and businesses, but also ensures that the City is eligible to receive FEMA Hazard Mitigation Funds to improve community resiliency!

Outlook

City of Lakewood - LHMP Update Community Stakeholder Invite

From Kaitlin Sanchez <KSanchez@lakewoodcity.org>

Date Thu 8/29/2024 5:41 PM

To Francisco Ontiveros <FOntiveros@lakewoodcity.org>; Veronica Copeland <VCopeland@lakewoodcity.org>; Ryan Bowman <RBowman@lakewoodcity.org>; Michael McDade <MMcDade@lakewoodcity.org>; Derek Nguyen <DNguyen@lakewoodcity.org>; Anthony Manzano <AManzano@lakewoodcity.org>; Gill Pacheco (gpachec@lasd.org) <gpachec@lasd.org>; 'Khoi Dao' <Khoi.Dao@fire.lacounty.gov>; Paul Kuykendall <PKuykendall@lakewoodcity.org>; 'lkwd.pec.stuckey@gmail.com' <lkwd.pec.stuckey@gmail.com>; Wilfred Cochico <WCochico@lakewoodcity.org>; 'odor@cityofartesia.us' <odor@cityofartesia.us>; 'devans@cerritos.us' <devans@cerritos.us>; 'avelasco@cypressca.org' <avelasco@cypressca.org>; 'TOliver@cityoflosalamitos.org' <TOliver@cityoflosalamitos.org>; 'comdev@cityofsignalhill.org' <comdev@cityofsignalhill.org>; 'Mmatson@paramountcity.com' <Mmatson@paramountcity.com>; 'bmcnerney@bellflower.org' <bmcnerney@bellflower.org>; 'urtiagad@yahoo.com' <urtiagad@yahoo.com>; 'Deena.Henry@macerich.com' <Deena.Henry@macerich.com>; 'scott.smith@abcusd.us' <scott.smith@abcusd.us>; 'dianagriffin@busd.k12.ca.us' <dianagriffin@busd.k12.ca.us>; 'ecano@lbschools.net' <ecano@lbschools.net>; 'ptu@paramount.k12.ca.us' <ptu@paramount.k12.ca.us>; 'jflores@paramount.k12.ca.us' <jflores@paramount.k12.ca.us>; 'patrick.houston@tenethealth.com' <patrick.houston@tenethealth.com>; 'francisco.m.martinez@sce.com' <francisco.m.martinez@sce.com>; 'Cynthia.Guidry@longbeach.gov' <Cynthia.Guidry@longbeach.gov>; 'Nem.Ochoa@gswater.com' <Nem.Ochoa@gswater.com>; 'SComfort@library.lacounty.gov' <SComfort@library.lacounty.gov>; 'cindy@pathwayshospice.org' <cindy@pathwayshospice.org>; 'anita.ward@caresolace.org' <anita.ward@caresolace.org>; 'lifc.executive@gmail.com' <lifc.executive@gmail.com>; 'gabrielle.mccormick@redcross.org' <gabrielle.mccormick@redcross.org>; Caitlin Cariaso <CCariaso@lakewoodcity.org>; 'ron.reeves@longbeach.gov' <ron.reeves@longbeach.gov>

Cc Shireen Kulkarni <Shireen.Kulkarni@rmpcorp.com>; Joshua Yordt <JYordt@lakewoodcity.org>; Chuck Martucci <CMartucci@lakewoodcity.org>

Good afternoon,

The City of Lakewood is beginning the update to its Local Hazard Mitigation Plan. The Plan seeks to identify hazard vulnerabilities for the community and brainstorm potential actions to help build resiliency. Once the plan is approved through the California Governor's Office of Emergency Services (Cal OES) and the Federal Emergency Management Agency (FEMA), the plan will entitle the City to grant funding opportunities to assist in implementing the proposed resiliency actions. In order to better understand regional vulnerabilities, and the way the community is impacted, FEMA guidelines suggest involving various stakeholders to obtain a more well-round perspective.

As such, we are assembling a planning team as part of the process, with members drawn from numerous community stakeholder organizations and agencies. The City of Lakewood would like to invite you, or a member of your team, to participate in the Hazard Mitigation Planning Committee (HMPC) meetings to guide the update process. During the HMPC meetings, you will have the opportunity to provide background knowledge and experience relevant to the group you represent.

We are planning to hold five meetings, once a month at Lakewood City Hall, 5050 Clark Ave., Lakewood 90712. The first meeting will be held on Monday, September 16 at 9:00am in the Executive Board Room.

Below is a general overview for our Committee Meetings:

Meeting #1: Project Overview/Hazard Identification and Profiling

Meeting #2: Goals and Objectives

Meeting #3: Vulnerability Assessment

Meeting #4: Mitigation Strategy Development

Meeting #5: Benefit-Cost Review

Please confirm your interest in participating in this important community project. If you cannot participate but know someone from our community who may be interested, please pass along the invitation and provide us with a name and an email address where we can send future meeting invitations.

Please free to contact me if you have any questions or need additional information on the planning process. Thank you in advance for your consideration.

Sincerely,

Kaitlin Sanchez

Public Safety Manager
City of Lakewood
5050 Clark Avenue
Lakewood, CA 90712
562-866-9771, ext. 2113

PUBLIC SAFETY
Partners with Our Community

lakewoodcity

City of Lakewood, Ca Government

Outlook

City of Lakewood - Community Outreach for LHMP

From Kaitlin Sanchez <KSanchez@lakewoodcity.org>
Date Wed 1/15/2025 2:30 PM
To 'lifc.executive@gmail.com' <lifc.executive@gmail.com>
Cc Shireen Kulkarni <Shireen.Kulkarni@rmpcorp.com>

1 attachment (229 KB)
City of Lakewood LHMP Flyer 1.pdf;

Good afternoon members of the Lakewood Interfaith Council,

My name is Kaitlin Sanchez, and I am the Public Safety Manager for the City of Lakewood. I am writing you today to share that the city has an important emergency management project we are currently working on – an update of the city's the Local Hazard Mitigation Plan (LHMP). The LHMP is a plan that seeks to enhance the resilience of communities, reducing their vulnerability to damage, loss, or disruption from natural or human-caused hazards. While the city cannot entirely eliminate natural and human-caused risks to the community, the LHMP aims to enhance community safety.

Community involvement is needed in the LHMP planning process to bring diverse perspectives and experiences into the project. Community members have unique insights of local hazards and vulnerabilities based on their experiences and observations within the community. To facilitate community involvement at this phase in the project, we are inviting the community to participate in an online survey.

I'd like to ask for your consideration in sharing this opportunity with your congregations. I've attached a flier with more information and a QR code which leads directly to the survey. I am happy to provide physical copies of the flier as well. Please let me know if you have any questions or would like more information on the LHMP update project.

Thank you for your consideration and I look forward to hearing from you!

Kaitlin Sanchez

Public Safety Manager
City of Lakewood
5050 Clark Avenue
Lakewood, CA 90712
562-866-9771, ext. 2113

PUBLIC SAFETY
Partners with Our Community

lakewoodcity

City of Lakewood, Ca Government

Outlook

City of Lakewood - Community Outreach for LHMP

From Kaitlin Sanchez <KSanchez@lakewoodcity.org>
Date Wed 1/15/2025 2:30 PM
To 'irene.taylor@kordarpk.com' <irene.taylor@kordarpk.com>; 'WF-Lakewood-Mgr@rpkdevelopment.com' <WF-Lakewood-Mgr@rpkdevelopment.com>; 'WF-Lakewood-Asst@rpkdevelopment.com' <WF-Lakewood-Asst@rpkdevelopment.com>
Cc Shireen Kulkarni <Shireen.Kulkarni@rmpcorp.com>

1 attachment (229 KB)
City of Lakewood LHMP Flyer 1.pdf;

Good afternoon Irene and Sandra,

My name is Kaitlin Sanchez, and I am the Public Safety Manager for the City of Lakewood. I am writing you today to share that the city has an important emergency management project we are currently working on – an update of the city's the Local Hazard Mitigation Plan (LHMP). The LHMP is a plan that seeks to enhance the resilience of communities, reducing their vulnerability to damage, loss, or disruption from natural or human-caused hazards. While the city cannot entirely eliminate natural and human-caused risks to the community, the LHMP aims to enhance community safety.

Community involvement is needed in the LHMP planning process to bring diverse perspectives and experiences into the project. Community members have unique insights of local hazards and vulnerabilities based on their experiences and observations within the community. To facilitate community involvement at this phase in the project, we are inviting the community to participate in an online survey.

I'd like to ask for your consideration in sharing this opportunity with your residents. I've attached a flier with more information and a QR code which leads directly to the survey. I am happy to provide physical copies of the flier as well. Please let me know if you have any questions or would like more information on the LHMP update project.

Thank you for your consideration and I look forward to hearing from you!

