Transportation Concept Report
Interstate 405
District 7
June 2013

Approvals:

District Director
Date: 7-15-2013

Deputy District Director
Planning, Public Transportation & Local Assistance
Date: 7-16-2013

DISCLAIMER

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 7 Division of Planning and Local Assistance makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

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ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway System (SHS) by identifying deficiencies and proposing improvements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP) and the Transportation System Development Plan (TSDP).

The District wide DSMP is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The TCR is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The CSMP is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The TSDP is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for public/stakeholders, the regional and local agencies.

TCR Purpose

California's State Highway System needs long range planning documents to guide the logical development of transportation systems as required by law and as necessitated by public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STAKEHOLDER PARTICIPATION

Stakeholder participation was sought throughout the development of the I-405 TCR. Outreach involved internal and external stakeholders.

Both internal and external stakeholders were asked to review the document for comments, edits, and for consistency with the intent of existing plans, policies, and procedures. The process of including and working closely with stakeholders adds value to the TCR, allows for outside input and ideas to be reflected in the document, increases credibility and helps strengthen public supports and trust.

EXECUTIVE SUMMARY

The I-405 Transportation Concept Report (TCR) is divided into several major sections; three of the sections – the Corridor Performance, System Characteristics and Corridor Concept – are the core of the document. All of the remaining sections provide a context for analyzing the I-405 corridor and document the data resources.

The main purpose of this TCR is to evaluate current and projected conditions along the route and suggest a configuration for I-405 that will meet projected demand within a framework of programming and implementation constraints and regional policy.

Historically the freeway system in Southern California is highly congested and this trend will continue into the future. Due to financial, environmental, right of way and political constraints, it is very difficult for Caltrans to continue to add more lanes to the system. With these limitations, Caltrans District 7 office has established LOS F0 as the minimum acceptable level of service on the freeway system (1996 District System Management Plan). The 2035 concept facility intent is to show how much additional capacity is needed to achieve the desired LOS.

Concept Summary Table

CONCEPT – 2035 FACILITY

Segment	ADT	Dir. Split	Peak Hour	Truck Peak Hour	2035 Baseline RTP		LOS "D" Attainment	Concept F0 Attainment
1	280,200	50.6%	21,900 (7.8%)	1,300 (5.9%)	8 MF + 2 HOV		14	10
					V/C	LOS		
					1.17	F0		
2	308,400	50.5%	23,200 (7.5%)	1,290 (5.5%)	8 MF + 2HOV		15	11
					V/C	LOS		
					1.12	F0		
3	307,500	51.0%	23,200 (7.6%)	1,280 (5.5%)	8 MF + 2 HOV		15	11
					V/C	LOS		
					1.25	F1		
4	276,400	51.9%	20,600 (7.5%)	1,320 (6.4%)	8 MF + 2 HOV		14	10
					V/C	LOS		
					1.13	F0		
5	303,700	53.0%	21,600 (7.1%)	1,250 (5.8%)	8 MF + 2 HOV		15	11
					V/C	LOS		
					1.2	F0		
6	363,900	53.5%	24,600 (6.8%)	1,250 (5.1%)	8 MF + 2 HOV		17	12
					V/C	LOS		
					1.26	F1		
7	353,000	52.5%	24,300 (6.9%)	1,300 (5.4%)	10 MF + 2 HOV		16	12
					V/C	LOS		
					1.21	F0		
8	377,800	52.9%	26,000 (6.9%)	920 (3.5%)	10 MF + 2 HOV		17	13
					V/C	LOS		
					1.2	F0		
9	379,700	58.7%	26,700 (7.0%)	760 (2.8%)	10 MF + 2 HOV		20	15
					V/C	LOS		
					1.37	F2		
10	281,800	60.7%	18,600 (6.6%)	450 (2.4%)	8 MF + 2 HOV		14	11
					V/C	LOS		
					1.19	F0		
11	211,500	70.8%	14,200 (6.7%)	390 (2.8%)	6 MF + 2 HOV		12	9
					V/C	LOS		
					1.12	F0		

Source: 2012-2035 RTP/SCS

** The number of lanes in the LOS D Attainment column is for both directions. LOS D Attainment indicate how many lanes it would require to achieve LOS D. It is meant show the severity of future conditions and what it would take to achieve LOS D. Caltrans is not suggesting that it is our plan to build the facility to achieve the LOS D.*

** The number of lanes in the LOS F0 attainment column is for both directions. The data in the LOS FO attainment column is only meant to show the severity of congestion on our system and what it would require to achieve that level of service. We recognize the difficulty in achieving the desired LOS given the financial, environmental, right of way and political constraints. However, it is Caltrans' goal to provide improved mobility when feasible.*

** Sometimes the model output implies that there would be aux. lanes (each direction) and aux. lanes are given only half capacity. That is why there are instances where we have odd number of lanes for both direction.*

** The 2035 Baseline includes all planned and programmed projects in the 2012-2035 RTP/SCS*

** We used 2008 for existing and 2035 for future to be consistent with the 2012-2038 RTP/SCS*

Concept Rationale

I-405 is a major north-south Interstate route that traverses through Los Angeles County and is used for international, interstate, interregional and intraregional travel and shipping through an urbanized corridor, serving the four major import-export terminals of Long Beach Municipal Airport, Los Angeles International Airport, and the ports of Long Beach and Los Angeles. In addition, it is used as a commuter route.

The route is part of the California Freeway and Expressway System.

Traffic volume is forecasted to increase on I-405 in 2035 and will require additional lanes to achieve the acceptable concept level of service. Several capacity improvements are planned, programmed, and recommended for this corridor.

Proposed Projects and Strategies

There are several capacity increasing and mainline improvements planned or programmed for I-405 throughout the corridor in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

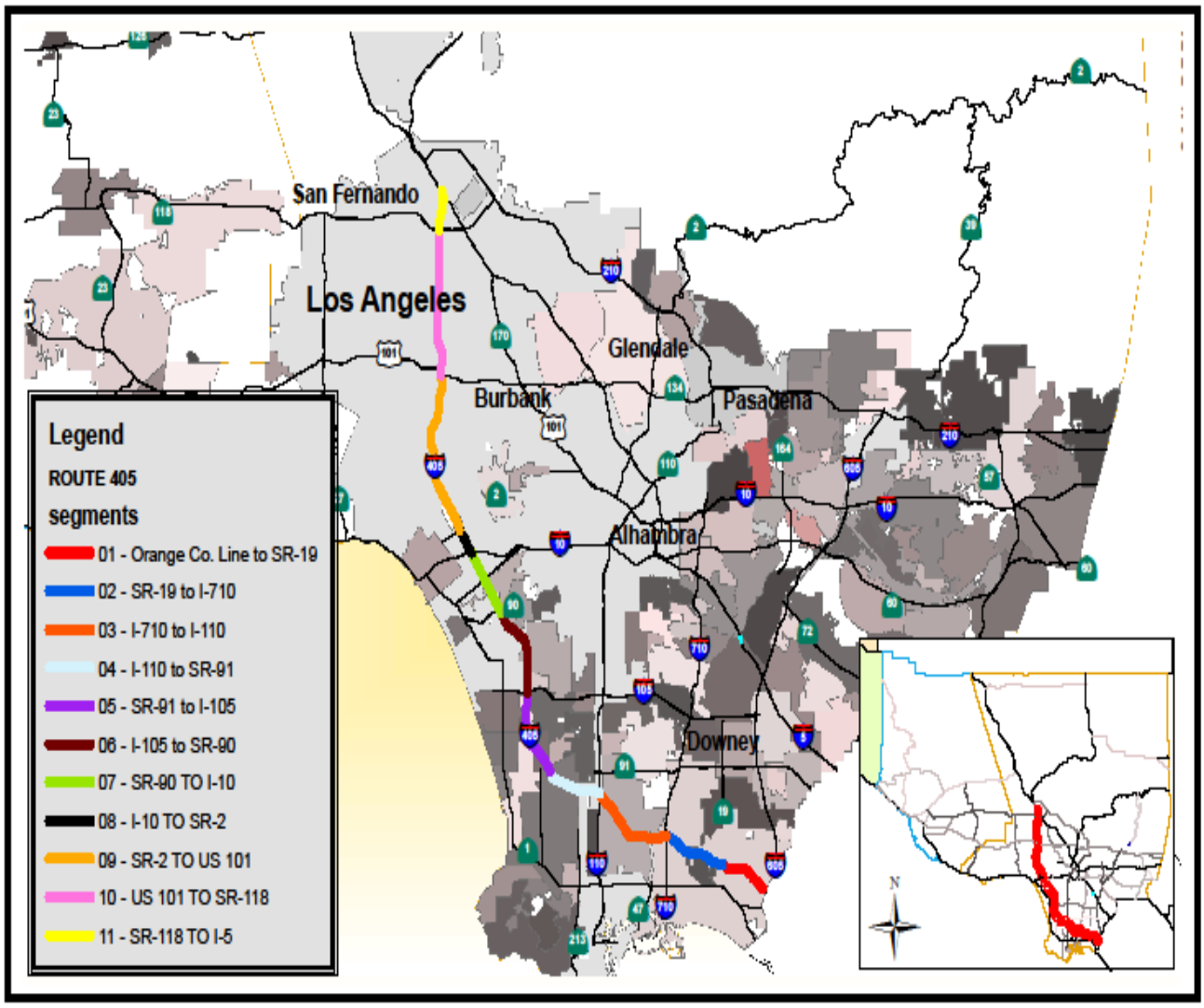
The 2012 -2035 RTP/SCS also includes a regional Express/HOT Lanes network on I-405 from I-5 (North San Fernando Valley) to the Los Angeles/Orange County Line.

