



LOS ANGELES DEPARTMENT OF CITY PLANNING

2017-2018

GROWTH & INFRASTRUCTURE REPORT

population



transportation

water



fire



housing wastewater sewer stormwater

SCHOOLS



SOLID WASTE / POWER / POLICE / CULTURAL RESOURCES

URBAN runoff libraries PARKS airports HARBOR

February 1, 2018



*Dear Members of the City Planning Commission,
City Council and Mayor Garcetti:*

The Department of City Planning is pleased to present the *2017-2018 Report on Growth and Infrastructure*. It is the latest in a series of reports providing detailed information on City demographics, development activity, infrastructure and public facilities.

The report is a program of the Framework Element of the General Plan. Its aim is to synthesize information about the City's growth and infrastructure in one place. The first half of the report focuses on population, housing and employment growth from the 2010 Census. Information is organized around the City's 35 Community Plan Areas, 2 Special Purpose Districts (the port and airport) and 7 Area Planning Commission areas. The second half focuses on the range of available and planned/completed infrastructure facilities to support that growth.

The report largely summarizes existing public reports, plans and other publications from the State, regional and other local agencies. It will be made available as a resource on the Internet. It is our hope that this and future reports become useful tools in understanding growth and change in the City. The reports provide an important window into understanding changing needs, demographics and infrastructure, thereby informing public debate on these topics.

The Department of City Planning is committed to providing this information to you and the public, and to assisting public policy and decision-making.

A handwritten signature in black ink, appearing to read 'Vincent P. Bertoni', with a large, stylized flourish at the end.

Vincent P. Bertoni, AICP
Director of Planning

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EXECUTIVE SUMMARY

This Growth and Infrastructure Report summarizes growth and infrastructure related plans, reports and data produced across the various City departments. By monitoring changes in Los Angeles' growth and infrastructure trends, the Report provides a basis for evaluating the City's progress towards meeting the goals and policies of its General Plan.



The Report looks at the change of population, housing units and employment as well as the infrastructure and public services in place to support it. Summaries of current infrastructure status and planned/completed infrastructure improvements deemed to be relevant to the City's growth and development are provided by topic area. The data is collected from public documents, departmental reports, and data from the State, regional, and other local agencies.

Documents included as of the release of the Growth and Infrastructure Report are the most recent available as of September 2017 and contain data through December 2016. Each department may have updated documents available on their website since then.

The Framework Element and Population Growth

The General Plan Framework Element was originally adopted by the City Council in December 1996 as part of the City's General Plan. It establishes a comprehensive citywide strategy for long-term growth of the City and was intended to guide the development of the other elements of the General Plan. The plan is a "smart growth" strategy that generally seeks to accommodate growth near transit and other existing infrastructure to assure a sustainable, economically viable future for Los Angeles. The Framework Element identifies a projected population of 4.3 million people living in 1,566,108 housing units.

An Environmental Impact Report (EIR) was prepared for the Framework Element that analyzed the environmental impacts of the plan and all of the infrastructure and services required to support that population. The EIR was certified and determined that the Framework Plan for accommodating 4.3 million people would have no significant impacts on the environment with the implementation of mitigations, with the exception of Land Use, Urban Form, Air Quality—Particulate Emissions, and Biological Resources. In other words, the infrastructure and services that were in place in 2001 (when the Framework was re-adopted and its EIR certified), were adequate to serve 4.3 million people. With regard to the impacts created by the Framework Element on land use, urban form, air quality and biological resources, the City Council determined that, despite such potential impacts, it was critical to adopt a sustainable, smart growth plan to accommodate the projected growth of Los Angeles and adopted "overriding considerations" for the approval of the Framework Plan and the certification of its EIR.

Since the adoption of the Framework, the rate of growth in Los Angeles has slowed significantly. The reduced growth rate has therefore resulted in lower population projections for the future. However, it is important to note that the current population projection provided in the 2016 RTP Growth Forecast produced by the Southern California Association of Governments (SCAG) for the year 2040, is now 4.6 million people. The following population table compares the existing estimated population with the projected Framework population

TABLE 1. Comparison of General Plan Framework Projections and Existing SCAG Estimates

	Population	Occupied Housing Units	Employment
2016 Estimate*	4,020,500	1,371,300	1,848,340
2020 Projection**	4,016,980	1,441,400	1,899,540
2035 Projection**	4,442,500	1,618,900	2,104,090
2040 Projection**	4,609,400	1,690,300	2,169,100
Framework Element Horizon 2010***	4,306,500	1,566,108	2,291,500

* Draft SCAG RTP 2020, September 2017

** Final SCAG RTP 2016, April 2016

*** The Framework Element included a “planning horizon” based upon regional growth forecasts from 1993. The estimates are not intended to represent maximum or minimum levels of development to be permitted.



Chapter One: **population, housing and development activity**

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. SCAG includes 69 districts which represent 191 member cities, including the City of Los Angeles. The region has a population of more than 18 million persons in an area encompassing more than 38,000 square miles. As the designated MPO, the Association of Governments is mandated by federal and state law to research and draw up plans for transportation, growth management, hazardous waste management, and air quality as well as additional mandates at the state level.

SCAG Local Profile of the City of Los Angeles May 2017

Since 2009, the Southern California Association of Governments (SCAG) has been preparing biennial Local Profile reports for every member city and county. The Local Profiles contain detailed demographic and socioeconomic data and analysis for population, income, housing, employment, and education. The 2017 reports feature additional information including median household income, single-family and multi-family permits, types and age of the housing stock, foreclosures, major work destinations for residents, and educational attainment for residents. Local Profiles provide a portrait of each city and its changes since 2000 and demonstrates current trends occurring in the city. Unless otherwise noted with parenthesis, the data used in the following sections is from the SCAG 2017 Local Profile of Los Angeles.

Population

Population Growth

Between 2000 and 2016 the population of the City of Los Angeles grew from 3,792,621 (Decennial Census) to 3,918,872 (2016 ACS Five Year Estimate). During this sixteen year period the City's growth rate was 3.3%.



Households

Number of Households

Between 2000 and 2016 the total number of households in the City of Los Angeles increased from 1,413,995 (Decennial Census) to 1,456,745 (Department of City Planning DRU), a growth rate of 3%.

Households by Size

In 2016, the city's average household size was 2.9, lower than the county average of 3.0. Approximately 70.7 percent of all city households had 3 people or fewer. About 29 percent of households were single-person households. Approximately 17 percent of all households in the city had 5 people or more.

Household Income

In 2016, about 50 percent of households earned less than \$50,000 annually. Approximately 24 percent of households earned \$100,000 or more. From 2000 to 2016, median household income increased by \$13,299.

Renters and Homeowners

Between 2000 and 2016, homeownership rates decreased and the share of renters increased.

Housing

Home Sale Prices

Between 2000 and 2016, the median home sales price of existing homes increased 172 percent from \$250,000 to \$680,000. Median home sales price increased by 74.7 percent between 2010 and 2016. In 2016, the median home sales price in the city was \$680,000, \$160,000 higher than that of the county overall.

Housing Units by Housing Type

In 2016, the City of Los Angeles had a total of 1,453,271 housing units. Approximately 44 percent were single family homes and 55 percent were multi-family homes. The most common housing type is multi-family buildings with 5 units or more, representing 46.1% of total units.

Age of Housing Stock

60 percent of the housing stock was built before 1970.

Employment

SCAG identified the top 10 places where residents of the City of Los Angeles commute to work in 2014 - Los Angeles, Burbank, Santa Monica, Glendale, Beverly Hills, Culver City, Pasadena, Torrance, Long Beach, and West Hollywood. SCAG also identified that

54.1 percent of commuters work within the City of Los Angeles, while 45.9 percent commute to other places.

Total Jobs

In 2015, total jobs in the City of Los Angeles numbered 1,783,626, a decrease of 1.3 percent from 2007.

Jobs in Specific Sectors

SCAG provides the total number of jobs in the following sectors: manufacturing, construction, retail trade, and professional and management.

Manufacturing jobs refer to people employed in the following sectors: food, apparel, metal, petroleum and coal, machinery, computer and electronic products, and transportation equipment. Between 2007 and 2015, the number of manufacturing jobs in the city decreased by 17.2 percent.

Construction jobs include those engaged in both residential and non-residential construction. Between 2007 and 2015, construction jobs in the city decreased by 36.6 percent.

Retail trade jobs consist of workers in the following retailers: motor vehicle and parts dealers, furniture, electronics and appliances, building materials, food and beverage, clothing, sporting goods, books, and office supplies. Between 2007 and 2015, retail trade jobs in the city remained relatively unchanged.

Jobs in the professional and management sector include those employed in professional and technical services, management of companies, and administration support. Between 2007 and 2015, the number of professional and management jobs in the city decreased by 5.9 percent.

City of Los Angeles Department of City Planning (DCP)

The Department of City Planning is charged with the responsibility of preparing, maintaining, and implementing a General Plan for the development of the City of Los Angeles. The Planning Department implements the General Plan utilizing a variety of tools through the application of zoning regulations.

Housing Element of the General Plan

The Housing Element of the General Plan is the City's blueprint for meeting the City's housing and growth challenges. It identifies housing conditions and needs, reiterates goals, objectives, and policies that are the foundation of the City's housing strategy, and provides an array of programs to create sustainable, mixed-income neighborhoods across the City. The Housing Element must be updated every eight years, with the 2013-2021 Housing Element update adopted in late 2013. Annual Progress Reports must also be submitted to the State each year reporting progress on meeting Housing Element objectives.



Regional Housing Needs Assessment (RHNA)

The RHNA quantifies the need for housing production within each jurisdiction during specified planning periods, based on population and employment projections. The 5th cycle 2013-2021 RHNA allocation for the City of Los Angeles is 82,002 housing units. Approximately forty percent of this figure is assigned to households with below moderate incomes (120% of Area Median Income).

2016 Annual Progress Report for the Housing Element

A total of 13,696 housing units were permitted in 2016. Of those, 1,465 units were affordable to households with moderate-incomes or below (143 moderate-income, 604 low-income and 718 very-low income). The Annual Progress Report also lists the yearly progress of each individual program listed in the Housing Element.

As of December 31, 2016, 53,463 units have been permitted between Year 1 and Year 4 of the RHNA Period. Of those, 5,554 units were affordable to households with moderate-incomes or below (275 moderate-income, 2,600 low-income and 2,679 very-low income).



Department of Building and Safety

The mission of the Department of Building and Safety is to protect the lives and safety of the residents and visitors of the City of Los Angeles and enhance the quality of life, housing, economic prosperity, and job creation. This is accomplished through advising, guiding, and assisting customers to achieve compliance with the Building, Zoning, Plumbing, Mechanical, Electrical, Disabled Access, Energy, and Green codes; and local and State laws, through a timely, ethical, cooperative, and transparent process for the facilitation of construction and maintenance of commercial, industrial, and residential buildings throughout the City.

Building and Safety Newsletter January 2017

Statistics on growth and development are compiled in quarterly newsletters distributed by the Department of Building and Safety.



Construction Activity

Construction in the first half of fiscal year (FY) 2016-2017 remained at higher levels than the first half of FY 2015-2016. In FYTD 2017 (July-December) 82,285 permits had been issued, construction valuation totaled \$3.62 Billion, 9,160 dwelling units were permitted, and 433,055 inspections were made.

Office of the Mayor

Performance Metrics

As part of Mayor Garcetti’s commitment to publicly accessible data and transparency, a new website has been developed that provides performance metrics to track the city’s progress toward key priorities (<https://data.lacity.org/browse>). Included in those metrics are several key growth and development measures such as building permit valuation and new business license registration. The measures are intended to be added to over time.

One of the development measures is the number of housing units permitted from July 2013. The Mayor has set a goal to achieve 100,000 new housing units permitted

by December 2021. In Fiscal Year 2016-17, the City issued permits to 17,722 new housing units; reaching 58,527 units from July 1, 2013 to July 30, 2017. During this period, FY2016-2017 registered the highest volume of new housing units permitted, about 60% higher than FY2013-2014.

2016 Department of City Planning Estimates

In order to present the most up to date growth data, the Department of City Planning’s Demographic Research Unit has provided population and housing estimates through July 1, 2016 based on current building permit data. The City uses a baseline of the April 1, 2010 US Census, in order to track growth since this established benchmark.

TABLE 2. Total Housing Unit Growth Trends by Area Planning Commission, 2010-2016

Area Planning Commission	2010 Census	2016 Estimate*	2010-2016 % Change
Central LA	300,110	323,176	7.7%
East LA	130,390	132,120	1.3%
West LA	197,027	202,775	2.9%
South LA	217,410	220,770	1.5%
Harbor	67,561	67,877	0.5%
South Valley	292,602	297,806	1.8%
North Valley	208,895	212,221	1.6%
Citywide	1,413,995	1,456,745	3.0%

**Department of City Planning, DRU, Population/Housing Estimate 10/01/2016. The Department of City Planning Population/Housing Estimates utilizes the "new housing unit method."*

TABLE 3. Total Population Growth Trends By Area Planning Commission, 2010-2016

Area Planning Commission	2010 Census	2016 Estimate*	2010-2016 % Change
Central LA	647,211	667,984	3.2%
East LA	391,963	398,617	1.7%
West LA	408,721	425,120	4.0%
South LA	723,748	735,872	1.7%
Harbor	195,486	204,368	4.5%
South Valley	729,702	772,214	5.8%
North Valley	695,790	714,697	2.7%
Citywide	3,792,621	3,918,872	3.3%

* US Census Bureau, 2016 ACS 5 Year Estimates

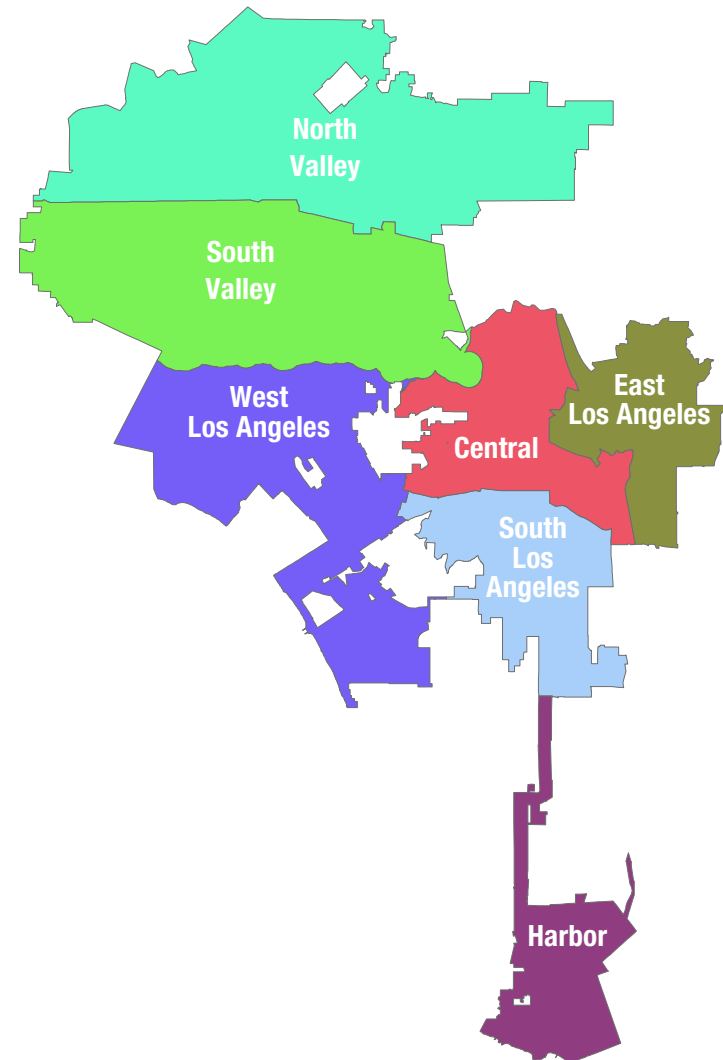


TABLE 4. Total Housing Unit Growth Trends by Community Plan Area, 2010-2016

Community Plan Area	2010 Census	2016 Estimate*	2010-2016 % Change
Arleta - Pacoima	23,368	23,651	1.2%
Bel Air - Beverly Crest	9,079	9,142	0.7%
Boyle Heights	23,054	23,493	1.9%
Brentwood - Pacific Palisades	27,391	27,561	0.6%
Canoga Park - Winnetka - Woodland Hills - West Hills	66,016	67,117	1.7%
Central City	23,626	35,194	49.0%
Central City North	6,618	7,464	12.8%
Chatsworth - Porter Ranch	34,031	35,624	4.7%
Encino - Tarzana	31,686	31,861	0.6%
Granada Hills - Knollwood	20,735	20,872	0.7%
Harbor Gateway	12,398	12,529	1.1%
Hollywood	103,187	106,941	3.6%
LAX	743	681	-8.3%
Mission Hills - Panorama City - North Hills	39,652	40,069	1.1%
North Hollywood - Valley Village	56,579	57,937	2.4%
Northeast Los Angeles	77,644	78,293	0.8%
Northridge	23,794	23,898	0.4%
Palms - Mar Vista - Del Rey	52,570	53,968	2.7%
Port of Los Angeles	397	267	-32.7%

TABLE 4. Total Housing Unit Growth Trends by Community Plan Area, 2010-2016

Community Plan Area	2010 Census	2016 Estimate*	2010-2016 % Change
Reseda - West Van Nuys	35,837	36,440	1.6%
San Pedro	31,662	31,877	0.7%
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	42,055	42,580	1.2%
Silver Lake - Echo Park - Elysian Valley	29,692	30,354	2.2%
South Los Angeles	82,186	83,576	1.7%
Southeast Los Angeles	68,651	70,468	2.6%
Sun Valley - La Tuna Canyon	24,045	24,291	1.0%
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	21,898	22,172	1.3%
Sylmar	21,372	21,643	1.3%
Van Nuys - North Sherman Oaks	60,429	61,910	2.5%
Venice	21,568	21,723	0.7%
West Adams - Baldwin Hills - Leimert	66,573	66,726	0.2%
West Los Angeles	38,501	39,367	2.2%
Westchester - Playa del Rey	25,267	28,113	11.3%
Westlake	40,847	43,237	5.9%
Westwood	21,908	22,220	1.4%
Wilmington - Harbor City	23,104	23,204	0.4%
Wilshire	125,832	130,340	3.6%
Citywide Total	1,413,995	1,456,745	3.0%

*Department of City Planning, DRU, Population/Housing Estimate (10/01/2016).