Kaitlin Sanchez

Public Safety Manager
City of Lakewood
5050 Clark Avenue
Lakewood, CA 90712
562-866-9771, ext. 2113

PUBLIC SAFETY
Partners with Our Community

lakewoodcity

City of Lakewood, Ca Government

CITY OF LAKEWOOD

HAZARD MITIGATION PLAN UPDATE

Shireen Kulkarni

Ryan Bray

Risk Management Professionals, Inc.
(949) 282-0123
www.RMPCorp.com

MEETING AGENDA

- Project Overview and Background
- Steering Committee Goals
- Risk Assessment Background
- Hazard Identification and Ranking

PROJECT OVERVIEW

DISASTER MITIGATION ACTION OF 2000

- Revitalized Federal Planning Requirements
  - State and Local Hazard Mitigation Plans
  - Plans must be updated every five years

- Federal Grant Funding Eligibility
  - Hazard Mitigation Grant Program (HMGP)
  - Building Resilient Infrastructure Communities (BRIC)

- Disaster Mitigation Act of 2000 is intended to facilitate cooperation between state and local authorities on risk reduction measures and to expedite funding allocation

PUBLIC PROCESS

DMA 2000 Stresses Public Participation:

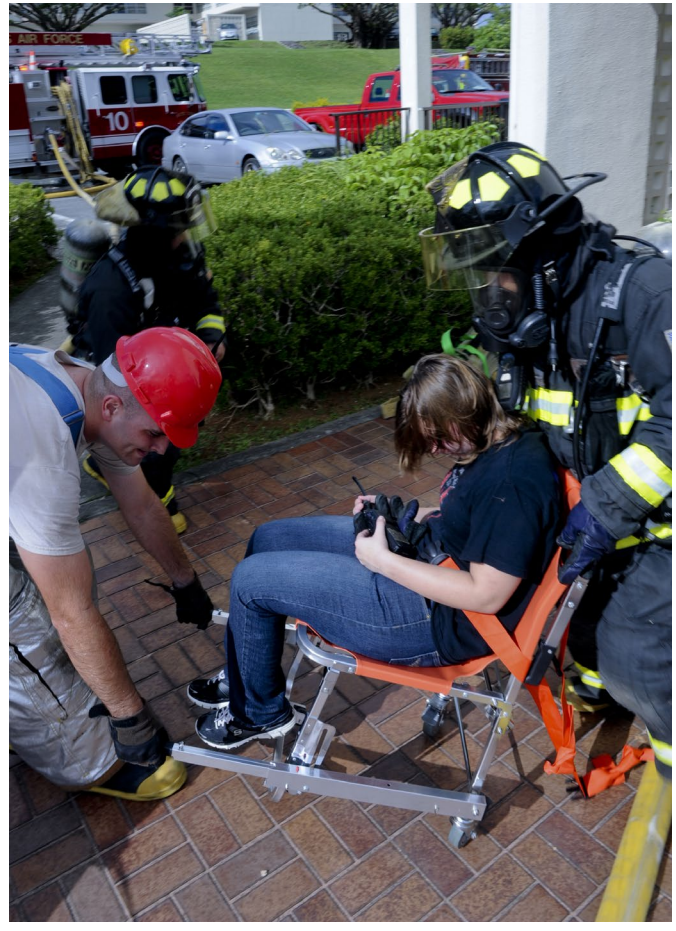
- An open public involvement process that is comprehensive, continuous and starts early
- Coordination with neighboring communities and various interest groups in Plan development



FOCUS ON SENSITIVE POPULATIONS

- New guidance requires a targeted effort to address portions of the population which may be at greater risk to the impacts of a hazard event.
- Identifying Factors
  - Age – Maturity & Youth
    - Persons under 5 Years – 6.1%
    - Persons over 65 Years – 15.6.0%
  - Economic Standing
    - Persons in poverty – 6.7%
  - Limited English Proficiency
    - Spanish, Asian/Pacific Island Languages, Other Indo-European languages– 5%
  - Disabilities(Hearing, Vision, Cognitive, Ambulatory, Self-Care, and Independent Living Difficulties)
    - With a disability– 10.2%

Source: U.S. Census Bureau (2022 American Community Survey 5-Year Estimates)



FEMA'S NEW GUIDANCE ON STAKEHOLDERS

Local/Regional agencies involved in Hazard Mitigation activities (Public works, emergency management)

Agencies that have the authority to regulate development (Zoning, planning, community, and economic development departments)

Neighboring Communities (Adjacent local governments)

Representatives of Businesses, Academia, and other Private Organizations (Private utilities)

Representatives of Nonprofit Organizations (Housing, healthcare, or social service agencies)

CLIMATE CHANGE

- California Adaptation Planning Guide (APG) released Spring 2020
- APG released in response to several Executive Orders encouraging research of and response to climate change
- The City of Lakewood is in the Southern portion of Los Angeles County. The City should consider some of the following hazards
  - Increased Temperatures
  - Reduced Precipitation
  - Sea Level Rise
  - Wildfire Risk
  - Public Health (heat and air quality)



STEERING COMMITTEE GOALS

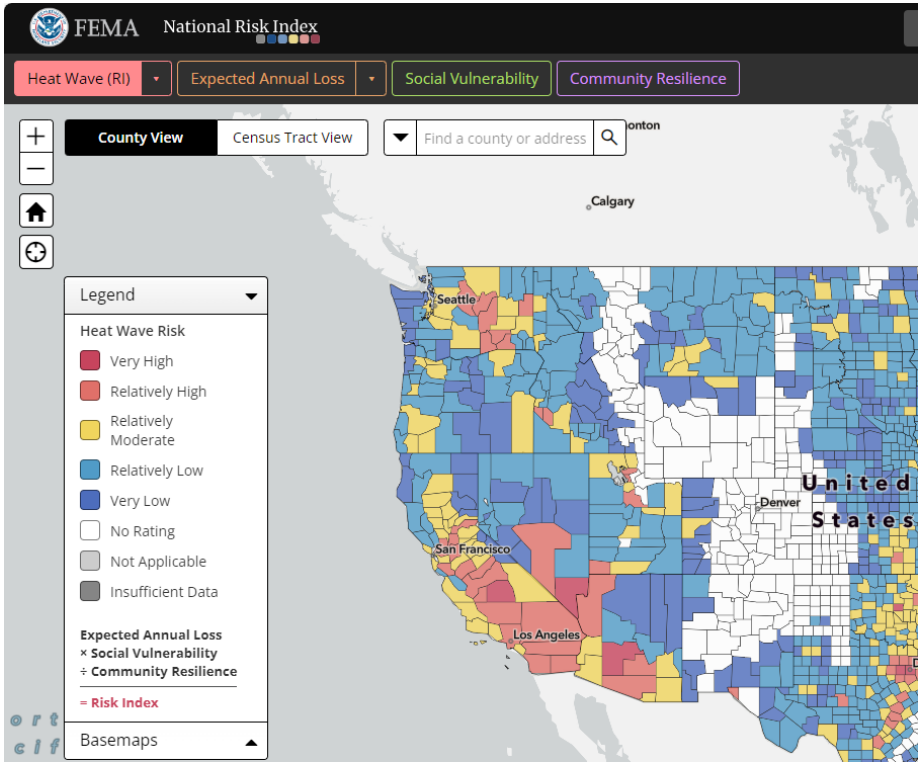
- Review existing Plan for implementation
- Review the list of potential hazards and add additional hazards for the revision
- Determine the hazard impacts throughout the City
- Interface with partner agencies to determine existing mitigation measures
- Develop possible approaches to projects which will reduce the impacts
- Prioritize mitigation projects for implementation

RISK ASSESSMENT METHODOLOGY

RISK ASSESSMENT METHODOLOGY

- Risk Assessment provides the foundation for the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards
- FEMA recommended steps for conducting a risk assessment
  - Describe Hazards
  - Identify Community Assets
  - Analyze Risks
  - Summarize Vulnerability
- Risk Management Professionals incorporates each of these steps into the Plan update process and has acquired CalOES and FEMA approval using this methodology many times.