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

SEGMENTS	DESCRIPTION	BEGIN PM	END PM
1	Orange Cty. Line to SR-19	0.26	3.32
2	SR-19 to I-710	3.32	7.59
3	I-710 to I-110	7.59	12.97
4	I-110 to SR-91	12.97	16.57
5	SR-91 to I-105	16.57	R21.18
6	I-105 to SR-90	R21.18	25.95
7	SR-90 to I-10	25.95	29.54
8	I-10 to SR-2	29.54	30.87
9	SR-2 to US 101	30.87	39.43
10	US 101 to SR- 118	39.43	46.87
11	SR- 118 to I-5	46.87	48.64

I-405 - SEGMENTS MAP



District 7 - Advance Planning
Map by - Skb. Jan 2013

ROUTE DESCRIPTION

Pursuant to Statutes relating to the California Department of Transportation, "(Interstate) Route 405 runs from Interstate 5 near El Toro (Orange County) to Interstate 5 near San Fernando." Route 405 is an Interstate/Interregional Freeway which originates in District 12 (Orange County) at Route 5 in the City of Irvine near El Toro and terminates in District 7 at Route 5 in Los Angeles County in the City of Los Angeles near the community of Mission Hills.

This Transportation Concept Report (TCR) addresses the portion of Route 405 located in Los Angeles County. Route 405 spans a total of 72.8 miles of which 48.6 miles are in District 7.

This TCR analyzes I-405 conditions using the 'segment' as the study unit. The Segments are generally defined as 'freeway interchange to freeway interchange' 'county line to freeway interchange', or 'freeway interchange to end of freeway'

Route Designation and Characteristics

I-405 is part of the Federal Aid Interstate (FAI) system, which is a subset of the National Highway System. Its' functional classification is P1P (Urban Principle Arterial). This route is a part of the Federal Surface Transportation Assistance Act (STAA) route network for oversized trucks and the Subsystem of Highways for the Movement of Extralegal Permit Loads (SHELL). In addition, it is also a part of the Strategic Highway Network (STRAHNET). For the purpose of this analysis, the route has been divided into 11 segments based on traffic volume, connections to local streets or State Highways, freeway interchanges, and the county boundary.

Seg	Freeway and Expressway System	National Higway System	Strategic Highway Network	Scenic Highway	Interregional Road System Route	High Emphasis Route	Focus Route	Federal Functional Classification	Goods Movements Route	Truck Designation	Rural/ Urban/ Urbanized	Metropolitan Planning Organization	Regional Transportation Planning Agency	Congestion Management Agency	Local Agency	Tribes	Air District	Terrain
1	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
2	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
3	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Rolling
4	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Rolling
5	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
6	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
7	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
8	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
9	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat/Rollir
10	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
11	Yes	Yes	Yes	No	No	No	No	Interstate	Yes	National Network	Urbanized	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Rolling

COMMUNITY CHARACTERISTICS

I-405 is a Principal Arterial in an urbanized corridor providing access to the cities of Beverly Hills, Carson, Culver City, El Segundo, Gardena, Hawthorne, Inglewood, Lawndale, Long Beach, Los Angeles, Manhattan Beach, Redondo Beach, Santa Monica, Signal Hills and Torrance.

LAND USE

The I-405 corridor is congested in certain areas, highly developed and the land use varies from residential, commercial, to industrial. The many significant trip generators along this corridor include:

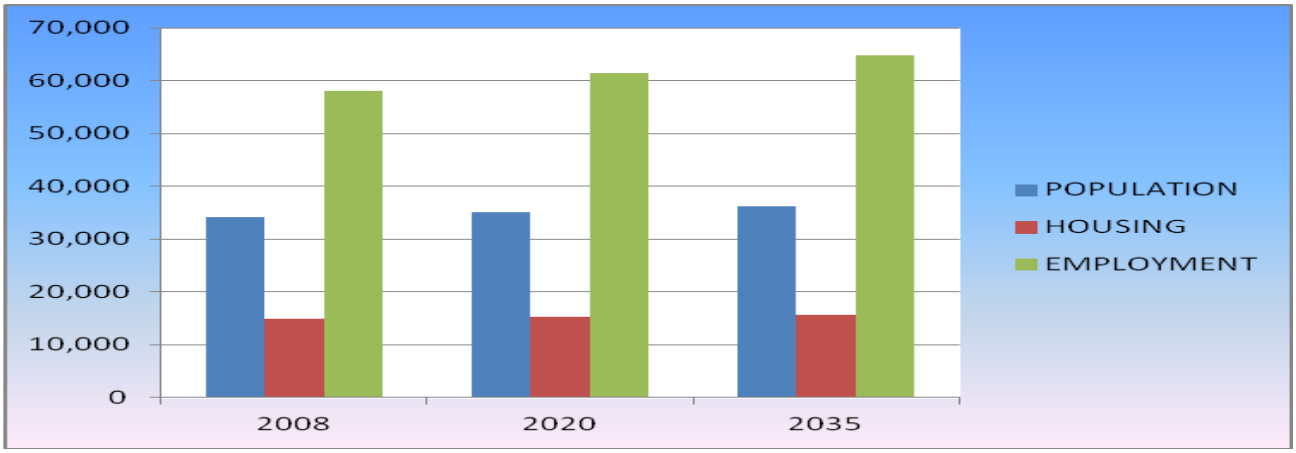
- Long Beach Airport
- California State University, Long Beach
- Long Beach City College
- California State University, Dominguez Hills
- Los Angeles County – Harbor UCLA Medical Center
- South Bay Galleria
- El Camino College
- Hawthorne Municipal Airport
- Los Angeles International Airport
- Hollywood Park
- Fox Hills Mall
- Santa Monica Pier
- Veterans Administration Center
- Veterans Medical Centers – West Los Angeles
- Federal Office Building
- University of California, Los Angeles
- The Getty Center
- Skirball Cultural Center and Museum
- Van Nuys Airport
- Panorama Mall

Significant growth in housing, population, and employment are generally projected throughout the I-405 corridor area. This growth is expected to occur through in fill and recycling of existing land uses.

The following tables and graphs show projected socioeconomic growths in the cities along I-405 Corridor per the SCAG 2012 -2035 RTP/SCS GROWTH FORECAST

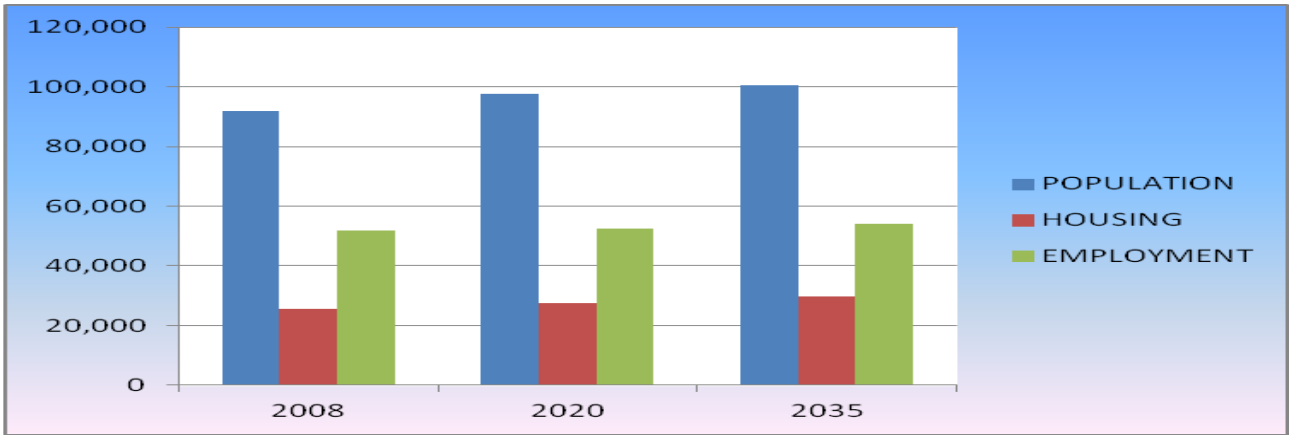
BEVERLY HILLS

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	34,100	35,000	36,300	2.64%	6.45%
HOUSING	14,900	15,200	15,600	2.01%	4.70%
EMPLOYMENT	58,000	61,400	64,800	5.86%	11.72%



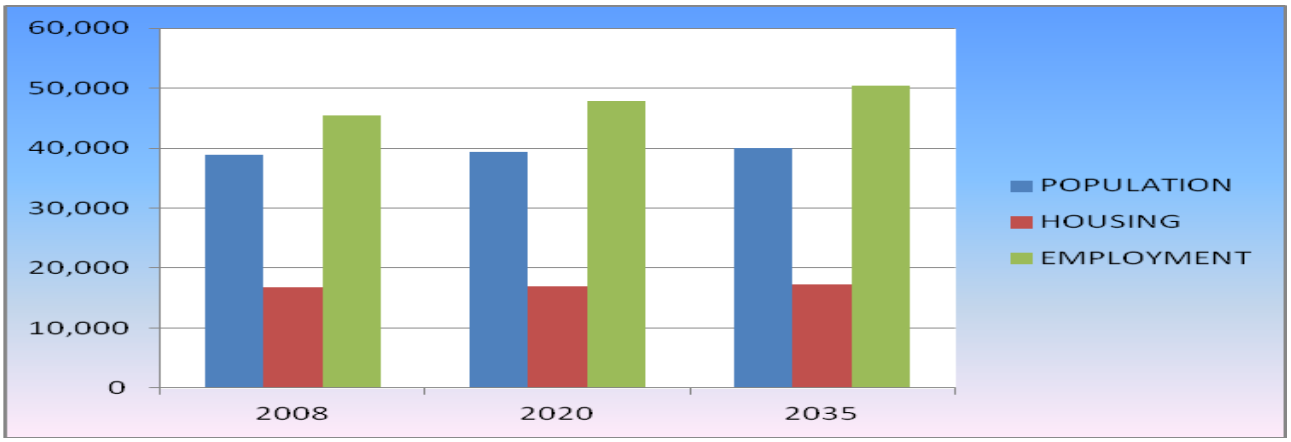
CARSON

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	91,700	97,500	100,600	6.32%	9.71%
HOUSING	25,500	27,400	29,600	7.45%	16.08%
EMPLOYMENT	51,900	52,500	54,000	1.16%	4.05%



