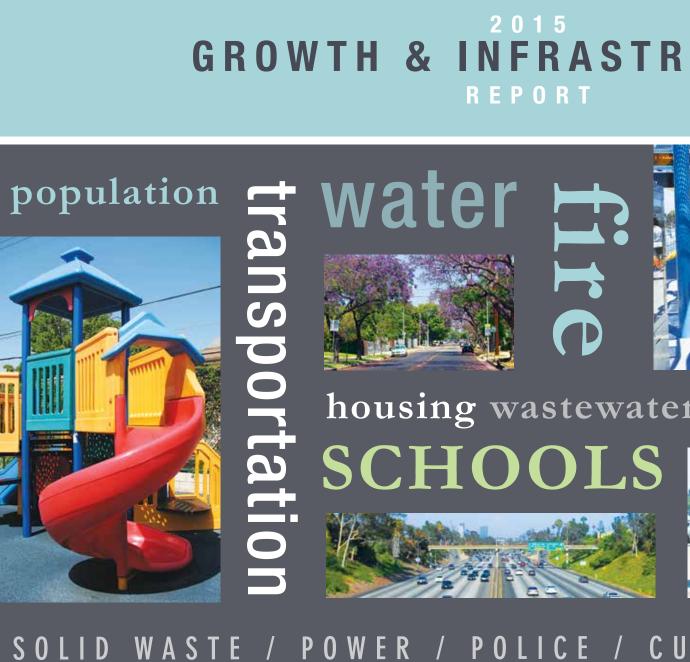
GROWTH & INFRASTRUCTURE











housing wastewater sewer stormwater



SOLID WASTE / POWER / POLICE / CULTURAL RESOURCES **URBAN** runoff libraries PARKS airports HARBOR Dear Members of the City Planning Commission, City Council and Mayor Garcetti:



The Department of City Planning is pleased to present the 2015 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 since 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 an interactive 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.



Vincent P. Bertoni, AICP Director of Planning

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executive summary

This Growth and Infrastructure Report summarizes and provides links to 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 December 2015. 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 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.

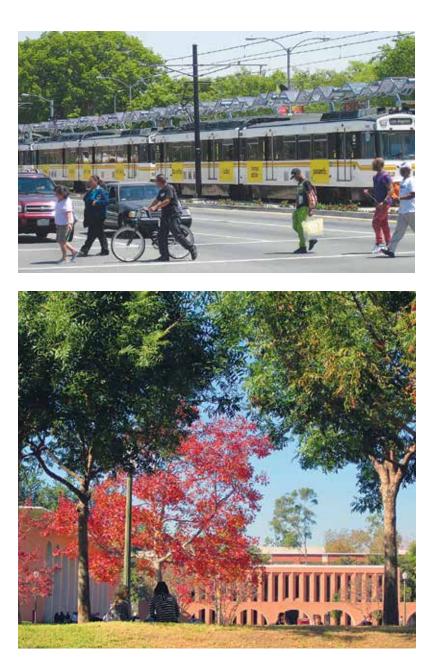
An Environmental Impact Report (EIR) was prepared for the Framework Element that analyzed the environmental impacts of the plan on all of the infrastructure and services required to support that population. The EIR was certified and determined that the Framework Plan for accommodating 4.3 million people 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. It is important to note that the current population estimate provided in the 2012 RTP Growth Forecast produced by the Southern California Association of Governments (SCAG) for the year 2035, is now 4.3 million people, the same population which the Framework Plan was designed to serve. The following population table compares the existing estimated population with the projected Framework population:

TABLE 1. Comparisor a	n of General Pland Existing Est		(Projections
	Population	Housing Units	Employment
2016 Estimate*	4,030,904	1,453,271	1,818,516
2020 Forecast (SCAG)	3,991,700	1,455,700	1,817,700
2035 Forecast (SCAG)	4,320,600	1,626,600	1,906,800
2040 Forecast (Draft SCAG)	4,609,400	1,690,300	2,169,100
Framework Element Horizon	4,306,500	1,566,108	2,291,500

*2016 population and housing estimates (January 1, 2014) come from the California Department of Finance (DOF) and 2014 employment (May 2014) is from a UCLA Anderson Forecast Employment Estimate for the City of Los Angeles. **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

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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 67 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 2015

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 2015 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. SCAG released the 2015 Local Profiles at the 2015 General Assembly in May 2015.



Population

Population Growth

Between 2000 and 2014, the total population increased by 5.7 percent from 3,694,742 in 2000 to 3,904,657 in 2014. The City's population growth rate of 5.7 percent was higher than the Los Angeles County growth rate of 5.5 percent

Households

Number of Households

Between 2000 and 2014, the total number of households in the City of Los Angeles increased by 60,039 units (4.7 percent), to total 1,335,399. The City's household growth rate of 4.7 percent was higher than the Los Angeles County growth rate of 4.3 percent. In 2014, the City's average household size was 2.9, just below the County average of 3.0.

Households by Size

In 2014, 70.7 percent of all households in the City had three people or fewer, and approximately 17 percent of all households had 5 people or more. Single-person households had the largest percentage of all households in the City with 29 percent.

Household Income

From 2000 to 2014, median household income increased by \$9,950 from \$36,541 to \$46,491.

Renters and Homeowners

Between 2000 and 2014, homeownership rates decreased by 0.6 percent while the share of renters increased by 0.6 percent. In 2014, renters' share was 62 percent, and homeownership rate was 38 percent.

Housing

Home Sale Prices

In 2014, the median homes sales price totaled \$550,000. This was an increase from the 2000 average of \$250,000 by 120 percent. Median home sales price increased 41.3 percent between 2010 and 2014. In 2014, the median home sales price in the city was \$100,000 higher than that in the county overall.

Foreclosures

There were a total of 466 foreclosures in 2014. Between 2007 and 2014, there were a total of 50,716 foreclosures.

Housing Units by Housing Type

In 2014, the City of Los Angeles had a total of 1,432,553 housing units. Approximately 45 percent were single-family homes and 54.3 percent were multi-family homes. The most common housing type was multi-family housing with five units or more.

Age of Housing Stock

64 percent of the housing stock in the City was built before 1970, and 36 percent of the housing stock was built between 1970 and 2014.

Employment

SCAG identified the top 10 places where residents of the City of Los Angeles commute to work in 2010 - Los Angeles, Burbank, Santa Monica, Glendale, Beverly Hills, Culver City, Pasadena, Torrance, Long Beach, and West Hollywood. SCAG also identified that 56.5 percent of commuters work within the City of Los Angeles, while 43.5 percent commute to surrounding cities. Approximately 25.09 percent of all commuters work at other destinations.

Total Jobs

In 2013, the City of Los Angeles had a total of 1,753,558 jobs compared to 1,807,175 jobs in 2007, representing a decrease of 3 percent.

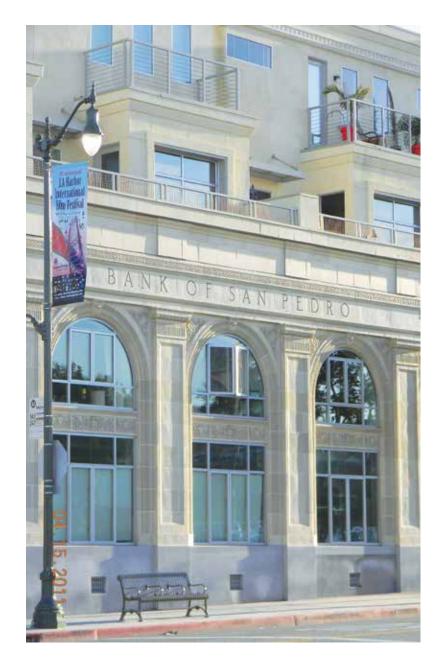
Jobs in Specific Sectors

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 product, and transportation equipment. In 2013, the total number of manufacturing jobs in the City of Los Angeles was 109,123, a decrease of 19.4 percent compared to 2007.

Construction jobs refer to those involved in both residential and non-residential construction. Between 2007 and 2013, construction jobs in the City of Los Angeles decreased from 83,491 to 56,958, a 31.8 percent decrease.

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 2013, retail jobs in the City decreased from 165,968 to 156,529, a decrease of 6 percent.

Professional and management jobs include professional and technical service, management of companies, and administration support. In 2013, the City had a total of 310,617 professional and management jobs compared to 325,862 jobs in 2007, a decrease of 4.9 percent.

California Department of Finance Demographic Research Unit

The Demographic Research Unit within the California Department of Finance serves as the official source of demographic data for the State of California planning and budgeting. The Research Unit provides annual population estimates for the State, counties, and cities. Information on housing units, vacancies, average household size, components of population change, and special populations are also available. The population estimates are used for a variety of purposes including research and planning by federal, state and local agencies, the academic community, and the private sector.

The Unit also forecasts population, births, and public school enrollment in various jurisdictions within the State of California. The State and counties' population projections are made for 50 years into the future and include age, sex, and race/ethnic detail. Calendar-year births are projected 10 years into the future at the State level with the projections distributed across the counties. The birth projections are categorized into six age groups and seven race/ethnic groups. The public school enrollment is forecasted for 10 years into the future. The enrollment projections are available at the county level for kindergarten through high school graduates.

Population and Housing Estimates for Cities, Counties and the State May 2016

This report provides the revised population and housing estimates for January 1, 2011-2015 and provisional population and housing estimates for January 1, 2016 for the state, counties, and cities. These population estimates incorporate 2010 census counts.

Population

The City of Los Angeles population estimate increased by 50,481 from 3,980,423 in 2015 to 4,030,904 in 2016. The City's population represents approximately 39 percent of the Los Angeles County's total population.

Housing Units

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In 2016, the total number of households (occupied housing units) is estimated to be 1,453,271 in 2016 with an average household size of 2.88. Approximately 44.3 percent are single-family units and 54.9 percent are multi-family housing units. A total residential vacancy rate of 5.9% was recorded compared to the 2015 estimate of 5.9%.



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. Fifty-seven percent of this figure is assigned to households with incomes below moderate (120% of Area Median Income).

2014 Annual Progress Report for the Housing Element

A total of 14,817 housing units were permitted in 2014. Of those, 1,770 units were affordable to households with moderate-incomes or below (47 moderate-income, 867 low-income and 856 very-low income). The Annual Progress Report also lists the yearly progress of each individual program listed in the Housing Element.

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In 2014, 18 percent of the 82,002 unit goal was achieved. Since the beginning of the 5th cycle, a total of 22,460 units have been permited, 27.3 percent of the total unit goal.

2016 Housing Change Report for the California Department of Finance

The Demographics Research Unit of the Department of City Planning prepares reports on the change in housing units each year for the State Department of Finance. The report uses data from building permit data compiled by the Department of Building and Safety. The information includes new construction, demolitions and conversions. The methodology employs a "lag-time" between the issuance of permits and completion of construction and/or demolition. The lagtimes are six months for construction of single-family dwellings and one year for multi-family dwellings due to the average construction timeline of these project types. Demolitions or removal of units from the housing stock are not lagged as they tend to occur during a much shorter time period. The 2016 report identifies a net increase of 13,366 total dwelling units during the 2015 calendar year. This includes a net increase of 298 single-family dwelling units and a net increase of 13,068 multi-family dwelling units.