TABLE 5. Total Population by Community Plan Area, 2010-2016

Community Plan Area	2010 Census	2016 Estimate*	2010-2016 % Change
Arleta - Pacoima	103,252	101,971	-1.2%
Bel Air - Beverly Crest	20,934	20,288	-3.1%
Boyle Heights	84,619	87,094	2.9%
Brentwood - Pacific Palisades	57,060	57,426	0.6%
Canoga Park - Winnetka - Woodland Hills - West Hills	175,476	188,199	7.3%
Central City	37,675	38,375	1.9%
Central City North	22,135	23,069	4.2%
Chatsworth - Porter Ranch	93,251	100,367	7.6%
Encino - Tarzana	72,018	75,826	5.3%
Granada Hills - Knollwood	60,690	63,177	4.1%
Harbor Gateway	40,136	41,313	2.9%
Hollywood	198,228	202,773	2.3%
LAX	1,566	1,675	7.0%
Mission Hills - Panorama City - N. Hills	142,510	148,107	3.9%
North Hollywood - Valley Village	136,616	140,997	3.2%
Northeast Los Angeles	237,256	240,185	1.2%
Northridge	66,906	71,577	7.0%
Palms - Mar Vista - Del Rey	110,715	116,805	5.5%
Port of Los Angeles	1,462	1,124	-23.1%

* US Census Bureau, 2016 ACS 5 Year Estimates

Community Plan Area	2010 Census	2016 Estimate*	2010-2016 % Change
Reseda - West Van Nuys	107,754	114,223	6.0%
San Pedro	76,651	79,049	3.1%
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	78,803	85,162	8.1%
Silver Lake - Echo Park - Elysian Valley	70,088	71,339	1.8%
South Los Angeles	270,354	273,636	1.2%
Southeast Los Angeles	278,337	288,115	3.5%
Sun Valley - La Tuna Canyon	88,556	86,926	-1.8%
Sunland - Tujunga - Lake View Terr. -Shadow Hills - East La Tuna Canyon	61,763	60,893	-1.4%
Sylmar	78,862	81,679	3.6%
Van Nuys - North Sherman Oaks	159,035	167,807	5.5%
Venice	36,962	35,905	-2.9%
West Adams - Baldwin Hills - Leimert	175,057	174,121	-0.5%
West Los Angeles	74,952	80,384	7.2%
Westchester - Playa del Rey	55,073	58,763	6.7%
Westlake	110,781	115,275	4.1%
Westwood	51,459	53,873	4.7%
Wilmington - Harbor City	77,237	82,882	7.3%
Wilshire	278,392	288,491	3.6%
Citywide Total	3,792,621	3,918,872	3.3%

* US Census Bureau, 2016 ACS 5 Year Estimates

TABLE 6. Estimated Change in Permits for New and Demolished Dwelling Units, October 1, 2015 to October 1, 2016

Community Plan Area	New Single-Family Dwelling Unit (SFDUs)	Demolished SFDUs	Net SFDUs	New Multi-Family Dwelling Unit (MFDUs)	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units
Arleta - Pacoima	50	-2	48	0	0	0	48
Bel Air - Beverly Crest	47	-26	21	0	0	0	21
Boyle Heights	3	-11	-8	92	-12	80	72
Brentwood - Pacific Palisades	129	-101	28	139	-4	135	163
Canoga Park - Winnetka - Woodland Hills - West Hills	41	-8	33	42	-7	35	68
Central City	0	0	0	4,856	0	4,856	4,856
Central City North	0	0	0	9	0	9	9
Chatsworth - Porter Ranch	117	-1	116	64	0	64	180
Encino - Tarzana	80	-53	27	49	0	49	76
Granada Hills - Knollwood	9	-3	6	0	0	0	6
Harbor Gateway	27	-6	21	10	0	10	31
Hollywood	136	-107	29	638	-75	563	592
LAX	0	0	0	0	0	0	0
Mission Hills - Panorama City - North Hills	32	-7	25	136	-9	127	152
North Hollywood - Valley Village	56	-72	-16	470	-79	391	375
Northeast Los Angeles	88	-21	67	263	-5	258	325
Northridge	13	-3	10	28	0	28	38
Palms - Mar Vista - Del Rey	42	-55	-13	298	-28	270	257
Port of Los Angeles	0	0	0	0	0	0	0

TABLE 6. Estimated Change in Permits for New and Demolished Dwelling Units, October 1, 2015 to October 1, 2016

Community Plan Area	New Single-Family Dwelling Unit (SFDUs)	Demolished SFDUs	Net SFDUs	New Multi-Family Dwelling Unit (MFDUs)	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units
Reseda - West Van Nuys	65	-9	56	96	0	96	152
San Pedro	2	-2	0	46	0	46	46
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	160	-112	48	180	-24	156	204
Silver Lake - Echo Park - Elysian Valley	73	-15	58	117	-8	109	167
South Los Angeles	16	-56	-40	673	-14	659	619
Southeast Los Angeles	86	-110	-24	299	-32	267	243
Sun Valley - La Tuna Canyon	19	-8	11	78	-20	58	69
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	40	-5	35	20	0	20	55
Sylmar	9	-3	6	56	0	56	62
Van Nuys - North Sherman Oaks	175	-59	116	367	-51	316	432
Venice	40	-29	11	6	-6	0	11
West Adams - Baldwin Hills - Leimert	48	-41	7	43	-20	23	30
West Los Angeles	61	-63	-2	372	-44	328	326
Westchester - Playa del Rey	25	-5	20	393	-19	374	394
Westlake	2	-14	-12	1,409	-15	1,394	1,382
Westwood	10	-10	0	112	-6	106	106
Wilmington - Harbor City	14	-1	13	0	0	0	13
Wilshire	79	-86	-7	2,005	-133	1,872	1,865
Citywide Total	1,794	-1,104	690	13,366	-611	12,755	13,445

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Chapter Two: **transportation**

The City of Los Angeles transportation system and services are planned for and provided by a variety of jurisdictions and agencies: California Department of Transportation (Caltrans), County Metropolitan Transportation Authority (Metro), Los Angeles Department of Transportation (LADOT), Los Angeles Department of City Planning (DCP), and Department of Public Works Bureau of Street Services. Transportation infrastructure and public services in the City include networks of highways and roads, sidewalks and paths, bikeways, bridges, transit, and supporting assets such as lights and signals.

This transportation section provides an overview of transportation infrastructure and services in the City of Los Angeles.

California Department of Transportation (Caltrans)

Caltrans is responsible for the planning, design, construction, maintenance, and operation of the state highway system. The City of Los Angeles is located within the jurisdiction of Caltrans District 7, which includes Los Angeles and Ventura counties. District 7 has the most expansive managed lane network in the state, covering over 556 lane miles, or approximately one-third of the entire state.

Caltrans Highways/Freeways - Managed Lanes System Plan 2016

Caltrans has developed a System Plan for Managed Lanes on State Highways that summarizes the likely evolution of managed lanes in California. A managed lane is an exclusive or preferential-use lane that is managed proactively in response to changing conditions in order to achieve improved efficiency and performance. Managed lanes use operations strategies such as access control, vehicle eligibility, and tolling, or a combination thereof. These strategies are determined based on factors such as safety, regional and interregional consistency, impacts on freeway performance, enforcement needs, environmental considerations, and community support. Strategies may be adjusted to meet required performance standards or to address other managed lane or freeway performance issues.

A managed lane is defined as one of the following: high-occupancy vehicle (HOV) lane, high-occupancy/toll (HOT) lane where tolled vehicles can also access the HOV lane, and express toll lane (ETL) where all vehicles must pay a toll to access the lane. Caltrans maintains nearly 396 lane miles of 24-hour HOV2+ and approximately 79 lane miles of peak period HOV2+ on SR-14 in north Los Angeles County and US 101 in Ventura County. In addition, there are currently just less than 83 miles of 24-hour priced managed lanes on I-10 (San Bernardino Freeway) and I-110 (Harbor Freeway) to downtown Los Angeles. Vehicles meeting minimum occupancy requirement do not pay the toll when using these lanes.

By 2040, the district is expected to add an additional 221 managed lane miles to the system, bringing the total to nearly 778 lane miles. In the future, the network will also have more than 374 lane miles of priced managed lanes by constructing new facilities or converting existing HOV2+ lanes. In addition to the current I-10 and I-110 priced lanes, new lanes are planned for I-5, I-105, I-405, and I-605.



Los Angeles County Metropolitan Transportation Authority (Metro)

Metro serves as transportation planner, coordinator, designer, builder and operator for Los Angeles County. More than 9.6 million people – nearly one-third of California’s residents – live, work, and play within its 1,433-square-mile service area.

Long Range Transportation Plan 2009-2040

Metro’s 2009 Long Range Transportation Plan provides a 30-year vision for Los Angeles County’s transportation system to the year 2040. The Plan identifies public transportation and highway projects, funding forecasts over a 30-year timeframe, multi-modal funding availability, sub-regional needs, and project performance measures.

Short Range Transportation Plan 2014

The 2014 Short Range Transportation Plan is a ten-year action plan that guides Metro’s programs and projects through 2024. It advances Metro towards the long-term goals identified in the 2009 Long Range Transportation Plan, a 30-year vision for addressing growth and traffic in Los Angeles County. It was adopted by the Metro Board in July 2014.

The Plan identifies the short-term challenges, provides an analysis of Metro’s financial resources, proposes action plans for the public transportation and highway modes, and includes other project and program initiatives. In addition, it addresses sustainability, future funding strategies, and lastly, measures the Plan’s performance.

Active Transportation Strategic Plan 2016

The Active Transportation Strategic Plan (Plan) is Metro’s county-wide effort to identify strategies to increase walking, bicycling and transit use in Los Angeles County. The Plan’s policy and infrastructure recommendations will require collaboration between Metro, local and regional agencies, and other stakeholders to ensure implementation. The Plan will focus on improving first and last mile access to transit and propose a regional network of active

transportation facilities, including shared-use paths and on-street bikeways, and develop a funding strategy to get them built.

The Active Transportation Strategic Plan was adopted by the Metro Board of Directors on May 26, 2016.

Los Angeles Department of Transportation (LADOT)

The Los Angeles Department of Transportation (LADOT) leads transportation planning, design, construction, maintenance and operations in the City of Los Angeles. LADOT works together and partners with other agencies to provide safe, accessible transportation services and infrastructure in the city and region.

Short Range Transit Plan 2016-17 (March 2017)

The Short Range Transit Plan provides an overview of the transit system in the City of Los Angeles including transit services provided and areas served, ridership, and inventory of fleet and equipment. The Plan also discusses budget and financial resources to support the Department’s goals and objectives for fiscal years 2016-17.

The City of Los Angeles, through LADOT’s Transit Services Bureau, provides fixed-route and demand-response (paratransit) services throughout the City.

Commuter Express

Commuter Express is a line haul peak period bus service largely running between the suburbs and Downtown LA. LADOT operates 13 Commuter Express routes and the Union Station/Bunker Hill Shuttle. Service is provided primarily on weekdays during the AM and PM peak commute periods. Commuter Express Route 142 is the exception; it operates from 5:20 AM to 11:40 PM on weekdays and from 5:30 AM to 11:15 PM on weekends/holidays. Headways typically vary from 15 to 60 minutes among the thirteen Commuter Express routes.

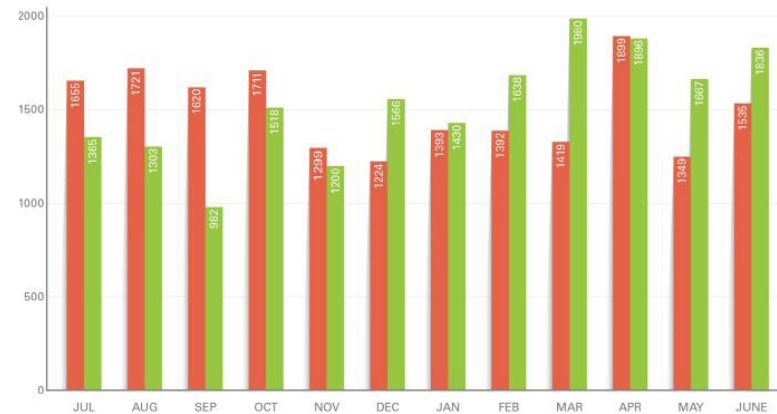
DASH

DASH is a community circulator service comprising 85% of total fixed route weekday revenue hours and 71% of total fixed route weekday revenue miles in the LADOT transit system. DASH operates twice as many vehicles as Commuter Express and carries over nine times as many passengers on an average weekday. LADOT runs 32 DASH routes; 5 in Downtown and 27 in communities throughout the city. DASH routes typically operate on weekdays between 6:30 AM and 7:00 PM, with selected routes operating as late as 10:00 PM. Many DASH routes also operate on Saturdays and a few offer service on Sundays/holidays.

Cityride

Cityride is a user side subsidy transportation program and dial-a-ride transportation service for seniors and persons with disabilities offered by the City to supplement the federally mandated Access Services program provided by Metro. Cityride also runs two fixed route shuttles. Cityride clients can purchase a specific amount of subsidized fare value on a quarterly basis which is redeemable for trips on the Cityride dial-a-ride service and/or City franchised taxicabs. There are currently 40,000 active clients in the Cityride program.

- LADOT’s DASH and Commuter Express fleets use 100% clean fuel, including vehicles powered by compressed natural gas (CNG) and liquid propane gas (LPG.) LADOT is currently pursuing grant funding to demonstrate zero emission bus (ZEB) technology, including pure electric and fuel cell buses. LADOT’s fleet currently consists of 360 vehicles.
- LADOT Transit is working with the City’s Bureau of Engineering on the construction of an LADOT Central Bus Facility in Downtown Los Angeles. This will be the first City owned bus maintenance and fueling facility and will house the Downtown DASH fleet.
- LADOT Transit leases and operates the South San Fernando Valley Park & Ride in Encino (aka Encino Park & Ride), which serves Commuter Express Routes 423, 549, 573 and 574. The facility provides 160 parking spaces, electric vehicle charging stations and bike lids. An electronic message sign with bus arrival information greets riders as they enter the facility.



PLAN REVIEW, MAINTENANCE & CONSTITUENT REQUESTS
FY 2014-2015
Received
Closed

- As part of the same action which established transit service performance standards, the City Council adopted “Guidelines for Establishing the Need for New DASH Service” and “Guidelines for Implementation of New DASH Service.” The New Service Implementation Guidelines set forth conditions under which startups should occur and what performance levels are expected at the conclusion of the one year probationary period.
- LADOT will continue to operate and maintain five Metrolink stations in Van Nuys, Northridge, Chatsworth, Sun Valley and Sylmar. LADOT will also continue to coordinate with Caltrans and Metro to secure additional public and private sites for park & ride facilities.

LADOT Annual Report 2015-16

The Los Angeles Department of Transportation (LADOT) prepares an annual report that highlights key elements of the City’s transportation infrastructure and recent accomplishments. The following list highlights some of LADOT’s recent accomplishments and milestones:

- Built the city's largest pedestrian scramble crosswalk at Hollywood and Highland that cut injury crashes to zero in the first six months
- Built improvements on Cesar Chavez Ave to reduce crossing distances and increase visibility of people walking
- Retimed over 490 traffic signals and installed 20 pedestrian "head starts" citywide
- Implemented School Safety Zones to reduce speed limits from 25 mph to 15 mph when Children Are Present at 13 schools and completed 195 school crosswalk upgrades
- Coordinated safety messages with LAPD, Los Angeles County Department of Public Health and Vision Zero Alliance
- Hired first ever Artist in Residence to connect Angelenos with the city's vision for a safer Los Angeles
- The third annual Walk to School Day broke the 100 school mark and included participation from over 20,000 LAUSD school children
- Received \$500,000 from the Office of Traffic Safety to fund targeted Vision Zero outreach and education activities
- Grants Partnered with Mayor's Great Streets Studio and the Department of Cultural Affairs to implement Great Streets Challenge Grant Events
- Launched Great Streets outreach on Lankershim Blvd and Sherman Way and completed outreach and design on Van Nuys Blvd, North Figueroa St and Venice Blvd
- Designed 12 miles of protected bikeways (Van Nuys Blvd, Venice Blvd, Highland Ave) and built over 12 miles of bikeway improvements
- Installed two bike corrals and 578 bike racks and installed bike racks on 155 DASH buses
- Installed 61 bike-share stations

- Opened new Transit Customer Service Center, launched LA Transit Pop-up service and, installed solar powered, real-time transit on stops Downtown
- Added Commuter Express Route 438 service to the new Redondo Beach / Marine Park & Ride lot
- Coordinated with Santa Monica Big Blue Bus to build over 200 new bus stops connecting the Metro Expo Line
- Expanded access to non-ownership models of vehicle mobility by executing a contract for Electric Vehicle (EV) car-sharing in low income communities
- Implemented Electric Vehicle Charger Program in City-owned Parking Facilities and executed a Participation Agreement with the Los Angeles Department of Water & Power (DWP) to purchase and install 82 Level 2 EV chargers in parking facilities throughout the City and, finalized agreement with Clean Fuel, NRG, and DWP to purchase and install 3 Level 3 EV chargers in various parking facilities



- Increased availability of parking and efficiency of use, by expanding LA Express Park to Westwood; constructed 50-space parking lot in Venice and 175-space garage in Chinatown
- Cut timeline for Preferential Parking Permits in half
- Presented initial recommendations for parking fine reduction and local meter revenue return to Transportation Committee
- Re-activated the citywide Speed Hump Program
- Improved restriping turnaround time for both resurfacing and slurry from a high of 40 days to 10 days, reviewed 1,987 Metro plans – 98% returned within 20 business days and, executed a partnership agreement with the Department of Building & Safety
- Created the Accessibility Advisory Committee to recommend disabled placard reform legislation and confiscated 849 disabled placards
- Closed 16,803 MyLADOT requests and launched a new Citywide Temporary Traffic Control online portal to improve construction coordination and opened a new Customer Service Center with state-of-the-art customer service technologies, including interactive kiosks and digital technologies



- Opened new Development Services Center at Figueroa Plaza along with the Departments of City Planning and Building & Safety, creating a consolidated One-Stop counter for better service
- Launched pilot program, Play Streets, to help residents transform Los Angeles City streets into places for playing, learning, and fun for all ages. Hosted demonstration Play Streets events in Boyle Heights, South LA, Watts, Pacoima, and Koreatown
- LADOT currently has 137 Capital Improvement Projects in various stages of construction
- Measure M design review projects include completion of the Exposition LRT Phase II, ongoing Purple Line Subway Extension, Regional Connector Subway and, Crenshaw Light Rail and East San Fernando Valley and Green LAX draft EIRs as well as the San Fernando Valley I-405 Corridor Planning Study

City of Los Angeles Local Transportation Profile 2015-16

Quick Facts

As described in the LADOT Annual Report – Fiscal Year 2015-16, key facts for the City of Los Angeles include:

Citywide Streets Inventory and Freeway System

- Approximately 7,500 miles of dedicated public streets
- 181 miles of freeway
- 4,600 signalized intersections and 97 flashing beacons
- 390 miles of red, yellow, white, green and blue curb markings

Inventory of Citywide On-and-Off Street Parking Controls

- 34,125 on-street parking meters
- 33,339 on-street card & coin payment machines
- 2,368 off-street metered spaces

- 90 off-street card & coin
- 118 off-street parking facilities

Parking

LADOT manages 150 established Preferential Parking Districts (PPDs)

Commute

According to the 2010 U.S. Census Bureau data, the City of Los Angeles has approximately 1.74 million workers over the age of 16. About 1.65 million workers work outside of the home. Of those who work outside the home, 52.6 percent spend less than half an hour commuting to work and 11.1 percent of workers spend an hour or more commuting to work. The average commute time was 29.6 minutes.