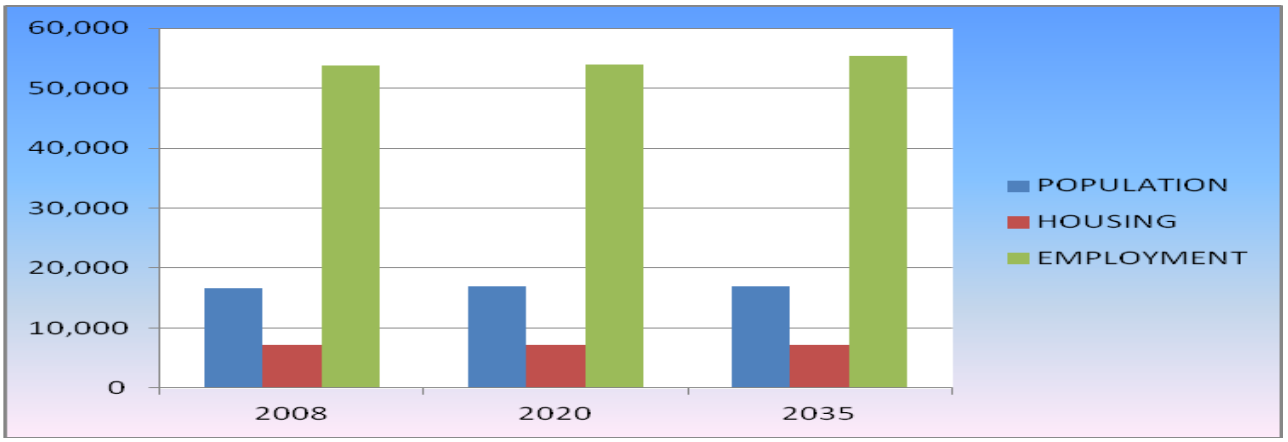
CULVER CITY

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	38,900	39,300	40,000	1.03%	2.83%
HOUSING	16,800	17,000	17,300	1.19%	2.98%
EMPLOYMENT	45,400	47,900	50,400	5.51%	11.01%



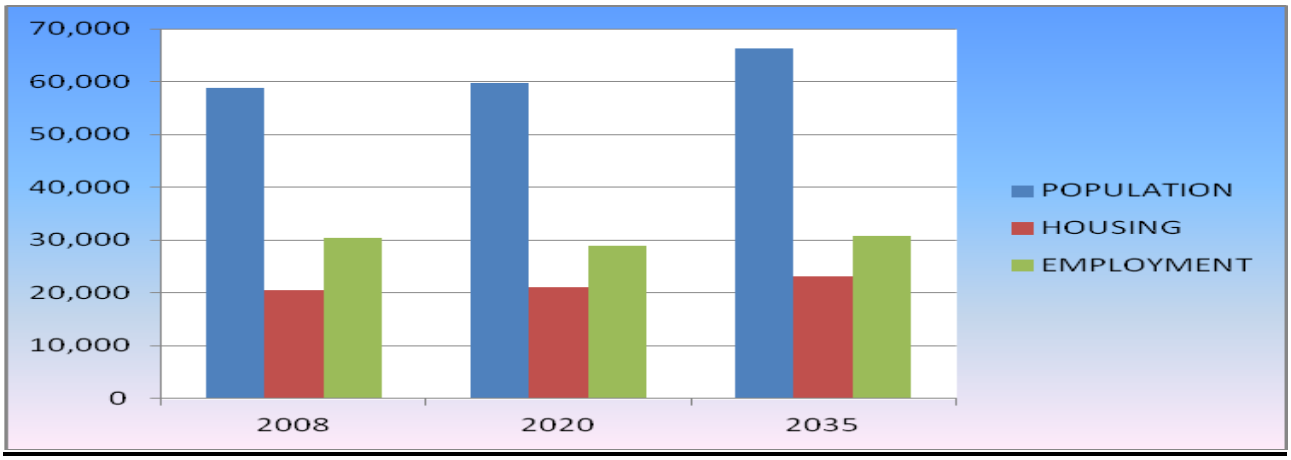
EL SEGUNDO

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	16,700	16,900	17,000	1.20%	1.80%
HOUSING	7,100	7,200	7,200	1.41%	1.41%
EMPLOYMENT	53,800	54,000	55,400	0.37%	2.97%



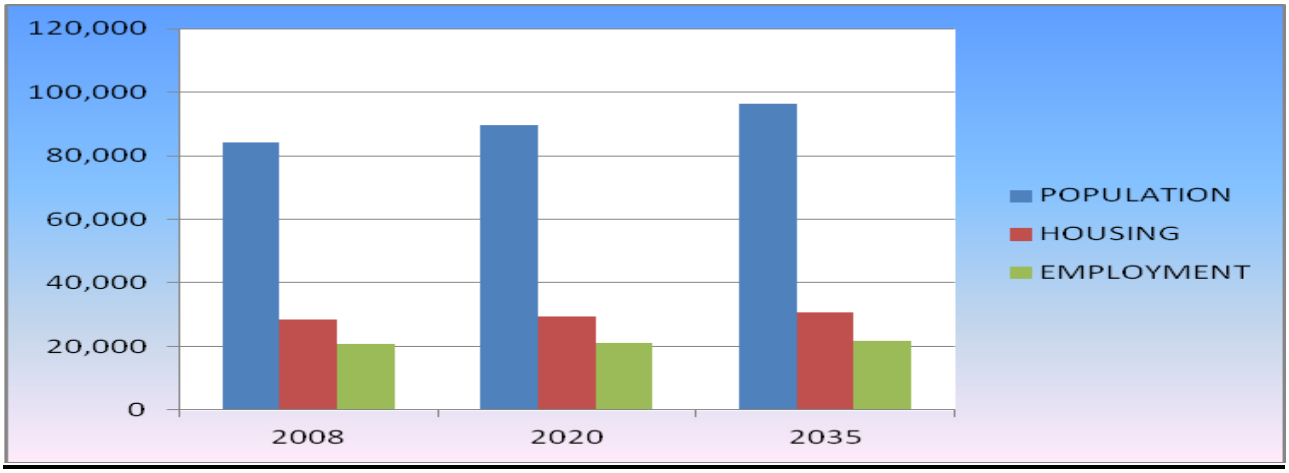
GARDENA

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	58,800	59,700	66,200	1.53%	12.59%
HOUSING	20,500	21,000	23,200	2.44%	13.17%
EMPLOYMENT	30,500	28,900	30,700	-5.25%	0.66%



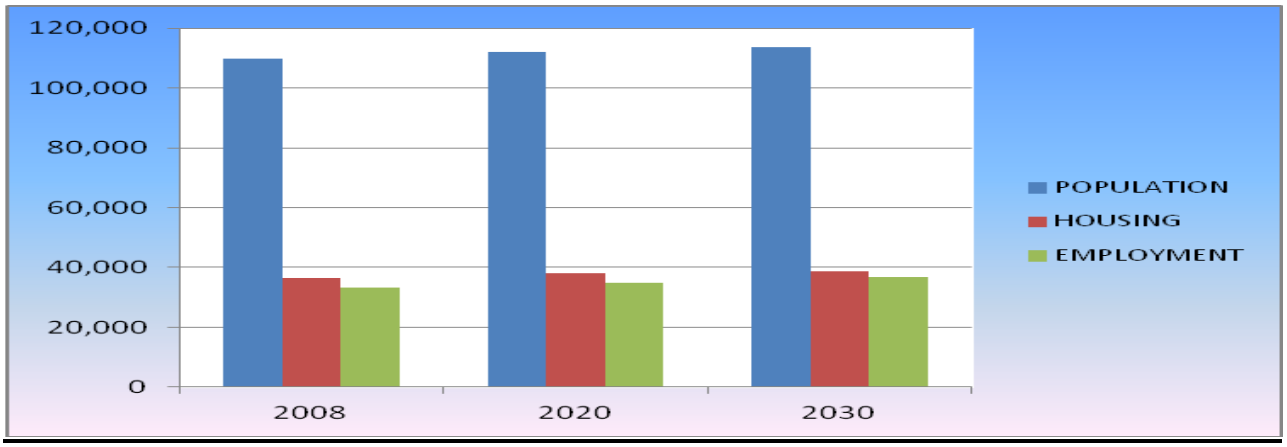
HAWTHORNE

	2008	2020	2035	2008 - 2020 CHANGE	2008 -2035 CHANGE
POPULATION	84,300	89,600	96,300	6.29%	14.23%
HOUSING	28,500	29,500	30,600	3.51%	7.37%
EMPLOYMENT	20,600	21,100	21,800	2.43%	5.83%



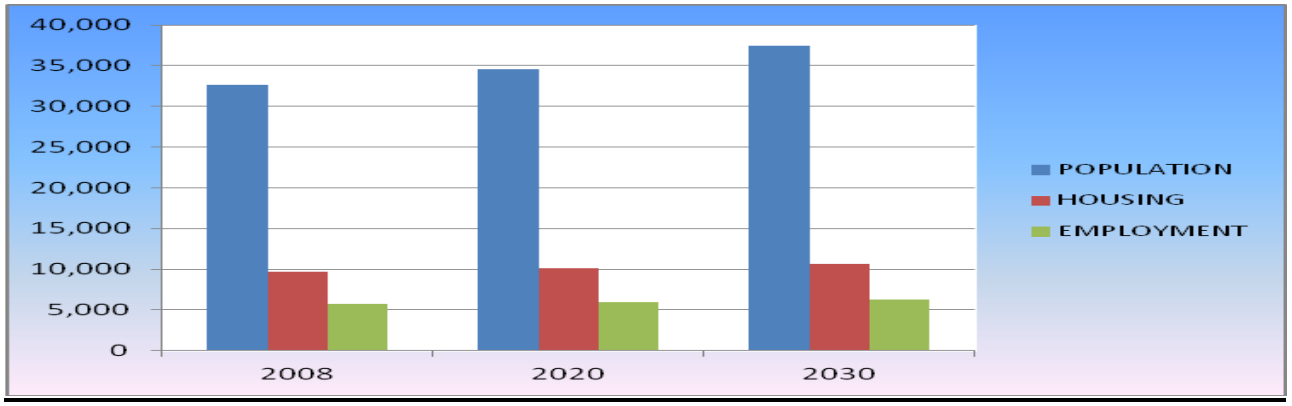
INGLEWOOD

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	109,700	111,900	113,500	2.01%	3.46%
HOUSING	36,400	37,900	38,800	4.12%	6.59%
EMPLOYMENT	33,400	35,000	36,700	4.79%	9.88%