FEMA'S NATIONAL RISK INDEX

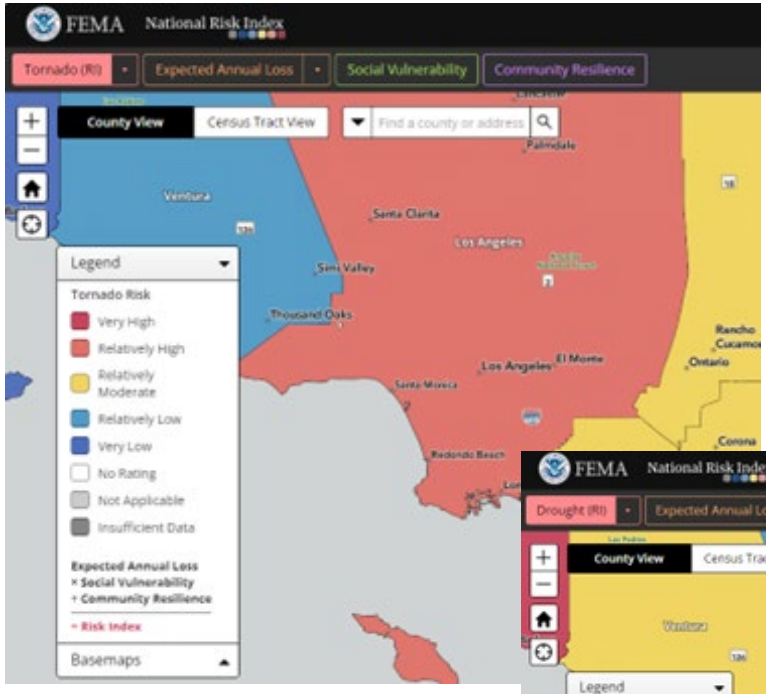


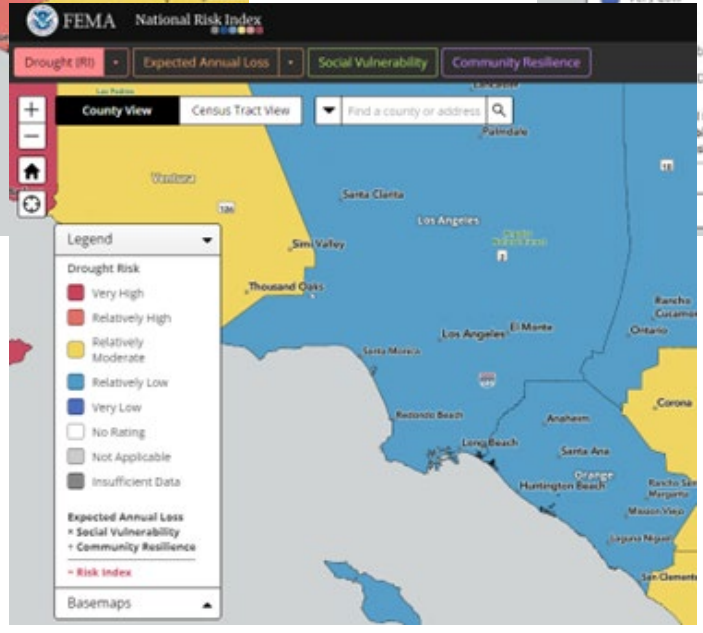
- The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards. It was designed and built by FEMA in close collaboration with various stakeholders and partners in academia, local, state and federal government, and private industry.
- The Risk Index leverages available source data for natural hazard and community risk factors to develop a baseline risk measurement for each United States county and Census tract.

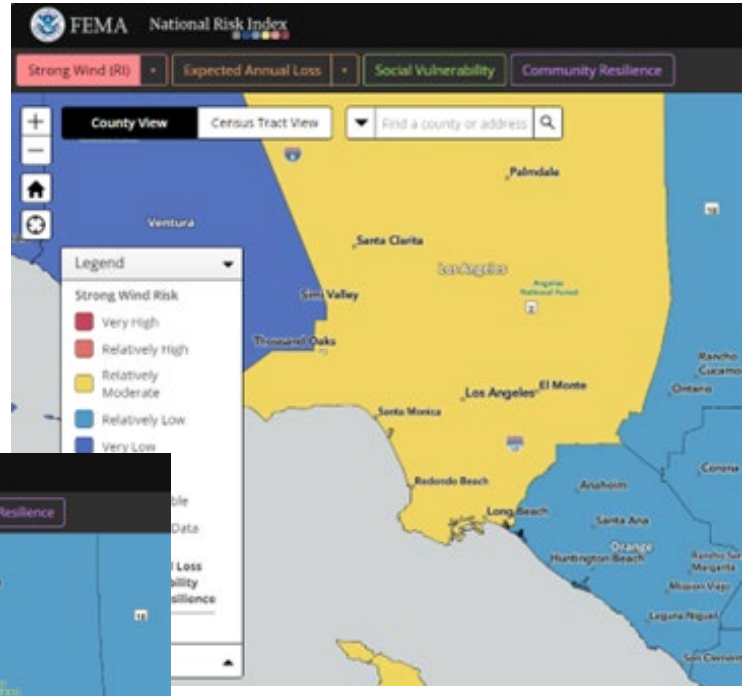
FEMA'S NATIONAL RISK INDEX-IDENTIFIED HAZARDS

- Drought: **Relatively Low**
- Earthquake: **Very High**
- Heat Wave: **Relatively High**
- Landslide: **Relatively High**
- Lightning: **Relatively High**
- Riverine Flooding: **Relatively Moderate**
- Strong Wind: **Relatively Moderate**
- Tornado: **Relatively High**
- Tsunami: **Relatively Moderate**
- Wildfire: **Very High**

FEMA'S NATIONAL RISK INDEX







RISK ASSESSMENT – HAZARDS FROM THE PREVIOUS PLAN

Earthquake
Flood
Windstorm
Drought
Other Hazards • Extreme Temperatures • Landslide • Wildland/Urban Fire • Subsidence • Volcanic Event

RISK ASSESSMENT – POTENTIAL HAZARDS

HAZARDS RESULTING FROM CLIMATE CHANGE

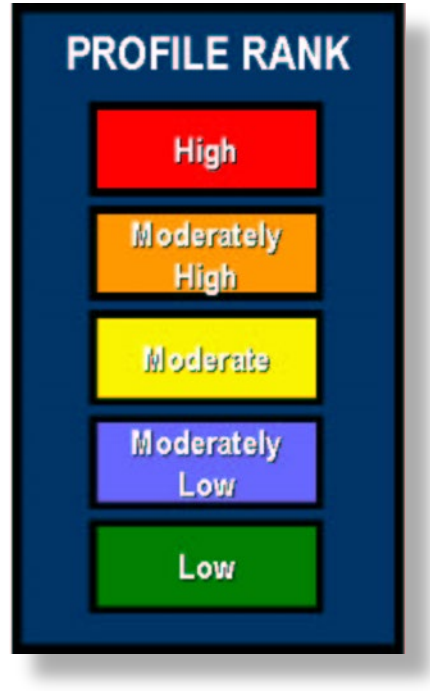
- Increased Temperatures
- Reduced Precipitation
- Sea Level Rise
- Reduced Tourism
- Reduced Water Supply
- Wildfire Risk
- Public Health (heat and air quality)

