

LAKEWOOD/ROSEMEAD BOULEVARD

Master Plan and Complete Street Evaluation



Prepared By

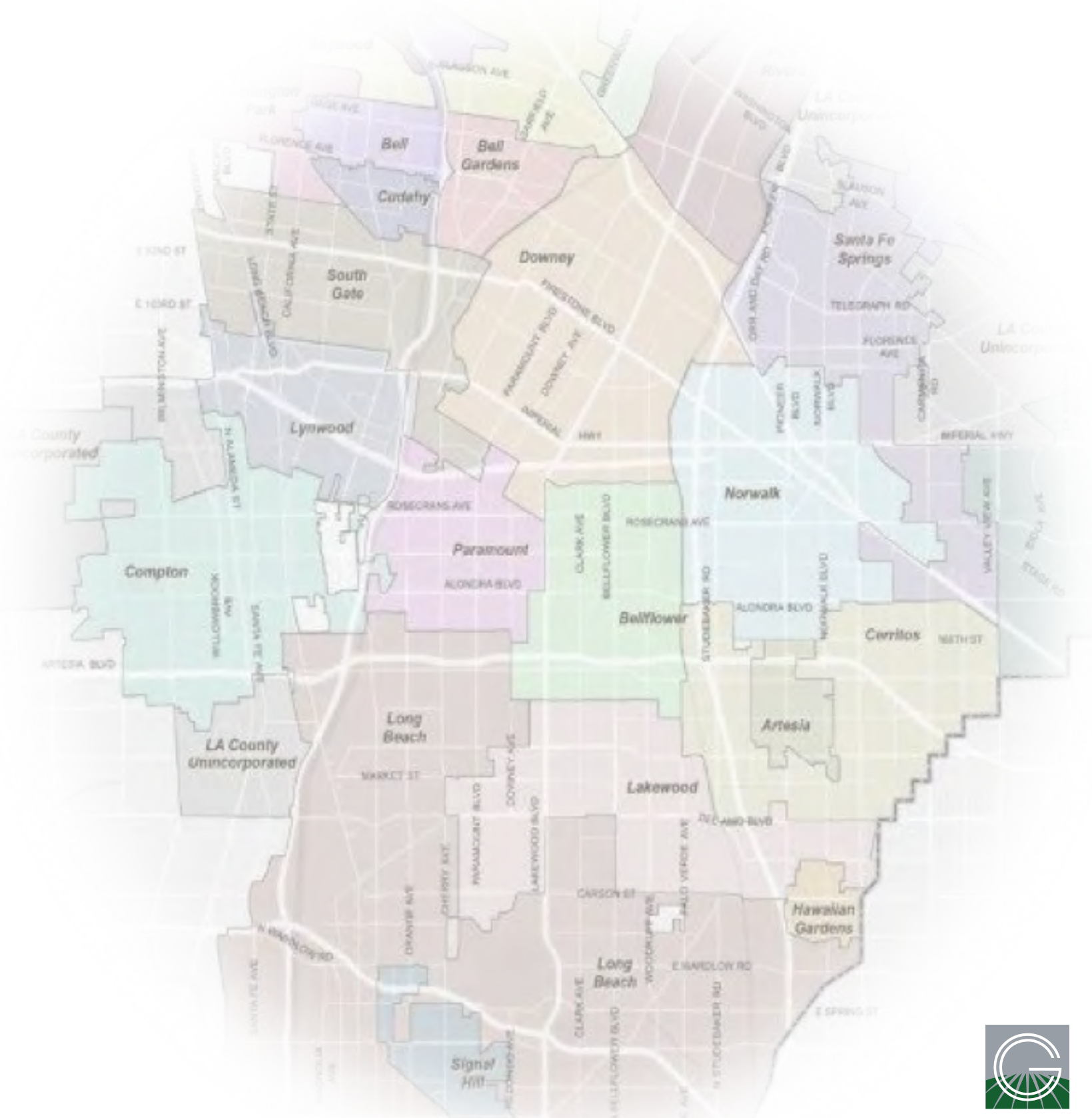


GATEWAY CITIES
COUNCIL OF GOVERNMENTS

TABLE OF CONTENTS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

- Study Overview
- Existing Conditions
- Corridor Vision
- Street Designation
- Street Focus Areas
- Water Resources



GATEWAY CITIES
COUNCIL OF GOVERNMENTS

STUDY OVERVIEW

This report is intended to serve as a guide for implementation of a project that will create a more attractive, livable, and pedestrian and bike friendly environment that operates effectively and efficiently for all modes of transportation along Lakewood/Rosemead Boulevard within the Gateway Cities.