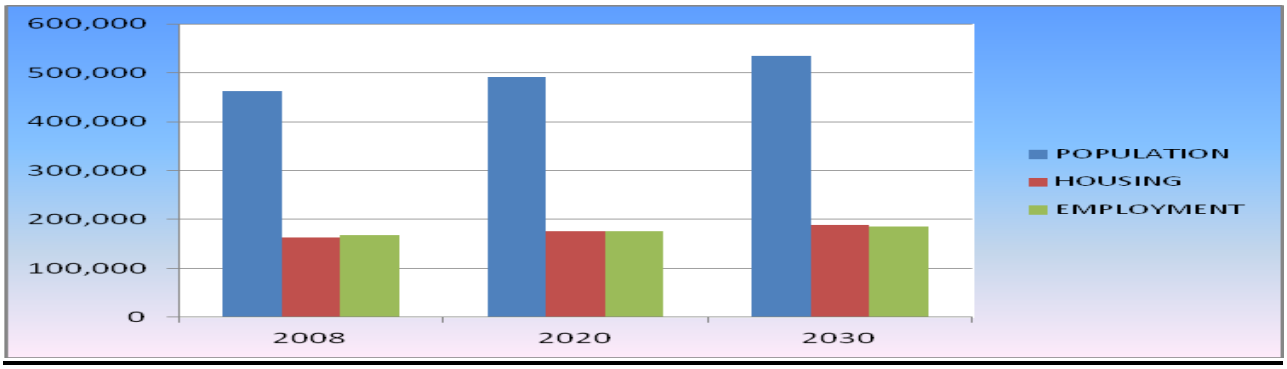
LAWNDALE

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	32,700	34,600	37,400	5.81%	14.37%
HOUSING	9,700	10,100	10,700	4.12%	10.31%
EMPLOYMENT	5,700	6,000	6,300	5.26%	10.53%



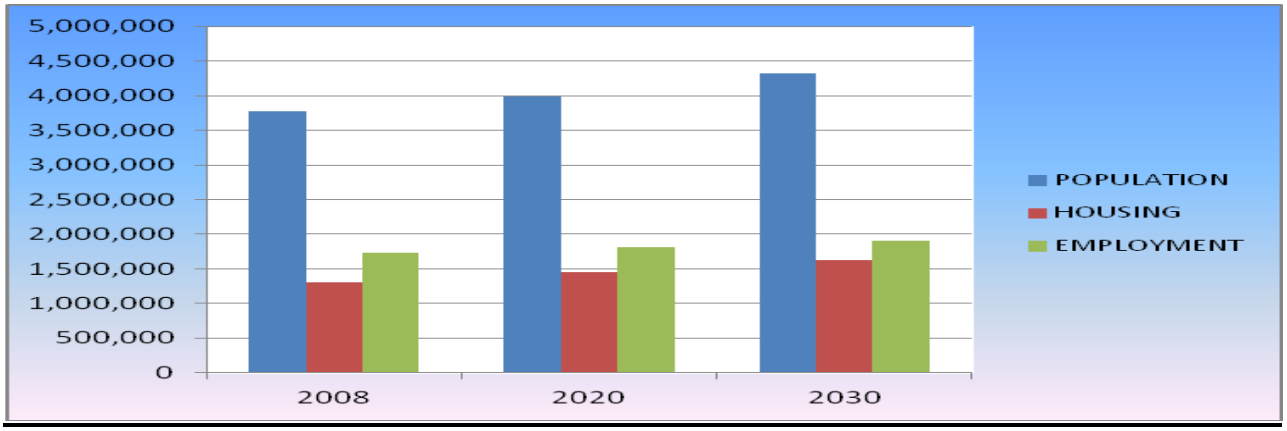
LONG BEACH

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	462,200	491,000	534,100	6.23%	15.56%
HOUSING	163,500	175,600	188,900	7.40%	15.54%
EMPLOYMENT	168,100	176,000	184,800	4.70%	9.93%



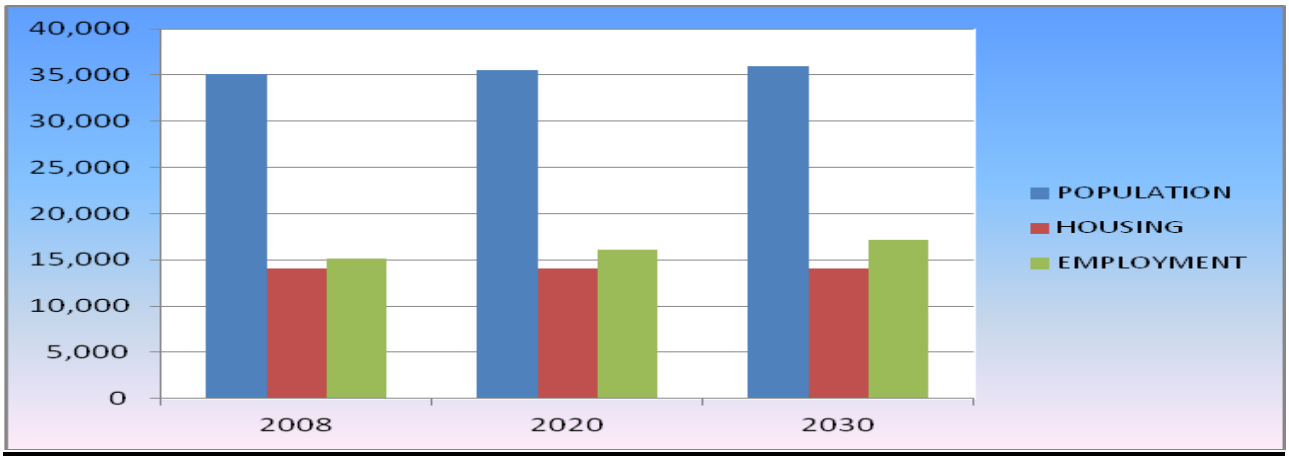
LOS ANGELES

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	3,770,500	3,991,700	4,320,600	5.87%	14.59%
HOUSING	1,309,900	1,455,700	1,626,600	11.13%	24.18%
EMPLOYMENT	1,735,200	1,817,700	1,906,800	4.75%	9.89%



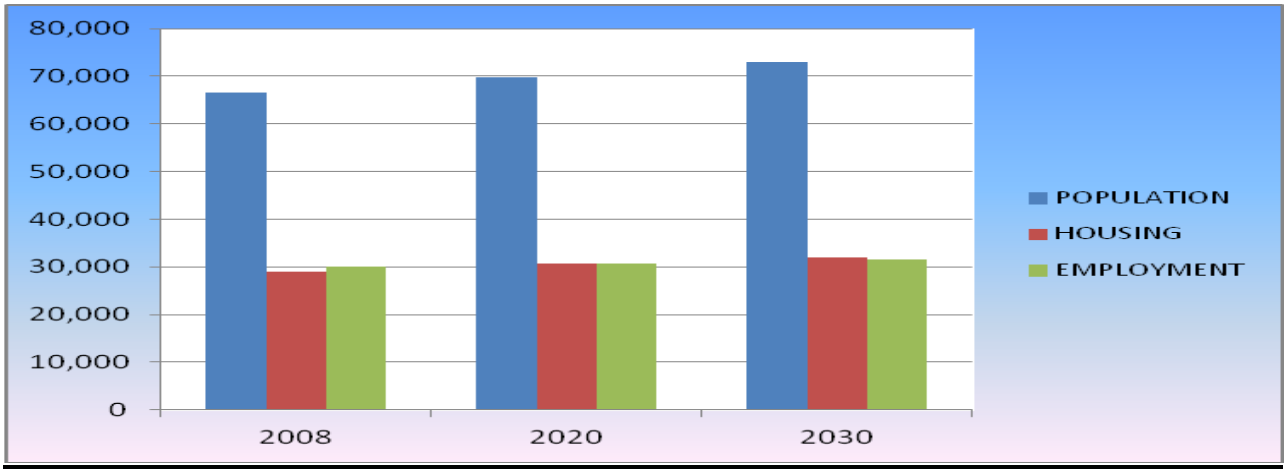
MANHATTAN BEACH

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	35,100	35,500	36,000	1.14%	2.56%
HOUSING	14,100	14,100	14,100	0.00%	0.00%
EMPLOYMENT	15,100	16,100	17,200	6.62%	13.91%



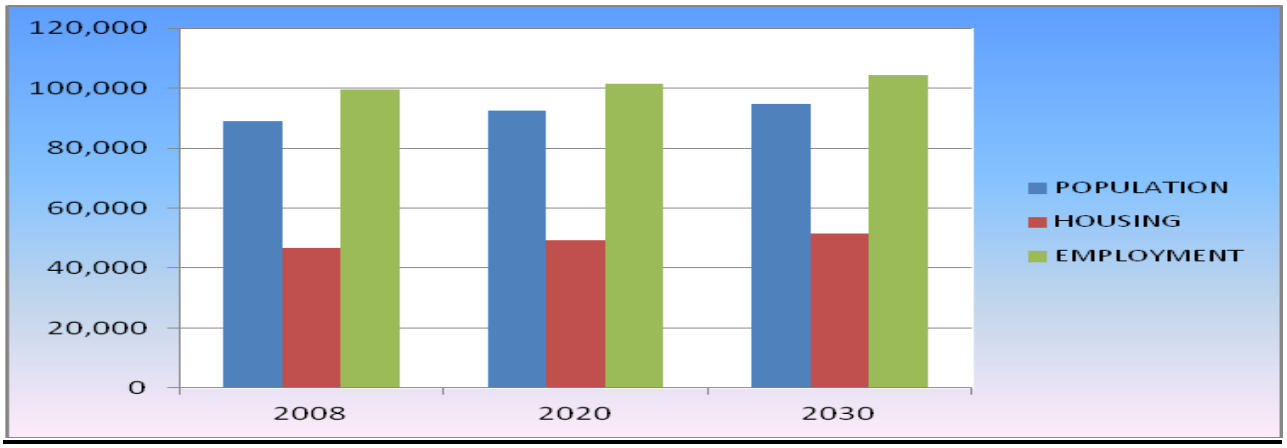
REDONDO BEACH

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	66,500	69,700	73,000	4.81%	9.77%
HOUSING	28,900	30,700	32,000	6.23%	10.73%
EMPLOYMENT	30,100	30,600	31,600	1.66%	4.98%