2017 Local Profile

The Local Profile report provides a variety of demographic, economic, education, housing, and transportation information.

Development Activity

The City now has 302 Class 1 Bike Path miles, 659 Class 2 Bike Lane miles, 519 Class 3 Bike Route miles, and 2 Class 4 Separated Bikeway miles.

Traffic Volume Counts

Detailed traffic count data can be found on [NavigateLA](#). Traffic Count Summaries can be found on the [Data LA](#) portal. In 2016, LADOT conducted 686 traffic counts, accounting for the passage of more than 10,000 motorized vehicles through various intersections across the City.

Transportation Technology Strategy, Urban Mobility in a Digital Age

With the rapid rise of technology in transportation, LADOT will need to deploy and support an ecosystem of advanced technologies to meet policy objectives and create truly great streets for all Angelenos. LADOT must evolve into a platform for transportation innovation that focuses on three core customer services: Data, Mobility, and Infrastructure.

Data as a Service is the rapid exchange of real-time condition and service information between customers, service providers, government and the supporting infrastructure to optimize safety, efficiency and the transportation experience. These pilots are opportunities to move LADOT towards Data as a Service by giving the staff experience in managing and optimizing data-sharing partnerships, exploring the value of analytics, and testing new tools.

Mobility as a Service centers on the customer; it provides a suite of transportation mode options through a single platform and payment system to simplify access to mobility choices. While many elements to deploy a true Mobility as a Service model in the region are beyond LADOT's jurisdiction, these pilots can demonstrate how more shared mobility, better connectivity, and improved interoperability between modes can shift travel behaviors for Angelenos.

Infrastructure as a Service is the idea that the use and access of public infrastructure should be subject to pay-as-you-go user fees that more closely align the costs associated with providing the infrastructure itself to how the infrastructure is being used. Since full-scale implementation of this model is contingent on state legislation and requires standardization, these pilots introduce interim ways to deploy technologies to respond more efficiently to changing infrastructure demand while testing public appetite for new approaches.

Los Angeles Department of City Planning (DCP)

The Department of City Planning is charged with the responsibility of preparing, maintaining, and implementing a General Plan for the development of the City of Los Angeles. The Planning Department implements the General Plan utilizing a variety of tools through the application of zoning regulations.

Mobility 2035, An Element of the General Plan

Mobility Plan 2035 (Mobility Plan) provides the policy foundation for achieving a transportation system that balances the needs of all road users. As an update to the City's General Plan Transportation Element (last adopted in 1999), Mobility Plan 2035 incorporates "complete streets" principles and lays the policy foundation for how future generations of Angelenos interact with their streets.

In 2008, the California State Legislature adopted AB 1358, The Complete Streets Act, which requires local jurisdictions to "plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context."

Mobility Plan 2035 includes goals that define the City's high-level mobility priorities. Each of the goals contains objectives (targets used to help measure the progress of the Plan) and policies (broad strategies that guide the City's achievement of the Plan's five goals): Safety First; World Class Infrastructure; Access for All Angelenos; Collaboration, Communication and Informed Choices; and Clean Environment & Healthy Communities.

Department of Public Works Bureau of Street Services

The Bureau of Street Services is responsible for maintenance, repairing, resurfacing, and cleaning improved streets, alleys, bridges, tunnels, pedestrian subways, and related structures. The Bureau also maintains street trees and landscaped median islands and embankments.

Bureau of Street Services Master Plan 2011-13

The Master Plan provides a guiding blueprint for the Bureau of Street Services for two years from 2011 to 2013. The Plan introduces key strategies, initiatives, and programs to improve street infrastructure in the City of Los Angeles.

The Bureau has adopted two implementation strategies to improve infrastructure

sustainability, transportation, and new technology. The two strategies are the One Hundred Days Initiatives and Two-Year Rollout. The One Hundred Days strategy included ten programs to deliver multi-functional targeted services:

1. Signature Streets Program
2. BSS Service Centers
3. Operation Smooth Lanes
4. Intersection Repair Program
5. Operation Downtown
6. City of LA Cold Patch" Pilot Project
7. Transfer Site Compactors
8. Operation Safe Schools
9. BSS Bikeway Steward Program
10. New BSS Website.

The Two-Year Rollout strategy includes four projects and programs:

1. New Rubberized Slurry Seal mix
2. New asphalt plant with increased recycling capacity
3. Cool Street Program pilot
4. New rut-resistant asphalt mix (LA MIX)

State of the Streets Report 2016

The Bureau of Street Services completed an assessment of the City of Los Angeles' street network in the State of the Streets Report. This triennial report also identifies funding needs and strategies to minimize the impacts created by insufficient preventive maintenance and resurfacing funding.

Street Inventory

The City of Los Angeles has approximately 7,500 centerline miles of improved streets that are categorized into two functional categories: Major and Residential.

Major streets are typically 45 feet to 100 feet wide and carry heavy volumes of traffic. With proper ongoing maintenance, the asphalt road of a Major street is expected to last 15 to 20 years due to higher traffic volumes and heavy vehicles such as commercial trucks and transit buses.

Residential streets are typically 15 to 45 feet wide, carrying lighter traffic loads. With proper maintenance, the asphalt road of a Residential street is expected to last 30 to 35 years.

Street Infrastructure Condition Assessment

The Bureau of Street Services adopted the Pavement Management System and the MicroPAVER system to monitor and maintain the City's 7,500 centerline mile street system. Using the system, the City's streets were identified and rated from A to F with A being the best, and F being the poorest. The condition levels were determined by using the internationally accepted Pavement Condition Index (PCI). The PCI is an index of the pavements' structural and surface operational condition and has a numerical rating index, ranging from 0 for a failed pavement to 100 for a pavement in perfect condition.

As of January 1, 2016, the average PCI for the Los Angeles road network was 62. Citywide, 46% of the road surface had a PCI of at least 71, indicating a state of good repair.

The Path Forward

The Department of Public Works engaged the engineering firm Harris & Associates to develop a detailed cost estimate for reconstructing streets that are in poor condition. Harris estimated that approximately \$3.85 Billion would be needed over a 15-year period of construction in order to bring all of these streets back to a state of good repair.

In November 2014, Mayor Eric Garcetti announced the "Street Smart" package of initiatives to resurface an additional 200 lane-miles per year. The proposed initiatives include: Increased fees for utilities who cut into city streets, and longer moratorium on cutting into newly-paved streets; improved collection of city parking tax to help fund additional street repair; upgraded Asphalt Plant I to 50% recycled asphalt capability, reducing costs and improving environmental sustainability; establishment of opt-in Community Beautification Assessment Districts to allow residents and businesses to voluntarily expedite street repairs; and an exploration of new technologies including "cool pavements" to reduce heat island effect.

Year End Figures 2014-15

Each year the Bureau of Street Services produces data reflecting its accomplishments and milestones through the Pavement Preservation Program, Street Cleaning Program, Urban Forestry Division, and Investigation and Enforcement Division.

The Bureau's Street Cleaning Program is responsible for sweeping approximately 13,000 curb miles of streets. This program is essential to maintaining sanitary environmental and public conditions. In 2014-15, the Bureau removed 71,384,712 square feet (or 1,855 cubic yards) of green waste as part of the City's weed abatement program.

The Bureau is responsible for maintaining and preserving the City's urban forest, one of the important elements of the public works infrastructure. In 2014-15, the Bureau planted more than 736 trees, removed 841, trimmed 28,000, and removed 1,204 stumps.

The Bureau is also concerned with the issuance of permits and violations for maintenance of clean, safe streets through its Investigation and Enforcement Division. In 2014-15, 3,976 building material permits were issued. The Bureau conducted 779 homeless cleanups and issued 1,888 notices of illegal dumping. There were 344 arrests made for illegal vending, 82,975 peak hour inspections, and 15,692 newsrack inspections. Special Event Permits totaled 906 and a total of 195,300 signs were removed. The Bureau completed 15,321 Service Request (SIR's), conducted 1,615 waste tire grant inspections, and issued 76 water discharge test permits.

Chapter Three: **water****Los Angeles Department of Water and Power**

The Los Angeles Department of Water and Power (LADWP) is responsible for the delivery of water and electricity to residents and businesses in the City of Los Angeles. The LADWP provides about 160 billion gallons of water to 4 million residents and 681,000 customers each year. Primary sources of water for the LADWP service area are the Los Angeles Aqueducts, local groundwater, recycled water, and imported water purchased from the Metropolitan Water District of Southern California.

LADWP delivers water to its customers through a complex and expansive network water system. The system consists of the nation's largest direct filtration plant with a capacity of 600 million gallons per day, 113 service zones, 7,200 miles of pipes, 96 pump stations, 325 regulator stations, 118 in-city tanks and reservoirs, 60,700 fire hydrants, and 208,000 gate valves.

This water section provides an overview of agency, the LADWP, responsible for water supply in the City of Los Angeles. The Los Angeles Department of Water and Power produces annual reports, management plans, and other documents to provide information about water demand, supply, capacity, and infrastructure.

Water Issues

Faced with increasing demands for additional water supplies and multi-year drought conditions, LADWP and other water agencies in Southern California are addressing the challenge of providing a reliable water supply for a growing population. LADWP has a long history of working to ensure that its customers have reliable water.

In response to a recent multi-year drought in California, Mayor Eric Garcetti issued Executive Directive No. 5 (ED5) in October 2014 and Sustainable City Plan (pLAn) in April 2015 setting goals for water use reduction and development of more sustainable local water supplies to address the City's heavy reliance on imported water supplies.

Expanded from ED5, the pLAn sets a number of water resources goals, including 25 percent reduction of average per capita potable water use by 2035, 50 percent reduction of imported water purchases from MWD by 2025, and expanding all local sources of water so that they account for at least 50 percent of the total supply by 2035. LADWP's 2015 Urban Water Management Plan (UWMP) incorporated the Mayor's pLAn goals and long-term water supply strategy, focusing on:

- Expanding water conservation
- Expanding water recycling
- Enhancing stormwater capture
- Cleaning up the San Fernando groundwater basin

Existing Water Supply

Primary sources of water for the LADWP service area are the Los Angeles Aqueducts (LAA), local groundwater, State Water Project (supplied by Metropolitan Water District of Southern California or MWD), and Colorado River Aqueduct (supplied by MWD). An additional water source, recycled water, is becoming a larger part of the overall supply portfolio. Water from LAA, State Water Project, and Colorado River Aqueduct is classified as imported because it is obtained from outside LADWP's service area.

Many of LADWP's traditional water supply sources are increasingly becoming more constrained due to climate extremes, environmental regulations, and groundwater basin contamination. To mitigate these impacts on supply sources, LADWP is developing a path towards sustainability by accelerating investments in conservation, water recycling, stormwater capture, and local groundwater development and remediation.

However, it is important to note that it is in LADWP's interest to protect all of its existing water supplies, including imported water. Pressure on one supply resource, such as reduced snowfall in the eastern Sierra Nevada Mountains affecting LAA supply during the drought results in an increased reliance on another supply resource — purchased water from MWD.

Over the last ten years, demands have undergone a drastic reduction from a peak of 670,970 AFY in FY 2006/07. Several sequences of multi-year drought have led to diminishing supplies and increased efforts in conservation. Most recently, the 5-year drought beginning in 2012 resulted in diminished supplies from the LAA and historically heavy reliance on purchased MWD water. This drove increased efforts in conservation that resulted in a 27 percent demand reduction in 2015/16 from 2006/07. Reliance on MWD reached a peak in FY 13/14 as a result of limited LAA supplies due to minimal snowfall in the eastern Sierra Nevada Mountains.

Water Demands

For the development of LADWP's 2015 UWMP, a new water demand forecast was prepared for the major categories of demand to allow the City to better understand trends in water use and develop effective conservation programs.

Water demands are driven by a number of factors:

- Demographics – population, number of single-family homes, and number of employees
- Socioeconomics – price of water, personal income, family size, economy, drought conservation effect, and passive water conservation
- Conservation – passive conservation from plumbing codes and landscape ordinances, passive conservation from behavioral changes, and active conservation from the City's various active conservation programs
- Weather – historical weather patterns including daily maximum temperature and precipitation
- Non-revenue water – the difference between total water consumption and billed water use

LADWP's service area population is expected to continue to grow over the next 25 years at a rate of 0.5 percent annually. While this is substantially less than the historical 1.0 percent annual growth rate from 1980 to 2010, it will still lead to approximately 493,200 new residents over the next 25 years.

Water Conservation

Conservation has had a tremendous impact on Los Angeles' water use patterns and has become a permanent part of LADWP's water management philosophy. The City of Los Angeles has long recognized water conservation as the core of multiple strategies to improve overall water supply reliability. Through its investments in conservation Los Angeles has become a national leader in water use efficiency. In the future, conservation will continue to be an important part of maintaining supply reliability and is a key component of the pLAN ultimately calling for a 25 percent reduction in per capita water use by 2035 over 2013/14 levels.

Future Water Supplies

The water management goal of LADWP is to implement cost-effective conservation, recycled water, stormwater capture programs, and groundwater remediation to meet the targets established in the pLAN. In addition, LADWP is also pursuing water to replace a portion of the LAA water used for environmental enhancements and mitigation in the eastern Sierra Nevada.



Water Recycling

Recycled water is a critical element of LADWP's local water supply strategy. Since 1960, the City has recognized the potential for water reuse and invested in recycled water treatment that meets Federal and State standards (Title 22) for non-potable water uses, including irrigation, industrial and environmental uses, and in infrastructure (commonly known as purple pipes) to convey recycled water to customers.

Expansion of recycled water use to offset potable demands has been included as one method that will help achieve the pLAN goals to reduce imported water purchases. Concurrently, the pLAN document establishes specific goals for recycled water use. In order to meet these goals, LADWP is working in conjunction with the Los Angeles Department of Public Works Bureau of Sanitation (LASAN) and Bureau of Engineering (BOE), to develop non-potable reuse projects for irrigation and industrial uses. In addition, the City is pursuing a groundwater replenishment (GWR) project to replenish the San Fernando Groundwater Basin with highly treated recycled water. The Environmental Impact Report for the GWR Project was adopted by the Board of Water and Power in December 2016. Project completion is expected in 2024. Additional opportunities to further expand the City's recycled water use over the long-term are also being studied.

Under the 2015 UWMP, recycled water use is projected to increase by more than 7 folds from 10,000 acre-feet per year (AFY) to 75,400 AFY by 2040.

Stormwater Capture

Stormwater runoff from urban areas is an underutilized local water resource. Within the City of Los Angeles, the majority of stormwater runoff is directed to storm drains and ultimately channeled into the ocean. This unused stormwater reaching the ocean carries with it many pollutants that are harmful to marine life and public health. In addition, local groundwater aquifers that should be replenished by stormwater are receiving less recharge than in the past due to increased urbanization. Urbanization has increased the City's hardscape, which has resulted in less infiltration of stormwater and a decline in groundwater elevations. In response, LADWP completed a Stormwater Capture Master Plan (SCMP) in 2015 to comprehensively evaluate stormwater capture potential within the City.

Stormwater capture can be achieved by increasing infiltration into groundwater basins (i.e., groundwater recharge) and by onsite capture and reuse of stormwater for landscape irrigation (i.e., direct use). Capturing and reusing more stormwater is a natural way to replenish local groundwater aquifers while improving water quality in our ocean, rivers and other water bodies.

Currently, the average stormwater capture is about 64,000 AF annually. By 2035, the annual stormwater capture is expected to increase 2 to 3 folds to between 132,000 AF (conservative case) and 178,000 AF (aggressive case).

Groundwater Remediation

Man-made pollution, caused by industrial activities beginning in the 1940s, has severely impaired the quality of San Fernando Basin groundwater, forcing closure of over half of LADWP's production wells. LADWP is taking action to remove the contamination from the groundwater to restore the beneficial use of the aquifer, which once provided adjudicated water rights of 87,000 AFY. The success of GWR and stormwater recharge is hinged on the groundwater remediation program.

To begin the remediation and cleanup of the local groundwater resources, LADWP has completed the construction of 25 groundwater monitoring wells in various areas of the eastern San Fernando Basin where the city's major wellfields are located.

The wells, along with a network of more than 70 existing wells, are being used to characterize the basin's groundwater quality in order to design and construct groundwater remediation facilities for removing contamination from the city's major wellfields in the San Fernando Basin.

Water Supply Reliability

Through the 25-year planning period covered by the 2015 UWMP, LADWP will be able to reliably provide water to its customers with current water supplies, planned future water conservation, and planned future water supplies. LADWP's reliability projections account for water quality impacts on supplies and impacts of climate change on both supplies and demands. To meet targets established in the pLAN, LADWP will reduce per capita water consumption through conservation, increase recycled water use including both non-potable reuse and indirect reuse, and reduce its reliance on imported water purchases from MWD.

The City's locally-developed supplies will increase from the current 5-year average of 14 percent (groundwater and recycled water) to 49 percent in dry years or to 47 percent in average years in the year 2040. These local supplies are not influenced by variability in hydrology, and will become the cornerstone of LA's future water supplies. As a result, the City's combined imported supplies will decrease significantly from 86 percent to 51 percent in dry years or to 53 percent in average years. As for the breakdown of the City's imported supplies, it is still highly influenced by hydrology. The Los Angeles Aqueduct system with limited storage capacity is subject to the variability of hydrology, while MWD (with its ample storage) is capable of providing supplemental water supply to the City regardless of hydrologic conditions. By FY 2039/40 LAA deliveries are projected at 7 percent in dry years and 42 percent in average years by FY 2039/40, MWD will make up the remaining 44 percent in dry years or 11 percent in average years to meet the City's need for supplemental water

Financing

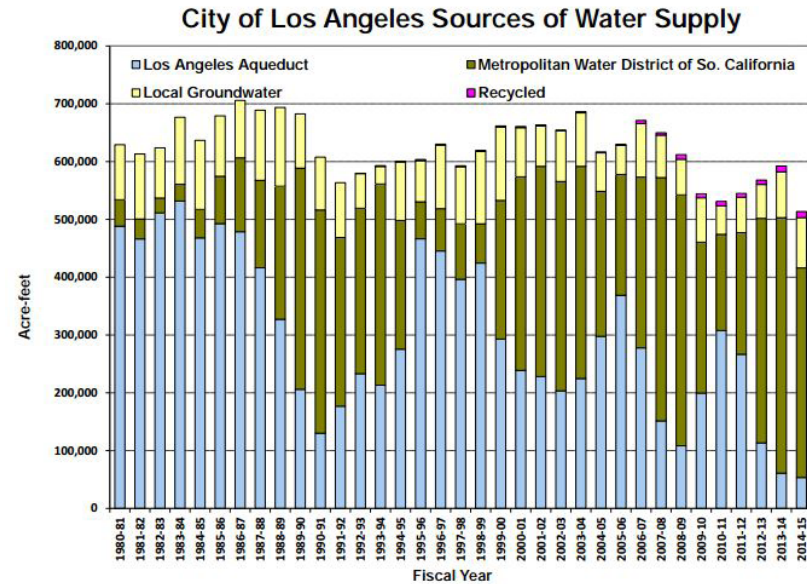
Funding for water resource programs and projects are primarily provided through LADWP water rates, with supplemental funding provided by the MWD and state and federal grants. LADWP will also seek reimbursement from potential responsible parties to assist with groundwater treatment program costs. To fund future programs, LADWP will utilize a combination of the following funding sources:

- **Water Rates** – The revenue collected through LADWP's current water rates is the primary funding source for resource programs designed to achieve the City's goals for conservation, water recycling, stormwater capture, and remediating the contamination in the San Fernando Basin. In addition to water resource programs, water rates will also fund critical programs to improve infrastructure reliability and meet water quality regulations.
- **MWD** – Currently provides funding through their Local Resources Program (LRP) for the development of water recycling, groundwater recovery, and seawater desalination. The LRP incentive structure offers three options: sliding scale incentives up to \$340/AF over 25 years, sliding scale incentives up to \$475/AF over 15 years, or fixed incentives up to \$305/AF over 25 years. MWD also promotes conservation through its Conservation Credits Program up to \$195/AF. Since its inception in 1990, the Conservation Credits Program has provided \$731 million in rebates and incentives throughout its service area cumulatively saving 2.4 million AF through 2016.
- **State Funds** – Funds for recycling, groundwater, conservation, and stormwater capture have been available on a competitive basis through voter approved initiatives, such as Propositions 50, 84 and 1. Proposition 1 allocates \$900 million to prevent or clean up contaminated groundwater. Occasionally low or zero-interest loans are also available through State Revolving Fund programs.
- **Federal Funds** – Federal funding for recycling is available through the U.S. Army Corps of Engineers, via periodic Water Resource Development Act legislation, and the U.S. Bureau of Reclamation's Title XVI program.