The goal of this project is to improve the Corridor by promoting a balanced, comprehensive multimodal transportation system in an effort to enhance sustainability of the communities that it serves and to address local and regional transportation needs. The study results and the Complete Street Master Plan are expected to lead to the programming, development, and construction of a Complete Street along Lakewood/Rosemead Boulevard. Specific goals are to: 1) improve the multimodal mobility and access, 2) promote and preserve multimodal transportation system, 3) improve safety and security, 4) foster livable and healthy communities, 5) promote social equity and environmental justice, 6) improve the air quality, and 7) support economic vitality and quality of life of its communities.

Objectives of this report include:

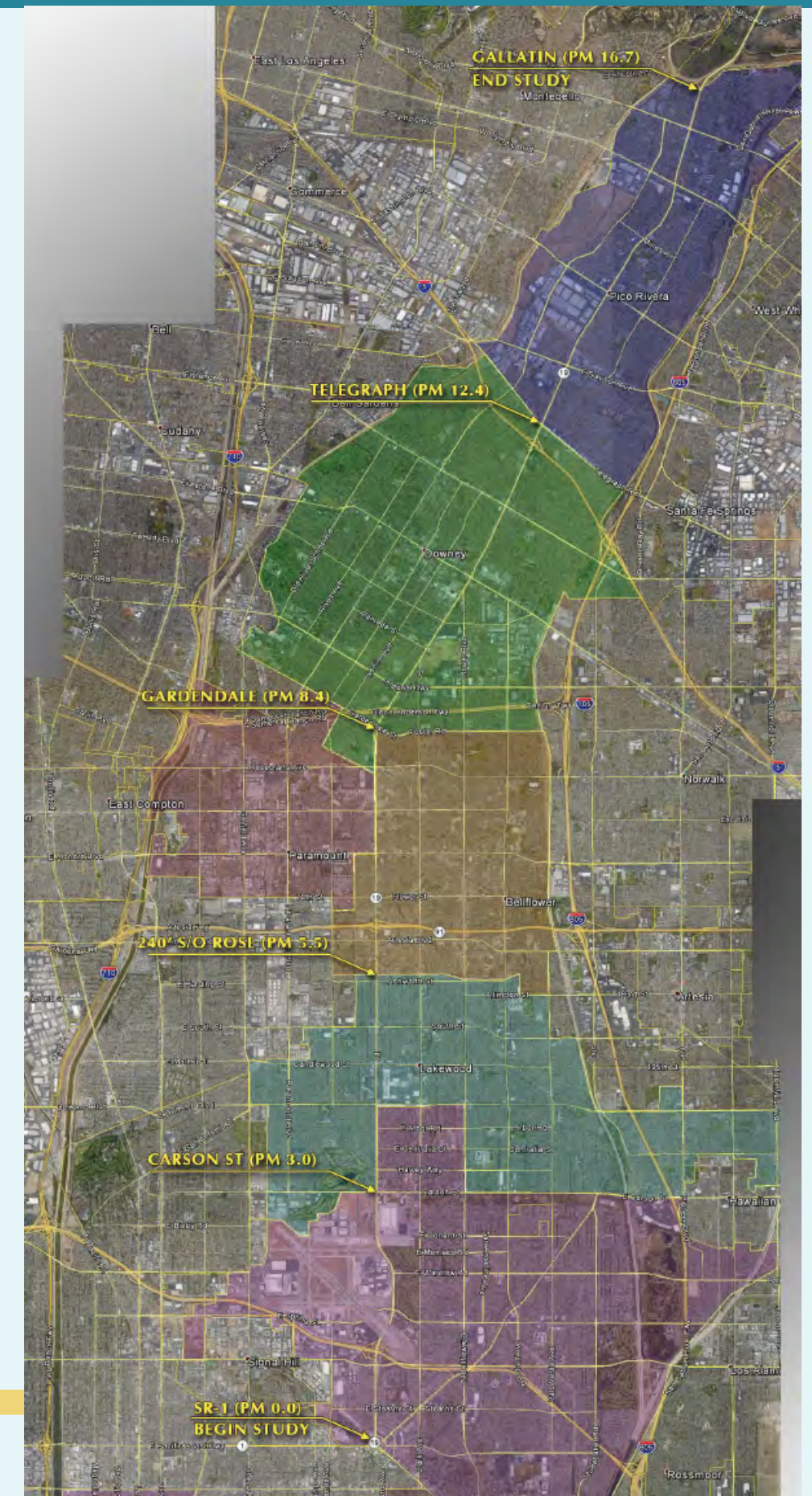
- Identify improvements to reduce transportation related greenhouse gases
- Identify concepts for creating sustainable communities
- Identify and develop community to school or safe routes to school plans
- Identify and develop Complete Street plans and streetscapes plans
- Identify and develop bike and pedestrian safety enhancement plans
- Identify traffic operations and safety enhancements opportunities