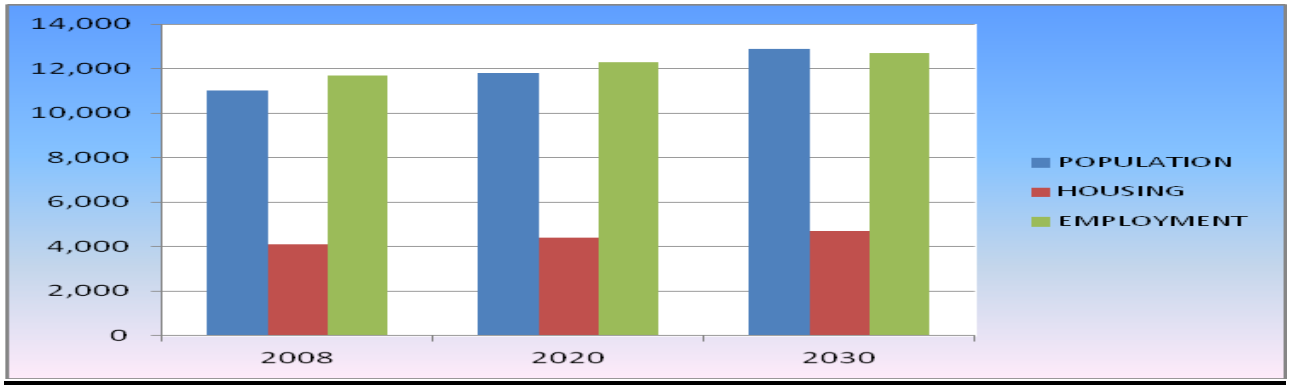
SANTA MONICA

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	89,100	92,400	94,700	3.70%	6.29%
HOUSING	46,600	49,200	51,400	5.58%	10.30%
EMPLOYMENT	99,500	101,600	104,200	2.11%	4.72%



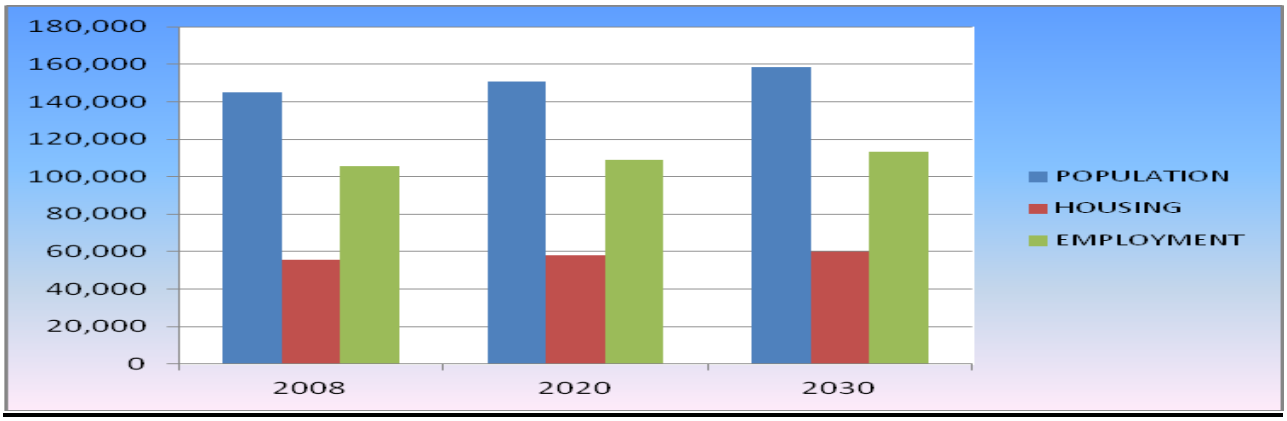
SIGNAL HILL

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	11,000	11,800	12,900	7.27%	17.27%
HOUSING	4,100	4,400	4,700	7.32%	14.63%
EMPLOYMENT	11,700	12,300	12,700	5.13%	8.55%



TORRANCE

	2008	2020	2030	2008 - 2020 CHANGE	20008 -2035 CHANGE
POPULATION	145,000	150,800	158,500	4.00%	9.31%
HOUSING	55,800	57,800	59,800	3.58%	7.17%
EMPLOYMENT	105,800	109,100	113,300	3.12%	7.09%



SYSTEM CHARACTERISTICS

For the purpose of analysis, the I-405 is divided into 11 segments based on logical termini including intersections, jurisdiction and changes in land use.

Existing Facility					
Segment/PM	Facility Type	Mixed-Flow Lanes	HOV Lanes	Centerline Miles	Lane Miles
1 (0.26 - 3.32)	Freeway	4	1	3.06	15.3
2 (3.32 - 7.59)	Freeway	4	1	4.27	21.35
3 (7.59 - 12.97)	Freeway	4	1	5.38	26.9
4 (12.97 - 16.57)	Freeway	4	1	3.6	18
5 (16.57 - R21.18)	Freeway	4	1	4.61	23.05
6 (R21.18 - 25.95)	Freeway	4	0	4.77	19.08
7 (25.95 - 29.54)	Freeway	5	0	3.59	17.95
8 (29.54 - 30.87)	Freeway	5	0	1.33	6.65
9 (30.87 - 39.43)	Freeway	5	0	8.56	42.8
10 (39.43 - 46.87)	Freeway	4	1	7.44	37.2
11 (46.87 - 48.64)	Freeway	3	1	1.77	7.08

RAMP METERS ON I-405			
Postmile	Direction	Location	Comments
Segment 1 (PM 0.26 - PM 3.32)			
0.55	NB	Studebaker	Operational
0.90	SB	Stearns	Operational
1.10	NB	Palo Verde	Operational
1.50	SB	Woodruff	Operational
1.73	NB	Woodruff	Operational
2.11	SB	Bellflower	Operational
2.16	NB	Bellflower	Operational
2.45	NB	Bellflower	Operational
2.45	SB	Bellflower	Operational
2.97	SB	Willow	Operational
3.28	NB	Lakewood	Operational
Segment 2 (PM 3.32 - PM 7.59)			
3.44	NB	Lakewood	Operational
3.47	SB	Lakewood	Operational
4.47	SB	Spring	Operational
4.57	NB	Spring	Operational
4.81	NB	Cherry	Operational
4.81	SB	Cherry	Operational
4.92	NB	Cherry	Operational
5.38	SB	Orange	Operational
5.46	NB	Orange	Operational
5.99	NB	Atlantic	Operational
6.00	SB	Atlantic	Operational
6.15	SB	Atlantic	Operational
6.42	SB	Long Beach	Operational
6.56	NB	Wardlow	Operational
7.22	NB	Pacific Pl	Operational
Segment 3 (PM 7.59 - PM 12.97)			
8.02	NB	Santa Fe	Operational
8.05	SB	Santa Fe	Operational
8.63	SB	Alameda	Operational
8.69	NB	Alameda	Operational
9.47	NB	Wilmington	Operational
9.47	SB	Wilmington	Operational
10.49	SB	Carson	Operational
10.70	NB	Carson	Operational
11.32	NB	Avalon	Operational
11.32	SB	Avalon	Operational

12.57	SB	Main St	Operational
Segment 4 (PM 12.97 - PM 16.57)			
13.31	NB	Vermont	Operational
13.69	SB	Normandie	Operational
13.81	NB	Normandie	Operational
14.34	NB	Western	Operational
14.52	SB	190th/Western	Operational
15.43	NB	Crenshaw	Operational
15.51	SB	Crenshaw	Operational
16.47	SB	Artesia	Operational
Segment 5 (PM 16.57 - R21.18)			
16.66	NB	Artesia	Operational
17.10	NB	Redondo Beach	Operational
17.52	NB	Hawthorne	Operational
17.64	SB	Hawthorne	Operational
18.20	NB	Inglewood	Operational
18.20	SB	Inglewood	Operational
18.30	SB	Inglewood	Operational
18.35	NB	Inglewood	Operational
19.16	NB	Rosecrans	Operational
19.16	SB	Rosecrans	Operational
19.36	NB	Rosecrans	Operational
20.13	NB	El Segundo	Operational
20.30	SB	El Segundo	Operational
20.39	NB	El Segundo	Operational
20.60	SB	El Segundo	Operational
Segment 6 (PM R21.18 to PM 25.95)			
21.80	SB	Imperial Hwy.	Operational
21.10	NB	Imperial Hwy.	Operational
21.30	SB	Imperial Hwy.	Operational
21.39	NB	Imperial Hwy.	Operational
22.00	SB	Century Bl.	Operational
22.30	SB	EB/WB-105 to SB-405	Operational
22.34	SB	Manchester	Operational
22.40	NB	WB-105 to NB-405	Operational
22.68	NB	Century Bl.	Operational
22.70	NB	Century Bl.	Operational
23.36	NB	Manchester Bl.	Operational
23.47	NB	Manchester Bl.	Operational
23.61	SB	La Cienaga Bl.	Operational
24.25	NB	La Tijera Bl.	Operational