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 October 2015

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

Building Valuation

In the 2015 fiscal year to date (July 1st to September 30th), total construction valuation was \$1.733 billion, with fiscal year 2015-16 projections of \$6.9 billion.

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Dwelling Units Permitted

In the 2015 fiscal year to date (July 1st to September 30th), dwelling units permitted totaled 3,821, with fiscal year 2015-16 projections of 15,284 units.

Office of the Mayor

Performance Metrics

As part of Mayor Garcetti's commitment to data and transparency, a new website has been developed that provides performance metrics to track the city's progress toward key priorities. 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. As of September 2015, 29,750 units have been permitted.



2015 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 to July 1, 2015 based on current building permit data. The data has been pegged to the April 1, 2010 US Census, in order to track growth since this data benchmark.

TABLE 2. Household Growth Trends by Area Planning Commission, 2010-2015											
Area Planning Commission	2010 Census	2015 Estimate*		2010-2015 % Change							
Central LA	300,149	314,857		4.9%							
East LA	130,390	131,669		1.0%							
West LA	197,025	201,577		2.3%							
South LA	217,413	219,991		1.2%							
Harbor	67,557	67,956		0.6%							
South Valley	292,586	296,654		1.4%							
North Valley	208,877	211,747		1.4%							
Citywide	1,413,997	1,444,451		2.2%							

*Department of City Planning, DRU,, Popultion/Housing Estimate 10/01/2015. The Department of City Planning Population/ Housing Estimates utilizes the "new housing unit method."

TABLE 3. Population Growth Trends By Area Planning Commission, 2010-2015										
	2010 Census	10 Census 2015 Estimate*		2010-2015 % Change						
Central LA	647,211	696,983		7.7%						
East LA	391,963	404,907		3.3%						
West LA	408,721	435,278		6.5%						
South LA	723,748	748,437		3.4%						
Harbor	195,486	198,960		1.8%						
South Valley	729,702	757,175		3.8%						
North Valley	695,790	723,639		4.0%						
Citywide	3,792,621	3,965,379		4.6%						

* Department of City Planning, DRU, Population/Housing Estimate 10/01/2015.

TABLE 4. Total Housing Un	its by Commun	ity Plan Area, 2010	0-201	5
Community Plan Area	2010 Census	2015 Estimate*		2010-2015 % Change
Arleta - Pacoima	23,368	23,604		1.0%
Bel Air - Beverly Crest	9,079	9,119		0.4%
Boyle Heights	23,054	23,382		1.4%
Brentwood - Pacific Palisades	27,391	27,400		0.0%
Canoga Park - Winnetka - Woodland Hills - West Hills	66,016	67,084		1.6%
Central City	23,626	30,440		28.8%
Central City North	6,618	7,557		14.2%
Chatsworth - Porter Ranch	34,031	35,473		4.2%
Encino - Tarzana	31,686	31,784		0.3%
Granada Hills - Knollwood	20,735	20,866		0.6%
Harbor Gateway	12,398	12,510		0.9%
Hollywood	103,187	106,466		3.2%
LAX	743	682		-8.3%
Mission Hills - Panorama City - North Hills	39,652	39,939		0.7%
North Hollywood - Valley Village	56,579	57,564		1.7%
Northeast Los Angeles	77,644	78,081		0.6%
Northridge	23,794	23,874		0.3%
Palms - Mar Vista - Del Rey	52,570	53,752		2.2%

TABLE 4. Total Housing U	nits by Commun	ity Plan Area, 201	0-201	5
Community Plan Area	2010 Census	2015 Estimate*		2010-2015 % Change
Port of Los Angeles	397	397		0.0%
Reseda - West Van Nuys	35,837	36,289		1.3%
San Pedro	31,662	31,831		0.5%
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	42,055	42,400		0.8%
Silver Lake - Echo Park - Elysian Valley	29,692	30,206		1.7%
South Los Angeles	82,186	82,968		1.0%
Southeast Los Angeles	68,651	70,355		2.5%
Sun Valley - La Tuna Canyon	24,045	24,229		0.8%
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	21,898	22,115		1.0%
Sylmar	21,372	21,646		1.3%
Van Nuys - North Sherman Oaks	60,429	61,534		1.8%
Venice	21,568	21,713		0.7%
West Adams - Baldwin Hills - Leimert	66,573	66,669		0.1%
West Los Angeles	38,501	39,043		1.4%
Westchester - Playa del Rey	25,267	27,753		9.8%
Westlake	40,847	41,867		2.5%
Westwood	21,908	22,115		0.9%
Wilmington - Harbor City	23,104	23,219		0.5%
Wilshire	125,832	128,528		2.1%
Citywide	1,413,995	1,444,451		2.2%

* Department of City Planning, DRU, Population/Housing Estimate [Developed from the 2015 Estimate on Table 6 and an estimate of miscellaneous unit types (boat houses, mobile homes, etc)]

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TABLE 5. Population by Community Plan Area, 2010-2015										
Community Plan Area	2010 Census	2015 Estimate*	2010-2015 % Change							
Arleta - Pacoima	103,252	108,589	5.2%							
Bel Air - Beverly Crest	20,934	25,774	23.1%							
Boyle Heights	84,619	85,016	0.5%							
Brentwood - Pacific Palisades	57,060	59,034	3.5%							
Canoga Park - Winnetka - Woodland Hills - West Hills	175,476	183,406	4.5%							
Central City	37,675	51,025	35.4%							
Central City North	22,135	24,377	10.1%							
Chatsworth - Porter Ranch	93,251	102,323	9.7%							
Encino - Tarzana	72,018	75,051	4.2%							
Granada Hills - Knollwood	60,690	63,755	5.1%							
Harbor Gateway	40,136	41,238	2.7%							
Hollywood	198,228	210,511	6.2%							
LAX	1,566	1,811	15.6%							
Mission Hills - Panorama City - N. Hills	142,510	145,329	2.0%							
North Hollywood - Valley Village	136,616	143,445	5.0%							
Northeast Los Angeles	237,256	245,723	3.6%							
Northridge	66,906	66,999	0.1%							
Palms - Mar Vista - Del Rey	110,715	115,886	4.7%							

*Department of City Planning, DRU, Population/Housing Estimate (10/01/2015)

TABLE 5. Population by Community Plan Area, 2010-2015										
Community Plan Area	2010 Census	2015 Estimate*	2010-2015 % Change							
Port of Los Angeles	1,462	1,663	13.8%							
Reseda - West Van Nuys	107,754	110,392	2.4%							
San Pedro	76,651	78,647	2.6%							
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	78,803	81,157	3.0%							
Silver Lake - Echo Park - Elysian Valley	70,088	74,168	5.8%							
South Los Angeles	270,354	279,068	3.2%							
Southeast Los Angeles	278,337	290,946	4.5%							
Sun Valley - La Tuna Canyon	88,556	90,715	2.4%							
Sunland - Tujunga - Lake View Terr Shadow Hills - East La Tuna Canyon	61,763	63,463	2.8%							
Sylmar	78,862	82,467	4.6%							
Van Nuys - North Sherman Oaks	159,035	163,723	2.9%							
Venice	36,962	39,968	8.1%							
West Adams - Baldwin Hills - Leimert	175,057	178,422	1.9%							
West Los Angeles	74,952	77,955	4.0%							
Westchester - Playa del Rey	55,073	59,446	7.9%							
Westlake	110,781	117,610	6.2%							
Westwood	51,459	55,404	7.7%							
Wilmington - Harbor City	77,237	77,411	0.2%							
Wilshire	278,392	293,461	5.4%							
Citywide	3,792,621	3,965,380	6.24%							

^{*}Department of City Planning, DRU, Population/Housing Estimate (10/01/2015)

TABLE 6. Estimated Change in New and Demolished Dwelling Units, July 1, 2014 to September 30, 2015												
Community Plan Area	New SFDUs ¹	Demolished SFDUs	Net SFDUs	New MFDUs ²	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units					
Arleta - Pacoima	10	-4	6	10	-2	8	14					
Bel Air - Beverly Crest	44	-42	2	10	0	10	12					
Boyle Heights	2	-4	-2	131	-7	124	122					
Brentwood - Pacific Palisades	133	-151	-18	88	-95	-7	-25					
Canoga Park - Winnetka - Woodland Hills - West Hills	15	-9	5	141	-1	140	145					
Central City	1	-1	0	461	-15	447	446					
Central City North	0	0	0	4,520	-20	4,500	4,500					
Chatsworth - Porter Ranch	83	-4	79	387	0	387	466					
Encino - Tarzana	68	-58	11	102	-54	48	59					
Granada Hills - Knollwood	5	-1	4	29	-2	27	31					
Harbor Gateway	16	-1	15	81	0	81	96					
Hollywood	229	-154	75	1,476	-218	1,258	1,332					
Los Angeles International Airport	0	-4	-4	0	-16	-16	-20					
Mission Hills - Panorama City - North Hills	15	-23	-8	134	-50	84	76					
North Hollywood - Valley Village	81	-62	19	320	-75	245	264					
Northeast Los Angeles	106	-27	79	199	-26	173	252					
Northridge	32	-2	30	56	-49	7	37					
Palms - Mar Vista - Del Rey	38	-63	-25	629	-82	548	522					

¹SFDU: Single-family Dwelling Unit, 6 month lag-time applied ²MFDU: Multifamily Dwelling Unit, 10 month lag-time applied

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TABLE 6. Estimated Change	in New and D	emolished Dwelli	ng Units, J	uly 1, 2014	to September 3	0, 2015	
Community Plan Area	New SFDUs ¹	Demolished SFDUs	Net SFDUs	New MFDUs ²	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units
Port of Los Angeles	0	0	0	0	0	0	0
Reseda - West Van Nuys	26	-15	11	46	-6	40	51
San Pedro	4	-6	-2	13	-15	-2	-4
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	125	-148	-23	216	-88	128	105
Silver Lake - Echo Park - Elysian Valley	140	-26	115	262	-35	227	341
South Los Angeles	24	-54	-30	267	-42	224	194
Southeast Los Angeles	50	-143	-93	493	-18	476	383
Sun Valley - La Tuna Canyon	16	-16	0	50	-3	47	48
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	36	-10	26	32	-3	29	54
Sylmar	12	-3	9	92	-1	91	100
Van Nuys - North Sherman Oaks	211	-60	151	613	-73	540	691
Venice	56	-46	10	65	-76	-11	-1
West Adams - Baldwin Hills - Leimert	24	-23	1	121	-76	45	46
West Los Angeles	57	-79	-22	530	-183	346	324
Westchester - Playa del Rey	27	-17	10	2,482	-48	2,434	2,444
Westlake	2	-9	-7	442	-27	415	407
Westwood	12	-17	-5	163	-66	97	92
Wilmington - Harbor City	7	-1	6	216	0	216	222
Wilshire	132	-123	9	1,219	-206	1,013	1,023
Citywide	1,840	-1,407	433	16,096	-1,678	14,418	14,851