In addition, this report will evaluate:

- Corridor enhancements for multimodal mobility, access, safety, and linkages
- Transit improvement opportunities to preserve transit facilities and optimize transit infrastructure
- Accessibility and connectivity of the multimodal transportation network

The presence of a Master Plan provides opportunities to revitalize the Corridor through urban design; diversity of higher density mixed use development; and improved transit, bike, and pedestrian connectivity. The higher densities of populations in the areas results in higher volumes of traffic and transit. The “new” street will attract development to the areas because of the improved access to the larger markets of Los Angeles and Orange County. Specific areas along the Corridor may become destinations as more commercial businesses are attracted to the area.

In addition, residential growth, via multi-use or live-work space, can be expected as a result of increases in retail, nightlife, and improved multimodal connectivity, which may lessen the desire of residents to commute to Los Angeles, Orange or Riverside Counties.



EXISTING CONDITIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

City of Long Beach

Segment Description	Approximate R/W Width (ft)	Begin PM	End PM	NB	SB	Median	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	Transit Stop	RR Crossing	NB	SB	Comments
SR-1 roundabout to 300' S/O E. Stearns	115	0.0	0.4	2	3	16' painted	0	12'	0	0	Yes	No	No	No	Yes	None	None	Yes	Yes	SB LT pocket to Outer Way, NB right lane=20'	
I/S of E. Stearns	115	0.4		2	3	0	12	12	0	0	Yes	0	Yes	Yes	No	Yes	None	None	No	No	Comm line E/W on southern side of I/S
400' N/O E. Stearns to 300' S/O E. 23rd	110	0.6	0.7	3	3	16' painted	0	0	0	0	0	0	Yes	Yes	Yes	Yes	None	None	No	No	4' raised curb median inside painted median
I/S of E. 23rd	110	0.7		3	3	0	12	12	0	0	0	0	Yes	Yes	Yes	Yes	None	None	No	No	Comm line E/W on southern side of I/S
300' N/O E. 23rd to 500' S/O E. Willow	120*	0.7	0.8	3	3	16' painted	0	0	0	0	0	0	Yes	Yes	Yes	No	None	None	No	No	4' raised curb median inside painted median
I/S of E. Willow	130	0.9		4	3	0	2x12	2x12	0	0	0	0	Yes	Yes	Yes	No	None	None	No	No	
300' N/O E. Willow to I-405 UC	145*	1.0	1.1	4	3	16' RCM	0	0	0	2x12	0	0	No	No	No	No	None	None	No	No	Widths vary approaching I-405 interchange
Undereath I-405 UC	115	1.1		3	3	6 RCM	0	0	0	0	0	0	Yes	Yes	No	No	None	None	No	No	190ft UC structure for I-405
I-405 UC to LB Airport UC	120*	1.1	1.2	3	3	10	0	0	0	0	0	0	0	0	No	No	None	None	No	No	
LB Airport OC	90	1.2	1.4	3	3	Wall	0	0	0	0	0	0	Yes	Yes	No	No	None	None	No	No	1000ft OC structure for LB Airport runways
LB Airport OC to 300' S/O E. Spring	140*	1.4	1.5	3	3	6-18 RCM	0	0	0	0	0	0	Yes	Yes	No	No	None	None	No	No	
I/S of E. Spring	150*	1.6		4	3	0	2x12	2x12	12	2x12	0	0	Yes	Yes	No	No	None	None	No	No	
300' N/O E. Spring to 300' S/O E. Wardlow	130*	1.7	1.9	4	4	18 RCM	0	0	0	0	0	0	Yes	Yes	No	No	None	None	No	No	
I/S of E. Wardlow	135	2.0		3	3	0	2x12	2x12	0	12	0	0	Yes	Yes	No	No	None	None	No	No	
300' N/O E. Wardlow to 300' S/O E. Conant	175*	2.1	2.4	4	4	20 RCM	0	0	0	0	0	0	Yes	Yes	No	No	None	None	No	Yes	RW includes frontage road
I/S of E. Conant	125*	2.5		3	3	4 RCM	2x12	2x12	12	0	0	0	Yes	Yes	Yes	Yes	None	None	No	No	SB No. 3 lane has width for RTL. OH Comm and power perpendicular.
300' N/O E. Conant to 300' S/O Carson	135*	2.6	2.9	3	3	20 RCM	0	0	0	0	0	0	Yes	Yes	No	Yes	None	None	No	No	T-I/S's of Cover and Douglas w/ turn pockets in median
I/S of E. Carson	130*	3.0		3	3	4	2x12	12	12	12	0	0	Yes	Yes	No	Yes	None	None	No	No	R/W narrows N/O Carson I/S
300' N/O Carson to Del Amo	105	3.1	3.9	2	2	20**	Var.	Var.	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	Yes	Yes	**20ft painted median w/ 4ft RCM. Frontage roads not in entire segment.
I/S of Del Amo	105*	4.0		3	2	0	12	12	0	12	0	0	0	0	No	No	None	None	No	No	Drainage structure immediately S/O I/S.