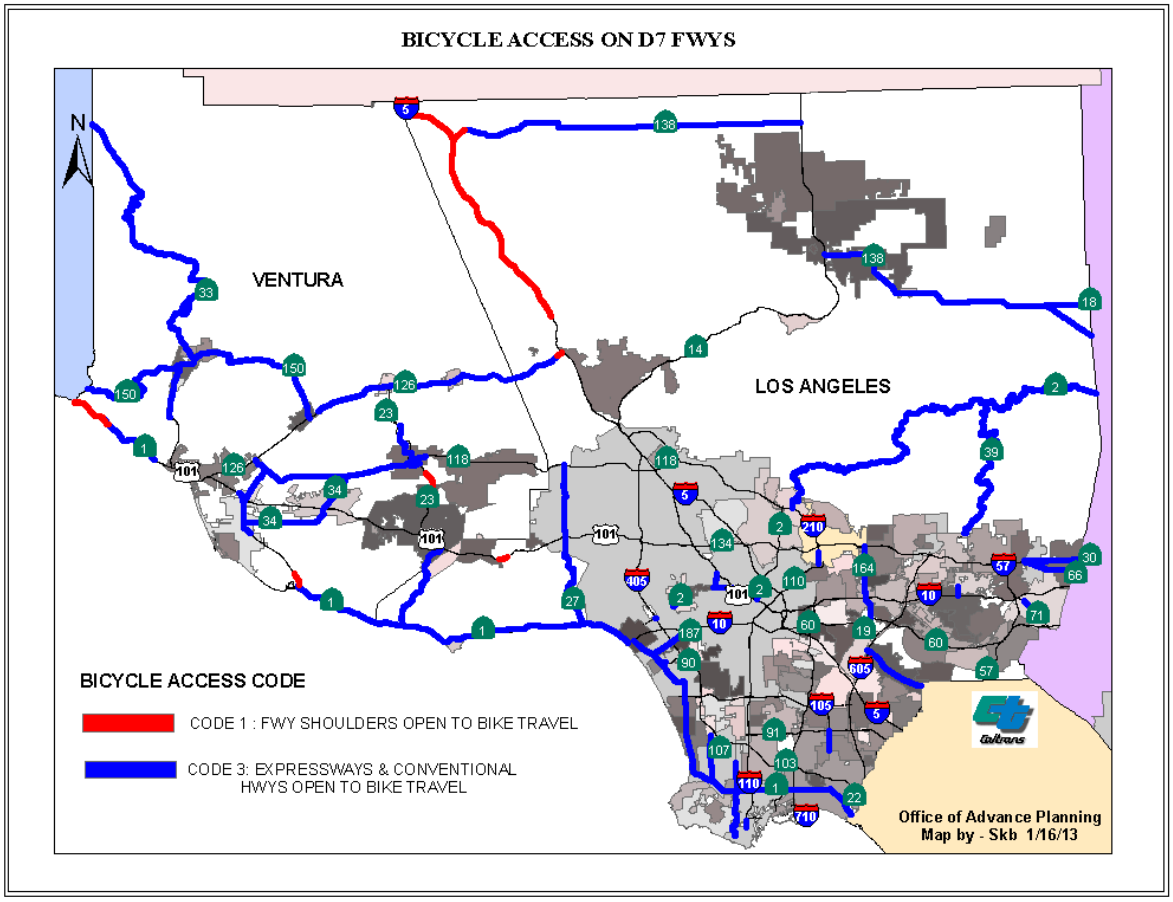
24.25	SB	La Tijera Bl.	Operational
24.80	NB	Howard Hughes Pkwy	Operational
25.00	SB	Howard Hughes Pkwy	Operational
25.83	SB	Jefferson Bl.	Operational
Segment 7 (PM 25.95 - PM 29.54)			
26.00	NB	Jefferson Bl.	Operational
26.84	SB	Braddock Dr.	Operational
27.35	NB	Culver Bl.	Operational
27.81	NB	Venice Bl.	Operational
27.81	SB	Venice Bl.	Operational
29.16	SB	National Bl.	Operational
Segment 8 (PM 29.54 - PM 30.87)			
30.13	NB	Pico / Olympic	Operational
30.80	SB	Santa Monica	Operational
30.95	NB	Santa Monica	Operational
Segment 9 (PM 30.87 - PM 39.43)			
31.39	SB	Wilshire Bl.	Operational
31.48	NB	Wilshire Bl.	Operational
31.57	NB	Wilshire Bl.	Operational
31.66	SB	Wilshire Bl.	Operational
32.90	SB	Sunset Bl.	Operational
32.96	NB	Sunset Bl.	Operational
33.50	SB	Sunset WB/Church Ln	Operational
33.42	NB	Moraga Ave	Operational
34.71	NB	Getty Center Drive	Operational
34.73	SB	Getty Center Drive	Operational
36.25	SB	Skirball/Muholland Drive	Operational
36.93	NB	Skirball/Muholland Drive	Operational
38.42	SB	Valley Vista	Operational
38.74	NB	Greenleaf St	Operational
39.90	SB	Ventura Bl.	Operational
Segment 10 (PM 39.43 - PM 46.87)			
40.80	SB	Burbank Blvd	Operational
40.42	NB	Burbank Blvd	Operational
41.31	SB	Victory Blvd	Operational
41.48	SB	Victory Blvd	Operational
41.49	NB	Victory Blvd	Operational
42.25	SB	Sherman Way	Operational
42.40	SB	Sherman Way	Operational
42.59	NB	Sherman Way	Operational
43.61	SB	Roscoe Blvd	Operational

43.93	NB	Roscoe Blvd	Operational
44.62	SB	Nordoff St	Operational
44.92	NB	Nordoff St	Operational
46.10	SB	Devonshire St	Operational
46.28	SB	Devonshire St	Operational
46.43	NB	Devonshire St	Operational
46.44	NB	Devonshire St	Operational
Segment 11 (PM 46.87 - PM 48.64)			
47.28	SB	San Fernando	Operational
47.62	SB	Rinaldi St	Operational
47.94	NB	Rinaldi St	Operational
Source: 2011 RMDP			

ACTIVE TRANSPORTATION FACILITY

The following map shows the Bicycle Access on D7 freeways. Access code 1 represents Freeway shoulders open to bike travel and Access Code 3 showing Expressways & Conventional highways open to Bicycle travel in D7.

No sections of I-405 are currently open to bicycle travel, however, there are existing parallel off system routes that can accommodate bicycle travel. Future improvements to I-405 corridor crossings or interchanges must not sever existing bicycle and pedestrian access facilities crossing the corridor and any new and planned projects at crossings or interchanges must provide for the safe accommodation of bicycles and pedestrians.



TRANSIT FACILITY

The transit component for I-405 embodies a multi-modal system including carpooling, express transit service, interregional and intra-regional travel and shipping route.

The Los Angeles County Metropolitan Transportation Authority (LACMTA) commonly branded as METRO, Antelope Valley Transit, Santa Clarita Transit, Metrolink and Los Angeles Department of Transportation (LADOT) Commuter Express currently serve this route. In addition to these agencies,

other transit provider (Torrance Transit, Gardena Municipal Bus Line, Santa Monica Bus Lines, Carson Circuit, Lawndale Trolley, Culver City Bus Lines and Municipal Area Express) also offer services that crisscross I-405.

FREIGHT

The economic vitality and well being of the Greater Los Angeles region depends upon the safe and timely transport of goods as well as people. I-405 is identified a Major International Trade Highway in the Caltrans 2007 Goods Movement Action Plan and Interregional Transportation Strategic Plan of 2012 , in conjunction with other routes (I-10, I-105, I-110, I-405, I-605, I-710), sea ports and airports in the area, I-405 serves as a part of the Intermodal Corridors of Economic Significance (ICES).

Current levels of congestion are detrimental to this vitality, and future projections indicate that this situation will get much worse. Southern California's aging transportation system is at capacity, serving a population in Los Angeles County of approximately ten million people. District 7 has five of the ten worst truck bottlenecks in the U.S. Truck vehicle miles traveled (VMT) is expected to double by 2030. Significant actions thus need to be taken to protect the economic well being of the region. These include improved rail service, including more grade separations; additional and improved intermodal transfer facilities; truck lanes on major truck routes; improved intermodal transfer facilities; truck lanes on major truck routes; improved access to and enhanced cargo handling capabilities at seaports: and improved air cargo accessibility with separation from passenger activities at airports.

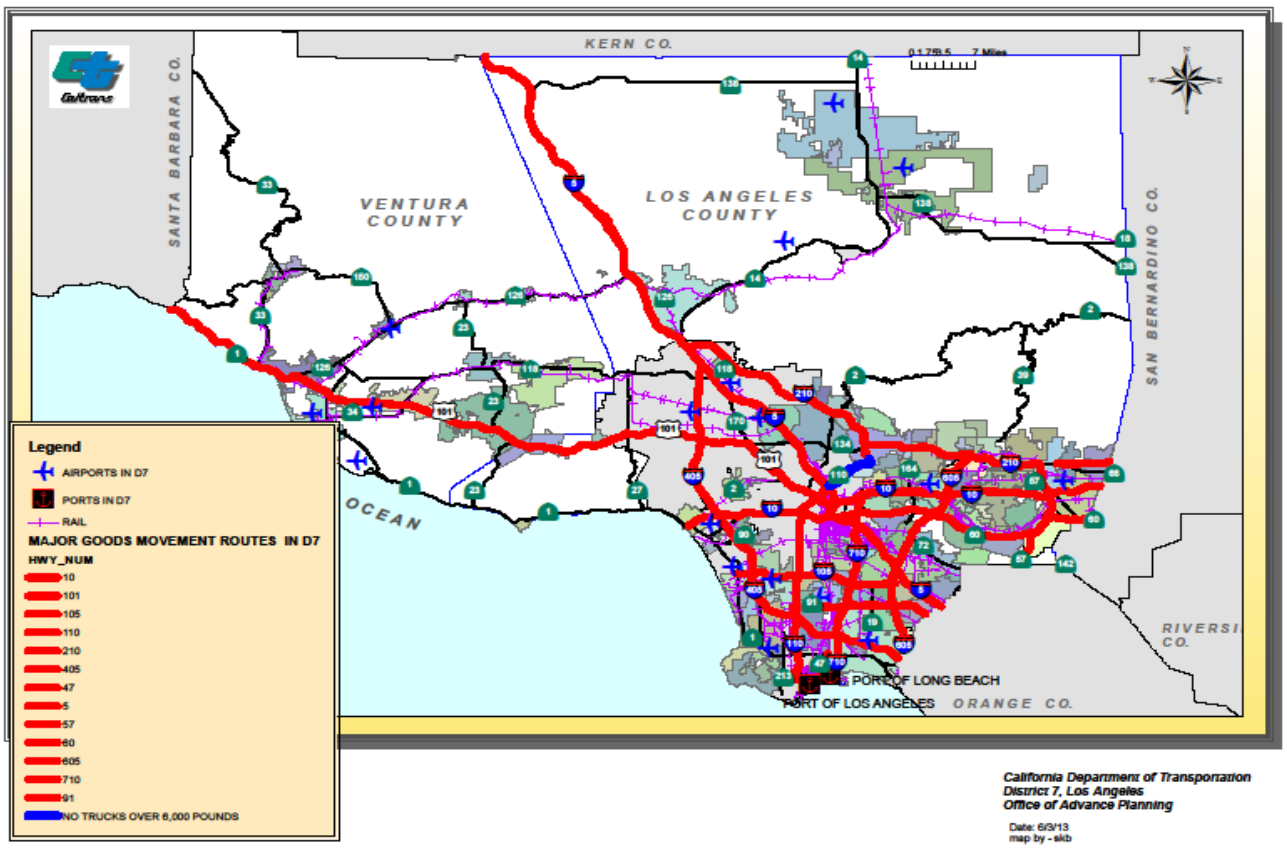
Some of the specific conditions affecting I-10 are as follows:

I-405 is a part of the Federal Surface Transportation Assistance Act (STAA) route network for oversized trucks and the Subsystem of Highways for the Movement of Extralegal Permit Loads (SHELL).