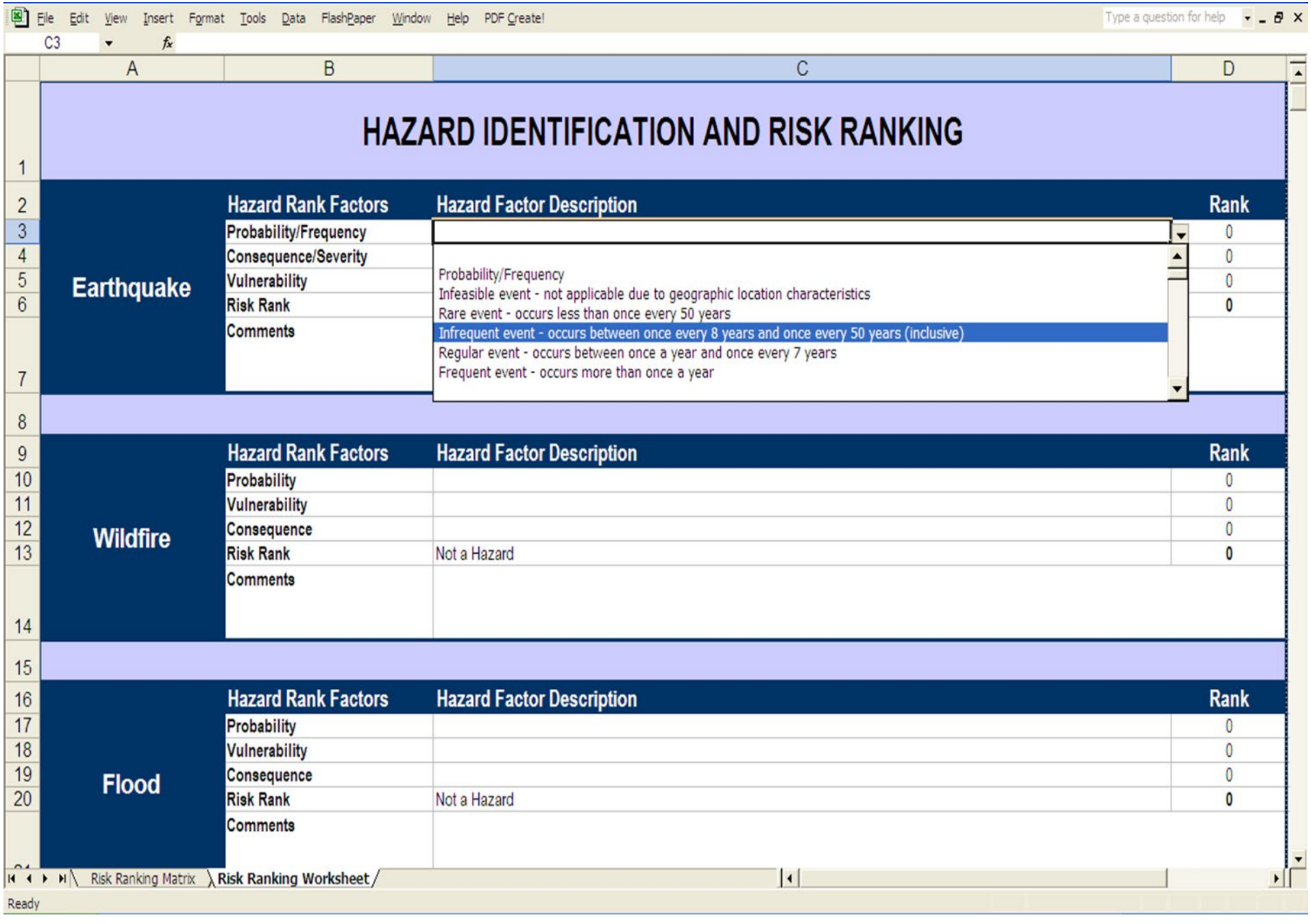


RISK RANK METHODOLOGY

- The risk ranking is facilitated using an automated interactive spreadsheet program that asks specific questions on potential hazards and then assigns a relative value to each potential hazard accordingly.

- The result of the workshop will be a ranked list of hazards to be studied in detail in the Hazard Mitigation Plan.




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HAZARD IDENTIFICATION AND RISK RANKING
Earthquake
Hazard Rank Factors
Hazard Factor Description
Rank
Probability/Frequency
Consequence/Severity
Vulnerability
Risk Rank
Comments
Probability/Frequency
Infeasible event - not applicable due to geographic location characteristics
Rare event - occurs less than once every 50 years
Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)
Regular event - occurs between once a year and once every 7 years
Frequent event - occurs more than once a year
Wildfire
Probability
Vulnerability
Consequence
Risk Rank
Not a Hazard
Comments
Flood
Probability
Vulnerability
Consequence
Risk Rank
Not a Hazard
Comments
Risk Ranking Matrix
Risk Ranking Worksheet
Ready

RISK RANKING – PROBABILITY/FREQUENCY

- **Recurrence Interval –** Prediction of how often a hazard will occur in the future, including projected return intervals

Probability/Frequency Rank Descriptors	Rank
Infeasible event - not applicable due to geographic location characteristics	0
Rare event - occurs less than once every 50 years	1
Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
Regular event - occurs between once a year and once every 7 years	3
Frequent event - occurs more than once a year	4

RISK RANKING – CONSEQUENCE/SEVERITY

Physical Damage – Structures and lifelines

Economic Impact – Loss of power, water, sanitation, roads, etc.…

Consequence/Severity Rank Descriptors	Rank
No damage	1
Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability	2
Moderate building damage, minor loss of lifelines (less than 12 hours), lost time injury but no disability	3
Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability	4
Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5

RISK RANKING - VULNERABILITY

- **Impact Area** – Area impacted by a hazard event
  Secondary Impacts – Capability of triggering additional hazards
  Onset - Period between initial recognition of an approaching hazard and when the hazard begins to impact the community

Vulnerability Rank Descriptors	Rank
No physical damage, no secondary impacts	1
Localized damage area	2
Localized damage area, minor secondary impacts, delayed hazard onset	3
Moderate damage area, moderate secondary impacts, moderate warning time	4
Widespread damage area, significant secondary impacts, no warning time	5

RISK RANKING - MATRIX

Probability/Frequency Description	Risk Ranking Matrix
Rare Event: Occurs less than once every 50 years	Probability/Frequency Value = 1
Infrequent Event: Occurs between once every 8 years and once every 50 years (inclusive)	Probability/Frequency Value = 2
Regular Event: Occurs between once a year and once every 7 years	Probability/Frequency Value = 3
Frequent Event: Occurs more than once a year	Probability/Frequency Value = 4

Probability/Frequency Value = 1

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Probability/Frequency Value = 2

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	2	4	6	8	10
2	4	8	12	16	20
3	6	12	18	24	30
4	8	16	24	32	40
5	10	20	30	40	50

Probability/Frequency Value = 3

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	3	6	9	12	15
2	6	12	18	24	30
3	9	18	27	36	45
4	12	24	36	48	60
5	15	30	45	60	75

Probability/Frequency Value = 4

Vulnerability \ Consequence/Severity	1	2	3	4	5
1	4	8	12	16	20
2	8	16	24	32	40
3	12	24	36	48	60
4	16	32	48	64	80
5	20	40	60	80	100

RISK RANK CATEGORIZATION

Risk Rank Equation

Risk = Probability x Consequence x Vulnerability

Risk Rank Categorization	
High Hazard	50 to 100
Moderately High Hazard	25 to 49
Moderate Hazard	15 to 24
Moderately Low Hazard	5 to 14
Low Hazard	1 to 4

QUESTIONS?

Shireen Kulkarni
Ryan Bray

Shireen.Kulkarni@RMPCorp.com
Ryan.Bray@RMPCorp.com
Risk Management Professionals, Inc.
(949) 282-0123
(949) 385-6004
www.RMPCorp.com

City of Lakewood
HAZARD MITIGATION PLAN-
Steering Committee Meeting #1

September 16th, 2024

Name	Affiliation	Position	Email Address	Phone #
VICKI STUCKEY	CITY OF LAKEWOOD	PLANNING & ENV COMM	STUCKEY5150@AOL.COM	3107202604
Kaitlin Sanchez	City of Lakewood	Project Manager	Ksanchez@lakewoodcity.org	562 852-6058
PAUL KUYKENDALL	CITY OF LAKEWOOD	SENIOR PLANNER	PKUYKENDALL@LAKEWOODCITY.ORG	(562) 866-9771 x-2344
Judy Aquino	City of Cypress	PLANNING	jaquino@cypressca.org	(714) 229-6723
Caitlin Canaso	city of lakewood	community services supervisor	ccanaso@lakewoodcity.org	562-866-9771 x 2418
WILFRED COCHICO	CITY OF LAKEWOOD	PURCHASING OFFICER	WCOCHICO@LAKEWOODCITY.ORG	562-8669771 X2640
MIKE MCDADE	CITY OF LAKEWOOD	MAINT. SUPV.	MMCDADE@LAKEWOOD city.org	562 866 9771 2426
JOSHUA YORST	CITY OF LAKEWOOD	DIRECTOR OF PUBLIC SAFETY	JYORST@LAKEWOODCITY.ORG	562) 866-9771 x2112

Name	Company	Position	Email Address	Phone #
Leonel Martin	City of Lakewood	Associate Civil Engineer	lmartin@lakewoodcity.org	(562) 474-4661
Luis Valdez	City of Long Beach	Disaster Preparedness Officer	luis.valdez@longbeach.gov	
Frank Ontiveros	City of Lakewood	Admin Asst	fontiveros@lakewoodcity.org	562-866-9771 ext. 2175
Tania Villegas	City of Lakewood	IFC	tvsmith02@gmail.com	
CHET SNYDER	YMCA	DIRECTOR FACILITIES	CHET.SNYDER@LBYMCA.ORG	714 861-9331
CHUCK MARTUCCI	CITY OF LAKEWOOD	EMERGENCY MANAGER	cmartucci@lakewoodcity.org	562-964-5806
KHOI DAO	COUNTY FIRE	CHIEF OFFICER	khoi.dao@fire.lacounty.gov	
Shireen Kulkarni	Risk management Professionals	Technical consultant.	shireen.kulkarni@rmpcorp.com	949-385-6004.
Ryan Bray	Risk Management Professionals	Senior Technical consultant	Ryan.Bray@RMPCorp.com	949.292.0123

CITY OF LAKEWOOD

HAZARD MITIGATION PLAN UPDATE

STEERING COMMITTEE MEETING #2

Shireen Kulkarni

Ryan Bray

Risk Management Professionals, Inc.
(949) 282-0123

www.RMPCorp.com

MEETING AGENDA

- Review Hazard Ranking
- Review Previous HMP Mitigation Goals and Objectives
- Engage in discussions to review and develop Goals and Objectives specific to the needs of the City
- Align Goals and Objectives with State and County Goals

HAZARD RANKING REVIEW

HAZARD RANKING SUMMARY

Rank	Score
High	
Earthquake	50
Moderately High	
Air Quality	40
Disease Outbreak	30
Urban Fire	30
Windstorm	27
Extreme Temperatures	27
Dam Failure	25
Adversarial Events	25
Moderate	
Power Loss	16
Drought	16
Hazardous Materials Release	15
Moderately Low	
Transportation Incident	12
Flood	8
Low	

MITIGATION GOALS AND OBJECTIVES



OVERALL PLAN GOALS (2018)

- Reduce the Threat to Life Safety
- Reduce the Threat to Lakewood Buildings, Facilities, and Infrastructure
- Enhance Emergency Response Capability, Emergency Planning, and Post-Disaster Recovery
- Vigorously Seek Funding Sources for Mitigation Actions
- Increase Public Awareness of Natural Hazards and Enhance Education and Outreach Efforts
- Incorporate Mitigation Planning into Natural Resource Management and Land Use Planning

NEXT STEPS…

ASSET INVENTORY

Review Asset Inventory

- Types and number of existing and future buildings
- Infrastructure
- Critical Facilities

Loss Estimates

- Review each asset category and assign potential percentage of damage expected due to each identified hazard

Identify Vulnerable Populations

- Identify groups that face an increased risk for each identified hazard

QUESTIONS?