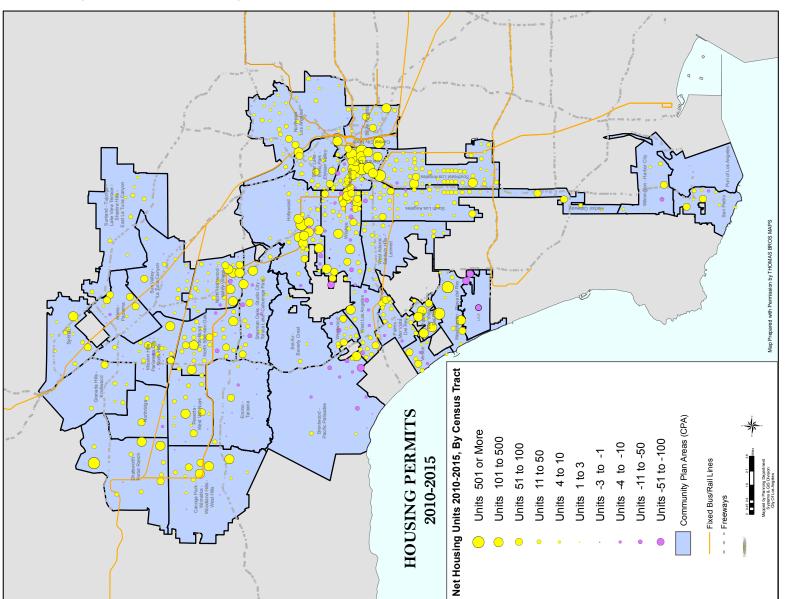
¹SFDU: Single-family Dwelling Unit, 6 month lag-time applied ²MFDU: Multifamily Dwelling Unit, 10 month lag-time applied

TABLE 7. Estimated Change in New and Demolished Dwelling Units, 2010 to September 30, 2015											
Community Plan Area	New SFDUs ¹	Demolished SFDUs	Net SFDUs	New MFDUs ²	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units				
Bel Air - Beverly Crest	140	-112	28	33	-15	18	46				
Boyle Heights	9	-24	-15	370	-27	343	328				
Brentwood - Pacific Palisades	451	-514	-63	295	-203	92	29				
Canoga Park - Winnetka - Woodland Hills - West Hills	85	-32	52	1,421	-1	1,420	1,472				
Central City	1	-1	0	3,113	-15	3,099	3,098				
Central City North	0	-1	-1	5,026	-20	5,006	5,005				
Chatsworth - Porter Ranch	268	-8	260	1,194	0	1,194	1,454				
Encino - Tarzana	151	-149	3	154	-56	98	101				
Granada Hills - Knollwood	32	-4	28	97	-2	95	123				
Harbor Gateway	27	-4	23	178	0	178	201				
Hollywood	427	-339	88	3,500	-348	3,152	3,239				
Los Angeles International Airport	0	-15	-15	0	-40	-40	-55				
Mission Hills - Panorama City - North Hills	26	-36	-10	389	-85	304	294				
North Hollywood - Valley Village	133	-141	-8	1,425	-160	1,265	1,257				
Northeast Los Angeles	251	-80	171	523	-28	495	666				
Northridge	46	-14	32	103	-53	50	82				
Palms - Mar Vista - Del Rey	114	-143	-29	1,419	-107	1,313	1,283				
Port of Los Angeles	0	0	0	0	0	0	0				
Reseda - West Van Nuys	52	-31	21	438	-6	432	453				
San Pedro	24	-14	10	126	-19	107	117				

¹SFDU: Single-family Dwelling Unit, 6 month lag-time applied ²MFDU: Multifamily Dwelling Unit, 10 month lag-time applied

TABLE 7. Estimated Change in New and Demolished Dwelling Units, 2010 to September 30, 2015							
Community Plan Area	New SFDUs ¹	Demolished SFDUs	Net SFDUs	New MFDUs ²	Demolished MFDUs	Net MFDUs	Total Net Dwelling Units
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	334	-384	-50	564	-186	378	328
Silver Lake - Echo Park - Elysian Valley	234	-69	166	427	-72	355	520
South Los Angeles	64	-215	-151	870	-87	782	631
Southeast Los Angeles	136	-534	-398	2,273	-119	2,155	1,757
Sun Valley - La Tuna Canyon	39	-35	4	187	-3	184	189
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	173	-38	135	150	-5	145	279
Sylmar	130	-14	116	176	-1	175	291
Van Nuys - North Sherman Oaks	267	-138	129	1,166	-89	1,077	1,206
Venice	155	-144	11	255	-115	140	151
West Adams - Baldwin Hills - Leimert	55	-59	-4	236	-100	136	132
West Los Angeles	176	-219	-43	961	-310	650	607
Westchester - Playa del Rey	51	-29	22	3,064	-125	2,939	2,961
Westlake	5	-15	-10	1,188	-96	1,092	1,081
Westwood	40	-50	-10	407	-252	155	145
Wilmington - Harbor City	18	-6	12	359	-250	109	121
Wilshire	284	-296	-12	3,170	-547	2,623	2,612
Citywide	4,428	-3,929	499	35,351	-3,546	31,805	32,304

¹SFDU: Single-family Dwelling Unit, 6 month lag-time applied ²MFDU: Multifamily Dwelling Unit, 10 month lag-time applied



MAP 1. Housing Permits Issued in Los Angeles, 2010-2015

8

The City of Los Angeles transportation system and services are

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)

The California Department of Transportation (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 is responsible for 42 freeways and highways consisting of 915 freeway and highway miles in Los Angeles County and 273 miles in Ventura County. On average, 100 million vehicle miles are traveled daily on District 7 freeways.

High Occupancy Vehicle (HOV) Annual Report 2015

Caltrans District 7 (Los Angeles and Ventura Counties) has the nation's most extensive High Occupancy Vehicle (HOV) lane program, which will be adding carpool lanes to virtually every freeway in the Los Angeles area. The HOV program increases mobility in the region and is also the least expensive method for accommodating economic growth and development.

As of October 2015, there were 557 lane-miles of managed lane facilities

in Caltrans District 7. It is comprised of 475 lane-miles of HOV lanes and 82 lane-miles of Express lanes. There are currently 514 HOV lane miles built, 31 under construction, 51 in design process, and 80 miles in planning process in Los Angeles and Ventura Counties. HOV facilities in Los Angeles County carry approximately 378,000 vehicles or 805,000 people per day.

Caltrans prepares an Annual Report of its High Occupancy Vehicle program. The Report provides information on the status of HOV projects, capacity, and other facility and infrastructure related to the project.

Los Angeles County Metropolitan Transportation Authority (Metro)

The Los Angeles County Metropolitan Transportation Authority (Metro) serves as transportation planner and coordinator, designer, builder, and operator for the 1,433 square mile service within the Los Angeles County.

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, multimodal funding availability, sub-regional needs, and project performance measures.



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. They work together and partner with other agencies to provide safe, accessible transportation services and infrastructure in the city and region.

Short Range Transit Plan 2014-15 (March 2015)

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 2014-15.

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

Commuter Express

LADOT provides a suburb-to-Downtown or suburb-to-suburb Commuter Express bus service via 14 routes. Most buses operate primarily during peak commute periods from 5:00 AM to 9:00 AM (AM Peak) and from 3:00 PM to 7:00 PM (PM Peak). Commuter Express carried about 1.8 million passengers in FY 2013-14.

LADOT operates a fleet of 103 Commuter Express buses. All vehicles are powered by cleaner burning compressed natural gas (CNG).

DASH

DASH Downtown Los Angeles and community DASH are shuttle bus services designed to provide localized service in Downtown LA and in 27 neighborhoods all across the City. Each route serves trips within that neighborhood and connects to other regional transit services such as Metro Rapid and local routes, Metrolink and Metro rail lines. DASH buses typically travel circuitous fixed routes and provide access to various activity centers, such as parks, recreation centers, cultural sites, medical facilities and retail areas. DASH buses carried about 19.6 million

passengers in the 2013-14 fiscal year.

LADOT operates a total of 209 DASH buses. All buses are powered by cleaner burning liquid propane gas (LPG) or CNG.

Cityride

Cityride is a transportation assistance program for individuals age 65 or older and qualified persons with disabilities in the City of Los Angeles and select areas of Los Angeles County. The program offers reduced costs for participants to purchase rides on City of Los Angeles permitted taxis or LADOT operated dial-aride services (DAR). Cityride, DAR and taxi service carried 176,675 passengers in the 2013-14 fiscal year.

The dial-a-ride service operates with 44 cut-away vehicles, each seating 6 to 10 passengers and equipped with a wheelchair lift.

All LADOT transit services are funded by City Proposition A Local Transit Assistance (PALTA) funds and administered by LADOT. In addition, LADOT also receives operating assistance from Metro and capital funding from Metro and the Federal Transit Administration (FTA).

LADOT Annual Report 2014-15

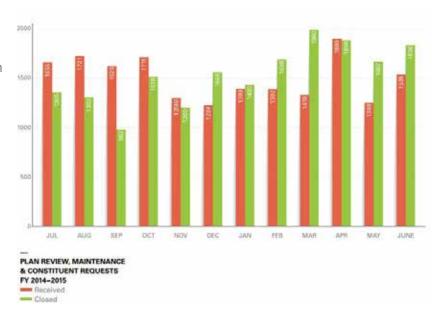
The Los Angeles Department of Transportation (LADOT) prepares an annual report that highlights key elements of the City's transportation infrastructure and recent accomplishments.