- Potentially Responsible Parties – LADWP may be able to recover some costs for groundwater cleanup from potentially responsible parties.

LA's Drinking Water Quality Report 2016

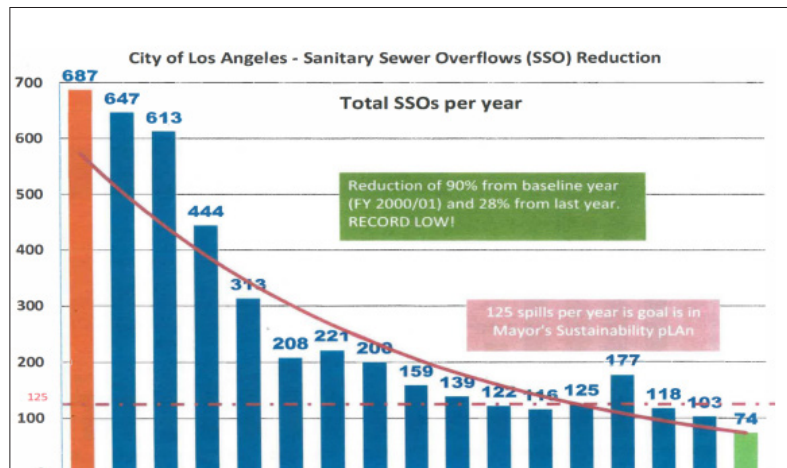
The annual report (also known as a Consumer Confidence Report) is required by the California Department of Public Health and is prepared in accordance with their guidelines. LADWP collects over 25,000 water samples across the city, and performed more than 40,000 water quality tests. They tested for more than 200 contaminants and constituents, including both regulated contaminants, such as arsenic, chromium, lead, and disinfection by-products, as well as constituents of interest such as sodium and hardness.



Chapter Four: **wastewater/sewer**

Wastewater generated within the City of Los Angeles is collected and treated by two agencies:

the Sanitation Districts of Los Angeles County and the City of Los Angeles Department of Public Works Bureau of Sanitation. The Sanitation Districts serve a portion of the City of Los Angeles. The majority of the City receives wastewater collection and treatment service from the Department of Public Works Bureau of Sanitation.



Sanitation Districts of Los Angeles County

The Sanitation Districts protect public health and the environment through innovative and cost-effective wastewater and solid waste management, and in doing so convert waste into resources such as recycled water, energy, and recycled materials.

The Sanitation Districts are a public agency created under state law to manage wastewater and solid waste on a regional scale and consist of 24 independent special districts serving about 5.5 million people in Los Angeles County. The service area covers approximately 824 square miles and encompasses 78 cities and unincorporated territory within the county.

The Sanitation Districts have been a leader in providing wastewater and solid waste management services to the region since the formation of the first districts in 1923. Today, the wastewater system includes approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants that transport and treat about half the wastewater in Los Angeles County. The Sanitation Districts' comprehensive solid waste management system currently provides about one-fourth of the countywide solid waste disposal needs through the operation of two sanitary landfills, three landfill energy recovery facilities, three materials recovery/transfer facilities, and two refuse-to-energy facilities. The Sanitation Districts do not pick up or collect trash from homes or businesses.

The agency also helps sponsor the Household Hazardous Waste and Electronic Waste Collection Program, which gives Los Angeles County residents a legal and cost-free way to dispose of unwanted household chemicals and electronic waste that cannot be put into the regular trash.

The Sanitation Districts are innovators in the production of green energy and water recycling. Approximately 120 megawatts of electricity, enough to supply the needs of about 160,000 homes, are created in the Sanitation Districts' wastewater and solid waste operations. Water reclamation plants produce 165 million gallons per day of recycled water that can be safely used for irrigation and other uses to replace the water used by over 400,000 Southern California families.

Clearwater Program Master Facilities Plan 2012

The Clearwater Program Master Facilities Plan (MFP) is a long-range planning document for the Joint Outfall System (JOS), a regional wastewater management system serving 73 cities and unincorporated county areas, including portions of the City of Los Angeles.

The Clearwater Program Master Facilities Plan identifies a recommended plan that will meet the wastewater management needs of the JOS through the year 2050. It evaluates infrastructure and facilities and makes recommendations on how to maintain a reliable wastewater management system.



Department of Public Works Bureau of Sanitation

The Bureau of Sanitation’s three primary programs are: wastewater collection, conveyance, treatment, and disposal; watershed protection; and solid resources, collection, recycling, and disposal.

The City’s wastewater service area consists of two drainage basin areas: the Hyperion Service Area (HSA) and the Terminal Island Service Area (TISA). The HSA covers approximately 515 square miles and serves the majority of the Los Angeles population as well as non-City agencies that contract with the City for wastewater service. The TISA is approximately 18 square miles and serves the Los Angeles Harbor Area.

The wastewater collection system’s physical structure includes over 6,700 miles of major interceptors and mainline sewers, 43 pumping plants, and various diversion structures and other support facilities.

The City owns and operates four major wastewater treatment facilities: Hyperion Treatment Plant (HTP), the Donald C. Tillman Water Reclamation Plant (DTWRP), Los Angeles-Glendale Water Reclamation Plant (LAGWRP), and the Terminal Island Water Reclamation Plant (TIWRP).

2017 One Water LA as a continuation of the 2006 Water Integrated Resources Plan

In 2016, the City of Los Angeles embarked on the One Water LA 2040 Plan. This plan will provide a strategic vision and a collaborative approach for integrated water management. In 2006, the City completed and adopted its first Water Integrated Resources Plan (IRP). This plan was the start of a paradigm shift for the City and resulted in significant achievements. Since then, the water landscape in the City has changed with increased demands, new regulations, and threats of climate change.

In response to these changes and to help achieve water sustainability, the City initiated the One Water LA 2040 Plan. This plan builds upon the success of the Water IRP, which had a planning horizon to year 2020. The One Water LA 2040 Plan takes a holistic and collaborative approach, to consider all water resources from surface water, groundwater, potable water, wastewater, recycled water, dry-weather runoff, and stormwater as “One Water.” The plan identifies multi-departmental and multi-agency integration opportunities to manage water in a more efficient, cost effective, and sustainable manner.

The One Water LA 2040 Plan represents the City’s continued and improved commitment to proactively manage all its water resources and implement innovative solutions, driven by the Sustainable City pLAn. The Plan will help guide strategic decisions for integrated water projects, programs, and policies within the City.



Bureau of Sanitation 2016-17 Strategic Plan

The Bureau of Sanitation's annual Strategic Plan outlines its progress with its major programs – the Clean Water Program, the Solid Resources Program, and the Watershed Protection Program. These programs all contribute to and build upon the overarching program of environmental sustainability, which also includes climate change; greenhouse gas emission monitoring, reporting and reduction; green infrastructure and urban greening; renewable energy and brownfield remediation.

In the 2016-2017 fiscal year, LASAN achieved the following:

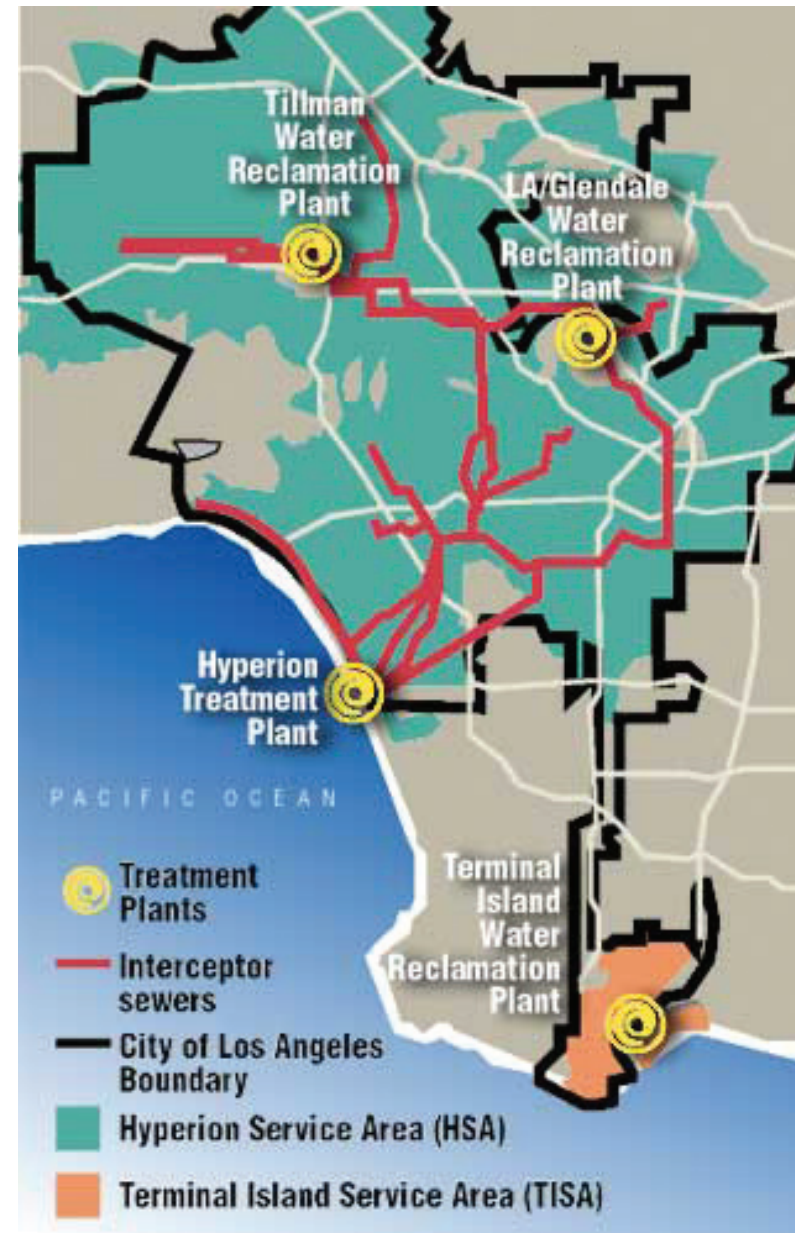
- Managed \$1.065B in Total Revenue with \$670M dedicated to the Clean Water Program, \$363M in Solid Resources, and \$32M in Watershed Protection
- Produced 88.7 million of gallons per day (mgd) of recycled water for beneficial reuse
- Decreased 89% of Sanitary Sewer Overflows since the year 2001
- Collected over 60 tons of material at our used oil and filter collection events
- Received over 20K visitors to the Los Angeles Environmental Learning Center at Hyperion (ELC)
- Captured 1,945 million of gallons per day (mgd) from rainwater and stormwater infrastructure projects for beneficial use
- Collected 4,133 tons of Household Hazardous Waste (HHW) at LA Sanitation's S.A.F.E. Centers... the equivalent of 55 Endeavor Space Shuttles!



Wastewater Capital Improvement Program 2016/17-2025/26

The Wastewater Capital Improvement Program (WCIP) includes capital developed for the City's Clean Water facilities. The projects included in the document have been approved by the City's Program Review Committee, comprised of Assistant Directors of LA Sanitation (LASAN) and a Deputy City Engineer. The administration, coordination and implementation of the projects in the 10-year WCIP are assigned to various divisions of LASAN and the Bureau of Engineering (BOE) in the Department of Public Works. The Program includes replacement, rehabilitation, and expansion of the City's wastewater treatment and collection system facilities. The 10-year estimated total cost of the Program is \$3,218,314,000.

The City's wastewater system is divided into two separate subsystems – Hyperion and Terminal Island – based upon the topographical features of the service area. The Hyperion System serves the area north of Imperial Highway and includes the Hyperion Treatment Plant in Playa Del Rey, the Los Angeles-Glendale Water Reclamation Plant near the City of Glendale and the Donald C. Tillman Water Reclamation Plant in the San Fernando Valley. The Los Angeles-Glendale and Donald C. Tillman Plants are located upstream of the Hyperion Plant and along the Los Angeles River, and treat only the liquid portion of the wastewater. All biosolids from these two upstream plants are conveyed to, and treated at the Hyperion Treatment Plant. The Terminal Island System serves the portion of the City south of Lomita Boulevard (the area between Lomita Boulevard and Imperial Highway is served by County Sanitation District #5). This subsystem has one treatment plant, the Terminal Island Water Reclamation Plant, located in the Los Angeles Harbor area. This plant also treats biosolids and produces recycled water.



Chapter Five: **stormwater and urban runoff**

Department of Public Works Bureau of Sanitation

The Bureau is responsible for the collection, transport, and disposal of stormwater through the City's system of natural and constructed channels, debris basins, pump plants, storm drain pipes, and catch basins. The City owns the following stormwater conveyance facilities and infrastructure: 1,125 miles of pipelines; 66,260 catch basin; and 11 pump plants.

Water Quality Compliance Master Plan for Urban Runoff (WQCMPUR) 2009

In 2009, the Board of Public Works adopted the WQCMPUR. This document is a 20-year strategy for clean stormwater and urban runoff in the City of Los Angeles and to meet all water quality regulations for the City's rivers, lakes, and coastal waters. The Master Plan provides an overview of the existing status of urban runoff management in the City, including a description of watersheds in the City, urban runoff pollutant sources, regulatory requirements for water quality, existing watershed management, and plans for compliance with regulatory requirements. In addition, the Master Plan plans for the future of urban runoff management in the City and discusses three initiatives: Water Quality Management Initiative, Citywide Collaboration Initiative, and Outreach Initiative. Lastly, the Plan contains a financial outlook that evaluates current and future revenues, provides an estimate of the costs needed for implementing the strategies proposed, and presents opportunities for funding.

Watersheds

The term "watershed" refers to all the land that drains to a common low point. Water moves through both underground and surface drainage pathways that converge into streams and rivers. Eventually, the water reaches a receiving water body such as a river, stream, lake, wetland, or the ocean. The City of Los Angeles collects urban runoff through its storm drain system, which is comprised of underground pipes, devices, conveyance networks, and treatments. This system is completely separate from the City's sewer system, which collects residential, commercial, and industrial

wastewater. The storm drain system generally starts on City streets with the gutters that convey runoff to the storm drain inlets or catch basins. The catch basins are considered as a link between the City's watersheds and an underground pipe network of small pipes that connect to larger pipes. Urban runoff ultimately gets emptied into constructed channels or streams and creeks. Smaller creeks and streams may empty into wetlands, lakes, or flood control basins. The larger water flows generally end up in rivers that discharge into harbors or directly into the ocean.

The City of Los Angeles has four watersheds that encompass the City: Los Angeles River, Ballona Creek, Dominguez Channel, and Santa Monica Bay.



The Los Angeles River watershed is the largest regional watershed and significant portions of impaired sub-watersheds are within City boundaries. It includes all the lands draining into the Los Angeles River, which is 51 miles long. The first 30 miles of the River are within the City of Los Angeles. The total watershed area is 833 square miles, and about 33 percent, or 277 square miles, of this watershed is located within the City of Los Angeles.

The Santa Monica Bay watershed is comprised of numerous sub-watersheds emptying into Santa Monica Bay. The watershed runs along the coast from the Ventura-Los Angeles County line in the north to the Palos Verdes Peninsula in the south. The total watershed area is 285 square miles, and 12 percent of this watershed is located within the City of Los Angeles.

The Ballona Creek watershed is comprised of the Ballona Creek, Ballona Creek Estuary, and Ballona Creek Wetlands. This watershed is located on the coastal plain of the Los Angeles basin, with the Santa Monica Mountains to the north and the Baldwin Hills to the south. The total watershed area is 128 square miles, and about 81 percent is located within the City of Los Angeles. The Ballona Creek is predominantly channelized and the watershed is highly developed with both residential and commercial properties.

The Dominguez Channel watershed includes the drainage areas of the Dominguez Channel, the Wilmington Drain/Machado Lake, Dominguez Channel Estuary, and the Torrance-Carson Channel that all eventually discharge through the Dominguez Channel into the Los Angeles Harbor area. The total watershed area is 109 square miles, and about 32 percent of this watershed is located within the limits of City of Los Angeles.

Factors Affecting Runoff and Water Quality

Rainfall

The City of Los Angeles has a semi-arid climate with average annual rainfall of 15 inches per year. Statistically, there are 33 measurable rain days per year, which may be as little as 0.01 inches of rain. However, according to the Los Angeles County rainfall data, the one-year storm event (the highest amount of rain expected from one storm in any given year) in Los Angeles is 1.7 inches of rain, the 5-year event is 3.5 inches of rain, and the 25-year event is 5.3 inches of rain. This may vary depending on the varied topography in the Los Angeles region.





Runoff Rates

The WQCMP provides estimates of the dry-weather runoff flow, average annual runoff, and seasonal event storm runoff. During most of the year, runoff management focuses on the relatively low-volumetric, dry-weather runoff. Dry-weather sources include landscape irrigation, street washing, car washing, groundwater seepage, illegal connections, hydrant flushing, construction runoff, and other commercial activities. The total dry-weather runoff for the four watersheds in the city of Los Angeles is estimated at 29 billion gallons per year. The dry-weather runoff for portions of watersheds located within City limits is 16 billion gallons per year.

The average annual runoff for all four watersheds is estimated at 353 billion gallons per year. Average annual runoff for portions of watersheds located within City limits is estimated at 56 billion gallons per year.