Shireen Kulkarni
Ryan Bray

Shireen.Kulkarni@RMPCorp.com
Ryan.Bray@RMPCorp.com
Risk Management Professionals, Inc.
(949) 282-0123

www.RMPCorp.com

City of Lakewood
HAZARD MITIGATION PLAN-
Steering Committee Meeting #2

October 15th, 2024

Name	Company	Position	Email Address	Phone #
Caitlin Cariaso	city of Lakewood	community services supervisor	ccariaso@lakewoodcity.org	562-866-9771 x2418
Manny Carreon	LA Co. FD	Battalion Chief	manny.carreon@fire.lacounty.gov	562-865-7804
Luis Valdez	City of Long Beach	Disaster Preparedness officer	Luis.Valdez@LongBeach.gov	562-721-8969
Gabby Mclormick	American Red Cross	Disaster Program Manager	gabrielle.mccormick@redcross.org	310-569-4651
JACK Wopschall	CO Lakewood	Senior Mgmt Analyst	Jwopschall@lakewoodcity.org	562-866-9771 x2514
Frank Ontiveros	Lakewood	Admin Asst	fontiveros@lakewoodcity.org	562-866-9771 x. 2125
WILFRED COCHICO	CITY OF LAKEWOOD	PLANNING OFFICER	WCOCHICO@LAKEWOODCITY.ORG	562-8669771 x 2640
VICKI STUCKEY	LAKEWOOD	COMMISSIONER/ RESIDENT	STUCKEY5150@AOL.COM	310 7202604

Name	Company	Position	Email Address	Phone #
CHET SNYDER	LKWD YMCA	FACILITY DIRECTOR	LBYMCA · CHET.SNYDER@LBYMCA.ORG	714 801-9331
PAUL KULKARNI	CITY OF LAKEWOOD	SENIOR PLANNER	PKULKARNI@LAKEWOODCITY.ORG	562-866-9771
Veronica Copeland	City of Lakewood	Special Events Assistant	vcopeland@lakwoodcity.org	562.866-9771 x2123
Kaitlin Sanchez	City of Lakewood	Public Safety Manager	ksanchez@lakewoodcity.org	562-440-2110
ANTHONY MANZANO	CITY OF LAKEWOOD	ASSISTANT WATER DIRECTOR	AMANZANO@LAKEWOODCITY.ORG	(562) 866-9771 x 2703
JOSHUA YORST	CITY OF LAKEWOOD	DIRECTOR OF PUBLIC SAFETY	JYORST@LAKEWOODCITY.ORG	(562) 866-9771 x2112
LUZ Ramirez	City of Lakewood	Lakewood RCS Intern	LRamirez@lakewoodcity.org	(562) 200-6159
CHUCK MARTUCCI	CITY OF LAKEWOOD	EMERGENCY MANAGER	cmartucci@lakewoodcity.org	(562) 964-5806
Shireen Kulkarni	RISK management professional	technical consultant	shireen.kulkarni@rmpcorp.com	949-282-0123
Ryan Bray	Risk Mgmt Prof.	Sr. Technical Consultant	ryan.bray@rmpcorp.com	949.282.0123

CITY OF LAKEWOOD

HAZARD MITIGATION PLAN UPDATE
COMMITTEE MEETING #3

Shireen Kulkarni
Ryan Bray

Risk Management Professionals, Inc.
(949) 282-0123
www.RMPCorp.com



MEETING AGENDA

- Develop Asset Inventory List
- Validate Vulnerability Assessment with Loss Estimate Calculations
- Discuss Sensitive Populations at Risk from Identified Hazard Events

ASSET INVENTORY & LOSS ESTIMATES

ASSET INVENTORY

- Asset Inventory
  - Types and number of existing and future buildings
    - Infrastructure
    - Critical facilities

Review each asset and assign potential percentage of damage expected due to each identified hazard

Asset Inventory Summary – City of Lakewood								
Type	Name	Address	Square Footage	Cost / Square Foot	Structure Value	Contents Value %	Contents Value	TOTAL
City Property	Burns Center	5510 Clark Avenue, Lakewood, CA 90712	15,694		6,119,500	100%	575,000	$6,694,500
City Property	Youth Center	4658 Woodruff Avenue, Lakewood CA 90713	7,550		2,478,000	100%	125,000	$2,603,000
City Property	Mae Boyar Park Community Center	6701 Del Amo Boulevard, Lakewood, CA 90712	4,100		1,992,200	100%	135,000	$2,127,200
City Property	Palms Park Community Center	12305 207th Street, Lakewood CA 90715	11,361		4,424,200	100%	250,000	$4,674,200
City Property	Mayfair Park Main Activity Building	5720 Clark Avenue, Lakewood CA 90712	15,904		5,377,800	100%	335,000	$5,712,800
City Property	Biscailuz Park Recreation Building	2601 Dollar Street, Lakewood CA 90712	2,411		987,499	100%	66,591	$1,054,090
City Property	Bloomfield Park Recreation Building	21420 Pioneer Boulevard, Lakewood CA 90715	7,553		2,735,300	100%	27,000	$2,762,300
City Property	Monte Verde Park Recreation Building	6929 Nixon Street, Lakewood CA 90713	4,279		1,328,000	100%	25,000	$1,353,000

COMMUNITY IMPACTS

COMMUNITY IMPACTS

- Current FEMA guidance places high importance on the evaluation of people at risk to hazards
- Special attention must be provided to identified vulnerable groups.
- Vulnerable Populations for Lakewood include:
  - Elderly (+65 years)
  - Youth (Under 17 but particularly under 10)
  - Economically Disadvantaged
  - English Language Proficiency

LAKEWOOD BY THE NUMBERS

Census Information (2020)

Population: 78,135

Under 5yrs: 6.1%

Over 65yrs: 14.1%

Persons in Poverty: 6.0%

NEXT STEPS…

MITIGATION ACTIONS

Develop Mitigation Actions

- Summarize mitigation project specifications
- Identify project goal categories
- Capital Improvements

Action Categories

- Prevention
- Property Protection
- Public Awareness
- Natural Resource Protection
- Emergency Services
- Structural Projects



QUESTIONS?

Shireen Kulkarni
Ryan Bray

Shireen.Kulkarni@RMPCorp.com

Ryan.Bray@RMPCorp.com

Risk Management Professionals, Inc.

(949) 282-0123

www.RMPCorp.com

City of Lakewood
HAZARD MITIGATION PLAN-
Steering Committee Meeting #3

November 19th, 2024

Name	Company	Position	Email Address	Phone #
Vicki Stuckey	LKD	Commissioner	Stuckey5150@Att.com	30 720 2604
Khoi Dao	LA County Fire	Acting Assistant Fire Chief	khoi.dao@fire.lacounty.gov	
Paul Kuykendall	City of Lakewood	Senior Planner	pkuykendall@lakewoodcity.org	(562) 866-9771 x 2344
Wilfred Cochico	City of Lakewood	Purchasing Officer	wcochico@lakewoodcity.org	562-866-9771 x2640
Caitlin Cariaso	city of Lakewood	Community Services Supervisor	ccariaso@lakewoodcity.org	562-866-9771 x2418
Jack Wopschall	CO/Lakewood	Senior Mgmt Analyst	Jwopschall@lakewoodcity.org	562-866-9771 x2514
Frank Ontiveros	Lakewood	Admin Assist	fontiveros@lakewoodcity.org	562-866-9771 ext. 2124
Joshua Yorst	Lakewood	Director of Public Safety	JYorst@lakewoodcity.org	562) 866-9771 x2112

Name	Company	Position	Email Address	Phone #
Anthony Manzano	Lakewood	Asst. Director Water Resources	AMANZANO@LAKEWOOD CITY.ORG	(949) 466-9598
Mike McDade	City of Lakewood	Supervisor	MMcdade@lakewoodcity.org	562 964-1056
Kaitlin Sanchez	City of Lakewood	Public Safety Manager	KSanchez@lakewood city.org	562-440-2110
Veronica Copeland	City of Lakewood	Special Events Assistant	vcopeland@lakewood city.org	562-804-9771 x2123
Chuck Martucci	City of Lakewood	Emergency Manager	cmartucci@lakewood city.org	562-964-5806
Luz Ramirez	City of Lakewood	RCS Intern	LRamirez@lakewood city.org	562-200-6159
Ryan Bragg	RMP	Sr. Tech Consultant	Ryan.bragg@RMPCorp.com	949.282.0123
Shireen Kulkarni	Risk management professionals	Technical Consultant	Shireen.Kulkarni@rmpcorp.com	949-282-0123