The following list highlights some of LADOT's recent accomplishments and milestones:

- Established interagency task force and collaborated with Mayor's Office to adopt Vision Zero, a citywide goal to eliminate traffic deaths by 2025
- In collaboration with the Mayor's Office, LADOT analyzed crashes and identified the City's High Injury Network of streets with the most need for focused improvements

As the first initiative of the Active Transportation team, the City installed highly visible continental crosswalks with advance limit lines at over 800 intersections, providing a clear zone for pedestrians and bicyclists. The City also Implemented 100 safety upgrades at crosswalks, retimed 400 traffic signals, installed pedestrian "head starts" known as Leading Pedestrian Intervals on Broadway and Reseda Blvd. Lastly, LADOT awarded over \$22 million in grant funds for education, engineering, enforcement, and evaluation for the Safe Routes to School under Vision Zero campaign

- Launched the Great Streets project with outreach on Venice, Central, Van Nuys, Cesar Chavez and Hollywood Great Streets segments; implemented improvements on Cesar Chavez and Reseda; facilitated short-term improvements on 14 of the Great Streets; partnered with Mayor's Great Streets Studio and Department of Cultural Affairs to fund and launch Great Streets Challenge Grants
- Improved bike safety and infrastructure by designing 10 miles of protected bikeways (Reseda Blvd., Figueroa, and Los Angeles); implemented 38.2 miles of bikeway improvements; installed 6 bicycle corrals and 964 bike racks; completed order to upgrade 100 percent of the DASH fleet to have bike racks; partnered with Mayor's Office and Metro to release Regional Implementation Plan and select bikeshare vendor; produced bikeshare station location map and conducted outreach to Downtown community; facilitated CicLAvia Wilshire, South LA, Venice, and Valley; established City's first bike-friendly business district in North East LA (NELA) and installed three bicycle repair stations citywide
- Created an enhanced bus riding experience by implementing the first mobile ticketing project in California, and Wi-Fi on Commuter Express buses
- Expanded access to non-ownership models of vehicle mobility by exceeding green taxicab fleet goal one year ahead of schedule with 75% of taxis now being hybrids; launched expansion of citywide carshare pilot
- Increased availability of parking and efficiency of use, by completing the installation of nine neighborhood dynamic message signs as part of LA Express Park; installed 14 electrical vehicle charging stations throughout the city
- Improved communication and Information access to support decision-making; launched Transtat for all bureaus to improve transparency and to become data driven
- Increased efficiency throughout the agency; improved restriping turnaround time for



slurry from a high of 67 days to a low of 8 days; shortened Metro-related plan review times for Crenshaw/ LAX, Regional Connector, and Purple Line Extension Segment I; gained approval by the Board of Taxicab Commissioners for a two-year extension of the nine taxicab company franchises through 2017 updated Parking Violations Bureau website, by providing additional features with improved functionality and present a cleaner, more modern aesthetic and user-friendly experience

- Improved agency identity, transparency, and customer service by expanding social media platform and communication outreach, all under the branding of "LADOTofficial"
- Improved Customer Service Satisfaction; improved MyLADOT response time; closed 18,381 service requests from July 2014 to June 2015; backlog was reduced by 25% from its peak in November 2014 of 7,274 to 5,472 in June 2015
- Improved customer service and reduced response time for Parking Ticket Resolution; released PayTixTM app for Android and Apple cell phone users
- Opened new West LA Service Center; revisited parking sign design and placement; obtained innovation funding to be the first city to install new grid-style pictorial parking guide signs

- Traffic control plan review for utilities; allotted overtime and created a new funding account to expedite review of traffic control plans for utility companies
- Improved Information sharing with stakeholders; increased outreach, produced 50 LADOT Weekly Briefs, 60 LADOT YouTube videos, and enhanced communication with Business Improvement Districts and Neighborhood Councils

The City of Los Angeles Transportation Profile 2014-15

The Department of Transportation prepared the Los Angeles Transportation Profile to provide a comprehensive overview of the transportation system in the City of Los Angeles. The Report provides an inventory of the City's airport and harbor system, street and freeway network, parking, taxi, and transit facilities. In addition, the Report includes data on the City's goods movement, mode share, commuting, traffic congestion, pedestrians and bicyclists.

Quick Facts

As described in the LADOT Annual Report – Fiscal Year 2014-15, 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 1,800 signalized approaches with left-turn arrows
- 40,000 intersections
- 22,000 marked crosswalks
- 1,200 miles of red, yellow, white, green and blue curb markings

Inventory of Citywide On-and-Off Street Parking Controls

- 34,661 on-street parking meters
- 33,162 on-street card & coin
- 2,288 off-street metered spaces

- 410 off-street card & coin
- 117 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

2015 Congestion Management Program -Local Development Report

Since its inception in 1992, the Department of Transportation has been the lead in ensuring city compliance with the state-mandated Congestion Management Program (CMP). It includes the requirement for a Countywide Deficiency



Plan, which was incorporated into the CMP in 1993. The CMP requires local jurisdictions to submit to Metro an annual Local Implementation Report (LIR) enumerating all development activity and all traffic mitigation projects/programs benefiting the CMP transportation network. Since 1994, the City of Los Angeles has maintained a positive balance of transportation improvement credits over new development debits to preserve compliance with the CMP. To date, the city has accumulated 2,107,508 in net credit points, points which include contributions for improvements to the regional transportation system.

Reporting of traffic mitigation projects/programs has been suspended indefinitely while Metro conducts studies on the best approach for compliance with the CMP. However, all new development activity must continue to be reported annually in the LDR to meet CMP compliance.

Development Activity

For the period June 1, 2014 to May 31, 2015, the LDR determined a total of 11,134 net housing units were added in Los Angeles (9,809 multi-family and 1,065 single-family) in addition to 260 group quarters. This includes the construction of 12,994 new housing units and the demolition or conversion of 1,860 units. Added net commercial space totaled 1,795,610 sq. ft. for



the same period. Total net non-retail development includes 172,070 sq. ft. of industrial space, 1,486,860 sq. ft. of office space, 213,000 sq. ft. of medical space, 12,940 sq. ft. of government space and 478,680 sq. ft. of institutional/ educational space.

Exempted development activity (not included in the development totals above) includes 353 units of low/very low-income housing and 1,166 dwelling units in mixed-use development near rail.

2015 Highway Monitoring Report

The report is a compilation of data for the 2015 CMP for the 47 monitoring stations situated in the City. It contains the Level of Service (LOS) Summary for the a.m. and p.m. peak hours, Monitoring Station descriptions (layouts and signal phase diagrams), Manual Count data, Level of Service (LOS) calculations, and the Intersection Turning Movement Summary.

Traffic Volume Counts

Detailed traffic count data can be found on NavigateLA. Traffic Count Summaries can be found on the <u>Data LA</u> portal. Between 2011 and 2014, LADOT conducted 3,043 traffic counts, accounting for the passage of 46,986,266 motorized vehicles through various intersections across the City

In addition, LADOT collects traffic counts and conducts performance level evaluation of 47 major intersections throughout the City. This effort is conducted biennially pursuant to the State-mandated Congestion Management Program.

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.

Mobility Plan 2035, An Element of the General Plan

Mobility Plan 2035 (Plan) provides the policy foundation for achieving a transportation systems 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 2015

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, 2015, 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

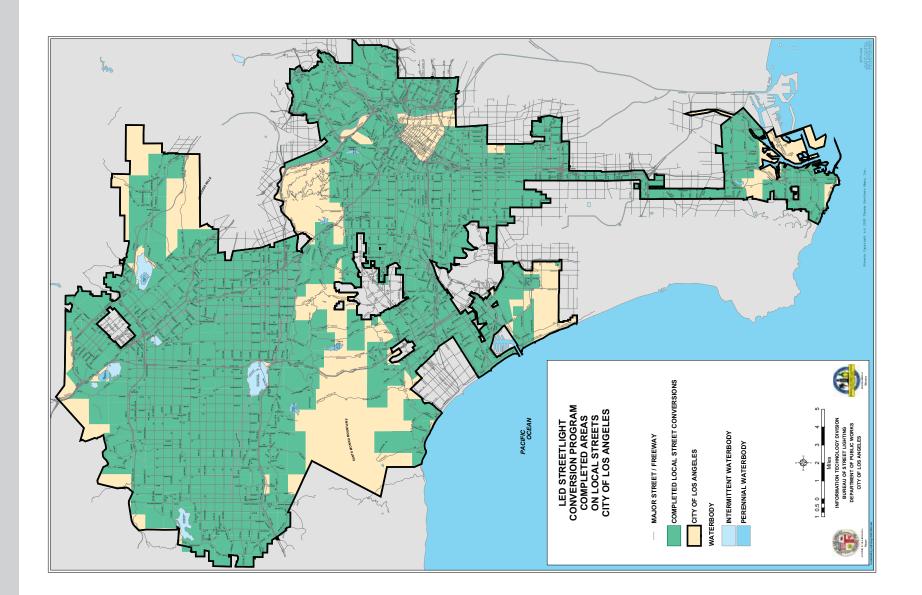
Each year the Bureau of Street Services produces data reflecting its accomplishments and milestones through the Pavement Preservation Program, Street Cleaning Program, Urban Forestry Division, and Investigation and Enforcement Division.

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.





In 1902, the City of Los Angeles established **the Los Angeles Department of Water and Power (LADWP)**, a municipal water system created after acquiring title to all properties of a private water company. Since then, LADWP has become the largest municipally owned and operated retail water utility in the nation, providing approximately 168 billion gallons of water to 3.8 million residents in the City of Los Angeles. 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 large and small pipes measuring more than 7,200 miles in length. Trunk lines are pipes with a diameter greater than 20 inches that transport water from wells and aqueducts to reservoirs. These trunk lines are connected to smaller pipes called distribution mains that supply water to the customers' service connection.

This water section provides an overview of agencies responsible for water supply in the City of Los Angeles. The Metropolitan Water District of Southern California and the Los Angeles Department of Water and Power produce annual reports, management plans, and other documents to provide information about water demand, supply, capacity, and infrastructure.

Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California (MWD) is a consortium of 26 cities and water districts that provides drinking water to approximately 19 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino and Ventura counties. The MWD is the largest water supplier for the City of Los Angeles. The MWD owns and operates an extensive range of capital facilities including the Colorado River Aqueduct (CRA), 16 hydroelectric facilities, nine reservoirs, about 1,000 miles of large-scale pipes and five water treatment plants.

The MWD delivers an average of 1.7 billion gallons of water per day to a 5,200 square mile service area, a six-county region from Ventura County in the north to San Diego County in the south through a conveyance and distribution system.





The Metropolitan Water District of Southern California Annual Report 2015

The Metropolitan Water District of Southern California (MWD) produces an annual report each Fiscal Year. The Annual Report 2015 provides detailed information about the MWD and summarizes the district's priorities, key policy issues, and accomplishments during 2014/15.

Accomplishments

System Operations and Planning: Effectively managed supplies and storage programs to meet member agency demands during California's fourth year of record drought; collaborated with Engineering Services to implement capital projects to further enhance operational flexibility by reducing areas traditionally served by only State Water Project (SWP) supplies; adjusted system operations to decrease the use of scarce SWP supplies by about 140,000 AF.

Colorado River: Maintained an 8-pump flow on the CRA throughout FY 2014/15 and delivered 1.19 MAF of CRA water, the largest delivery in 13 years; withdrew approximately 321,000 AF of intentionally created surplus water from Lake Mead during CY 2014, supplies that had been conserved and stored in Lake Mead in prior years for use in dry years.

Water Supply

Metropolitan holds a water supply contract for 1,911,500 acre-feet annually with the California Department of Water Resources, subject to availability. Drought conditions in fiscal year 2014/15 substantially reduced the amount of available State Water Project supplies with record low snowpack conditions reducing normally snow-covered Sierra watersheds to grassy meadows at the peak of the winter season. As a result, Metropolitan managed 634,679 AF through the State Water Project system, about 250,000 AF less than the previous year. To bolster these supplies, Metropolitan withdrew water from storage programs and exercised transfer and exchange agreements with Desert Water Agency and Coachella Valley Water District, and other SWP partners. The impact of the drought reduced all available supplies throughout the state with some areas seeing historically low supply conditions. During FY 2014/15, Metropolitan exercised its SWP water management programs to ensure delivery capability under these dry-year conditions. This included drafting more than 108,000 AF from its San Joaquin Valley and Mojave storage accounts, the same as the previous year, and nearly 30,000 AF from its flexible storage accounts, the remaining balance after nearly depleting these supplies in the previous year. FY 2014/15 deliveries and storage are subject to change based on future reconciliations by the Department of Water Resources.