Land Use and Imperviousness

Urban development leads to areas becoming significantly impervious to rainfall infiltration, which increases the percentage of runoff entering the stormwater system. This increase in the percentage may result in potential threat of major flooding. The WQCMP provides a breakdown of land use by watershed with corresponding impervious factors, which is a scale on how resistant the ground surface is to water

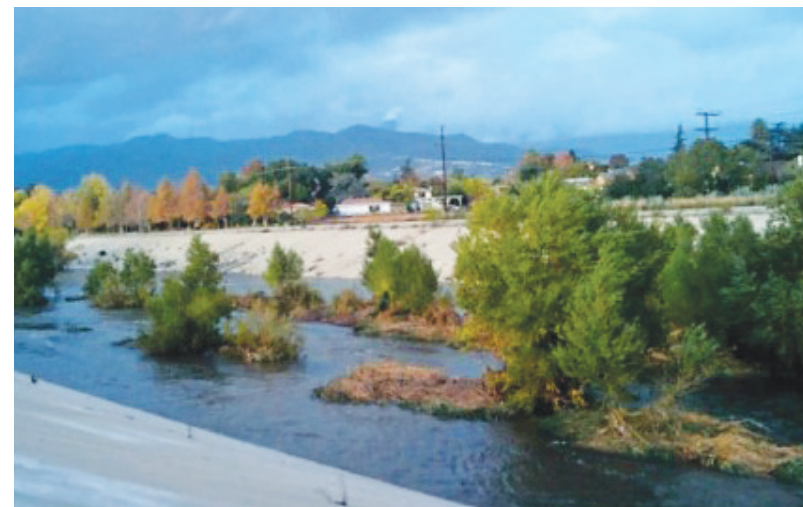
infiltration. Commercial and industrial areas have very high impervious factors (>0.9), which usually generate more pollution than other land use categories.

Watersheds within the City limits are highly developed with residential, commercial, and light industrial land use categories. Although major parts of the Los Angeles River and Santa Monica Bay watersheds are relatively open with low imperviousness factors, much of this land is located in the mountains and generally upstream from suspected pollution sources.

Demographics

Increase in population, number of residences and commercial/industrial activity affect runoff pollution in two ways: increase in generation of runoff pollutants and increase in redevelopment and new development which may increase the imperviousness of the area. The WQCMP uses Southern California Association of Governments' (SCAG) population projection to determine future growth.

According to the document, future growth is not likely to result in a proportional increase of the runoff volume as the City of Los Angeles is already highly developed. However, the Master Plan discusses an implementation strategy to regulate future redevelopment to increase open areas and to limit the impact of urban sprawl.



Water Quality

The WQCMP summarizes water quality standards that are defined by the Los Angeles Regional Water Quality Control Board (LARWQCB). These standards are used for establishing water quality numeric targets for Total Maximum Daily Loads (TMDLs). City departments and other agencies monitor the quality of the City's waters on a regular basis by taking samples and analyzing these samples in the laboratory for pollutant concentrations. The Master Plan compares the existing water quality of the City's rivers, lakes, and coastal water with the water quality numeric targets. This comparison allows the City to determine the current status of the City's waters. The LARWQCB has established water quality numeric targets for the following impairment categories: trash, bacteria, metals, toxic pollutants, and nutrients.

Total Maximum Daily Loads (TMDL) Implementation Plans

As of 2009, the City of Los Angeles had two TMDL Implementation Plans (Marina Del Rey Harbor and Santa Monica Bay Beaches) and a number of others in the process of being developed.

Watershed Management Plans

The City of Los Angeles has several watershed management plans for the area. The WQCMP provides a description of each management plan prepared since 1994. Examples of the plans include the Los Angeles River Revitalization Master Plan and the City's Water Integrated Resources Plan.

Implementation Strategy

The WQCMP provides implementation strategies, which are long-term watershed-specific management plans. The strategies include general guidelines and technical, physical, and procedural methods to achieve water quality goals. Each of the four watersheds in the Los Angeles area has its own water quality goals, which are defined by the NPDES MS4 Permit. WQCMP identifies three initiatives for the implementation strategies: Water Quality Management Initiative, Citywide Collaboration Initiative, and Outreach Initiative.

Enhanced Watershed Management Plans

Municipalities, non-governmental organizations and community stakeholders throughout the County of Los Angeles have worked collaboratively to develop Enhanced Watershed Management Plans for the following watersheds: Ballona Creek, Dominguez Channel, Marina Del Rey, Santa Monica Bay and Upper Los Angeles River. The objectives of the Enhanced Watershed Management Plans (or EWMPs) are to comply with water quality mandates, improve the quality of our rivers, creeks and beaches, and address current and future regional water supply issues.

Chapter Six: **solid waste****City of Los Angeles Department of Public Works Bureau of Sanitation**

The solid resources program's primary responsibility is to collect, clean, and recycle solid waste generated in the City of Los Angeles and surrounding communities.

Solid Waste Integrated Resources Plan 2013

The Solid Waste Integrated Resources Plan (SWIRP) - most commonly known as the City's Zero Waste Plan - lays out a long term plan through 2030 for the City's solid waste programs, policies and environmental infrastructure. Investment in such infrastructure will help to achieve Mayor Garcetti's goals as outlined in the Mayor's Sustainability Plan and will create jobs in the local economy.

The Solid Waste Integrated Resources Plan (SWIRP) is a stakeholder-driven process and long-range master plan for solid waste management in the City of Los Angeles (City). SWIRP proposes an approach for the City to achieve a goal of 90 percent diversion by 2025. These targeted diversion rates would be implemented through an enhancement of existing policies and programs, implementation of new policies and programs, and the development of future facilities to meet the City's recycling and solid waste infrastructure needs over a 20-year planning period.



SWIRP stakeholders established their vision through the adoption of twelve guiding principles. These guiding principles were developed through an extensive public outreach process, bringing together more than 3,000 stakeholders throughout the City during more than 250 meetings, workshops, and citywide conferences

SWIRP Guiding Principles

1. Education to decrease consumption
2. City leadership as a model for Zero Waste practices
3. Education to increase recycling
4. City leadership to increase recycling
5. Consumer responsibility
6. Convenience
7. Incentives
8. New, safe, technology
9. Protect public health and environment
10. Equity
11. Economic efficiency

The City has undertaken a community-based approach to planning for a sustainable city of the future and making that vision a reality through a two-phase process.

Phase 1 Goals:

- Educate stakeholders about the opportunities for sustainable resource management now and throughout the next 20 years
- Create a consensus-based process to ensure that all voices are heard and everyone has the opportunity to participate
- Establish community-based goals and objectives that reflect the needs, concerns, and vision of the community as a whole
- Identify the policies, programs, and facilities that will be needed to achieve these goals

Phase 2 Goals:

- Continue to engage stakeholders in the community-based planning process to ensure that the stakeholders are committed to realizing the Phase 1 goals in the Phase 2 plan
- Inform the City's stakeholders about the costs, risks, and benefits of the options
- Ensure that these options are both feasible and practical and that our choices are cost-effective and environmentally sound



- Fully analyze the City's waste stream and waste projections through the planning period
- Clearly describe and conceptually design each system component of the integrated resources management plan, including the policies, programs, and facilities identified in Phase 1, and ensure that they will work together to achieve the City's goals in an integrated resources system
- Estimate and evaluate the costs of the system components and prepare a funding and financing plan
- Conduct an environmental review of the integrated resources system

An essential component of SWIRP is the identification and development of future facilities to meet the City's recycling and solid waste infrastructure needs through 2030. Some of the City's current infrastructure is owned and operated by the City, including:

- Central Los Angeles Recycling & Transfer Station (CLARTS)
- Griffith Park Composting Facility
- Harbor Mulching Facility
- Lopez Canyon Environmental Center, including a composting/mulching facility
- Seven S.A.F.E. Centers located throughout the City
- Six District Yards serving each of the City's six wastesheds

However, much of the recycling and solid waste infrastructure used by generators in the City is owned and operated by the private sector and other public agencies, including the Sanitation Districts of Los Angeles County.

Over the past 20 years, as the City's landfills were closing, the City sought options for transfer and disposal of solid waste. In 2004, the City purchased the Central Los Angeles Recycling & Transfer Station and has been interested in seeking transfer station options in West Los Angeles.

In support of the City's goal of ending urban landfilling, the City has also evaluated long-haul options to the remote desert landfills. However, the City's orientation shifted with the adoption of the RENEW LA Plan in 2006. RENEW LA focused not on transfer and disposal, but maximizing diversion through source-separation programs, material recovery facilities, composting facilities, and converting residual waste into energy through new technologies.

The City has been investigating advanced technology for alternative treatment of residual waste since 2004 and is currently procuring the City's first Alternative Technology project.

Throughout Phase 1 of the SWIRP planning process, stakeholders discussed facility options and toured local facilities. During Phase 2, stakeholders identified the specific facility needs resulting from the implementation of the SWIRP policies and programs and discussed options for maximizing diversion from disposal through residual waste processing and treatment through Alternative Technologies such as advanced thermal recycling and anaerobic and aerobic digestion.



Chapter Seven: **power**

The Los Angeles Department of Water and Power (LADWP)

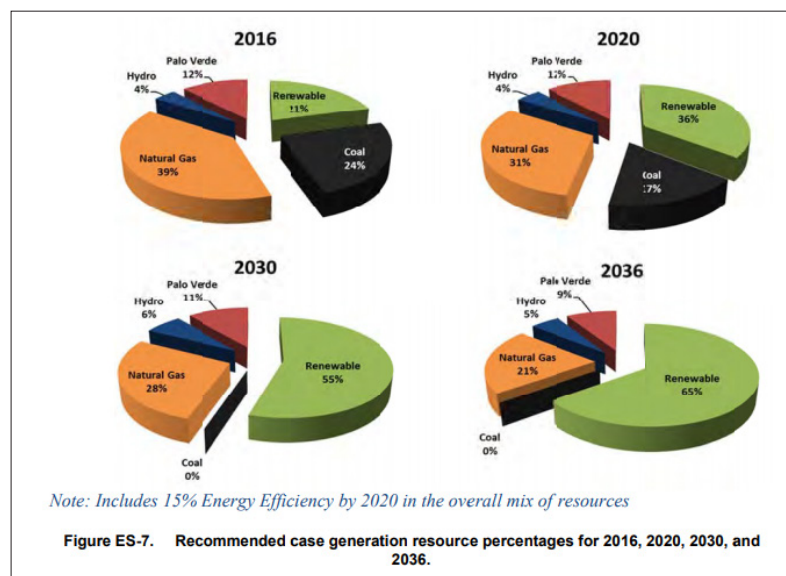
The Los Angeles Department of Water and Power (LADWP) is responsible for delivery of water and electricity to residents and businesses in the City of Los Angeles. LADWP supplies more than 26 million megawatt hours of electricity annually for the City of Los Angeles' 1.4 million residential and business electric customers. The average resident uses about 5,900 kilowatt-hours of electricity per year. Business and industry consume about 70 percent of the electricity in Los Angeles, but residents constitute the largest number of customers. In addition to serving residential and other customers, the LADWP lights public streets and highways, powers part of the City's water system, and sells electricity to other utilities.

Power Integrated Resource Plan 2016

The Los Angeles Department of Water and Power (LADWP) annually prepares a Power Integrated Resource Plan (IRP), a planning document that provides a 20-year framework to meet the City of Los Angeles' current and future energy needs. The document provides forecasts of electricity demand, discusses the resources available or needed to meet the demand, and addresses the issue associated with each resource and the Power System in general. The IRP also identifies long term goals and strategies, near term actions, and financial requirements to meet the City's projected electricity demand.

Facts and Figures

- For the Fiscal Year 2016-17, the Power System budget is \$3.9 billion. This includes \$1 billion for operations and maintenance, \$1.5 billion for capital projects, and \$1.4 billion for fuel and purchased power
- The Power System transfers 8% of its gross operating revenue (estimated at \$267 million in FY 2015-16) to the City's General Fund each year to provide critical City services



- LADWP has over 7,880 megawatts (MW) of generation capacity from a diverse mix of energy sources
- Power Resources as of 2015 were reported as such:
 - Renewable Energy: 21%
 - Natural Gas: 25%
 - Nuclear: 10%
 - Large hydro: 3%
 - Coal: 37%
 - Other/Unspecified: 4%
- Typical residential energy use per customer is about 500 kilowatt-hours (kWh) per month. Business and industry consume about 70% of electricity in Los Angeles, but residents constitute the largest number of customers

The Power System is responsible for inspecting, maintaining/replacing, and operating the following:

- 4 in-basin thermal plants
- 14 small hydroelectric plants
- 1 large hydroelectric plant
- 1 wind power plant
- 2 solar photovoltaic plants
- 3,637 miles of overhead transmission circuits spanning five states
- 124 miles of underground transmission towers
- 15,452 transmission towers
- 6,752 miles of overhead distribution lines
- 3,626 miles of underground distribution cables
- 162 distributing stations
- 21 receiving stations



- 50,636 substructures
- 308,523 distribution utility poles
- 3,166 pole mounted capacity banks
- 1.28 million distribution crossarms
- 31,728 utilitarian streetlights

The goal of the 2016 Integrated Resource Plan (IRP) is to identify a portfolio of generation resources and Power System assets that meets the city's future energy needs at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards. The IRP examines a total of ten different case scenarios with a combination of strategies, including early coal replacement, accelerated renewable portfolio standard (RPS), local solar, energy storage, and transportation electrification. The recommended IRP case scenario balances LADWP's objectives and identifies four key initiatives – greenhouse gas reduction, transportation electrification, dispatchable resources, and Power System reliability.

Department of Public Works Bureau of Street Lighting

The Bureau of Street Lighting is one of five Bureaus in the Department of Public Works, responsible for the design, construction, operation, maintenance and repair of the street lighting system within the City of Los Angeles. There are currently more than 220,000 lights in the City consisting of more than 400 designs.

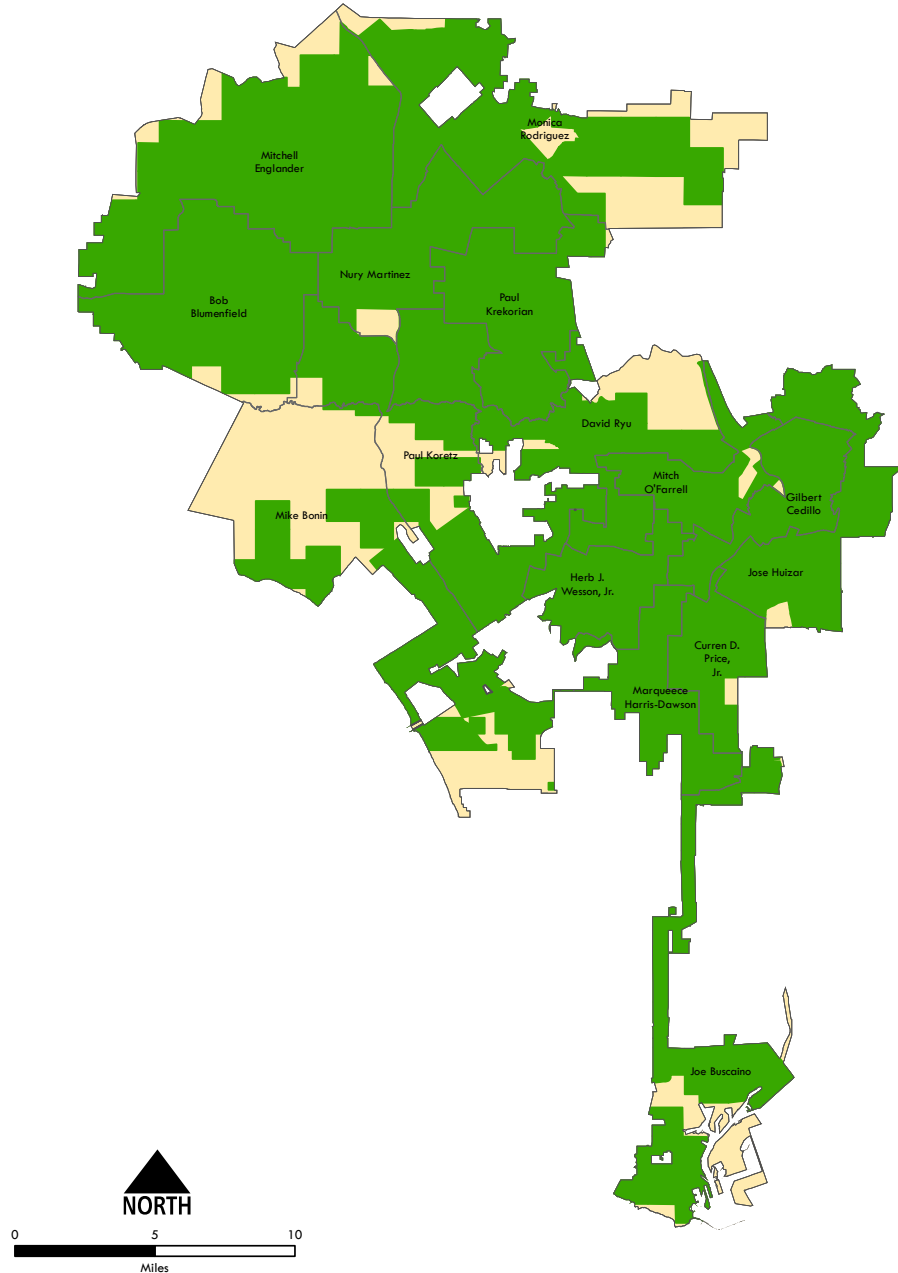
The Bureau of Street Lighting has replaced 175,272 street lights with LED bulbs in the City of Los Angeles. This retrofit project, the LED Street Lighting Energy and Efficiency Program, reduces the City's carbon emissions by more than 62,000 metric tons every year.

Before the program, the City's street lights consumed 168 gigawatt hours of electricity at an annual cost of \$15 million, while emitting 110,000 metric tons of carbon dioxide. The new LED lights now reduce energy use by 63.8 percent and reduce carbon emissions by 61,641 metric tons a year. This results in an annual energy savings of approximately \$9,415,910.

LED Streetlight Citywide Conversion

Completed Areas
City of Los Angeles

- LED Conversion Complete
- City of Los Angeles
- Council District



Chapter Eight: fire

The Los Angeles Fire Department (LAFD)

The Los Angeles Fire Department (LAFD) is a full-spectrum life safety agency protecting more than four million people who live, work and play in America's second largest city.

The Los Angeles Fire Department preserves life and property, promotes public safety and fosters economic growth through a commitment to prevention, preparedness, response and recovery as an all risk life safety response provider.

Every day, the LAFD responds to more than 1,112 emergency responses. Department Rescue Ambulances (RAs) transport more than 571 people to area hospitals each day. The firefighters in all 106 fire stations within the City respond to traffic accidents, strokes, heart attacks, and without question - fire.



The LAFD's 3,320 uniformed fire personnel protect life, property and the environment through their direct involvement in fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education and community service. An equally committed non-sworn cadre of 353 professional support personnel provide technical and administrative expertise in their corresponding pursuit of the department's mission.