Truck volumes in 2008 range from 3.0% to 5.1% of ADT. Regionally, truck traffic is expected to increase by over 50% by 2025, with virtually no capacity available to handle this added volume.

Seaports: The ports of Los Angeles and Long Beach are near Route 405 and primarily accessible to it via Routes 710 and 110 and the Alameda Corridor. These two ports combined are the largest port complex in the United States. It is expected that most port cargo going less than 800 miles will be transported by truck. These are full service ports, handling in particular containers, autos, and bulk cargo. Together they are the third busiest in the world, and are forecasted to triple in both domestic and international cargo volumes by 2025.

D7 GOODS MOVEMENT CORRIDOR MAP



ENVIRONMENTAL CONSIDERATION - California is known for traffic congestion and its impacts. Pollution of various types is typical in this region. Air quality, noise and water pollution are common. Below is the latest attainment/nonattainment status of I-405 Corridor which falls in the South Coast Air Basin.

POLLUTANTS	STATE DESIGNATION
Ozone (1hr)	Nonattainment
Ozone (8hr)	Nonattainment
CO (8hr)	Attainment
PM10 (24 hr.)	Nonattainment
PM2.5 (24 hr.)	Nonattainment
NO2 (Annual)	Nonattainment
SO2 (1 hr)	Attainment
Lead	Nonattainment

CORRIDOR PERFORMANCE:

Segment 1 has 274,200, 4.0 % of which are associated with truck travel. The segment currently operates at LOS F0

Segment 2 has 274,500 AADT, 5.1 % of which is associated with truck travel. The segment currently operates at LOS F0

Segment 3 has 304,400 AADT, 4.4 % of which was truck travel. The segment currently operates at LOS F1.

Segment 4 has 272,400 AADT, 3.8 % of which was truck travel. The segment currently operates at LOS F0.

Segment 5 has 294,500 AADT, 3.3 % of which was truck travel. The segment currently operates at LOS F0.

Segment 6 has 352,000 AADT, 3.1 % of which are associated with truck travel. The segment currently operates at LOS F1.

Segment 7 has 322,400 AADT, 3.1 % of which is associated with truck travel. The segment currently operates at LOS F0.

Segment 8 has 360,000 AADT, 3.1 % of which was truck travel. The segment currently operates at LOS F0.

Segment 9 has 364,500 AADT, 3.0 % of which was truck travel. The segment currently operates at LOS F1.

Segment 10 has 247,700 AADT, 3.0 % of which was truck travel. The segment currently operates at LOS F0.

Segment 11 has 162,800 AADT, 3.9 % of which was truck travel. The segment currently operates at LOS E.

Basic System Operations							
Segment	AADT 2008	AADT 2035	LOS 2008	LOS 2035	LOS CONCEPT	VMT 2008	VMT 2035
1	274,200	280,200	F0	F0	F0	695,600	711,000
2	274,500	308,400	F0	F0	F0	912,900	919,500
3	304,400	307,500	F1	F1	F0	1,291,800	1,308,600
4	272,400	276,400	F0	F0	F0	833,700	846,300
5	294,500	303,700	F0	F0	F0	981,600	1,011,500
6	352,000	363,900	F1	F1	F0	1,320,800	1,365,200
7	322,400	353,000	F0	F0	F0	837,300	916,000
8	360,000	377,800	F0	F0	F0	209,600	218,500
9	364,500	379,700	F1	F2	F0	2,961,300	3,002,200
10	247,700	281,800	F0	F0	F0	1,635,500	1,858,400
11	162,800	211,500	E	F0	F0	180,800	236,300

Truck Traffic				
Segment	Total Average Annual Daily Truck Traffic (AADT) 2008	Total Trucks (% of AADT) 2008	5 + Axle Average Annual Daily Truck Traffic (AADT) 2008	5 + Axle Trucks (% of AADTT) 2008)
1	11,000	4.0%	4,300	39.2%
2	14,000	5.1%	6,600	47.0%
3	13,400	4.4%	5,400	40.0%
4	10,500	3.8%	4,000	37.9%
5	9,800	3.3%	3,700	37.9%
6	10,900	3.1%	4,600	42.0%
7	10,000	3.1%	3,400	33.9%
8	11,000	3.1%	3,800	34.2%
9	11,100	3.0%	3,800	34.2%
10	7,500	3.0%	2,900	39.0%
11	6,200	3.9%	2,300	37.4%

CORRIDOR CONCEPT

CONCEPT RATIONALE

The transportation concept describes the operating conditions and physical facilities required to provide those conditions that could exist on I-405 after considering the conclusions, priorities and strategies discussed in the District System Management Plan (DSMP), the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and other planning documents. The route concept represents what could reasonably be accomplished to facilitate the mobility of traffic desiring to use the route. It assumes that management improvement strategies and system operation improvements to maximize the efficiency on I-405 will be implemented.

The transportation concept is composed of a Level of Service (LOS) and facility component. The concept LOS indicates the minimum level of service the District would allow on a route prior to proposing an alternative to improve operating conditions. The concept facility is the facility that could be developed to maintain or attain the concept LOS F0.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

Segment	County	Post Miles	Project Description	Source	RTP ID
1	LA	3.5	4th PSR at 91/605/405 (on 405 from south of Altimos Ave to 405/605 IC	PDS	
1	LA	4.8	Avalon Blvd I/C modification at I-405 improving Avalon/I-405 IC by constructing a new SB on-ramp, widening NB off-ramp and on-ramp, Widening Avalon Blvd northbound	2012-2035 RTP/SCS	LAE2198-LAE2198
2	LA	7.21	Add additional lane at National on-ramp	Metro 09 LRTP	
2	LA	4.88	Reconfiguring the I-405 freeway interchanges, at Cherry Avenue, to incorporate both northbound and southbound on/off ramps and to conform with Caltrans design criteria. (No additional capacity, only an interchange reconfiguration.)Only for PSR phase.	2012-2035 RTP/SCS	1OM0702-LA0G124
3	LA	7.8	Route 710: Reconstruct I-710 Interchanges at I-5, at I-405, at SR 91, and at I-105. As part of the I-710 Corridor Program proposing 4 truck lanes (ports-rail yards), 10 general lanes (port-SR-60)(ISTEA ID # 37)(SAFTEA-LU 3773)	2012-2035 RTP/SCS	LA0B952
3	LA	9.56	Route 405: Wilmington Avenue Interchange Modification at I-405. Improve I-405/Wilmington Avenue interchange by adding a new northbound on-ramp and widening of Wilmington Avenue, 223rd, and existing on- and off-ramps.	2012-2035 RTP/SCS	LAF1103
3	LA	11.22	Modify SB on-ramp at Avalon Bl	Metro 09 LRTP	
4	LA	14.38/14.59	Widen SB on-ramp at 190th (just west of Western Av) from Western Av to 190th St	Metro 09 LRTP	
4	LA	15.00	Widen NB off ramp to 182nd St and modify signal at terminus (I-405 at 182nd/Crenshaw improvement)	PDS	
4	LA	12.97	Route 110: Northbound 405/southbound 110 connector widening or replacement with a flyover and construct a new auxiliary lane on southbound 110 from I-91/I-110 interchange to Torrance Blvd. (EA 29370 PPNO 4552)	2012-2035 RTP/SCS	REG0703 (FTIP LA0G872)
4	LA	15.45	Route 405: Crenshaw Blvd on / off Ramp Improvements [EA 29360 PPNO 4551] - STUDY ONLY.	2012-2035 RTP/SCS	REG0703 (FTIP LA0G874)
5	LA	16.57/17.59	Add NB auxiliary lane from Redondo Beach Bl to Hawthorne	Metro 09 LRTP	

5	LA	16.57	At Artesia Bl, modify NB on-ramp from Artesia Bl WB to add a third lane onto NB I-405	Metro 09 LRTP	
5	LA	16.57	I-405, I-110, I-105 and SR-91 Ramp and Interchange Improvements (South Bay)	2012-2035 RTP/SCS	1M1003
5	LA	17.59	I-405 ramp improvements at Hawthorne Bl. (1) Reopen SB Hawthorne to NB I-405 (2) Upgrade signalization at I-405 SB and NB off-ramps Hawthorne Bl	Metro 09 LRTP	
5	LA	18.23	Widen NB on-ramp at Inglewood Ave	Metro 09 LRTP	
5	LA	18.23/19.21	Add NB auxiliary lane from Hawthorne to Inglewood Av	Metro 09 LRTP	
5	LA	18.23/19.21	Add NB auxiliary lane from Inglewood Bl to Rosecrans Av	Metro 09 LRTP	
5	LA	19.21	Widen SB off-ramp to Hindry Av and I-405 at Rosecrans	Metro 09 LRTP	
5	LA	19.21	Implement I-405 at Rosecrans Access Point improvement projects	Metro 09 LRTP	
5	LA	19.21	Signalize intersection at bottom of SB Rosecrans off-ramps	Metro 09 LRTP	
5,6	LA	17.59/22.22	Add NB auxiliary lane from SR-107 to Inglewood	Metro 09 LRTP	
6	LA	21.17/23.36	Add connector metering between I-105 and SR-90 interchange	Metro 09 LRTP	
6	LA	21.18/25.90	Install connector metering at I-105 and SR-90 interchanges	Metro 09 LRTP	
6	LA	21.18/25.93	Add connector metering between I-105 and SR-90 interchanges	Metro 09 LRTP	
6	LA	21.18/25.93	Add auxiliary lanes from SR-90 to I-105	Metro 09 LRTP	
6	LA	22.22/23.36	Construct SB auxiliary lane on I-405 from Manchester Bl to Century Bl	Metro 09 LRTP	
6	LA	22.22	Widen NB Inglewood loop on-ramp	Metro 09 LRTP	
6	LA	22.2	I-405 Direct HOV Connector to LAX	2012-2035 RTP/SCS	
6	LA	23.36/25.93	South of SR-90 near LAX - Re-align I-405 south of SR-90, where it bends sharply just north of Manchester Bl	Metro 09 LRTP	
6	LA	23.78/25.16	Construct SB auxiliary lane on SB I-405 from Florence Av to Howard Hughes Pkwy	Metro 09 LRTP	
6	LA	23.78/25.16	Add NB auxiliary lane from Florence to Hughes Parkway	Metro 09 LRTP	
6	LA	24.27	Add NB 405 auxiliary lane on I-405 from La Tijera on-ramp to Howard Hughes on-ramp	Metro 09 LRTP	