Metropolitan's net SWP payments during FY 2014/15 were \$440 million on a modified accrual basis. Metropolitan also administered existing storage programs located outside its service area along the SWP system.

Water Sales

Metropolitan responded to the worsening water supply conditions by heightening conservation messaging and public drought awareness. As dry winter conditions threatened to continue into 2015, Metropolitan revised the region-wide water supply allocation plan which was last used in 2010. On April 1, 2015, Gov. Jerry Brown issued a mandatory cutback on urban water users throughout the state, effective June 1, 2015. This reduction has continued through 2016, and requires urban potable water users to cut use 25 percent below the same months of CY 2013. In April 2015, Metropolitan's board voted to implement the revised imported water 10 allocation plan beginning July 1, 2015. The plan called for a 15 percent reduction in imported water use by member agencies. As a result of these substantial drought response actions, Metropolitan's water sales for FY 2014/15 dropped 7.3 percent below water sales in the prior fiscal year.

The growing awareness of drought and retail conservation caused sales in FY 2014/15 to fall below the 10-year average annual sales of 1.99 MAF. In FY 2014/15, Metropolitan sold 1.91 MAF of water, about 150,000 AF (7.3 percent) lower than the prior fiscal year. Treated water sales were 890,000 AF or 47 percent of total sales, with maximum daily system deliveries as high as 7,150 AF per day.

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 168 billion gallons of water to 3.9 million residents and 674,000 customers each year.



Urban Water Management Plan 2015

The Los Angeles Department of Water and Power (LADWP) prepares and adopts an Urban Water Management Plan (UWMP) every five years to evaluate future water demands and supplies under average and dry year conditions.

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. Through its actions, LADWP is committed to maintaining system reliability as it meets future water demands. Since the completion of the 2010 Urban Water Management Plan (UWMP), multiple city goals and policy objectives have reshaped future plans for water supply in Los Angeles. In 2012, LADWP established a set

of Guiding Principles to maintain water supply reliability and cost effectiveness for customers by accelerating plans for local supply development. In October 2014, Mayor Eric Garcetti issued Executive Directive 5 (ED5), which mandated City goals and actions in response to the drought. In April 2015, LA's Sustainable City pLAn (pLAn) was released, establishing short-term and long-term targets for the City to strengthen and promote sustainability. Within the pLAn category of local water, a multi-faceted approach to reducing water use and developing a locally sustainable water supply was developed.

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 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 are 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 and the pLAn 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 the recent minimal snowfall in the eastern Sierra Nevada Mountains affecting LAA supply 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 start of a multi-year drought 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 22 percent demand reduction in 2014/15 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

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

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 Conservation

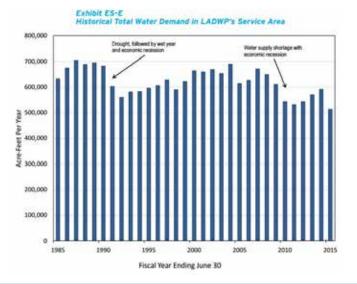
Conservation has had a tremendous impact on Los Angeles' water use patterns and has become a permanent part of LADWP's water management philosophy. The City of Los Angeles has long recognized water conservation as the core of multiple strategies to improve overall water supply reliability. Through its 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 ED No. 5 and pLAn ultimately calling for a 25 percent reduction in per capita water use by 2035 over 2013 levels.

Future Water Supplies

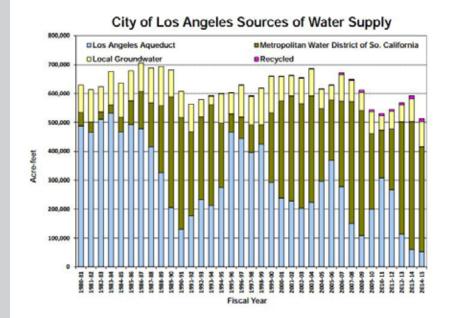
The water management goal of LADWP is to implement cost-effective conservation, recycled water, and stormwater capture programs to meet the targets established in ED No. 5 and pLAn. In addition, LADWP is also pursuing water to replace a portion of the LAA water used for environmental enhancements and mitigation in the eastern Sierra Nevada.

Water Supply Reliability

With its current water supplies, planned future water conservation, and planned future water supplies, LADWP will be able to reliably provide water to its customers through the 25-year planning period covered by this UWMP. Reliability includes accounting for water quality impacts on supplies and impacts of climate change on both supplies and demands. To meet targets established in ED No. 5 and 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 projected supply portfolio under multiple dry year conditions are almost identical to that under single dry year conditions. New water conservation is shown as a combined supply source with stormwater reuse. Groundwater is combined with increased pumping due to groundwater replenishment with purified wastewater and captured stormwater. The exhibits show that the City's locally-developed supplies will increase from 14 percent to 49 percent in dry years or to 47 percent in average years. 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



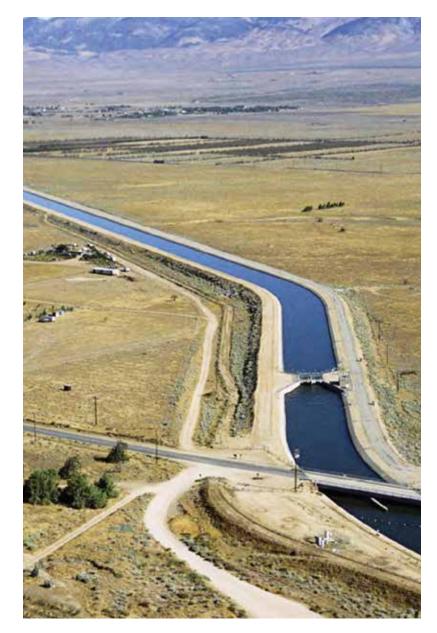
will make up the remaining 44 percent in dry years or 11 percent in average years to meet the City's need for supplemental water.

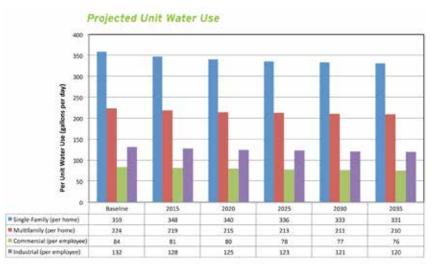
Financing

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.
- 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 \$487 million in rebates and incentives throughout its service area cumulatively saving 2.2 million AF through 2015.
- State Funds Funds for recycling, groundwater, conservation, and stormwater capture have been available on a competitive basis though 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.

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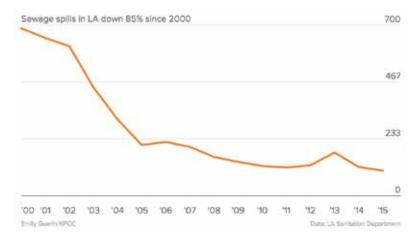


LA's Drinking Water Quality Report 2014

The annual Drinking Water Quality 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 240,000 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. Tables I-IV of the report list the results of water tests performed by LADWP and MWD from January to December 2014.

Water Photos: Courtesy of Los Angeles Department of Water & Power (LADWP)

Wastewater generated within the City of Los Angeles is collected and treated by two agencies: the Sanitation Districts of Los Angeles County and the 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, 54 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).

2012 5-Year Review of the 2006 Water Integrated Resources Plan

In 2006, the City of Los Angeles adopted the Water Integrated Resources Plan (IRP), an implementable facilities plan through the year 2020 that integrates water supply, water conservation, water recycling, runoff management, and wastewater facilities planning. Since the adoption of the 2006 Water IRP, the City developed the Water IRP 5-Year Review to revisit the IRP recommendations, to reflect changes in the year 2006-2011, and to review recommendations accordingly.

In 2006, the population of the wastewater service area was expected to expand by 700,000 people before the year 2020, according to projections of the Southern California Association of Governments (SCAG) in 2001. Based on the population projection, the 2006 IRP projected the wastewater flow to increase 16 percent by the year 2020, totaling 531 million gallons per day (MGD).

However, the 5-Year Review document identified that there has been a significant decrease in wastewater over the years. Based on historical wastewater flow data from 1987 to June 2011, the flow was actually decreasing at a rate of 2.53 MGD over that time span.



chapter four: wastewater/sewer

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Additionally, using the demographic projection by SCAG, the Hyperion Service Area (HSA) was estimated to have wastewater flow of 443 MGD in 2000, while the actual wastewater flow was monitored at 425 MGD in 2011.

As part of the 2006 Water IRP recommendations, wastewater treatment facilities would be expanded and improved to accommodate future flow increases through projects that were categorized as "Go-Projects" and "Go-If-Triggered Projects." Go-Projects' design and construction were intended to begin right away while Go-If-Triggered Projects would be implemented if or when additional information or circumstances, such as population growth or changes in demand for sewage capacity, trigger the need to begin design and construction. Based on population and flow triggers as well as additional new information, most of the "Go-Projects" have been deferred and most of the "Go-If-Triggered Projects" have not been triggered.

Given that the Water IRP window is coming to an end in 2020, and in consideration of evolving financial, social and sustainability factors, the City has embarked on developing the One Water Los Angeles 2040 Plan. As with the IRP, the One Water LA 2040 Plan will be developed in collaboration with key stakeholders and the general public. These stakeholders represent LA's diverse geography, demographics, and interests in putting together a comprehensive platform as a starting point for all water-related planning efforts.

Bureau of Sanitation 2015-16 Strategic Plan

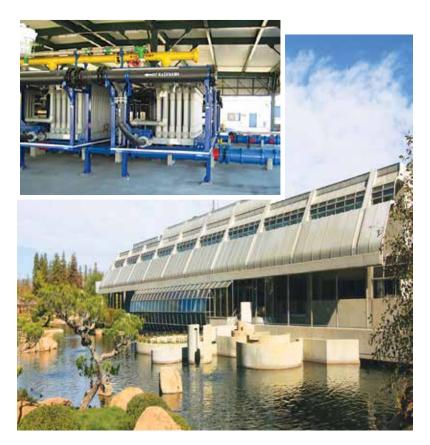
The Bureau of Sanitation's annual Strategic Plan outlines its progress with its major programs – the Clean Water Program, the Solid Resources Program, and the Watershed Protection Program. These programs all contribute to and build upon the overarching program of environmental sustainability, which also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

In the 2014-2015 fiscal year , LASAN achieved the following:

Managed \$991.4M in Total Revenue with \$607.3M dedicated to the Clean Water

Program, \$348.8M in Solid Resources, and \$35.3M in Watershed Protection

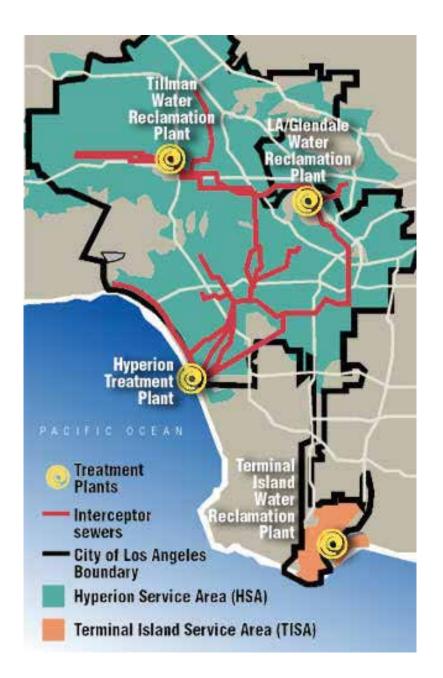
- Cleaned nearly 7,000 miles of sewer pipes and chemically treated 8,648 sewer pipes for root control
- Decreased 82% of Sanitary Sewer Overflows since the year 2000
- Conducted 346,691 tests for metals, organics, toxicity, and other indications of treatment systems' performance
- Collected 81,372 samples from the environment and treatment plants
- Removed 2,095 tons of debris from catch basins
- Hired 17 new engineering graduates



Wastewater Capital Improvement Program 2015/16-2024/25

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 \$3,186,240,000.