CITY OF LAKEWOOD

HAZARD MITIGATION PLAN UPDATE
COMMITTEE MEETING #4

Shireen Kulkarni
Ryan Bray

Risk Management Professionals, Inc.
(949) 282-0123
www.RMPCorp.com



MEETING AGENDA

- Develop Asset Inventory List
- Validate Vulnerability Assessment with Loss Estimate Calculations
- Discuss Survey Responses
- Discuss Sensitive Populations at Risk from Identified Hazard Events

ASSET INVENTORY & LOSS ESTIMATES

ASSET INVENTORY/ VULNERABILITY ASSESSMENT

- Asset Inventory
  - -Types and numbers of existing and future buildings
  - -Infrastructure
  - -Critical Facilities

- Review each asset and assign potential percentage of damage expected due to each identified hazard

COMMUNITY IMPACTS

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- Vulnerable Populations for Lakewood include:
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  - Youth (Under 17 but particularly under 10)
  - Economically Disadvantaged
  - English Language Proficiency

MITIGATION ACTIONS

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- Summarize mitigation project specifications
- Identify project goal categories
- Capital Improvements

Action Categories

- Prevention
- Property Protection
- Public Awareness
- Natural Resource Protection
- Emergency Services
- Structural Projects

NEXT STEPS…



QUESTIONS?

Ryan Bray
Shireen Kulkarni

Ryan.Bray@RMPCorp.com

Shireen.Kulkarni@RMPCorp.com

Risk Management Professionals, Inc.

(949) 282-0123

www.RMPCorp.com

City of Lakewood
HAZARD MITIGATION PLAN-
Steering Committee Meeting #4

December 10th, 2024

Name	Company	Position	Email Address	Phone #
PAM KUYKENDALL	CITY OF LAKEWOOD	SENIOR PLANNER	pkuykendall@lakewoodcity.org	x2244
VICKI STUCKEY	COMMISSIONER		STUCKEY5150@AOL.COM	
JACK WOPSCHALL	CO LAKEWOOD	Senior Mgmt Analyst	JWopschall@lakewoodcity.org	2514
WILFRED COCHICO	CITY OF LAKEWOOD	PURCHASING OFFICER	WCochico@lakewoodcity.org	562-866-9771 X 2640
FRAN ONTIVEROS	Lakewood	Admin Assist	fontiveros@lakewoodcity	562-866-9771 x2125
Kaitlin Sanchez	Lakewood	Public Safety Manager	KSanchez@lakewoodcity.org	562 440 2110

CITY OF LAKEWOOD
HAZARD MITIGATION PLAN
STEERING COMMITTEE #5

Shireen Kulkarni
Ryan Bray
Risk Management Professionals, Inc.
(949) 282-0123
www.RMPCorp.com

Discussion Topics

- Review Public Feedback
- Review Mitigation Actions/Revise if Needed
- Begin Benefit-Cost Review of Mitigation Projects
- Discuss schedule for last steps of update process

PUBLIC OUTREACH EVENTS

- “Very safe neighborhood”
- “Consider burying power lines- long term investment that could save money down the road”
- “Better Signage for Senior Center location in event of an emergency”
- “Information on what to do in the event of an emergency would be helpful”

PUBLIC INPUT RESULTS

- Total Responses: 123
- In the past five years, 65% of people have not experienced a hazard event
- For those who have, it was mainly earthquake, air quality issues, disease outbreak, or power loss
- About half of residents have received information about how to make themselves safer

	COMPLETELY UNCONCERNED	MODERATELY UNCONCERNED	CONCERNED	MODERATELY CONCERNED	EXTREMELY CONCERNED	TOTAL
Earthquake	1.64% 2	7.38% 9	31.97% 39	38.52% 47	20.49% 25	122
Air Quality Issues	3.36% 4	18.49% 22	29.41% 35	29.41% 35	19.33% 23	119
Disease Outbreak	9.09% 11	26.45% 32	36.36% 44	16.53% 20	11.57% 14	121
Urban FIre	10.00% 12	31.67% 38	29.17% 35	19.17% 23	10.00% 12	120
Windstorm	9.17% 11	37.50% 45	26.67% 32	21.67% 26	5.00% 6	120
Extreme Temperatures	10.00% 12	27.50% 33	21.67% 26	26.67% 32	14.17% 17	120
Dam Failure	45.45% 55	28.10% 34	15.70% 19	4.96% 6	5.79% 7	121
Adversarial Events	12.71% 15	26.27% 31	39.83% 47	13.56% 16	7.63% 9	118
Power Loss	2.46% 3	19.67% 24	30.33% 37	31.97% 39	15.57% 19	122
Drought	4.13% 5	19.83% 24	31.40% 38	21.49% 26	23.14% 28	121
Hazardous Materials Release	12.61% 15	25.21% 30	34.45% 41	15.97% 19	11.76% 14	119
Mass Transportation Incident	19.49% 23	43.22% 51	27.97% 33	5.93% 7	3.39% 4	118
Flood	21.49% 26	33.06% 40	23.97% 29	13.22% 16	8.26% 10	121

MITIGATION ACTION REVIEW/ BENEFIT COST REVIEW

Purpose of Benefit-Cost Review

- FEMA requires the Steering Committee to prioritize actions for implementation
- The process is designed to help the Steering Committee weigh pros and cons for each action
- RMP's method utilizes a qualitative methodology with a High, Medium, and Low range
  - High – Benefits are perceived to exceed costs without further study or evaluations; or the action is critical
  - Medium – Benefits are perceived to exceed costs, but may require further study or evaluation prior to implementation
  - Low – Benefits and costs require evaluation prior to implementation

Benefit-Cost Review

- Review each identified mitigation project and quantify the benefits and costs of implementing each project
  - Assign a priority based on the benefit-cost review

Mitigation Action Prioritization: Benefit-Cost Review			
Mitigation Activity	**Benefits (Pros)**	**Costs (Cons)**	**Priority**
HMP.2023.01 -- Initiate a study to investigate opportunities for cross-functional and multi-benefit mitigation projects that achieve benefits in the areas of flood protection, drinking water quality and supply, environmental and habitat quality, regional economic impacts, and other social and public health effects. Develop a framework for quantifying individual project and mutli-project benefits and conduct a feasibility study to develop a multi-hazard mitigation program.	• →	• → $2,000,000 in project costs	
HMP.2023.02 -- Implement flood protection, recharge, and water supply infrastructure projects emphasizing multi-benefit hazard mitigation projects.	• →	• → $50,000,000	
HMP.2023.03--Continue build-out and integration of the Chain of Lakes improvement projects, including maximizing on-site power generation and the Chain of Lakes Pipeline.--(possible floating solar--maybe wellsite power generation)	• →	• → $120,000,000	

BENEFIT-COST REVIEW EXAMPLE

- Example from FEMA

Actions	Benefits (Pros)	Costs (Cons)	Priority
Floodproof 10 businesses in the downtown area	- Avoidance of 1 loss of life every 20 years (casualties reduced by half) - Saving of $90,000 in private damages and $5,000 in public cost - Loss of use of 10 downtown businesses completely eliminated - Community's problem of business interruption solved - Federal grants like FMA and PDM can be applied for to implement the proposed floodproofing - Will help improve CRS rating in the long term (so entire community's flood insurance premium will be reduced) - More than half the members of the City Council are opposed to buy-outs; it might be easier to get their support for an alternative to buy-outs	- Floodproofing cost = $10,000 X 10 = $100,000 - Need at least 3 people to administer (after obtaining technical assistance from the State) - Need a year to implement	High (Priority no. 1)
Build safe rooms for a neighborhood of 50 homes without basements	- Avoidance of 5 lives lost every 20 years (casualties reduced by half) - Public and political support for mitigating this hazard exists (due to regular recurrence of tornadoes)	- City will share 50% of the cost per existing home = $2,000 X 50 = $100,000 - Administrative cost per home = $1,000 X 50 = $50,000 - Need 3 years to complete - Tornadoes are unpredictable; they may never strike this exact area again	Medium (Priority no. 2)
Broadcast educational video on local channel on hazard mitigation	- Local channel might be willing to broadcast free of cost - Publicity would spread awareness about mitigation methods as well as what to do in an emergency	- Cost of preparing video = $5,000 - Only 5% of population might notice the broadcast - Only 5% of that 5% might actually consider acting on individual mitigation methods	Low (Priority no. 3)

NEXT STEPS…

Next Steps…

The Draft Hazard Mitigation Plan will be provided to each member for review. Once comments are implemented, the Public Review Draft Hazard Mitigation Plan will be presented.