LAFD Strategic Plan 2015-2017

The Los Angeles Fire Department has implemented a strategic plan that outlines nine goals and corresponding strategic actions. These goals include:

1. Provide Exceptional Safety and Emergency Service
2. Implement and Capitalize on Advanced Technologies
3. Identify Cost Effective Solutions to Manage Expenditures
4. Enhance Qualities of Leadership, Management, and Project Delivery
5. Enhance LAFD Risk Management Systems
6. Strengthen Community Relationships to Improve Infrastructure and Enhance Resiliency during Emergency Events
7. Implement Green Initiatives that will Improve Emergency Systems and Reduce Impact
8. Recruit, Develop, and Retain a Professional and Diverse Workforce
9. Support New Business and Improve Development Services

As of the FY 2016-17, divided into 4 Geographic Bureaus and sub divided into 14 total Battalions, the LAFD deployed the following resources for emergency operations across 106 Fire Stations (unless noted otherwise, 24 hours a day / 7 days a week):

- 43 four-person Basic Life Support (BLS) Engine companies
- 51 four-person Paramedic Assessment Engine companies
- 14 six-person Basic Life Support (BLS) Light Force (Truck) companies
- 27 six-person Paramedic Assessment Light Force (Truck) companies
- 1 five-person Basic Life Support (BLS) Truck company
- 93 two-person Advanced Life Support (ALS) rescue ambulances
- 40 two-person Basic Life Support (BLS) rescue ambulances
- 6 variably staffed two-person Basic Life Support (BLS) rescue ambulances
- 2 two-person Assistant Bureau Commander command teams
- 9 two-person Battalion command teams
- 5 one-person Battalion command units
- 7 one-person Battalion EMS Officer units



Photos Credit: Rick McClure, licensed under creative commons, flickr

- 7 one-person Battalion EMS Officer units (10 hours/4 days a week)
- 4 Deputy Chief Geographic Bureau Commanders (5 days a week, and on-call)
- 3 Assistant Bureau Commanders (10 hours/4 days a week, and on call)
- 4 Training Support Specialists (10 hours/4 days a week)
- 4 Geographic Bureau EMS Officers (10 hours/4 days a week)
- 1 four-person Hazmat Squad company
- 3 flex staffed Hazmat Squad companies
- 1 two-person Urban Search and Rescue Unit
- 1 two-person Heavy Rescue Unit
- 1 five-person Large Fire Boat
- 1 eight-person Large Fire Boat
- 3 three-person Small Fire Boats
- 6 Fire Helicopters (including Paramedic Air Ambulance capabilities)
- 2 two-person Fast Response Vehicles (10 hours/4 days a week)
- 1 two-person Nurse Practitioner Response Unit (10 hours/4 days a week)



As of the FY 11-12 Deployment Plan, the LAFD deployed the following resources on a daily basis:

- 89 two-person Advanced Life Support (ALS) rescue ambulances
- 34 two-person Basic Life Support (BLS) rescue ambulances
- 7 one-person EMS district units
- 2 two-person Division command teams
- 7 two-person Battalion command teams
- 7 one-person Battalion command units

- 90 four-person Engine companies
- 42 six-person Light Force companies
- 1 four-person Hazmat Squad company
- 3 swing staffed Hazmat Squad companies
- 1 two-person Urban Search and Rescue Unit
- 1 two-person Heavy Rescue Unit

Current Resource Allocation

As of April 2016, staffing includes 984 firefighters and the following increased resources are available on a daily basis (if there's been no change from above, the figures are not included):

- 93 four-person Engine companies
- 41 six-person Light Force companies
- 91 four-person Engine companies
- 2 two-person Fast Response Vehicles
- 1 two-person Nurse Practitioner Response Unit

FireStatLA

In October 2014 Fire Department Chief Ralph M. Terrazas, Mayor Eric Garcetti, Councilmember Mitchell Englander, and Dr. Craig Uchida, president of Justice & Security Strategies Inc., announced the formal launch of FireStatLA and the online publication of LAFD response data. The Department evaluates four metrics: two response time-related criteria and the location of frequent fire false alarm and emergency medical service calls in each battalion. FireStat is aimed at increasing accountability, improving decision making and better allocating resources, with the primary goal of improving response times. The calculated response data on LAFD.org is updated monthly, while the raw data spreadsheet is updated quarterly. Additionally, the raw data used to calculate these parameters have been posted to the City's Open Data website at data.lacity.org.

The most recent reporting period ran from January to April 2016. In this period, average call processing times for Emergency Medical Services (EMS) incidents averaged 1 minute and 2 seconds while response times for turnout and travel averaged 5 minutes and 24 seconds. To contrast, non-EMS average call processing time was also 1 minute and 2 seconds, while average response time for turnout and travel averaged 5 minutes, 16 seconds for the same period.

Chapter Nine: **police**

The Los Angeles Police Department

The Los Angeles Police Department's (LAPD) mission is to safeguard the lives and property of the people it serves, to reduce the incidence and fear of crime, and to enhance public safety while working with diverse communities to improve their quality of life.

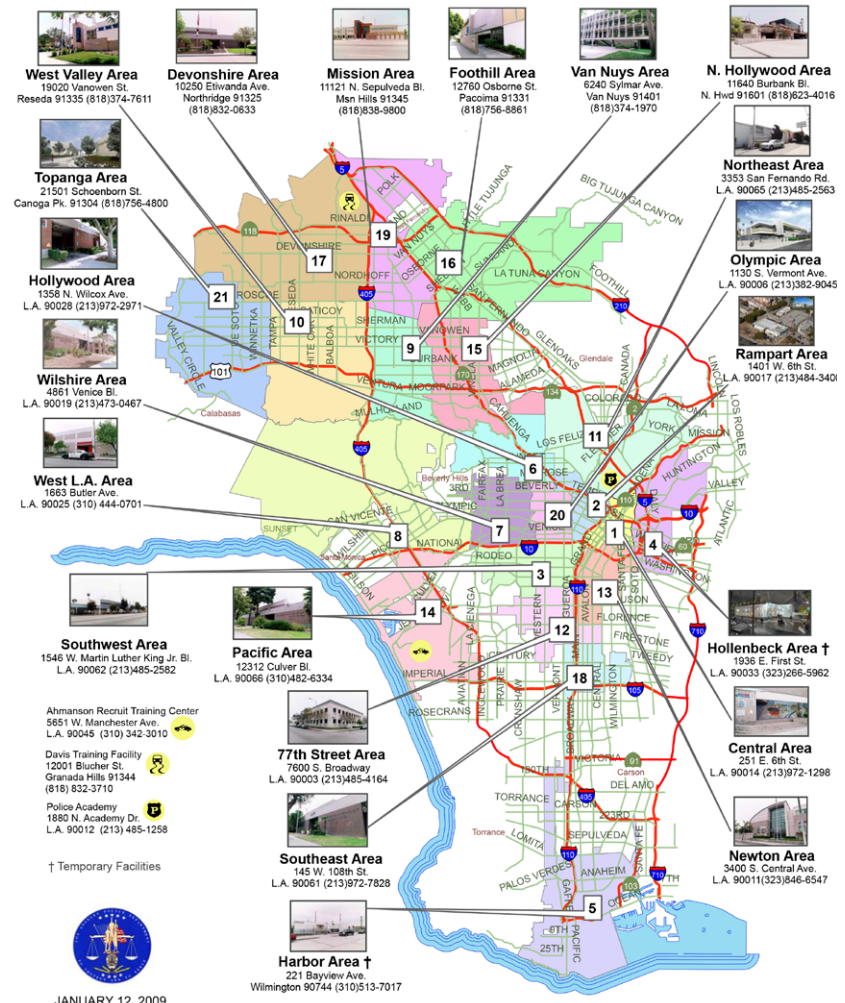
LAPD Strategic Plan 2016

The Strategic Plan lays out an ambitious path forward for the LAPD. A path that will be guided by a strong and effective strategic management process that assesses where LAPD is today, where it plans to go, and how it delivers tangible action and results. This Plan is just one component of a multidimensional strategy management process that bridges from short-term annual budget requests to a long-term vision for LAPD in 2020 and beyond.

The Strategic Plan is the culmination of a collaborative endeavor starting in early 2015 among the 150 sworn and civilian command staff to elicit feedback on LAPD's current strengths, weaknesses, opportunities, and challenges to develop an agenda for sustained change and improvement. More than 500 points of feedback were logged and incorporated from over 200 hours of strategy and goal-setting work sessions

Sworn Personnel by Rank, Gender, and Ethnicity Report (SPRGE) 2016

The Los Angeles Police Department keeps track of its workforce and growth through the Sworn Personnel by Rank, Gender, and Ethnicity Report (SPRGE). According to the Report, the Department has a total of 12,970 sworn and civilian personnel as of October 2017.



Los Angeles Police Department Area Stations

Prepared by: LAPD ICSB, ECCCS Division, ESDS Section

Photos Credit: Los Angeles Police Department (LAPD)

COMPSTAT

A promising trend in significantly reducing violent crimes in the communities of Los Angeles is beginning to emerge. Although many may argue that there are many factors that directly effect any downturn in crime, one new factor, which was absent prior to Chief William Bratton's appointment to the Chief of the Los Angeles Police Department, was the implementation of his crime control model known as COMPSTAT. COMPSTAT, short for computer statistics, has a well-established and proven track record in reducing crimes and improving the overall operating systems of several major metropolitan police departments. Police Departments such as New York, Boston, Philadelphia, Miami, New Orleans, and Newark, New Jersey have all experienced significant reduction in violent crimes as a result of the implementation of the COMPSTAT crime control model. Although many of these departments have custom tailored the COMPSTAT process to their own department and community needs, the core elements of COMPSTAT have remained the same. The core elements

provide a basic road map that puts police officers back in the business of proactively fighting crime rather than reacting to it. A vital component of the COMPSTAT philosophy is its emphasis on holding police managers directly accountable for combating the crime in their assigned area and providing them the authority to deploy resources to achieve the desired results.

COMPSTAT has four distinct principles

1. Accurate and Timely Intelligence
2. Effective Tactics
3. Rapid Deployment
4. Relentless Follow-Up and Assessment

Chapter Ten: **schools****The Los Angeles Unified School District (LAUSD)**

LAUSD enrolls more than 640,000 students in kindergarten through 12th grade at over 900 schools and 187 public charter schools. The boundaries spread over 720 square miles and include the City of Los Angeles as well as all or parts of 31 smaller municipalities and several unincorporated sections of Southern California.



In addition to the City of Los Angeles, other cities located entirely within LAUSD are Cudahy, Maywood, Gardena, San Fernando, Huntington Park, Vernon, Lomita, and West Hollywood. Cities partially located within LAUSD are Alhambra, Bell, Bell Gardens, Beverly Hills, Calabasas, Carson, City of Commerce, Culver City, Downey, El Segundo, Hawthorne, Inglewood, Long Beach, Lynwood, Montebello, Monterey Park, Rancho Palos Verdes, Rolling Hills Estates, Santa Clarita, Santa Monica, South Gate, South Pasadena, and Torrance.

LAUSD Fingertip Facts 2016-2017

Fingertip Facts, prepared by the Los Angeles Unified School District, provides a general overview about LAUSD, student enrollment, number of schools and facilities, and finance during 2016-17 school year.

Quick Facts

- The LAUSD has a total of 1,302 schools and education centers within the District
- As of March 2016 total student enrollment in LAUSD, including Adult Education, was 734,641
- LAUSD receives over 80 percent of its General Fund Restricted and Unrestricted money from Base Revenue Limit and other State sources. The LAUSD General Fund pays for schools expenses including certified salaries, classified salaries, employee benefits, books and supplies, other operating expenses, capital outlay, and other outgoing expenses. The total General Fund expense during 2016-17 school year was \$7.59 billion

Strategic Execution Plan 2016

The Facilities Services Division within Los Angeles Unified School District prepares a Strategic Execution Plan annually to outline plans to build new schools, repair and modernize existing schools, and assess capital needs and master planning. In an effort to meet the needs of students and communities of LAUSD, the Division executes a variety of projects under their programs: New School Construction Program, Repair and Modernization Program, and the Capital Improvement Program.

New School Construction Program

The New School Construction Program relieved overcrowding and addressed facilities needs through the construction of new classrooms and the expansion of athletic and play space at school sites. The primary goal of the program is to provide all LAUSD students with the opportunity to attend a school in their neighborhood that operates on a traditional two-semester calendar. To achieve this goal, the following objectives were established:

- Build new schools where the overcrowding need is greatest
- Fulfill District obligations resulting from the Williams case settlement by eliminating the use of the Concept 6 calendar
- Eliminate involuntary busing and multi-track calendars
- Implement Full-Day Kindergarten
- Integrate small schools/small learning communities into the design concept of new secondary schools

Repair and Modernization Program

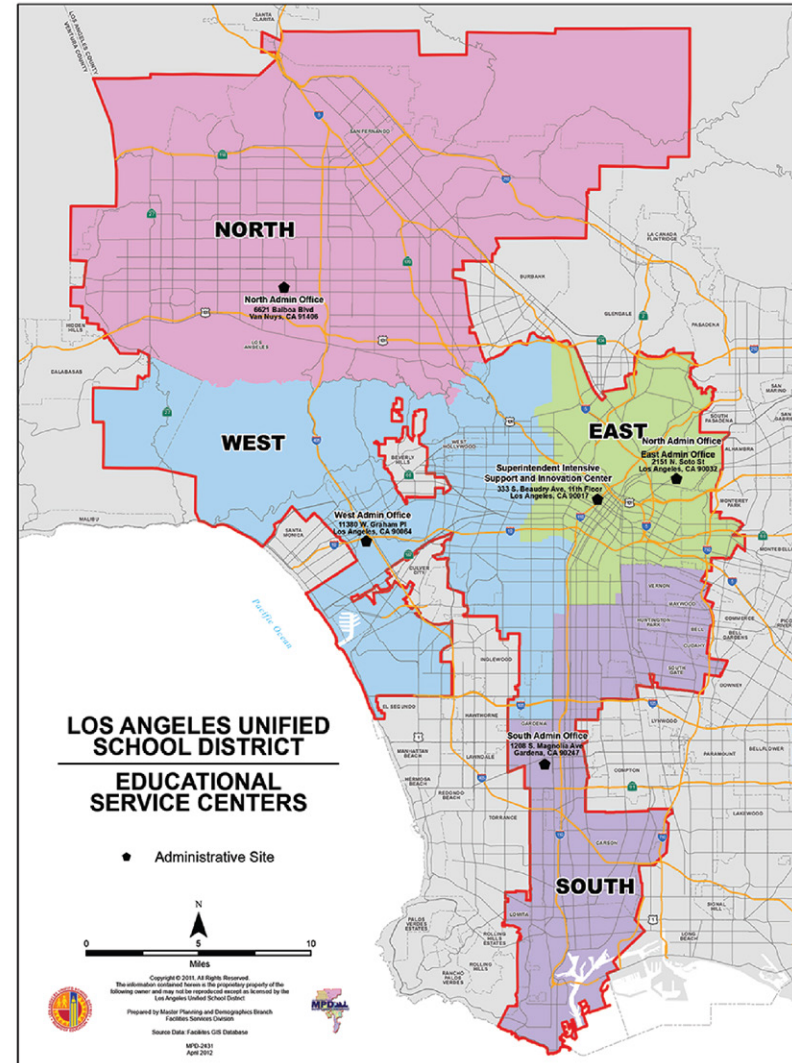
The main goal of the Repair and Modernization Program is to repair and modernize existing schools to improve deteriorating, aging, and outdated conditions.

The Repair and Modernization Program has completed more than 23,000 construction projects since the program began. The Facilities Services Division planned to complete construction for more than 300 projects at existing LAUSD campuses as part of the Repair and Modernization Program.

Capital Improvement Program

The Capital Improvement Program (CIPR) allocates local bond funds previously held in a program reserve for the New School Construction Program as well as project savings realized from a favorable bidding environment to the CIPR. The CIPR establishment approved a list of priority projects to be undertaken and allocated funds to assess and plan for the capital needs of LAUSD schools that may not have been addressed by Board-approved projects.

The Capital Improvement Program completed two new K-12 schools and one new adult education center as well as more than 200 repair and modernization projects, photovoltaic installations, sustainability projects, and facelift projects. The Capital Improvement Program will deliver two new K-12 schools, two new K-12 redevelopment projects, and more than 200 additional projects in the next year.



School Update Program

On January 14, 2014 the Board of Education approved the School Upgrade Program (SUP). The next phase of the Districts bond program will modernize, build, and repair school facilities to improve student health, safety and educational quality. SUP reflects the intent and objectives of Measure Q, the current needs and conditions of school facilities, and educational goals. The Board's action approved specific categories of need and spending targets for a total allocation of \$7,852,970,000 to support the development of projects that align with the overarching goals and principles:

- Schools should be safe and secure
- Building systems should be sound and efficient
- Facilities should align with instructional requirements and vision

Funding and Cost

The Facilities Services Division addresses the LAUSD's needs for additional classroom capacity and modernized schools through four local bonds: Proposition BB and Measures K, R, and Y. These bonds were passed by the voters within LAUSD boundaries and provide for the majority of the funds. Measure Q, a fifth local bond, is not part of the current program. However, the bond is anticipated as the primary funding source for future capital projects. The balance of program funding is comprised of State bonds approved through ballot initiatives (Propositions 1A, 47, 55, and 1D), Federal funding, grants, and various local matching funds.

The current bond program is valued at approximately \$19.5 billion with two primary funding sources: local bonds and matching funds from State bonds. Approximately 89 percent of total program funding is provided by the two sources. Other sources include developer fees, Certificates of Participation (COPs), and special funding sources such as Federal Emergency Management Agency (FEMA) grants, local sources of matching funds, etc.

Uses of funds are reported in three major budget categories: direct project costs, indirect costs, and program reserve. The direct project costs include construction,



site related costs, design, project management, other project costs, and additional estimated cost to complete projects. Approximately 92 percent of funds are used for direct costs. The indirect costs include program management, non-Facility Services Division support, and other costs.

Detailed lists of construction and repair and modernization projects are provided in the Strategic Execution Plan.

Chapter Eleven: **cultural resources****City of Los Angeles Department of City Planning – Office of Historic Resources (OHR)**

The Office of Historic Resources in the Department of City Planning coordinates the City of Los Angeles' historic preservation activities. The mission of the Office of Historic Resources is to create a comprehensive, state-of-the-art, and balanced historic preservation program for the City of Los Angeles. The key goals of the Office are: to complete a pioneering citywide historic resources survey; to achieve "Certified Local Government" status in historic preservation (approved in 2007); to integrate historic preservation fully into Los Angeles' planning process; to serve as an expert resource on preservation for the Department of City Planning and for other City departments; to provide responsive customer service in conducting historic preservation reviews; and to create additional incentives and creative partnerships for historic preservation.

Historic-Cultural Monument Report (HCMs)

In 1962, the City of Los Angeles enacted the Cultural Heritage Ordinance, which allows the designation of buildings and sites as individual local landmarks called "Historic-Cultural Monuments" (HCMs). The Ordinance establishes the designation criteria, which are contained in the definition of a Monument in the Ordinance. The Ordinance also identifies the procedures for the Cultural Heritage Commission and Historic-Cultural Monument designations. Currently, the City has over 1,100 Historic-Cultural Monuments.

The Office of Historic Resources (OHR) provides a Historic-Cultural Monument Report that lists historic resources in each of the City of Los Angeles' 35 Community Plan areas. OHR maintains a database of all HCMs.