EXISTING CONDITIONS Lakewood/Rosemead Boulevard Master Plan and Complete Street Evaluation Study

City of Downey

Segment Description	*Varies/Avg	Begin PM	End PM	Thru Lanes		Median	LT		RT		Parking		Sidewalk		OH Utilities		Transit Stop	RR Crossing	Frontage Roads		Comments
	Approximate R/W Width (ft)			NB	SB		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB			NB	SB	
300' N/O Somerset to 300' S/O Rosecrans	110	7.5	7.9	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate No. 3 lane
I/S of Rosecrans	110	8.0		2	2	5 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Rosecrans to 300' S/O Gardendale	160*	8.1	8.3	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes*	Yes*	Yes	Yes	None	None	Yes	Yes	N & S frontage roads separated by 8' RC parkway. SW's on frontage only.
I/S of Gardendale	100	8.4		2	2	2-5 RCM	12	12	0	12	Yes	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Gardendale to 300' S/O I-105 UC	105	8.5	8.4	2	2	0-3 painted	12	12	12	12	No	No	Yes	Yes	No	No	Stonewood Center	None	Yes	No	
I-105 OC	130*	8.5		2	2	0	2x12	0	0	0	No	No	Yes	Yes	No	No	None	None	No	No	330' OC at I-105. Transit pullouts in NB & SB.
300' N/O I-105 UC to 300' S/O Imperial Hwy	130*	8.6	8.9	2/3	2	15 RCM	0	0	0	2x12	No	No	Yes	Yes	No	No	None	None	Yes	No	RW include NB frontage road. 10' RC parkway at frontage road.
I/S of Imperial Hwy	120	9.0		3	3	4 RCM	2x12	2x12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Imperial Hwy to 300' S/O Firestone	130*	9.1	10.4	3	3	15 RCM	12/var	12	0	0	No	No	Yes	Yes	No	No	None	None	No	Yes	RW width includes frontage road. N & S frontage roads separated by 8' RC parkway. SW's on frontage only.
I/S of Firestone	125*	10.5		3	3	3-8 RCM	12	12	12	12	No	No	Yes	Yes	No	No	Pico Rivera Plaza	None	No	No	
300' N/O Firestone to 300' S/O Florence	100	10.6	11.3	3	3	3-20 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
I/S of Florence	100	11.4		3	3	3-5 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Florence to 300' S/O I-5 UC	140-160*	11.5	12.0	2	2	0-16 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	Yes	Yes	RW includes frontage. Frontage roads separated by 14' RC parkways
I-5 UC	130	12.1		2	3	15 RCM	0	0	2x12	12	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O I-5 UC to 300' S/O Telegraph	100	12.2	12.4	2	2	16 RCM	12	0	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
I/S of Telegraph	100	12.5		2	2	5 RCM	12	12	0	0	No	No	Yes	Yes	No	No	Whittier Narrows Recreation Area	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT



EXISTING CONDITIONS Lakewood/Rosemead Boulevard Master Plan and Complete Street Evaluation Study

City of Lakewood

Segment Description	*Varies/Avg	Begin PM	End PM	Thru Lanes		Median	LT		RT		Parking		Sidewalk		OH Utilities		Transit Stop	RR Crossing	Frontage Roads		Comments
	Approximate R/W Width (ft)			NB	SB		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB			NB	SB	
300' N/O Carson to Del Amo	105	3.1	3.9	2	2	20**	Var.	Var.	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	Yes	Yes	**20ft painted median w/ 4ft RCM. Frontage roads not in entire segment.
I/S of Del Amo	105*	4.0		3	2	0	12	12	0	12	0	0	0	0	No	No	None	None	No	No	Drainage structure immediately S/O I/S.
300' N/O Del Amo to 300' S/O Candlewood	120	4.1	4.4	3	3	30 RCM	Var.	Var.	0	0	0	0	Var	Var	No	Yes	Metro 265, 266; LB91, LB93, LB103, LB111, LB112, LB176, LB191	None	No	Parking*	Parking lot on other side of 15' parkway
I/S of Candlewood	145	4.5		3	3	Var RCM	12	2x12	12	0	0	0	Yes	Yes	No	Yes	None	None	No	No	



EXISTING CONDITIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

City of Bellflower

Segment Description	*Varies/Avg Approximate R/W Width (ft)	Begin PM	End PM	Thru Lanes		LT		RT		Parking		Sidewalk		OH Utilities		Transit Stop	RR Crossing	Frontage Roads		Comments	
				NB	SB	Median	NB	SB	NB	SB	NB	SB	NB	SB	NB			SB	NB		SB
300' N/O Candlewood to 300' S/O Rose	170*	4.6	5.5	3	3	Var RCM	Var.	Var.	0	0	0	0	Yes	Yes	Yes	Yes	Metro 117, 265, 266	None	Yes	Yes	N & S frontage roads separated by 8' RC parkway. Major power transmission line xing 200' N/O Ashworth
I/S of Rose	115	5.6		3	3	5 painted	12	12	0	0	0	0	Yes	Yes	Yes	Yes	None	None	Yes	Yes	N & S frontage roads separated by var width RC parkway
300' N/O Rose to 400' S/O SR-91 UC	105	5.6	6.0	3	3	5-12*	Var.	Var.	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	*5' RCM inside variable width painted medians. NB OH power stops at Artesia.
SR-91 UC	125	6.1		2	2	16 RCM	0	0	12	12	No	No	Yes	Yes	No	Yes*	None	None	No	No	200' undercrossing at SR-91 includes mainline and EB onramp. *Powerlines outside City R/W
300' N/O SR-91 UC to 300' S/O Flower	100	6.2	6.3	2	2	20 painted	Var.	Var.	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	No	No	
I/S of Flower	100	6.5		2	2	5 RCM	12	12	0	0	No	No	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Flower to 300' S/O Alondra	105	6.6	6.8	2	2	5-20 painted	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	Yes	No	NB frontage has 10' RC landscaped parkway
I/S of Alondra	110	6.9		2	2	5 RCM	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Alondra to 300' S/O Somerset	100	7.0	7.3	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate No. 3 lane
I/S of Somerset	100	7.4		2	2	5 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Somerset to 300' S/O Rosecrans	110	7.5	7.9	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate No. 3 lane
I/S of Rosecrans	110	8.0		2	2	5 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Rosecrans to 300' S/O Gardendale	160*	8.1	8.3	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes*	Yes*	Yes	Yes	None	None	Yes	Yes	N & S frontage roads separated by 8' RC parkway. SW's on frontage only.
I/S of Gardendale	100	8.4		2	2	2-5 RCM	12	12	0	12	Yes	No	Yes	Yes	No	No	None	None	No	No	