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.



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 management 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 City of Los Angeles 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.

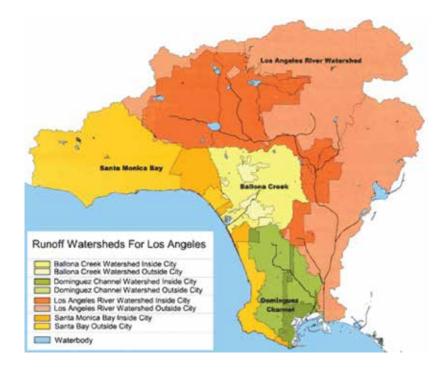
The Santa Monica Bay watershed is comprised of numerous sub-watersheds emptying into Santa Monica Bay. The watershed runs along the coast from the Ventura-Los Angeles County line in the north to the Palos Verdes Peninsula in the south. The total watershed area is 285 square miles, and 12 percent of this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

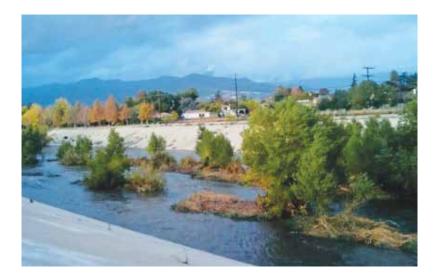
The WQCMP provides estimates of the dry-weather runoff flow, average annual runoff, and seasonal event storm runoff. During most of the year, runoff management focuses on the relatively low-volumetric, dry-weather runoff. Dry-weather sources include landscape irrigation, street washing, car washing, 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 watershedspecific 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 each of LA's five 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.

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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. City leadership to increase recycling
- 6. Consumer responsibility
- 7. Convenience
- 8. Incentives
- 9. New, safe, technology
- 10. Protect public health and environment
- 11. Equity
- 12. Economic efficiency

chapter six: solid waste

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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

chapter six: solid waste

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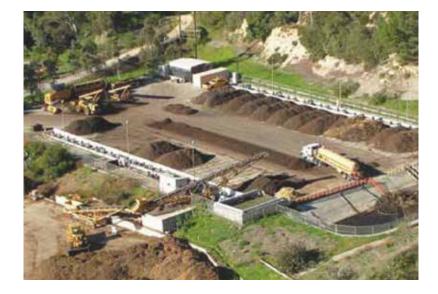
However, much of the recycling and solid waste infrastructure used by generators in the City is owned and operated by the private sector and other public agencies, including the Sanitation Districts of Los Angeles County.

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.



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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.

Integrated Resource Plan 2015

The Los Angeles Department of Water and Power (LADWP) annually prepares a Power Integrated Resource Plan (IRP), a planning document that provides a 20year 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 2015-16, the Power System budget is \$4.1 billion. This includes \$1 billion for operations and maintenance, \$1.6 billion for capital projects, and \$1.5 billion for fuel and purchased power.

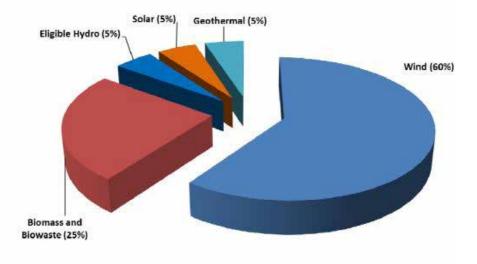


Figure D-1: 2014 LADWP Renewable Energy Mix

- The Power System transfers 8% of its gross operating revenue (estimated at \$265.6 million in FY 2014-15) to the City's General Fund each year to provide critical City services
- LADWP has over 7,640 megawatts (MW) of generation capacity from a diverse mix of energy sources
- Power Resources as of 2014 were reported as such:

Renewable Energy: 20% Natural Gas: 22% Nuclear: 9% Large hydro: 2% Coal: 40% Other/Unspecified: 7%

 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.

chapter seven: power

- 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
- 3,507 miles of overhead transmission circuits spanning five states
- 124 miles of underground transmission towers
- 15,452 transmission towers
- 6,800 miles of overhead distribution lines
- 3,597 miles of underground distribution cables
- 162 distributing stations
- 21 receiving stations
- 50,636 substructures
- 321,516 distribution utility poles



- 3,166 pole mounted capacity banks
- 1.3 million distribution crossarms
- 31,728 utilitarian streetlights

Major Changes from the 2014 IRP

Major changes from last year's 2014 IRP include expanded discussion on:

- Senate Bill 350 signed into law, requiring a target 50% renewable portfolio standard by 2030 and doubling of energy efficiency savings and demand reduction.
- An agreement under which LADWP will sell its 21 percent share (477 MW) in the coalfired Navajo Generating Station in Arizona to Salt River Project; the sale will close on July 1, 2016.
- The Maximum Generation Renewable Energy Penetration Study (MGRPES), which analyzed the impact of 40 and 50 percent penetration of variable energy resources (VERs) on LADWP's system balancing requirements, including reserve requirements, ramp rate requirements, system reliability and operation requirements (system inertia and frequency response), and generation dispatch strategies.
- Scattergood Generating Station Unit 3 was repowered with a modern, state-ofthe art combined-cycle unit and two simple-cycle gas turbine units for a total generation of 508 MW to reduce the use of once-through cooling.
- Expanded discussion on the Transportation Electrification Program to meet IRP electrification goals.
- Status update on the Integrated Human Resources Plan (IHRP) and Customer Care and Billing (CCB).
- Natural gas prices and renewable energy costs have been revised downwards compared to last year's 2014 IRP.
- In this 2015 IRP, the overall base renewable portfolio levelized cost is \$91/MWh, which represents a \$1/MWh decrease from last year and a \$4/MWh decrease from 2013. This cost reduction was achieved primarily through several recently signed power purchase agreements for cost-effective large central solar and geothermal projects, resulting in a more optimized and diverse portfolio that accounts for



changing price trends and market developments. The 2015 IRP excludes Solar Customer Net Metered in the levelized cost calculation because it is not counted toward RPS requirements. By maintaining flexibility in the selection of cost-effective renewable resources, LADWP is able to secure the best pricing as market conditions evolve.

- Updated case scenarios including additional 50 percent Renewable Portfolio Standard (RPS) cases by 2030 with varied amount of local solar and transportation electrification. The 40 percent by 2030 RPS case is no longer considered due to the recent enactment of Senate Bill 350. Los Angeles Department of Water and Power 2015 Power Integrated Resource Plan Executive Summary FINAL ES - 4 December 31, 2015
- The 2015 IRP incorporates updates to reflect the latest load forecast, fuel price and projected renewable price forecasts, and other numerous modeling assumptions. Major renewable projects approved this year by the Board and City Council includes Hudson Ranch Geothermal and Springbok 2 Solar Power Purchase Agreements. Copper Mountain 3 reached full commercial operation and Don Campbell 2, Hudson Ranch, and Heber 1 Geothermal Power Purchase Agreements were also placed in-service this year. These projects were among the approved and executed projects this past year which took advantage of lower renewable prices.

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.

In 2012, the Bureau of Street Lighting completed replacing 141,089 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 47,000 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 63.1 percent and reduce carbon emissions by 47,583 metric tons a year.

The project cost an estimated \$57 million over the four years. It was funded through a \$40 million loan from the Los Angeles Department of Water and Power (LADWP), which will be paid entirely through savings in energy and maintenance costs by 2019. Once the loan is repaid, the City will begin to save \$10 million annually. Additionally, \$16 million in LADWP rebate funds and \$3.5 million from the Street Lighting Maintenance Assessment Fund were used.



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The Los Angeles Fire Department (LAFD)

The Los Angeles Fire Department (LAFD) is a full-spectrum life safety agency providing services to the City of Los Angeles residents. The LAFD's services include fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. There are 3,292 uniformed fire personnel who protect life, property, and the environment and non-sworn cadre of 342 professional support personnel who provide technical and administrative expertise in their corresponding pursuit of the Department's mission.



A total of 984 uniformed firefighters, including 270 serving as firefighter/ paramedics, are always on duty at fire departments citywide. The City has 106 neighborhood fire stations located across the Department's 471 square-mile jurisdiction.

The Los Angeles Fire Department utilizes an array of sophisticated software to determine emergency responses throughout the city. To help the public relative to each type of emergency response, a series of response maps has been developed.

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

LAFD Deployment Plan 2011-2012

The Los Angeles Fire Department has implemented a deployment plan to efficiently and effectively allocate resources, create long term structural change, and provide stable and permanent savings in the City budgetary constraints. The new Deployment Plan allows the LAFD to permanently end the Modified Coverage Plan (MCP), ending the disruptive rotating closures that resulted from the MCP.

Fiscal Year 2011-2012 Resource Allocation

The Department implemented the Deployment Plan on July 3, 2011, including:

- Permanently closing one Division Office
- Permanently closing two Battalion Offices
- Permanently closing 12 Engines and opening one Engine (net loss of eleven)
- Permanently closing seven Light Forces
- Permanently closing seven 800-Series Ambulances and opening three 800-Series Ambulances (net loss of four)

Under the Deployment Plan, staffing increased from 933 firefighters deployed daily under the Expanded Modified Coverage Plan (EMCP), to 986 firefighters.





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

chapter eight: fire

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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.

The Los Angeles Police Department

The Los Angeles Police Department's 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.

Crimes & Initiatives Report 2015-2016

The Department annually releases a summary of crime for the past year with a comparison to historical averages in order to provide commentary on the issues impacting current trends. In 2015 there were a total of 283 homicides, 1,649 rapes, 8,935 robberies, 13,585 aggravated assaults, 15,968 burglaries, 16,313 motor vehicle thefts, and 59,915 acts of larceny. Viewed in a historical context, these are some of the lowest crime rates in the last fifty years.

The Department has also found an inverse relationship between crime and population growth. As population approached 4 million inhabitants in 2015, Part I crimes totaled 298 crimes per 10,000 inhabitants, an average not seen since 1953. This is attributed to a number of factors including expanded crime suppression capability, doubling the number of Domestic Abuse Response Teams (DART), expanded gang reduction and youth development programs, implementation of the smart policing initiative to combat violent crime, deployment of crime forecasting to prevent property crime, and refinement of the COMPSTAT process to identify and quickly respond to crime trends.

Sworn Personnel by Rank, Gender, and Ethnicity Report (SPRGE) 2015

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 12,655 sworn and civilian personnel as of September 2015.