6	LA	24.27	SB on-ramp from Howard Hughes Pkwy - Widen and extend 2 meter lanes and 1 HOV metered lane and lengthen merging length. Construct auxiliary lane between on- and off ramps between Howard Hughes Dr and La Tijera Bl.	Metro 09 LRTP	
6	LA	24.27/25.93	Route 405: In Los Angeles: From La Tijera Blvd to Jefferson Blvd; Add Aux Lane PPNO: 3348 EA: 24130	2012-2035 RTP/SCS	LA0D332
6	LA	25.93	Construct new NB collector-distributor road at Jefferson Bl ramps	Metro 09 LRTP	
6	LA	25.93	SB off-ramp to WB Jefferson Bl - Add acceleration lane to WB Jefferson Bl for free right-turn move	Metro 09 LRTP	
6	LA	25.93	NB on-ramp from Jefferson Bl - Widen and extend 2 meter lanes and 1 HOV metered lane and lengthen merging length	Metro 09 LRTP	
6	LA	25.93	Add connector metering at SR-90 connector ramps to I-405	Metro 09 LRTP	
6	LA	25.95	Modify NB and SB collector/distributor from SR-90 off-ramp to SR-90 on-ramp	Metro 09 LRTP	
6,7	LA	23.36/27.20	Add SB auxiliary lane from Culver to Manchester Av	Metro 09 LRTP	
6,7	LA	24.27/27.20	Add NB auxiliary lane from La Tijera to Culver Bl	Metro 09 LRTP	
7	LA	29.54	Widen from 3 to 4 lanes through I-10	Metro 09 LRTP	
7	LA	29.54	Improve I-10 and I-405 Interchange	Metro 09 LRTP	
8,9	LA	29.54/32.5	Route 405: Garvee debt payments Rte 405 - Waterford Av to Rte 10 - Aux LNE: Los Angeles - Waterford Ave to Rte 10 CNST S/B Aux Lne & S/B HOV LNE (2001 CFP 8354) (EA 195900 ,PPNO 2333).	2012-2035 RTP/SCS	LA0D193
8,9	LA	29.54/39.43	Route 405: add a 10-mile HOV lane on the NB 405 between I-10 and U.S. 101 in LA from Rte 10 to Rte 101 widen for HOV Lane & modify Ramps, & HOV Ingress/Egress at Santa Monica Blvd (EA 12030, PPNO 0851G, SAFETLU SECTION 1302 #18, 1934 #20)	2012-2035 RTP/SCS	LA0B408
9	LA	32.99	Reconfigure/Reconstruct Sunset Bl/NB I-405 Fwy ramps	Metro 09 LRTP	
9	LA	33.00	Reconfigure both NB and SB on/off-ramps at Sunset Bl & I-405	Metro 09 LRTP	
9	LA	34.76	Add NB 405 auxiliary lane on I-405 from Howard Hughes on-ramp to Sepulveda off-ramp	Metro 09 LRTP	

9	LA	34.76/37.03	Install reversible lane on Sepulveda Bl through tunnel at Mulholand Dr, install bike facilities from Skirball Center Dr to Bel Air Crest Rd, implement intersection improvements Skirball Center Dr, I-405 FWY SB on-ramp, Moraga Dr, Wilshire Bl	2012-2035 RTP/SCS	LA996425 - LA996425
9	LA	36.18	Reconstruct the Skirball Center Dr ramps	Metro 09 LRTP	
9	LA	36.18	Widen SB on-ramp at Skirball Center Dr and I-405	Metro 09 LRTP	
10	LA	39.43	I-405/US-101 Interchange	Metro 09 LRTP/2012-2035 RTP/SCS	
10	LA	39.43	Route 405: Garvee Debt Service: In Los Angeles on Rte 405/101 Connector Gap Closure (2001 CFP 7248, 2001 CFP 8347) (EA# 20120K, PPNO 2336). (BOTH RIP & IIP)	2012-2035 RTP/SCS	LA0D194
11	LA	47.97/48.64	Construct Direct HOV Connectors (Route 5/405IC)	PDS	
11	LA	48.64	I-5/I-405 Carpool Lane Partial Connector (South to North)	2012-2035 RTP/SCS	1H0103
	LA		Conduct toll lane feasibility on I-405	Metro 09 LRTP	
	LA		Additional SR-91/I-605/I-405 solutions (beyond identified hot spots)	2012-2035 RTP/SCS	

Demonstration Projects from Compass Blueprint (Compass Blueprint is a new way to look at how Southern California grows. It is driven by Mobility, Livability, Prosperity and Sustainability)
Long Beach Blvd Corridor Plan Phase 1 & 2 – Vision Plan and Specific Plan for Long Beach Blvd corridor between Willow St located 1 mile from I-405 south to Pacific Coast Highway (PCH) – Proposes increasing density along corridor, offset by reduced parking requirements and improve access to LA METRO Blue Line Stations. **South Bay Cities Council of Governments (SBCCOG) Sustainable Arterials Feasibility Study** – One of three pilot areas is Marine Ave at I-405 – Strategic Plan for increasing multi-modal access, Neighborhood Electric Vehicle (NEV) use, modest increase in density, and development of local serving retail.

There was an I-405 Corridor System Management Plan (CSMP) report done by Caltrans and SCAG in 2010. The CSMP identified hot spots along the route and recommends projects to mitigate these problem locations. In addition to the projects and strategies list above, there are efforts by local Council of Governments (COG) in conjunction with Caltrans to help improve mobility on and along

the I-405 corridor. South Bay Cities COG has developed a database (South Bay Highway Program) that can be referenced for additional projects.

CONCLUSION

Traffic volume is forecasted to increase on I-405 due to the growth in population, housing and employment along this route and throughout the region. Growth in the region will continue to create mobility challenges and put additional stresses on our transportation system. Southern California is not only an important component of California's economy but it is also vital to the United States and world's economies as a whole. It is critical that mobility be maintained and improved in order to sustain the economic growth that is expected. In addition to sustaining the economic vitality of the region, mobility is also an important component in enhancing the quality of life for the residents in this region. I-405 is only one component of the transportation infrastructure but it plays a critical role in providing mobility for the region. In order to improve mobility, additional capacity will be required beyond those planned and programmed in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to maintain an acceptable level of service through 2035.

District 7 Office employs a variety of strategies to address current congestion challenges including:

- High Occupancy Vehicle Lane (HOV)
- Ramp Metering
- Congestion Pricing (Toll Lanes)
- Changeable Message Signs (CMS)

Several regional freeway capacity expansion projects are in the planning process, under development or under construction which will assist in decreasing congestion.

Constructing an HOV or Managed Lane system continues to be a priority.

The highway system is only one component of the transportation infrastructure; but it plays a very important role in providing mobility for the region. To achieve the desired minimum acceptable level of service, additional lanes will be needed beyond those planned and programmed in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

In addition to the projects on our system, Caltrans supports programs such as Transit Oriented Development (TOD). TOD is a moderate to higher density development, located within easy walk of major a transit stop. Generally with a mix of residential, employment and shopping opportunities designed for pedestrians. Research have shown that these types of development increase the number of trips made by transit, walking and cycling thus reducing the number of car trips and reducing tailpipe emissions.

SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) identifies High Quality Transit Areas (HQTAs) meeting definitions established in SB 375. These areas

are intended to direct and prioritize future growth, and further, establish eligibility for certain types of projects to access CEQA streamlining. Note, however, that residential and other types of development along freeways can be associated with increased health risk due to emissions exposure. Future projects should refer to available information resources, including but not limited to SCAG's 2012-2035 RTP/SCS Environmental Justice Appendix and Program Environmental Impact Report.

Appendix A

GLOSSARY OF TERMS AND ACRONYMS

Acronyms

AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
AQMD	Air Quality Management District
CALTRANS	California Department of Transportation
CMP	Congestion Management Plan
FHWA	Federal Highway Administration
HOV	High Occupancy Vehicle Lane
HOT	High Occupancy Toll Lane
IC	Interchange
ITS	Intelligent Transportation System
LOS	Level of Service
MF	Mixed Flow Lane
MFE	Mixed Flow Equivalent
ML	Managed Lane
MPO	Metropolitan Planning Organizations
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agency
SCAG	Southern California Association of Governments
SHOPP	State Highway Operation Protection Program
STIP	State Transportation Improvement Program
T	Truck Lane

TDM	Transportation Demand Management
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles Travel

DEFINITIONS

Annual Average Daily Traffic (AADT) - AADT is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th.

Concept LOS – The minimum acceptable level of service over the next 20-25 years.

Facility Concept – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, state highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, transportation demand management, and incident management.

Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

Level of Service (LOS) – It is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort and convenience. LOS can be categorized as follows:

LOS A describes free flowing conditions.

LOS B also indicative of free flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.

LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the present of other vehicles.

LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.

LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.

LOS F is a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle.

Mainline – includes travel way for through traffic but not freeway to freeway interchanges, local road interchanges, ramps, or auxiliary lanes.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between six percent and 10 percent of the Annual Daily Traffic (ADT). The lower values are generally found on roadways with low volumes.

Post Mile (PM) – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a county to the next county line. The milepost values start over again at each county line. Mile post values usually increase from south to north or west to east depending upon the general direction the route follows within the State. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as “R” or “M”) are established for it.

Segment – A portion of a facility between two points.

Vehicle Miles Traveled (VMT) – Is the total number of miles traveled by motor vehicles on a road or highway segments.