Historic Preservation Overlay Zones (HPOZs)

The City of Los Angeles has developed Historic Preservation Overlay Zones (HPOZs) to identify and protect neighborhoods with distinct architectural and cultural resources. An HPOZ consists of buildings and structures from a similar time period that have kept most of their original design features. HPOZs are established and administered by the Los Angeles City Planning Department (in concert with the City Council). The Department reviews proposed exterior alterations and additions to properties located within designated HPOZ districts.

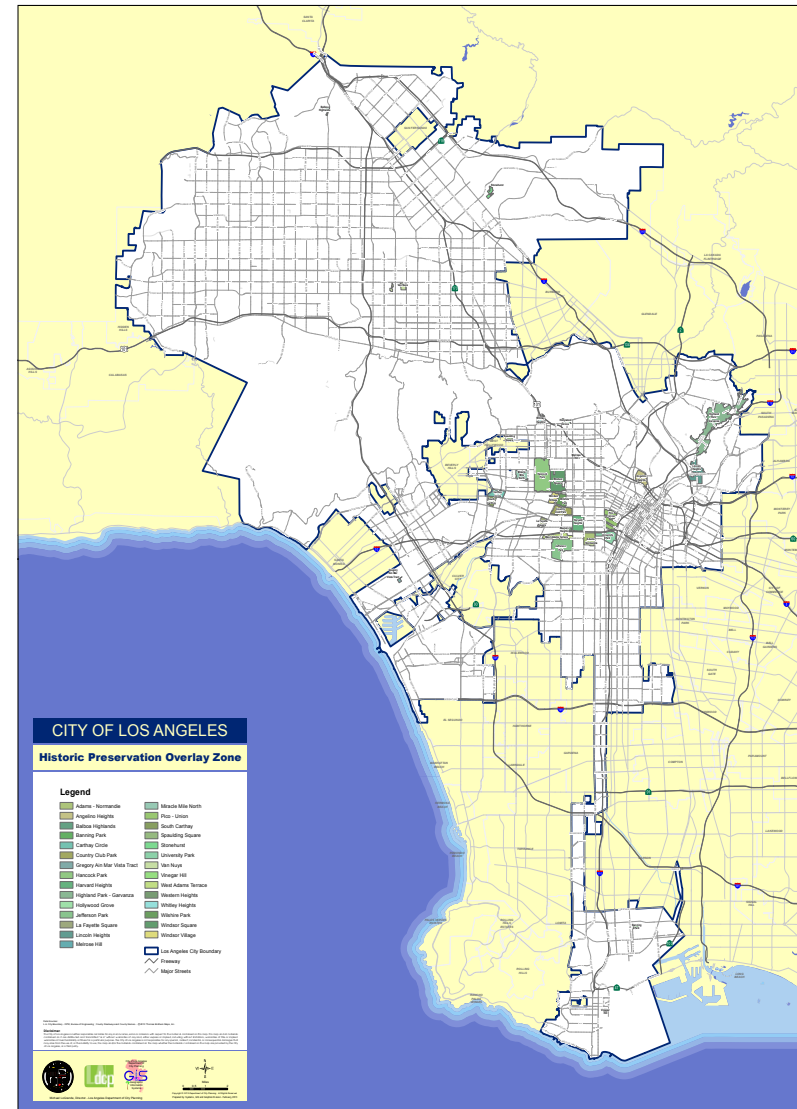
The City currently has 35 designated HPOZs: Adams-Normandie, Angelino Heights, Balboa Highlands, Banning Park, Carthay Circle, Carthay Square, Country Club Park, El Sereno-Berkshire, Gregory Ain Mar Vista Tract, Hancock Park, Harvard Heights, Highland Park-Garvanza, Hollywood Grove, Jefferson Park, Lafayette Square, Lincoln Heights, Melrose Hill, Miracle Mile North, Oxford Square, Pico-Union, South Carthay, Spaulding Square, Stonehurst, University Park, Van Nuys, Vinegar Hill, West Adams Terrace, Western Heights, Whitley Heights, Wilshire Park, Windsor Square, and Windsor Village, and 52nd Place. HPOZ areas range in size from approximately 50 parcels to more than 3,000 properties.

El Pueblo de Los Angeles Historical Monument Authority

The El Pueblo de Los Angeles Historical Monument Authority is a department of the City of Los Angeles that manages 22 historic buildings surrounding Plaza Park. El Pueblo is governed by the El Pueblo Board of Commissioners that was established in 1992 by the Los Angeles City Council. The nine Commission members are appointed by the Mayor of Los Angeles. The Commission establishes policies, sets lease rates, and provides long-term oversight for the 44-acre Monument including five museums, 28 historical buildings, and over 10,000 historical artifacts.

Los Angeles Department of Cultural Affairs (LADCA)

As a leading, progressive arts and cultural agency, DCA empowers Los Angeles' vibrant communities by supporting and providing access to quality visual, literary, musical, performing, and educational arts programming; managing vital cultural



centers; preserving historic sites; creating public art; and funding services provided by arts organizations and individual artists.

Formed in 1925, DCA promotes arts and culture as a way to ignite a powerful dialogue, engage LA's residents and visitors, and ensure LA's varied cultures are recognized, acknowledged, and experienced. DCA's mission is to strengthen the quality of life in Los Angeles by stimulating and supporting arts and cultural activities, ensuring public access to the arts for residents and visitors alike.

DCA advances the social and economic impact of arts and culture through grantmaking, public art, community arts, performing arts, and strategic marketing and development. DCA creates and supports arts programming, maximizing relationships with other city agencies, artists, and arts and cultural nonprofit organizations to provide excellent service in neighborhoods throughout Los Angeles.

Cultural Affairs Impact Profile

DCA's operating budget was \$12.4 million in fiscal year 2016/17. It included \$956,757 for administering Public Art Programs; \$5,089,902 for Community Arts facilities and programming; \$935,896 for arts and cultural marketing and fundraising; \$3,877,427 for administering Grants Programs; and \$1,527,678 for general administration and support. The City's \$12.4 million investment in the arts yielded approximately \$86.8 million* in local economic development.

DCA significantly supports artists and cultural projects through its Public Art Division. In FY16/17 the division managed 42 active percent for art projects totaling \$4.9 million. Of this amount, typically 15 to 20% was attributed to artists' fees. Through its long-established Grants Administration Division, DCA invested in LA's creative community by granting \$3.5 million in FY16/17 to 295 artists and nonprofit organizations.

DCA's Marketing and Development Division has raised \$36 million over the last 15 fiscal years to re-grant to LA-based artists and arts and cultural organizations, and to support DCA's special programming and facilities. The Division also curates and promotes the City's arts and cultural events through development and collaboration with strategic partners, design and production of creative catalogs, publications,

and promotional materials, and management of the department's website and social media channels yielding 2.9 million digital impressions in FY16/17.

DCA provides arts and cultural programming through its Community Arts Division and its Performing Arts Division, managing numerous neighborhood arts and cultural centers, theaters, historic sites, and educational initiatives.

- DCA manages and programs 21 Neighborhood Arts and Cultural Centers including: 9 Arts and Cultural Centers, 4 Theaters, 2 Historic Sites, and 6 Galleries
- DCA oversees 11 Public/Private Partnership Arts Facilities
- DCA manages 3 Prop K facilities in development

Impact of DCA Community Arts Programs and Performing Arts Facilities in FY16/17

- Number of people served at Community Arts programs: 244,701
- Number of people served at Performing Arts facilities: 184,914
- Number of people served at DCA-managed arts and cultural centers: 48,316
- Number of people served at DCA-managed theaters: 112,200
- Number of people served at DCA-managed art galleries: 23,747
- Number of people served at public-private partnership community arts centers: 133,762
- Number of people served by guided tours of Hollyhock House and Watts Towers: 23,352

**This number is derived from applying NEA's average multiplier effect of 1:7 (National Endowment for the Arts, "Funding in the Arts", Dec 2016).*

Chapter Twelve: **libraries****The Los Angeles Public Library (LAPL)**

LAPL provides free and easy access to information and learning opportunities for infants, children, teens, and adults. The LAPL can be accessed through the Central Library in downtown Los Angeles, eight regional branch libraries, 64 community branches, four bookmobiles, and the Internet.

Los Angeles Public Library Strategic Plan 2015-2020

The Los Angeles Public Library (LAPL) Strategic Plan is a blueprint that identifies the library's strengths and opportunities, goals, objectives, and activities and initiatives

to provide new facilities, technology, materials, and programs. The 2016-2020 Strategic Plan outlines six main goals which include:

- Cultivate and inspire young readers
- Nurture Student Success
- Champion literacy and lifelong learning
- Contribute to L.A.'s economic growth
- Stimulate the imagination
- Strengthen community connections and celebrate L.A

Los Angeles Public Library Branch Facilities Plan 2007

The Los Angeles Public Library (LAPL) Branch Facilities Plan was initially adopted by the Board of Library Commissioners in 1988. The Facilities Plan was the most significant infrastructure blueprint in the history of the Los Angeles Public Library. It guided the construction, maintenance, and organization of public libraries and set specific standards to define service areas and the size of branch facilities. Based on the Plan, 90 percent of the library infrastructure was replaced in a fifteen-year period. The new and renovated facilities more than doubled from 700,000 square feet to more than 1,400,000 square feet in the City of Los Angeles.

In 2005, the Los Angeles Public Library began to plan for the future by analyzing current and future library services and facilities needs and population growth projections to the year 2030. Based on the library's service and facility needs assessments and public input, the LAPL prepared a revised Branch Facilities Plan. The new Plan was approved by the Board of Library Commissioners on February 9, 2007.

The 1988 Branch Facilities Plan's specific standards consisted of two components: a Criteria for New Libraries (formerly Site Selection Guidelines) and a List of Projects.

The screenshot shows the Los Angeles Public Library website. At the top, there's a header with the library's name and a logo. Below that is a navigation bar with links for 'Collections & Resources', 'Locations & Hours', 'What's On?', 'Get Involved', 'About LAPL', and 'Library Store'. A sidebar on the left lists various services and resources. The main content area features a search bar, a 'Catalog Search' section, and a 'Latest Blog Posts' section with several articles dated in October 2014. There are also sections for 'Hot Titles' and 'What's New at LAPL'.

Facilities Criteria for New Libraries

The Criteria for New Libraries are standards for the size and features of branches based on location and the population served in each community. The Criteria for New Libraries proposes building larger libraries than proposed in the 1988 Branch Facilities Plan. The recommended library sizes are 12,500 square feet facilities for communities with less than 45,000 population and 14,500 square feet facilities for communities with more than 45,000 residents. It also recommends that when a community reaches a population of 90,000, a second branch library should be considered for that area

Proposed Project List

The proposed List of Projects identified facility status of existing library branches and the need for new branch libraries in communities without libraries.

The list included:

- 2 renovations – Atwater and Echo Park
- 3 new buildings on same sites – Benjamin Franklin, Eagle Rock, and West Los Angeles
- 6 relocations with new buildings on new sites – Angeles Mesa, Felipe de Neve, Granada Hills, Robert L. Stevenson, Van Nuys and Vermont Square
- 8 new libraries in areas that currently do not have a library – Arleta, East Valley, Valley Glen, Lake Balboa, Mission Hills, Mulholland, Southeast Los Angeles, West Hills and West San Pedro



Chapter Thirteen: **parks****City of Los Angeles Department of Recreation and Parks**

The Department of Recreation and Parks maintains and operates more than 400 sites for recreational use. The Department establishes, operates and maintains parks, swimming pools, public golf courses, recreation centers, museums, youth camps, tennis courts, sports programs and programs for senior citizens. It also supervises construction of new facilities and improvements to existing ones.

2009 Citywide Community Needs Assessment

The Department of Recreation and Parks conducted the Citywide Community Needs Assessment as the first step in the preparation of a Citywide Recreation and Parks Master/Strategic Plan and a Five-year Capital Improvement Plan. The Needs Assessment identifies, quantifies, and preliminarily prioritizes the tremendous need for recreation and open space in the City. A high level review was also performed of the Department's facilities in an attempt to address the various facilities needing improvements to meet current and future needs, prevent future maintenance problems, and serve an increasingly dense and urbanized population.

Parks and Open Space

There are more than 36,000 acres of all public parks and open space, which include Recreation and Park lands and county land within the city-limits. Total acreages by category are:

- Mini parks – 50.46 total acres
- Neighborhood parks – 773.72 total acres
- Community parks – 2,966.43 total acres

- Regional and large urban parks – 32,288.98 total acres
- Based on these inventories, the service level for all park land is 9.231 acres per 1,000 persons; however, this number is drastically skewed by the large number of regional/large urban park land (89.5 percent of all acreage falls into the regional/large urban park classification).

The service levels for all four park classifications are:

- Mini Parks - 0.013 acres per 1,000 persons
- Neighborhood parks – 0.198 acres per 1,000 persons
- Community parks – 0.759 acres per 1,000 persons
- Regional and large urban parks – 8.261 acres per 1,000 persons
- Total parks – 9.231 acres per 1,000 persons

In the 2009 Community Needs Assessment, RAP developed the following preliminary recommended service level guidelines for park classifications:

- Mini parks – 0.10 acres per 1,000 persons
- Neighborhood parks – 0.150 acres per 1,000 persons
- Community parks – 2.00 acres per 1,000 persons
- Regional and large urban parks – 6.0 acres per 1,000 persons
- Total parks – 9.60 acres per 1,000 persons

Any recommended guidelines in the Needs Assessment are preliminary only and need additional research and analysis to determine final guidelines, goals, and objectives.

Public Recreational Assets and Amenities

Inventories and service levels of major assets and amenities are listed below. Service levels are based on inventories for all public recreational assets and amenities. Inventories include only those assets and amenities owned by the Recreation and Park Department and Los Angeles County.

- Playground – 424 total
- Swimming pools – 62 total
- Splashpad – 13 total
- Baseball/softball fields – 256 total
- Rectangular fields (football, soccer, lacrosse, et al.) – 127 total
- Basketball hoops – 799 total
- Tennis courts – 321 total
- Dog parks – 9 total
- Skate parks – 27 total

Park Fee (Quimby) Update

Ordinance 184,505 (Parks Dedication and Fee Update ordinance) was passed by City Council on September 7, 2016 with an effective date of January 11, 2017. The ordinance requires most residential projects that create new dwelling units or joint living and work quarters to dedicate land or to pay a fee for the purpose of developing park and recreational facilities. Residential projects that propose one or more additional dwelling units will be subject to the new Park Fee unless they meet one of the exceptions listed in Los Angeles Municipal Code Section 12.33 C.3 (e.g. certain affordable housing units and secondary dwelling units may be exempt from any requirement to pay a fee).

This ordinance came largely in response to three key issues: an outdated fee structure, limited expenditure ability, and lack of land dedication and park access. The proposed ordinance has modernized the fees by recalibrating the cost of park development and establishing a new impact fee for all net new residential development (including apartments and condominiums). The new ordinance also increases the allowable radius of park development from residential development sites, encouraging greater flexibility.

The Southern California Association of Governments (SCAG) Regional Growth Forecast estimates that the City will add significantly more people during the coming decades. It is necessary to acquire and develop new park and recreational facilities to serve the new residential population and to maintain the existing service levels. This ordinance encourages land dedication over payment of in-lieu fees where applicable. Developments which contain fifty (50) or more dwelling units, and include a tract map, may be subject to a requirement to dedicate land to the City.

50 Parks Initiative

As part of an effort to equitably distribute access to parks for City residents, the Department of Recreation and Parks is implementing a long-term initiative to meet the needs of a growing metropolis. The initiative requires partnership with Federal, State, and local agencies as well community groups, non-profits, private individuals, and local businesses. The purpose of the initiative is to substantially increase the number of parks and facilities available across the City, with specific focus on densely populated neighborhoods and communities that lack sufficient open space and recreational services.

The development of new public parks in neighborhoods where a large percentage of residents do not live in close proximity to a park or recreational facility will provide innumerable physical, social, health, and environmental benefits to those communities - and the City as a whole. New parks help stabilize neighborhoods by providing needed public infrastructure improvements, removing blight caused by abandoned buildings and empty lots, and beautifying underutilized public property.

Green space provides substantial benefits to human health in terms of recreation, increased physical activity, reduced risk of obesity and healthcare, and stress reduction. In densely populated urban areas, green space located within walking distance is more likely to promote physical activity outside the home. Green space benefits communities in a variety of ways including increasing levels of social contact and social integration, particularly in underprivileged neighborhoods.



Chapter Fourteen: **airports****The Los Angeles World Airports (LAWA)**

The Los Angeles World Airports (LAWA) is a proprietary department of the City of Los Angeles, under the management and control of a seven-member Board of Airport Commissioners appointed by the Mayor and confirmed by the City Council. LAWA receives no funding from the City's general fund. LAWA operates two airports in the Los Angeles Air Trade Area: Los Angeles International Airport (LAX) and Van Nuys Airport (VNY). In November 2016, LAWA turned over full operation and management of the Ontario International Airport to the Ontario International Airport Authority. LAWA also owns land in the Palmdale area associated with the Palmdale Regional Airport. LAWA owned buildings and land in Palmdale are leased for a variety of uses including a golf course and agriculture.

**Los Angeles International Airport (LAX)**

Los Angeles International Airport (LAX) is the fourth busiest airport in the world and second busiest in the United States, offering 737 daily nonstop flights to 100 domestic cities and 1,386 weekly nonstop flights to 88 cities in 44 countries on 73 passenger air carriers.

In 2016, LAX served nearly 80.9 million passengers processed over 2.2 million tons of air cargo valued at over \$101.4 billion, and handled 697,138 aircraft operations (landings and takeoffs).

Van Nuys Airport (VNY)

Van Nuys Airport (VNY) ranks as one of the world's busiest general aviation airports, located in the heart of the San Fernando Valley. Dedicated to noncommercial air travel, VNY averages over 213,721 takeoffs and landings annually. VNY has two parallel runways – one with full instrument landing system – and a FAA tower. The main runway is 8,000 feet in length and the training runway is 4,000 feet long. VNY has a rich history in aviation, hosting record breakers and celebrities over its 88 years in service.

In addition, more than 100 businesses are located on the 730-acre airport, including two major fixed-base operators (FBOs). These operators provide aircraft storage and parking, aviation fuel, aircraft sales, flight instruction, aircraft charter and aircraft maintenance. Some of the FBOs also serve as major leaseholders of airport property, subletting land and buildings to other airport tenants. VNY also serves as home to numerous companies that provide aviation support activities such as aircraft repairs, avionics, interior work and other specialized functions.

Project Fact Sheets

Los Angeles World Airports (LAWA) currently has a multi-billion-dollar capital improvement program underway at Los Angeles International Airport (LAX). On the Airport's Development Group website, LAWA provides a comprehensive fact sheet for each project in the Capital improvement program. Each fact sheet presents a project description, traveler benefits, traveler impacts, environmental impacts, construction

dates, cost and funding. (<http://www.lawa.org/laxdev/laxdev.aspx>). Project information and fact sheets for projects that have not begun construction but are in the planning phase can be found at www.ourlax.org.