CONTACT INFORMATION

Shireen Kulkarni

Ryan Bray

Ryan.Bray@RMPCorp.com

Risk Management Professionals, Inc.
(949) 282-0123
(877) 532-0806
www.RMPCorp.com

City of Lakewood
HAZARD MITIGATION PLAN-
Steering Committee Meeting #5

February 18th, 2025

Name	Company	Position	Email Address	Phone #
Kaitlin Sanchez	Lakewood	Public Safety Manager	ksanchez@lakewoodcity.org	562-440-2110
Caitlin Cariaso	city of Lakewood	community services supervisor	ccariaso@lakewoodcity.org	562-866-9771 x 2418
Paul Kuykendall	City of Lakewood	Senior Planner	PKUYKENDALL@LAKEWOODCITY.ORG	x-2344
Frank Ontiveros	c/o Lakewood	Admin Assist	fontiveros@lakewoodcity.org	562-866-9771 x2125
Ruby Pico	Lakewood	Mangemt Analyst	rpico@lakewoodcity.org	562-866-9771 2127
WILFRED COCHICO	LAKEWOOD	FINANCING OFFICER	wcochico@lakewoodcity.org	562-8669771 x2640
CHUCK MARTUCCI	CITY OF LAKEWOOD	COMMUNITY SAFETY MANAGER	cmartuccie lakewoodcity.org	562-866-9771 X-2402
Vicki STUCKEY	City Lakewood	COMMISSIONER	STUCKEY515@AOL.COM	3107202604

Name	Company	Position	Email Address	Phone #
CHET SNYDER	LAKEWOOD Family YMCA	FACILITIES & FLEET DIRECTOR	CHET.SNYDER@LBYMCA.ORG	714 801-9331
MIKE MCDADE	City of Lakewood	Eng Supervisor	mmcdade@lakewoodcity.org	562 964-1096
JACK WOPSCHALL	co/Lakewood	Senior Mgmt Analyst	Jwopschall@lakewoodcity.org	562-866-9771 x2514

DIVIDER SHEET

TO: The Honorable Mayor and City Council

SUBJECT: Fiscal Year (FY) 2025-26 Midyear Budget Review and Adjustments and Presentation of the FY 2026-28 Two-Year Budget Preparation Calendar

INTRODUCTION

The city is currently in the second year of the FY 2024–26 Two-Year Budget adopted in June 2024. With approximately seven months of FY 2025–26 financial data now available, it is an appropriate time to review current budget estimates and revise them as necessary. Despite ongoing economic volatility and uncertainty, the city continues to perform well and expects this positive trend to continue. Both revenues and expenditures have remained relatively stable. Overall, the city is well-positioned to maintain service levels and fund planned infrastructure improvements without foreseeable difficulty.

The focus of this report is on the city's operations and the two major funds, the General Fund and the Water Utility Enterprise Fund.

STATEMENT OF FACT

General Fund

The General Fund is the city's largest fund and the one over which the City Council exercises the greatest discretionary authority. The Council approved the city's budget last summer and has since adopted several amendments affecting General Fund expenditures. As a result, the currently adopted budget, inclusive of all year-to-date amendments, projects a surplus of $738,254, with revenues exceeding expenditures by that amount at fiscal year-end.

After reviewing year-to-date financial results, broader fiscal trends, and organizational needs, the revised budget projection is expected to result in a surplus of $202,963. While this represents a reduction of $535,291 from the adopted budget projection, the General Fund remains in a positive position. Moreover, actual year-end results have historically exceeded projections due to the city's conservative budgeting practices and prudent financial management. Accordingly, the revised projection continues to reflect the city's ability to meet service demands and maintain fiscal stability.

STATEMENT OF FACT – Continued
The table below summarizes the adopted and revised budget snapshots:

	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
SOURCES / REVENUES	$ 84,772,719	$ 85,436,429	$ 663,710
USES / EXPENDITURES	84,034,465	85,233,466	(1,199,001)
PROJECTED GENERAL FUND SURPLUS	**$ 738,254**	**$ 202,963**	**$ (535,291)**

General Fund – Revenues & Transfers
As a whole, General Fund revenues and transfers in are expected to total $85,436,429 for the year, or $663,710 more than previously budgeted. Within the adjustment there are a number of contributing items that are worth highlighting. The following table provides an overall view with further noteworthy details below:

ACCOUNT DESCRIPTION	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
PROPERTY TAXES	$ 7,502,000	$ 7,537,000	$ 35,000
SALES TAX - BRADLEY BURNS	18,246,000	17,369,000	(877,000)
SALES TAX- MEASURE L	14,172,000	13,639,000	(533,000)
FRANCHISE FEES	1,750,000	1,700,000	(50,000)
BUSINESS LICENSE TAX	720,000	720,000	-
DOCUMENTARY TRANSFER TAX	280,000	310,000	30,000
TRANSIENT OCCUPANCY TAX	110,000	110,000	-
UTILITY USERS TAX	3,990,000	4,010,000	20,000
OTHER TAXES	134,000	135,000	1,000
LICENSES & PERMITS	2,176,000	2,676,000	500,000
FINES / FORFEITURES / PENALTIES	675,100	986,200	311,100
USE OF MONEY & PROPERTY	4,477,950	5,177,950	700,000
FROM OTHER AGENCIES	12,853,800	12,975,800	122,000
CURRENT SERVICE CHARGE	12,977,040	13,231,650	254,610
BUDGETED TRANSFERS	4,708,829	4,858,829	150,000
TOTAL REVENUE	**$ 84,772,719**	**$ 85,436,429**	**$ 663,710**

STATEMENT OF FACT – Continued

- Sales and Use Tax: Bradley Burns and Measure L – When viewed in the context of the overall revenue base, these adjustments represent a decrease of $1,410,000, or 4.3 percent from the adopted budget. This change reflects modest softness across the city's major sales tax sectors, including general consumer goods, autos and transportation, and fuel and service stations, in a somewhat challenging economic environment. Broader factors such as sustained inflation, elevated interest rates, and the anticipated effects of newly implemented tariffs continue to influence consumer behavior. Even so, the city's largest sales tax producers have remained resilient and continue to provide a stable foundation for revenues. More importantly, the majority of multi-year sales tax revenue projections continue to assume modest growth and do not reflect a significant economic contraction. As a result, the city's overall sales tax outlook remains stable despite near-term pressures.

- Use of Money & Property - $700,000 increase. As a result of growth in the city's reserves and sustained investment yields, earnings are expected to be considerably higher. The much-anticipated decline in interest rates has not materialized as quickly or sharply as originally projected. Consequently, investment earnings have benefited from greater than budgeted investment earnings.

- Licenses & Permits - $500,000 increase. As a result of several large developments, building & safety permit revenues are anticipated to increase by $400,000 over the course of the fiscal year. Additionally, animal license revenues are expected to be $100,000 greater. Previously, the city's contract provider, the Southeast Area Animal Control Authority (SEAACA) "netted" animal licensing revenues against costs billed to the city. After adoption of the city's budget SEAACA informed the city that they would be remitting all licensing revenues, while also charging the "gross" amount for their services. Consequently, the revenue adjustment above is accompanied by an increase in contractual costs presented in the expenditures section of this report.

- Fines/Forfeitures/Penalties - $311,100 increase. This adjustment is largely reflective of a projected $278,000 increase in revenue from Los Angeles County, who distributes revenue collected from violation fines and distributes them to cities throughout the county. Additionally, local parking fines are expected to be $30,000 greater than anticipated. The number of citations issued has increased modestly, consistent with higher parking demand and ongoing enforcement efforts in a more constrained parking environment.

General Fund - Expenditures

Operational expenditures are largely trending as expected and remain in alignment with the adopted budget. While an increase of $1,199,001, or approximately 1.14 percent, is anticipated for the year, this change is manageable and reflects normal operational adjustments.

STATEMENT OF FACT – Continued
The table below summarizes these changes, with additional detail on the more significant items provided following the table.

ACCOUNT DESCRIPTION	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
EMPLOYEE SERVICES	$ 31,825,982	$ 32,009,555	$ (183,573)
CONTRACT SERVICES	37,750,999	38,273,832	(522,833)
FACILITIES EXPENSES	2,599,926	2,767,191	(167,265)
OFFICE EXPENSES	220,500	223,300	(2,800)
MEETING EXPENSES	228,375	235,075	(6,700)
SPECIAL DEPT SUPPLIES	2,804,977	2,929,011	(124,034)
OTHER OPERATING EXP	2,948,326	2,967,188	(18,862)
CAPITAL OUTLAY	2,050,380	2,223,314	(172,934)
OPERATIONAL EXPENDITURES	80,429,465	81,628,466	(1,199,001)
CAPITAL PROJECTS (CIPs) SET-ASIDE	3,605,000	3,605,000	-
TOTAL EXPENDITURES	**$ 84,034,465**	**$ 85,233,466**	**$ (1,199,001)**

- Employee Services - $183,573 increase. $60,864 of the increase is due to part-time employee salary adjustments, primarily in the Recreation & Parks Services Department. $15,000 is proposed for the addition of a new Management Trainee in the Administration Department. Lastly, $49,119 is the result of increased vacation and sick leave "buy back" where employees did not use the leave time and it is subsequently converted to pay.