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

The Los Angeles Unified School District (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 2015-2016

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 2011-12 school year.

Quick Facts

- The LAUSD has a total of 1,274 schools and education centers within the District
- During 2014-2015 total student enrollment in LAUSD, including Adult Education, was 732,833
- 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 2015-16 school year was \$7.08 billion

Strategic Execution Plan 2015

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:

chapter ten: schools

- 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

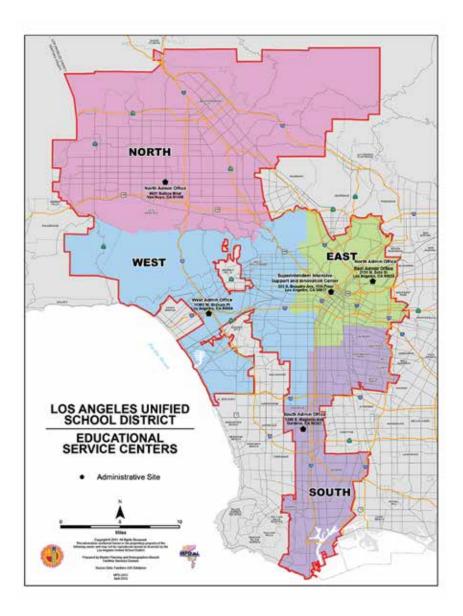
The main goal of the Repair and Modernization Program is to repair and modernize existing schools to improve deteriorating, aging, and outdated conditions.

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

Capital Improvement Program (CIPR), which 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 Boardapproved 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.



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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:

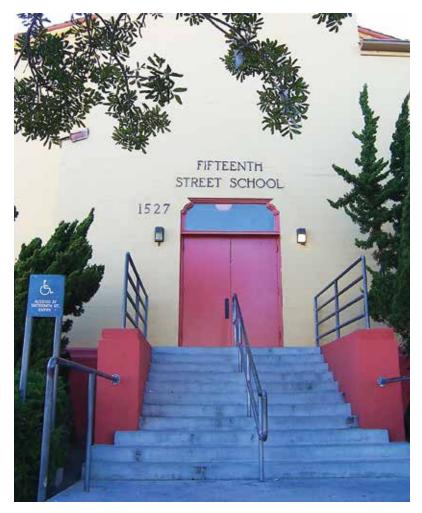
- Schools should be safe and secure
- Building systems should be sound and efficient
- Facilities should align with instructional requirements and vision

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.



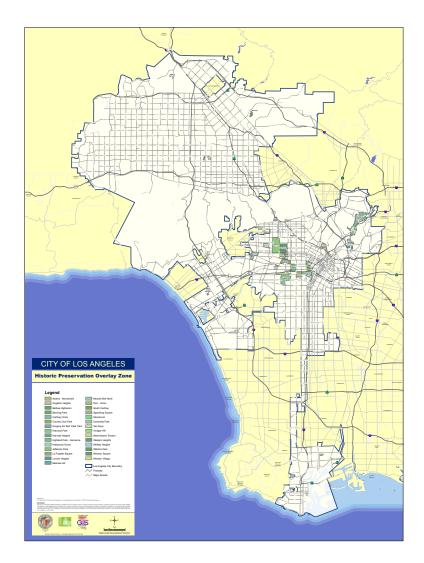
Historic Preservation Overlay Zones (HPOZs)

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 30 designated HPOZs: Adams-Normandie, Angelino Heights, Balboa Highlands, Banning Park, Carthay Circle, Country Club Park, 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, 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 44acre 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, and 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, 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.

Cultutal Affairs Impact Profile

DCA's operating budget and managed portfolio totaled over \$36 million in fiscal year 2014/15. It consisted of: \$12.3 million from the Private Arts Development Fee Program (ADF); \$9.8 million in Transient Occupancy Tax funds; \$6.76 million in City related and indirect cost allocations; \$3.7 million in one-time City funding; and \$3.5 million in funds from the Public Works Improvements Arts Program (PWIAP) in addition to private and public funds raised from foundation, corporate, government, and individual donors.

DCA significantly supports artists and cultural projects through its Public Art Division by administering a portfolio that totaled \$15.8 million in PWIAP and ADF funds in FY14/15. Of this amount, typically 15% to 20%, or between \$2.4 and \$3.2 million, was attributable to artists' fees.

DCA's Marketing and Development Division has raised \$35 million over the last 14 fiscal years to re-grant to LA-based artists and arts and cultural organizations, and to

support DCA's special programming and facilities. DCA also invests in LA's creative community by granting approximately \$2.3 million annually to 295 artists and nonprofit arts and cultural organizations through its long-established Grants Administration Division. 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 website visited by over 3 million people annually.

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

- DCA manages and programs 22 Neighborhood Arts and Cultural Centers including: 10 Arts and Cultural Centers, 4 Theaters, 2 Historic Sites, and 6 Galleries.
- DCA oversees an additional 12 Public/Private Partnership Arts Facilities.
- DCA also manages 3 Prop K facilities in development.

Impact of Department of Cultural Affairs Facilities and Community Arts Program 2015-16

- Number of people served at DCA-managed Community Arts programs: 221,202
- Number of people served at DCA-managed arts and cultural centers: 64,832
- Number of people served at DCA-managed theaters: 65,959
- Number of people served at DCA-managed art galleries: 58,406
- Number of people served at public-private partnership community arts centers: 57,323
- Number of people served by guided tours of Watts Towers: 12,957
- Number of people served by guided tours of Hollyhock House: 19,048

The Los Angeles Public Library (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



2015-2020 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.

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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 identifies facility status of existing library branches and the need for new branch libraries in communities without libraries. The list includes:

- 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.





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 offer positive alternatives to 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; 94.7 percent of total mini park acreage inventoried is City owned
- Neighborhood parks 773.72 total acres; 94.0 percent of total neighborhood park acreage inventoried is City owned
- Community parks 2,966.43 total acres; 87.3 percent of total community park acreage inventoried is City owned
- Regional and large urban parks 32,288.98 total acres; 38.3 percent of total regional/large urban park acreage inventoried is City owned

Regional/large urban park land is the only category of which the City does not own the gross majority of total acreage; much of the non-City owned acreage is attributable to the Santa Monica Mountain Conservancy, the Angeles National Forest, Topanga State Park, and Santa Anta Susana Pass State Historic Park

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

Preliminary recommended service level guidelines for park classifications are:

- Mini parks 0.10 acres per 1,000 persons
- Neighborhood parks 1.50 acres per 1,000 persons
- Community parks 2.00 acres per 1,000 persons
- Regional and large urban parks 8.00 acres per 1,000 persons
- Total parks 11.60 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 the Los Angeles County.

- Playground 383 total; 1 structure per 10,205 persons
- Swimming pools 58 total; 1 site per 67,388 persons
- Splashpad 9 total; 1 site per 434,280 persons
- Picnic areas 286 total; 1 site per 13,666 persons
- Baseball/softball fields 253 total; 1 field per 15,449 persons
- Rectangular fields (football, soccer, lacrosse, et al.) 170 total;
 1 field per 22,991 persons
- Basketball courts 212 total; 1 court per 18,436 persons
- Tennis courts 321 total; 1 court per 12,176 persons
- Volleyball courts 32 total; 1 court per 122,141 persons
- Dog parks 9 total; 1 site per 434,280 persons
- Skate parks 9 total; 1 site per 434,280 persons
- Community/cultural center space (square feet) 1,502,000 square feet;
 0.38 square feet per person
- Recreation/fitness center space (square feet) 2,101,000 square feet;
 0.54 square feet per person

Quimby Fee Update Program

Pursuant to various City ordinances, some, but not all, residential development projects in the City are required, as a condition of approval, to either dedicate land for recreation and park purposes or pay a fee in-lieu. The in-lieu fees collected through these ordinances are variously called "Quimby Fees", "Park Fees", or "Finn Fees." These in-lieu fees are paid to the Department of Recreation and Parks (RAP) and may be expended by the Board of Recreation and Park Commissioners (Board) only for the acquisition of park land or for the development of park and recreation facilities

The Department of City Planning (DCP) is leading an initiative (Park Program) to review and update the General Plan policies and City ordinances that regulate the City's park fee programs. The key objective of the Park Program is to increase park acreage and park access citywide, with a focus on expanding resources available in underserved communities. The scope of the Park Program includes the creation of a Park Advisory Committee, stakeholder outreach, and the completion of various technical analyses (e.g. existing conditions analysis, nexus study, financial analysis, etc.).

The Fee Update Program comes 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 will moderinze the fees, recalibrating the cost of park development, establishing a new impact fee for all new net residential development (including aparments and condominiums). The new ordinance will also increase the allowable radius of park development from residential development sites, encouraging greater flexibility.

50 Parks Initiative

As part of an effort to equitably distribute access to parks for City residents, the Department of Recreation and Parks began 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 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 benefits of the initiative include an increase in quality of life for community members as well as stabilizing neighborhoods by providing the public infrastructure required to avoid urban blight.

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 and receives no funding from the City's general fund. LAWA operated three airports in the Los Angeles Air Trade Area: Los Angeles International Airport (LAX), LA/Ontario International Airport (ONT), and Van Nuys Airport (VNY). LAWA also maintains LA/Palmdale Regional Airport (PMD).



Los Angeles International Airport (LAX)

Los Angeles International Airport (LAX) is the fifth busiest airport in the world and second busiest in the United States, offering 692 daily flights to 85 domestic cities and 928 weekly nonstop flights to 67 cities in 34 countries on 59 passenger air carriers.

In 2014, LAX served nearly 70.7 million passengers, processed more than two million tons of air cargo valued at over \$96.3 billion, and handled 636,706 aircraft operations (landings and takeoffs).

LA/Ontario International Airport (ONT)

LA/Ontario International Airport (ONT) is a medium-hub, full-service airport with commercial jet service to major U.S. cities and through service to many international destinations. ONT is located in the Inland Empire, approximately 35 miles east of downtown Los Angeles in the center of Southern California. The airport is the centerpiece of one of the fastest-growing transportation regions in the United States. ONT's service area includes a population of six million people living in San Bernardino and Riverside Counties and portions of north Orange County and east Los Angeles County. In 2015 4.2 million passengers used the airport and 509,809 tons of air freight were shipped.

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 217,000 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 86 years in service.

In addition, more than 100 businesses are located on the 730-acre airport, including four 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 Airport (LAWA) currently has a multi-billion-dollar capital improvement program underway at Los Angeles International Airport (LAX). On the Airports 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.

Highlights of Major Projects Currently Under Construction at LAX

The LAX Landslide Modernization Project (Project) consists of several primary components. At the centerpiece is an Automated People Mover (APM) system, which would 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 would be built completely above grade without diminishing existing roadway capacity. The APM systems would connect to the passenger terminals in the CTA with a pedestrian walkway located above the existing roads and curb areas in the CTA. The APM would transport passengers between the CTA and the other main components



of the Project located east of the CTA, including a state-of-the-art, Consolidated Rental Car Facility (CONRAC), new public parking facilities, and multiple locations for passenger pick up and drop off. In addition, the APM system would include a connection to the Airport Metro Connector (AMC) transit station to be located at 96th Street/Aviation Boulevard. The AMC transit station is planned by Metro as a separate and independent project. The APM system will provide passengers with access to the regional transit system. The Project is expected to complete Project Approval in fourth quarter of 2016 and begin construction in 2017. It is expected to be completed no later than 2023.