Highlights of Major Projects in Planning at LAX in 2016

- The LAX Landside Access Modernization Program (LAMP) consists of several primary components. At the centerpiece is an Automated People Mover (APM) system, a 2.24 mile train with 6 stations, which will provide free, fast, convenient, and reliable access to the Central Terminal Area (CTA) for passengers, employees, and other users of LAX, 24 hours a day. The APM will be built completely above grade without diminishing existing roadway capacity. The APM systems will connect to the passenger terminals in the CTA with pedestrian walkways from each APM Station connecting to Vertical Cores providing access to the terminals. The walkways will be located above the existing roads and curb areas in the CTA. The APM will transport passengers between the CTA and the other main components of LAMP located east of the CTA, including a state-of-the-art, Consolidated Rental Car Facility (CONRAC), new public parking facilities, passenger pick up and drop off locations and Metro's Airport Metro Connector (AMC) transit station which connects passengers to the Metro Crenshaw Line. The AMC transit station is currently under construction by Metro at 96th Street/



Aviation Boulevard. The AMC transit station is planned by Metro as a separate and independent project. The LAMP project is expected to receive project approval in 2017. Construction of the major LAMP components will begin in 2018. The APM, ConRAC, Terminal Vertical Core Improvements, and ITF West are currently scheduled for completion at various dates through early 2024.

- The LAX Terminal 1.5 project proposes the construction of a new building located between Terminals 1 and 2. The new facility will ease congestion and provide connectivity between the two terminals – both within the ticketing and check in portion as well as post-security screening. LAX Terminal 1.5's post-security airside pedestrian connection means passengers connecting between the two terminals will no longer have to leave the secure area of the concourse, exit the building, and go through security again to make a connection. LAX Terminal 1.5 plays an integral role in LAWA's efforts to modernize the north terminals.
- The Terminals 2 and 3 Modernization Project plays an integral role in LAWA's efforts to modernize the north terminals. Approximately 830,000 square feet of new building space would be added to the two terminals. The proposed project would provide additional space balanced with passenger demand for ticketing, passenger and baggage check-in, and security screening. The proposed project would ease congestion and provide enhanced connectivity between the two terminals – both within the ticketing and check-in portion as well as post-security screening and would enable increased operational flexibility and efficiency.

Highlights of Major Projects Under Construction at LAX in 2016

- The new Midfield Satellite Concourse – North/Baggage Optimization Project is a \$1.6 billion concourse addition to the Tom Bradley International Terminal (TBIT). The concourse will feature 12 aircraft gates, and is designed as an addition to TBIT, connected by a pedestrian tunnel and utility tunnel. The new concourse will be accessed either by bus or by a 1,000-foot long pedestrian tunnel from TBIT. The new concourse is being designed with sustainability in mind, and with the directive to achieve LEED Silver and CAL Green Tier 1 certifications. Sustainable ideas include use of daylight, energy and water conservation, reducing the effect of heat generated by building roofs and pavement, and use of recycled materials.



- The \$515.8 million Terminal 1 Renovation involves an undertaking by Southwest Airlines to renovate the nearly 30-year-old terminal to improve its interior, its outdoor aircraft parking ramp area, and the traffic flow through the Central Terminal Area. Terminal 1 opened in 1984 and is in need of modernization to accommodate the needs of a technology-rich, post 9/11 world. The upgrades include: a new state-of-the-art consolidated security screening checkpoint; a fully automated checked baggage inspection and sorting system; an integrated passenger waiting room/concessions program; refurbished arrivals/baggage area; replacement of the passenger boarding bridges; renovations to airline support office space; relocation of the main entrances towards the west end of the building to ease traffic congestion; new ramp pavement and hydrant fuel system improvements. The project is expected to be completed in late 2018.

LAWA initiated the Terminal 2 Improvement Program designed to significantly improve the level of service and appearance of the 30-year-old building. The approximately \$320 million project is designed to bring cohesion to Terminal 2, so it will have a complimentary appearance throughout. The improvements included major upgrades to the ticketing lobby, baggage screening, baggage-claim area, and concourses, as

well as construction of all new concessions and upgrades of all systems (electrical, mechanical, communication, etc.) that serve the terminal.

This \$573 million renovation of Terminals 7 and 8 promises to deliver a superior experience for customers at LAX. When completed, the project will refurbish virtually all of its public space in the terminals and offer more of the conveniences and amenities that passengers value. The new look terminals and gate areas will feature a modern design with relaxed and inviting spaces, including a variety of comfortable seating options and abundant charging stations for travelers' electronic devices. The expansive ticketing lobby will incorporate the latest technology such as self-tagging baggage kiosks. These technologies, along with an upgraded security-screening checkpoint, will enable travelers to move quickly and efficiently from curb to gate. The project is expected to be completed in spring 2018.

The In-Line Baggage Handling and Screening System Program will improve and automate the security screening of checked baggage at all LAX terminals and will make travel through LAX safer, faster and more convenient. The total cost of the program covering all nine LAX terminals is estimated at \$613 million, with reimbursement expected to total \$460 million from the Transportation Security Administration. LAWA is responsible for the projects at Terminal 3 and the Tom Bradley International Terminal. The airlines in Terminals 1, 4, 5, 6, 7 and 8 will pay for their respective systems. The TBIT, T-2, T-3, T-5, T-6 and T-7-8 projects are completed.

The federal government is requiring airports to improve the Runway Safety Area (RSA) zone at the ends of each of their runways. These mandated improvements will provide an extra margin of safety for landing and departing aircraft. RSAs provide a buffer zone should an aircraft overshoot, overrun or veer off a runway while landing or taking off. Work has already been completed to expand the RSAs on Runway 7R-25L and Runway 6L-24R, and is currently taking place on the west end of Runway 6R-24L. The total budget for the RSA projects at LAX is approximately \$300 million.

Completed Projects at LAX in 2016

This \$270-million Elevator, Escalator, and Moving Walkway Modernization Project replaced or refurbished 212 outdated systems with modern units throughout the airport. New escalators, elevators, and walkways will now speed travelers to their gates and baggage-claim areas in a safe and efficient manner with energy-saving, sustainable technology.

The \$118-million Curbside Appeal and Roadway Improvement Project provides a new, dramatically upgraded look for LAX with the installation of modern LED (light emitting diode) street lighting, wayfinding components, and a new canopy for Terminal 4. The project also includes traffic safety and roadway improvement measures including an Upper/Departures Level retrofit and traffic improvements to World Way South and Center Way. Project components include: installation of custom-made art deco LED light poles; sleek, metallic silver canopies in front of terminal façades evoking the glory days of aviation; an LED light band running the length of the Central Terminal Area and covering a portion of the upper roadway edge. The program will enhance the appearance of LAX and improve vehicular movement and safety on the roadway.

The first phase of work for the Terminal 6 Renovation, completed in summer 2012 at a cost of \$238 million, increased lobby space, replaced traditional ticketing counters with new check-in kiosks, bag-check stations, and a behind-the-scenes in-line baggage-handling system. Additional security-screening checkpoints were added to facilitate quicker screening, and the number of gates increased. Alaska Airlines also made improvements to its branding and décor, as well as to its club lounge. A second, \$70.5 million phase of work, completed in 2016, included renovation and expansion of concessions space.

This \$148.5-million Terminal 4 Connector consisted of the design and construction of a multi-use, multi-level facility providing a secure connection between Tom Bradley International Terminal to Terminal 4. Connecting the two terminals will allow passengers easier access to those needing to reach connecting flights. The new space will include a Checked Baggage Inspection System, South Matrix Interline Baggage Transfer facility, and a four-lane Passenger Security Screening Checkpoint. A Public Plaza on the Upper/Departures Level provides outdoor seating.

This \$250-million renovation of Terminal 5 project has improved passenger service and security with a new in-line baggage-screening system, as well as expansion and streamlining of the federal passenger-screening checkpoints and international passenger-processing facilities. A new baggage claim facility, new elevators and escalators, and new passenger amenities such as lounges and dining options reflecting Los Angeles culture and cuisine were also part of the undertaking.

Airports Development Executive Management Program Status Report (Monthly)

The Airports Development Group of the Los Angeles World Airport (LAWA) prepares monthly Program Status Reports to provide updates on the capital improvement projects. These reports present project description followed by the master program schedule, a financial section with budget, cash flow and change orders, owner-controlled insurance program (OCIP), and a subcontractor utilization summary report.

LAX Plan 2013

The LAX Plan is a component of the Land Use Element of the City's General Plan. It provides goals, objectives, policies, and programs that establish a framework for the development of facilities that promote the movement and processing of passengers and cargo within a safe and secure environment while continuing to serve as the region's principal international gateway.

LAX Specific Plan 2016

The LAX Specific Plan is the principal mechanism by which the goals and objectives of the LAX Plan are achieved and how the policies and programs are implemented. It is the guiding regulatory document that establishes zoning, development regulations and standards consistent with the LAX Plan. In 2016, the LAX Specific Plan was amended for the Northside Plan Update.

Airport Layout Plan

The Airport Layout Plan consists of a series of drawings that illustrate the layout of existing facilities at LAX and proposed facilities, consistent with Alternative D. Its goal is to serve as a record drawing for the airport and a guide for future development.

Mitigation Monitoring and Reporting Program 2014

The Mitigation Monitoring and Reporting Program (MMRP) for CEQA documents ensures compliance with the proposed mitigation measures identified for certain LAWA projects. The MMRPs describe the method and timing of implementation, monitoring frequency, and actions indicating compliance.

Los Angeles International Airport Traffic Generation Report August 2016

Per Section G, Monitoring and Reporting, of the Los Angeles International Airport Specific Plan, Los Angeles World Airports (LAWA) is required to prepare an annual Traffic Generation Report. This traffic report shall identify the current number of Trips being generated by LAX, the number of Trips anticipated to be generated at the completion of the any Master Plan Project(s) in development at the time of the report, the Trips proposed to be generated following the implementation of the Master Plan as informed by current and Project-based Trip counts, and the number of Trips anticipated to be generated by on-going Master Plan construction activities.

Aviation Activity Analysis Report 2013

The Los Angeles World Airports (LAWA) prepares an annual Aviation Activity Analysis per Section 7 Subsection G, Monitoring and Reporting, of the Los Angeles International Airport Specific Plan. The Analysis Report identifies the number of passengers, volume of air cargo, and aircraft operations at the Los Angeles International Airport (LAX).



Airport photos: Courtesy of Los Angeles World Airports (LAX)

Statistics Summary

- In 2016, the total passenger volume was 80.921 Million Annual Passengers (MAP), a 7.96 percent increase compared to 2015.
- The total cargo volume in 2016 was 2.2 Million Annual Tons, an increase of 2.98 percent compared to 2015.
- The number of commercial aircraft operations (landings and takeoffs) totaled 697,138 in 2016, a 6.34 percent increase from 2015.

Chapter Fifteen: **harbor****The Port of Los Angeles**

The Port of Los Angeles, the gateway for international commerce, is located in San Pedro Bay 20 miles south of downtown Los Angeles. The Port of Los Angeles covers 7,500 acres of land and water along 43 miles of waterfront. It has 24 passenger and cargo terminals, including automobile, breakbulk, container, dry and liquid bulk, and warehouse facilities. The Port is also home to the U.S. West Coast's largest cruise passenger complex, the World Cruise Center. This seaport features record-setting cargo operations as well as environmental initiatives, security measures, diverse recreational and educational facilities, and Los Angeles' waterfront destination.

The Port of Los Angeles is a proprietary department of the City of Los Angeles. It is self-supporting and does not receive taxpayer dollars. The Port is directed by a five-member Board of Harbor Commissioners, whose members are appointed by the Mayor and approved by the Los Angeles City Council. The Port derives its fees from shipping and other services and is considered a landlord port, leasing property to tenants who, in turn, operate their own facilities.



Annual container counts for Port of Los Angeles are measured in twenty-foot equivalent units (TEUs), a standard measurement used in the maritime industry for measuring containers of varying lengths. In Calendar Year (CY) 2016, the Port of Los Angeles handled 8.8 million TEUs, a 7.3 percent increase from CY 2015. The Port ranked 1st place in the United States and 19th in the world in the container volume ranking.

In CY 2016, the Port's top five containerized imports were furniture (491,186 TEU), auto parts (381,110 TEU), apparel (283,124 TEU), electronic products (218,938 TEU), and miscellaneous plastic products (184,836 TEU). The top five containerized exports in CY 2016 were wastepaper (278,351 TEU), animal feeds (209,983 TEU), scrap metal (100,141 TEU), fabrics, including raw cotton (86,084 TEU), and soybeans (51,160 TEU).

The Port of Los Angeles' top trading partners in CY 2016 were China/Hong Kong (\$137 billion), Japan (\$39 billion), Vietnam (\$15 billion), South Korea (\$15 billion), and Taiwan (\$12 billion).

The Port of Los Angeles has a significant economic impact on the region as well as the nation with total operating revenue of \$453 million and net income of \$59 million in FY 2016. The Port generates about 999 jobs at the City of Los Angeles Harbor Department. In Los Angeles, there are about 144,000 jobs related to the Port of Los Angeles, about 517,000 jobs in the five-county region, and about 1.6 million jobs throughout the United States.

The Port Master Plan

The Port Master Plan is a long-range plan that establishes policies and guidelines for future development within the coastal zone boundary of the Port of Los Angeles. The California Coastal Act of 1976 requires a Port Master Plan, which should respond to the demands of international and domestic waterborne commerce, navigation, and fisheries. The Master Plan was updated in 2014 to reflect all recent land use planning and projects, replace outdated language, and provide an easy to understand land use plan.

Demand

The Port of Los Angeles, in a joint effort with the Port of Long Beach, prepared a new Long Term Cargo Forecast in 2015, which forecasts demand through 2040 for both containerized and non-containerized cargo.

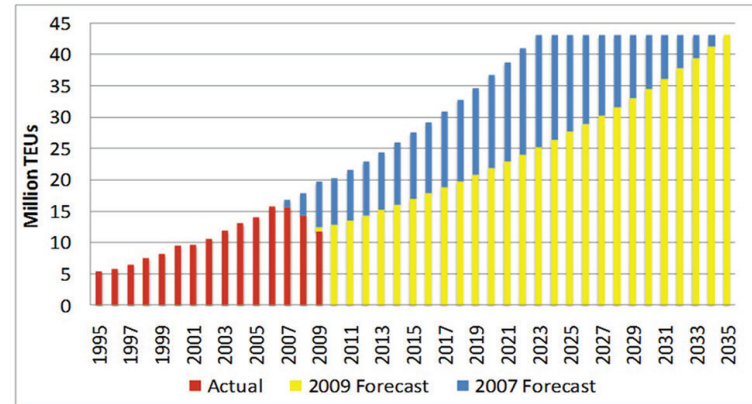
The overall long-term growth rates for the ports of Los Angeles and Long Beach are forecast to be 5.7 percent per year through 2020 and 3.75 percent per year through 2040. The combined total twenty-foot equivalent unit (TEU) container volume in 2040 is forecast to be 41.1 million TEU for the two ports.

- Dry bulk export tonnage demand is projected to increase at an average annual rate of 0.12 percent over the forecast period to 2040. Dry bulk import tonnage demand is projected to increase at an average annual rate of 2.4 percent over the forecast period
- Liquid bulk export tonnage is projected to grow slowly by 2.8 percent through the Port. Liquid bulk import tonnage is expected to growth slightly through 2020 and gradually decline through 2040 for an overall growth rate of -0.2 percent
- Break bulk import tonnage is projected to grow slowly by 1.9 percent through the Port
- RoRo (vehicles) export tonnage is projected to grow at an average annual rate of 5.7 percent through 2040. The demand for import RoRo cargo tonnage through the Port is projected to increase at an average annual rate of 3.3 percent through 2040

Planning Area

The new Master Plan reduces the number of planning areas from nine to five planning areas: San Pedro, West Basin/Wilmington, Terminal Island, Fish Harbor, and Waterways. Four of the planning areas address the land areas of the Port within the Coastal Zone, while the fifth addresses the water area of the Port. The Master Plan provides general overview, planning framework, and proposed projects for each planning area.

Figure 1. Container Forecast Chart



Transportation Infrastructure and Programs

The Port of Los Angeles developed infrastructure and programs to provide a variety of transportation modes that link destinations within the Port and to surrounding communities. The four programs and infrastructure are the waterfront promenade, bike paths, California Coast Trail, and trolley line.

The waterfront promenade has a general width of 30 feet and provides access to the waterfront with views of the Port. The Port has approved various projects and plans to provide over 10 miles of waterfront promenade and pedestrian pathways.

The Port, in coordination with the City of Los Angeles Department of City Planning, has developed bicycle access throughout the outer edges of the Port. The bicycle paths range from designated bike lanes within streets to multipurpose pathways that accommodate bicycles along the promenade. There are also numerous bike-share stations along the promenade.

The California Coastal Trail is a network of public trails along the 1,200-mile California coastline. The Port promenade is linked to the Coastal Trail's upper and lower coastal trails.



The San Pedro Historic Business Improvement District provides a rubber-tired trolley that serves the World Cruise Center, Ports O'Call Village, and Downtown San Pedro.

Development Guidelines and Policies

The Master Plan outlines the development guidelines, process for issuing coastal permits, and coastal development permit policies. Information about application procedures, permit types and general procedures, public hearing, board action, revocation, reapplication, and approval can be found in the document.

The Port of Los Angeles Strategic Plan 2017-2022

The Strategic Plan is a visioning document that aligns the broad spectrum of activities of the Port of Los Angeles. The Plan outlines both Port-wide priorities and objectives and Bureau-specific initiatives. Each initiative is paired with metrics that will be used to measure the Port's performance and success.

Port of Los Angeles Adopted Annual Budget Fiscal Year 2017-2018

The Los Angeles Harbor Commission adopted an annual budget of \$1,174.9 million for Fiscal Year 2017-18. The adopted budget includes \$160.5 million for Capital, \$614.2 million as the unappropriated balance, \$256.4 million in operating expenses, \$88.7 million in restricted cash/future commitments, \$37.6 million in debt repayments, and \$17.3 million in non-operating expenses. This budget is projected to create

approximately 1,920 direct and indirect jobs (not including Harbor Department employees), of which 1,240 are attributable to capital spending.

The \$160.5 Capital Budget million will allow for the continued development of the Port's World-Class Infrastructure at sites including container, cruise, and cargo terminals, and community access developments in San Pedro and Wilmington. These developments aim to facilitate the efficient flow of trade groups throughout the Port, and also the attraction of visitors to the LA Waterfront.

Comprising 14 percent of the total departmental budget, adopted capital expenditures include \$97.7 million of direct costs in the Capital Improvement Program (CIP) for projects that have been approved and those pending approval, indirect costs of \$45.9 million in capitalized interest and overhead allocations, \$16.0 million for capital equipment, and \$1.0 million for land and property acquisition.

In FY 2017-18, 43 percent of the CIP Budget, or \$41.6 million, is earmarked for terminal development projects. About 19 percent of the CIP Budget, or \$18.2 million, is funded for Public Access/Environmental Enhancement projects, which include the Los Angeles and Wilmington Waterfront Projects. Approximately 8 percent of the Adopted CIP Budget, or \$7.8 million, is for transportation improvement projects. Other CIP components include the unallocated CIP fund, IT Security improvements, and other projects to upgrade miscellaneous facilities throughout the Port.