- Capital Outlay - $172,934 increase. This amount includes $88,000 for the replacement of computer servers and switches as well as the purchase of additional hardware that enhances the city's cybersecurity efforts. $30,000 are proposed for the upgrade and relocation of the city's AM radio station equipment to The Centre. Lastly, $27,079 is proposed for the purchase of a new John Deere Leaf/Litter Vacuum.

- Contract Services - $522,833 increase. This number reflects several increases and offsetting decreases. Some of the larger components are as follows:
    - $304,500: Additional funding is required to cover the cost for plan check services performed by the city's consultant (TRB). These added costs will cover previously unanticipated development projects that arose during the year and are offset by plan check revenues mentioned earlier.
    - $263,000: Decrease in Los Angeles County Sheriff's Department services, which is reflective of a vacant Special Assignment Officer (SAO) Deputy Unit for a significant portion of the fiscal year.
    - $196,898: As previously mentioned, increased funding is necessary to fund a portion of the contractual costs for SEAACA. The costs will be partially offset by anticipated animal license revenues.

STATEMENT OF FACT – Continued

- $172,790: Additional funding is needed to cover a portion of the contractual costs for EDCO residential waste hauling services.
- $50,000: Additional funding for a new city event - FIFA World Cup Watch Party.
- $20,000: Increase to fund added drone show to celebrate the nation's semi-quincentennial (250th) birthday.

Water Utility Enterprise Fund

The Water Utility Enterprise Fund is the city's second largest fund. It accounts for the full operation of the city's robust water system.

The adopted budget anticipated a surplus of $4,532. After considering year-to-date information and fiscal trends, a new budget projection results in a revised surplus amount of $11,532 or an increase to the projected surplus by $7,000. The table below summarizes the adopted and revised budget snapshots:

WATER FUND SUMMARY	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
SOURCES / REVENUES	$ 16,169,000	$ 16,254,000	$ 85,000
USES / EXPENSES	$ 16,164,468	$ 16,242,468	(78,000)
PROJECTED WATER FUND SURPLUS	**$ 4,532**	**$ 11,532**	**$ 7,000**

Water Fund - Revenues

Overall, water revenues are anticipated to be $16,254,000 or $85,000 more than originally budgeted. As the city has experienced historically, water meter sales (the largest revenue source) are highly sensitive to weather patterns and may vary significantly.

STATEMENT OF FACT – Continued
The table below provides an overall view of revenues, followed by some brief notations.

ACCOUNT DESCRIPTION	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
INVESTMENT EARNINGS	$ 490,000	$ 575,000	$ 85,000
RENTS AND CONCESSIONS	53,000	53,000	-
ENERGY UTILITY REBATES	0	0	-
OTHER REVENUE	75,000	75,000	-
METERED WATER SALES	13,000,000	13,000,000	-
METERED WTR SALES-INTERCONNECT	1,100,000	1,100,000	-
FIRE PROTECTION SERVICES	212,000	212,000	-
RECYCLED WATER	535,000	535,000	-
LEASE OF WATER RIGHTS	610,500	610,500	-
SERVICE INITIATION FEES	43,500	43,500	-
SERVICE RESTORATION CHARGES	50,000	50,000	-
TOTAL REVENUES	**$ 16,169,000**	**$ 16,254,000**	**$ 85,000**

- Investment Earnings - $85,000 increase. Similar to the city's General Fund, earnings are expected to be greater than anticipated as a result of higher and sustained investment yields.

Water Fund - Expenses
Water expenses are expected to be $16,242,468, or $78,000 more than projected in the adopted budget.

ACCOUNT DESCRIPTION	ADOPTED BUDGET	REVISED BUDGET	FAVORABLE / (UNFAVORABLE)
EMPLOYEE SERVICES	$ 3,785,675	$ 3,785,675	$ -
CONTRACT SERVICES	1,407,000	1,412,000	(5,000)
FACILITIES EXPENSES	2,056,850	2,056,850	-
OFFICE EXPENSES	5,500	5,500	-
MEETING EXPENSES	20,000	20,000	-
SPECIAL DEPT SUPPLIES	831,171	904,171	(73,000)
OTHER OPERATING EXP	5,886,859	5,886,859	-
CAPITAL OUTLAY	375,713	375,713	-
TRANSFERS	1,795,700	1,795,700	-
OPERATIONAL EXPENSES	**$ 16,164,468**	**$ 16,242,468**	**$ (78,000)**

- Special Department Supplies - $73,000 increase. Most of the proposed increase ($63,000) is needed for additional booster pump maintenance.
- Miscellaneous - $22,700 increase. While not reflected above under operating expenses, it is an appropriate time to make a proposed adjustment of $22,700 in engineering services for the Water Main Replacement CIP. The additional funds would cover additional design services necessary for the CIP.

STATEMENT OF FACT – Continued

Review and Update: FY 2026-28 Two-Year Budget Preparation Calendar

As planning begins for the development of the city's FY 2026-28 Budget, staff has prepared a calendar of milestone dates culminating with the Council's review and scheduled adoption of the budget on June 9, 2026. Attached is a draft calendar.

RECOMMENDATION

It is recommended that the City Council:

1) Adopt the noted changes for inclusion into the City's FY 2025-26 Revised Budget and direct staff to make all related adjustments to the City's budget appropriations; and
2) Review the FY 2026-28 Two-Year Budget Preparation Calendar and provide feedback to staff.

ER for JG

Jose Gomez
Director of Finance & Administrative Services

Thaddeus McCormack
City Manager

DRAFT

Budget Preparation Calendar
Two-Year Budget
FY 2026-27 and FY 2027-28

Due Date?	Who?	What?
Feb 7th	Council / City Mgr. (CM)	Council goal-setting meeting: Operational and Capital Improvement Proj. (CIP) priorities
Feb. 11th	Fin & Adm. Services (FASD) and Public Works (PW)	Provide departments with the budget development reports: ♦ Full-time position labor allocation report (MS Excel) ♦ Part-time (hourly) and OT expenditure report (MS Excel) ♦ Department-specific expenditure & revenue report (MS Excel) ♦ PW will send call for projects for FY 2026-2033 Seven-Year CIP Plan to all depts. ***Unless otherwise stated, files will be emailed by the assigned FASD Budget Analyst***
Feb 19th	All Depts.	City Manager - All departments budget kick-off meeting
Feb. 23rd	All Depts.	Make changes / scan / and email full-time position labor allocation report (MS Excel file) to Budget Analyst Departments submit CIP request forms back to PW
Mar 2nd	All Depts.	Make changes / scan / email to Budget Analyst the following: ♦ Part-time (hourly) Budget for Object #50200 & 50210 (MS Excel) ♦ OT Budget for Objects #50150 & 50250 (MS Excel)
Mar. 9th-16th	All Depts.	Enter department revenue & expenditure data in MUNIS Budget Module for two years: FY 2026-27 and FY 2027-28. PW to enter CIPs *(All object codes #51000-58799 - except: #55560)* ***Provide budget memo to FASD highlighting noteworthy items***
Mar 24th	FASD	Provide budget narratives to Depts. - "Top side of budget book division detail" (PDF file)
Mar. 25-31st	CM / FASD / PW	Hold Council Budget Committee meetings - Operational and CIP
Mar. 31st	FASD / PW	Print budget and CIP Plan drafts for City Manager and departments to review
Mar 30 - Apr 6th	All Depts.	City Manager meetings w/ Directors re: budget and CIPs
Apr. 13th	All Depts.	Make changes / scan / email dept. operating budget narratives to Budget Analyst
Apr 14-17th	All Depts.	If needed - 2nd round of meetings City Manager meetings w/ Directors
Apr. 22nd	FASD	Review and finalize operating budget narratives
Apr 23rd	PW	Present FY 2026-2033 Seven-Year CIP Plan to CIP Committee (1st and Last Round)

Due Date?	Who?	What?
May 7th	PW	Present FY 2026-2033 Seven-Year CIP Plan to Planning & Environ. Commission
May 11-15th	CM / FASD / PW	Hold Council Budget Committee Meetings: Discuss Operational and CIPs Budget
May 21st	FASD / PW	Distribute Proposed Operating and Capital Budget to all departments
May 26 - Jun 4	All Depts.	City Council - Operating and Capital Budget Study Session
June 9th	All Depts.	City Council - Operating and Capital Budget Presentation and Adoption

Department	Budget Analyst
Administration	Claire Pierson
Communications	Jerry Altuna
Community Development	Minh Duong
Finance & Admin Services	Jerry Altuna
Public Safety	Minh Duong
Public Works	Claire Pierson
Rec and Com Services	Anne Rodriguez
Water Resources	Anne Rodriguez