EXISTING CONDITIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

City of Pico Rivera

Segment Description	*Varies/Avg Approximate R/W Width (ft)	Begin PM	End PM	Thru Lanes		LT		RT		Parking		Sidewalk		OH Utilities		Transit Stop	RR Crossing	Frontage Roads		Comments	
				NB	SB	Median	NB	SB	NB	SB	NB	SB	NB	SB	NB			SB	NB		SB
I/S of Telegraph	100	12.5		2	2	5 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Telegraph to 300' S/O Slauson	100	12.6	13.0	2	2	4-18 RCM	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	800' S/O I/S	No	No	
I/S of Slauson	100	13.1		2	2	5 RCM	12	12	0	12	No	No	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lane in NB direction wide enough for RT
300' N/O Slauson to 300' S/O Washington	135*	13.2	14.0	2	2	0,4-12 RCM	12	12	0	0	No	No	Yes	Yes	Yes	Yes	None	1250' N/O I/S*	No	No	*RR underpasses (2), 4 tracks total
I/S of Washington	100*	14.1		2	2	4 RCM	12	12	12	12	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Washington to 300' S/O Mines	100/165*	14.2	14.7	2/3	2	4-15 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	Yes	Yes	RW includes frontage. Frontage roads separated by 10' RC parkways. Ped OC 0.5 mi N/O I/S
I/S of Mines	100	14.8		2	2	6 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Mines to 300' S/O Whittier	100/155*	14.9	15.5	2	2	15 RCM	12	12	0	0	No	No	Yes	Yes	No	No	Flair Business Park	None	Yes	Yes	RW includes frontage. Frontage roads separated by 12' RC parkways.
I/S of Whittier	105	15.6		2	2	4 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	
300' N/O Whittier to 300' S/O Beverly	115*/Var	15.7	16.1	2	2/3	4-12 RCM	12	12	0	0	No	No	Yes	Yes	No	Yes	None	900' N/O I/S*	Yes	No	*RR underpass, 4 tracks total
I/S of E. Beverly	135*	16.2		2	2	6 RCM	12	2x12	12	0	No	No	Yes	Yes	Yes	Yes	None	None	No	No	
300' N/O Beverly to 300' S/O Gallatin	125	16.3	16.6	2	2	15 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	No	None	None	No	No	
I/S of Gallatin (Pico Rivera City limit)	125	16.7		2	2	4 RCM	12	12	12	12	No	No	Yes*	Yes*	Yes	No	None	None	No	No	Sidewalks S/O I/S only. Major transmission tower x-ing over I/S.



EXISTING CONDITIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

City of Paramount

Segment Description	*Varies/Avg	Begin PM	End PM	Thru Lanes		Median	LT		RT		Parking		Sidewalk		OH Utilities		Transit Stop	RR Crossing	Frontage Roads		Comments
	Approximate R/W Width (ft)			NB	SB		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB			NB	SB	
I/S of Alondra	110	6.9		2	2	5 RCM	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Alondra to 300' S/O Somerset	100	7.0	7.3	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes	Yes	Yes	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate No. 3 lane
I/S of Somerset	100	7.4		2	2	5 RCM	12	12	0	0	No	No	Yes	Yes	No	No	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate RT
300' N/O Somerset to 300' S/O Rosecrans	110	7.5	7.9	2	2	5-20 RCM	12	12	0	0	Yes	Yes	Yes	Yes	No	Yes	None	None	No	No	No. 2 lanes in SB and NB wide enough to accommodate No. 3 lane