- The 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 Elevator, Escalator, and Moving Walkway Modernization is a \$270-million project that will replace or refurbish 212 outdated systems with modern units throughout the airport. New escalators, elevators, and walkways will speed travelers to their gates and baggage-claim areas in a safe and efficient manner with energy-saving, sustainable technology. Replacement of all units is scheduled for completion in 2016.
- The \$118-million Curbside Appeal and Roadway Improvement Project will provide a new, dramatically upgraded look for LAX with the installation of modern LED (light emitting diode) street lighting, wayfinding components, and new canopies for Terminal 3 and 4. The project will also include traffic safety and roadway improvement measures including and 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 facades evoking the glory days of aviation; an LED light band running the length of the Central Terminal

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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.

Completed Projects at LAX

- The New Tom Bradley International Terminal (New TBIT) Project is a \$1.9-billion project that now provides greater capacity to the existing facility's west side with the addition of new gates to accommodate new-generation aircraft and a Great Hall for dining, retail shopping and passenger amenities beyond passenger security screening. The project was completed in 2015.
- The Central Utility Plant Replacement Project is a \$424-million project that replaced the dated, 50-year-old existing Central Utility Plant (CUP) with a modern, energy-efficient facility with state-of-the-art computerized management systems. The new CUP enhances passenger comfort, and reliability of utility service and safety within the newly renovated and modernized terminals. Project was completed in March 2015.
- The Terminal 5 Renovation Project is a \$229-million renovation of Terminal 5 that now improves 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 are also a part of the undertaking. Major portions of this project were completed in June 2015.

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.

Los Angeles International Airport Master Plan 2004

The Los Angeles International Airport (LAX) Master Plan is a modernization plan that accounts for the growth of the airport since 1984. The Draft LAX Master Plan and Draft Environmental Impact Statement and Environmental Impact Report were published in 2000-2001, which included three project alternatives: A, B, and C. The Draft documents was publicly circulated for public input. LAWA then developed a new alternative, Alternative D, with public comments taken into account. The Alternative D is a regional approach alternative for the LAX Master Plan that represents the communities' priorities and increases safety and security of the airport.

The Final LAX Master Plan provides the basis for a broad policy statement regarding the conceptual strategic framework for future improvements at LAX and as working guidelines to be consulted by LAWA as it develops future projects under the Master Plan. The following documents are regulatory entitlements and/or mitigation measures that implement Alternative D: the LAX Plan, the LAX Specific Plan, the Airport Layout Plan, the Tentative Tract Maps, the Mitigation Monitoring and Reporting Program, and the LAX Master Plan Program Relocation Plan.

LAX Plan 2004

The LAX Plan is the City of Los Angeles' general plan for the airport that sets goals, policies, objectives, and programs for long-term development. The Plan ensures that the use of airport is consistent with the vision established by Alternative D. The LAX Plan establishes a land use policy framework.

LAX Specific Plan 2013

The LAX Specific Plan establishes zoning and development regulations and standards consistent with the LAX Plan for the airport and LAX Northside. It also establishes procedures for processing future projects and activities under the LAX Master Plan Program.

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.

Tentative Tract Maps

The Tentative Tract Maps' primary purpose is to vacate public streets that would no longer be necessary if Alternative D is approved and to provide for the orderly and proper abandonment or relocation of utilities that may be affected. It consolidates parcels that are no longer necessary.

Mitigation Monitoring and Reporting Program 2014

The Mitigation Monitoring and Reporting Program (MMRP) ensures compliance with the proposed mitigation measures identified in the Final Environmental Impact Report (EIR). It describes the method and timing of implementation, monitoring frequency, and actions indicating compliance.

LAX Master Plan Program Relocation Plan

The Relocation Plan addresses the acquisition of properties and relocation of businesses and residents, if any, associated with Alternative D. The Los Angeles World Airports (LAWA) will adopt a residential and business relocation plan in compliance with federal, state, and local law prior to the commencement of acquisition.

Los Angeles International Airport Specific Plan Amendment Study

The Specific Plan Amendment Study (SPAS) identifies and evaluates potential alternatives to the projects that were previously analyzed as part of the LAX Master Plan Program required further evaluation prior to implementation.

Los Angeles International Airport Traffic Generation Report August 2015

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 or 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 implantation 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."

This study is the eleventh Traffic Generation Report to be completed since the Los Angeles City Council's approval of the LAX Master Plan Program in December 2004.

The Environmental Impact Report (EIR) for the LAX Master Plan forecasted 8,286 net new trips during the airport peak hour at full build-out and after implantation of mitigation measures.

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The typical design day used for the LAX Master Plan is a Friday in August. The total number of trips for the airport peak hour of 11 am to noon is as follows:

1996 Airport Peak Hour Volume (Base Year) 17,725 trips

2014 Airport Peak Hour Volume 16,386 trips

2015 Airport Peak Hour Volume (Projected from 2004 EIR) 26,011 trips

These volumes show that the August 2015 airport peak-hour volume does not exceed 8,236 additional trips above the base-year total of 17,725 trips and is in fact 1,339 trips less than the 1996 base year volumes.

The results of the August 2015 traffic volume study also reveal that there were 12,598 trips recorded at LAX during the 8 am to 9 am peak hour and 14,250 trips in the 5 pm to 6 pm peak hour. This represents 620 more trips during the morning peak hour in August 2015 than during the 1996 base year.

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).

Statistics Summary

- In 2014, the total passenger volume was 70.7 Million Annual Passengers (MAP), a 5.62 percent increase compared to 2013.
- The total cargo volume in 2014 was 2 Million Annual Tons, an increase of 3.90 percent compared to 2013.
- The number of commercial aircraft operations (landings and takeoffs) totaled 578,002 in 2014, a 3.38 percent increase from 2013.



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

The Port of Los Angeles

The Port of Los Angeles is located in San Pedro Bay 20 miles south of downtown Los Angeles, the gateway for international commerce. 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 nation's 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 Fiscal Year (FY) 2015, the Port of Los Angeles handled 8.2 million TEUs, a 1.2 percent decrease from FY 2014. The Port ranked 1st place in the United States and 16th in the world in the container volume ranking.

In CY 2012, the Port's top five containerized imports were furniture (412,057 TEU), apparel (327,070 TEU), auto parts (318,808 TEU), electronic products (217,707 TEU), and footwear (145,905 TEU). The top five containerized exports in CY 2012 were wastepaper (332,054 TEU), animal feeds (197,013 TEU), scrap metal (196,845 TEU), cotton (108,700 TEU), and resins (68,309).

The Port of Los Angeles' top trading partners in CY 2012 were China/Hong Kong (\$138 billion), Japan (\$46 billion), South Korea (\$17 billion), Taiwan (\$13 billion), and Vietnam (\$10 billion).

The Port of Los Angeles has a significant economic impact on the region as well as the nation with total operating revenue of \$409.8 million and net income of \$101.9 million in FY 2012. The Port generates about 994 jobs at the City of Los Angeles Harbor Department. In California, there are about 1.2 million jobs related to the Port of Los Angeles and about 3.6 million jobs throughout the United States.

The Port Master Plan August 2014

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 original Port Master Plan was first approved and certified by the Los Angeles Harbor Commission in 1980. Since then, there have been twenty amendments to the original Master Plan.

In February 2014, the Los Angeles Board of Harbor Commissioners approved the new Port Master Plan and its supporting Final Environmental Impact Report. The new Plan reflects all recent land use planning and projects, replaces outdated language, and provides an easy to understand land use plan. In addition, the new Plan contains reorganization and revisions to the goals and policies guiding coastal permitting, permitting guidelines and procedures, and the land use plan. Both documents include responses to comments received during the public comment period. The new Master Plan is subject to certification by the California Coastal Commission.

Demand

The Master Plan provides information about long-term cargo forecast, prepared jointly by the Port of Los Angeles and the Port of Long Beach, which forecasts demand through 2030 for container, dry bulk, liquid bulk, and general cargo.

- A long term **cargo** forecast in 2007 projected that the ports of Los Angeles and Long Beach would grow at approximately 6 percent per year through 2030, trendaveraged. However, this forecast was not adjusted for the Great Recession in 2008. The new cargo forecast in 2009 adjusted for the Great Recession. The overall long-term growth rates for the ports of Los Angeles and Long Beach are forecast to be 5.5 percent per year through 2020 and 4.7 percent per year through 2030. The combined total twenty-foot equivalent unit (TEU) container volume in 2030 is forecast to be 34.6 million TEU for the two ports, or approximately 17.3 million TEU each.
- Dry bulk export tonnage demand is projected to increase at an average annual rate of 1.2 percent over the forecast period to 2030. Dry bulk import tonnage demand is projected to increase at an average annual rate of \$3.9 over the forecast period, with the annual rate of growth declining over time.
- **Liquid bulk** export tonnage is projected to grow slowly by 1.3 percent through the Port. Liquid bulk import tonnage is also projected to grow slowly by 1.9 percent.
- General cargo export tonnage is projected to grow at an average annual rate of 2.5 percent through 2030. The demand for import general cargo tonnage through the Port is projected to increase at an average annual rate of 4.0 percent through 2030. Automobile imports are the top general cargo category today and they are projected to see demand growth remain at 3 percent annually through 2030.

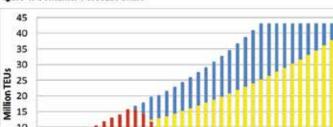


Figure 1. Container Forecast Chart



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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.

2009 2011 2013 2015 2017 2019 2019 2023 2023 2025 2023 2029

2009 Forecast 2007 Forecast

20312033

Transportation Infrastructure and Programs

2005

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Actual

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 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.

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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.

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.

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 2012-2017

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 2015-2016

The Los Angeles Harbor Commission adopted an annual budget of \$1,001.1 million for Fiscal Year 2015-16. The adopted budget includes \$263.2 million for Capital, \$354.0 million as the unappropriated balance, \$241.4 million in operating expenses, \$97.5 million in restricted cash/future commitments, and \$45 million in debt repayments/non-operating expenses. The total capital spending includes one of the largest annual Capital Improvement Programs (CIPs) in Port history: \$198.8 million or 19.7 percent of the total budget. The CIP supports the Port's objective to develop and maintain its infrastructure. In FY 2015-16, 4,890 direct and indirect jobs are projected to be created, of which 3,200 are attributed to capital spending.

In FY 2015-16, 62 percent of the CIP Budget or \$122.8 million is earmarked for terminal development projects. About 3 percent of the CIP Budget or \$6.1 million is funded for Los Angeles Waterfront Projects. Approximately 22.5 percent of the Adopted CIP Budget or \$44.8 million is for transportation improvement projects. And 0.7 percent or \$1.3 million has been budgeted in the CIP Adopted Budget for security projects.