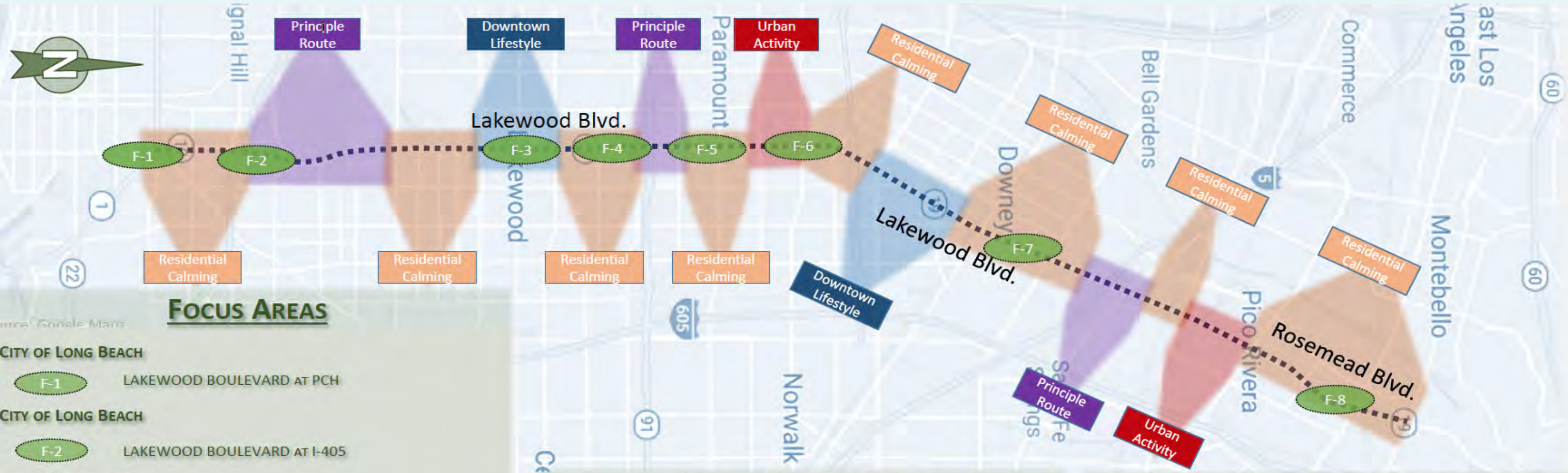
CORRIDOR VISION

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study



STREET DESIGNATIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study



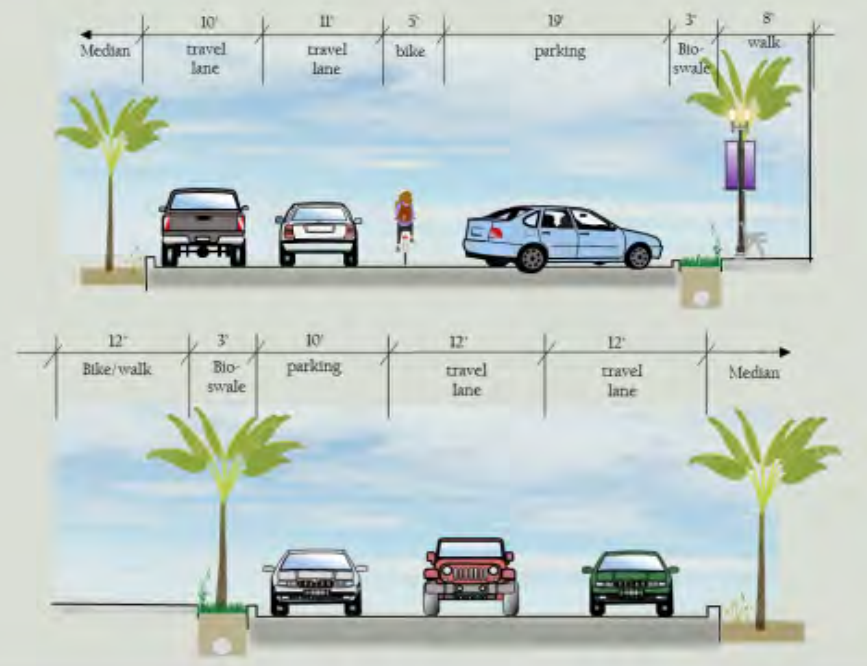
FOCUS AREAS

- CITY OF LONG BEACH**
F-1 LAKEWOOD BOULEVARD AT PCH
- CITY OF LONG BEACH**
F-2 LAKEWOOD BOULEVARD AT I-405
- CITY OF LAKEWOOD**
F-3 LAKEWOOD BOULEVARD AT DEL AMO BLVD
- CITY OF BELLFLOWER & PARAMOUNT**
F-4 LAKEWOOD BOULEVARD AT SR-91
- CITY OF BELLFLOWER & PARAMOUNT**
F-5 LAKEWOOD BOULEVARD AT ALONDRA BLVD
- CITY OF BELLFLOWER & PARAMOUNT**
F-6 LAKEWOOD BOULEVARD AT SOMERSET BLVD & FUTURE ECO-RAPID CORRIDOR
- CITY OF DOWNEY**
F-7 LAKEWOOD BOULEVARD AT FIRESTONE
- CITY OF PICO RIVERA**
F-8 ROSEMEAD BOULEVARD AT MINES AVE

STREET DESIGNATIONS

No	Type	Description
1	Downtown Lifestyle	Street designed to serve retail and mixed land uses, promoting walking, bicycling, and transit within an attractive landscaped corridor.
2	Urban Activity	Street designed to serve mixed use commercial, retail and residential areas with active transportation activities.
3	Residential Calming	Street designed to promote slowing traffic.
4	Principal Route	Multi-lane facility designed to serve higher volume traffic corridor movements.

STREET TYPICAL-SECTION SAMPLES



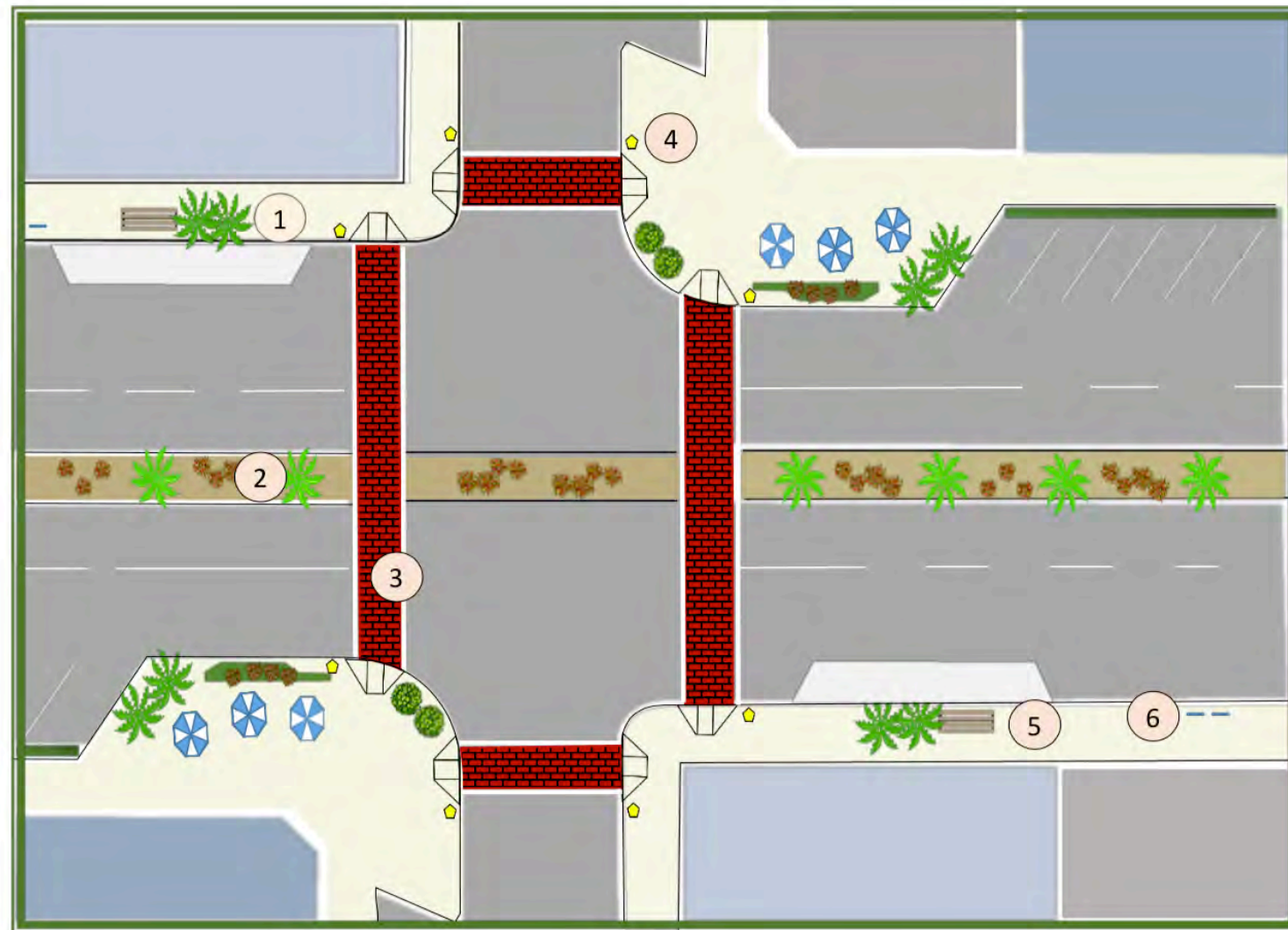
STREET DESIGNATIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

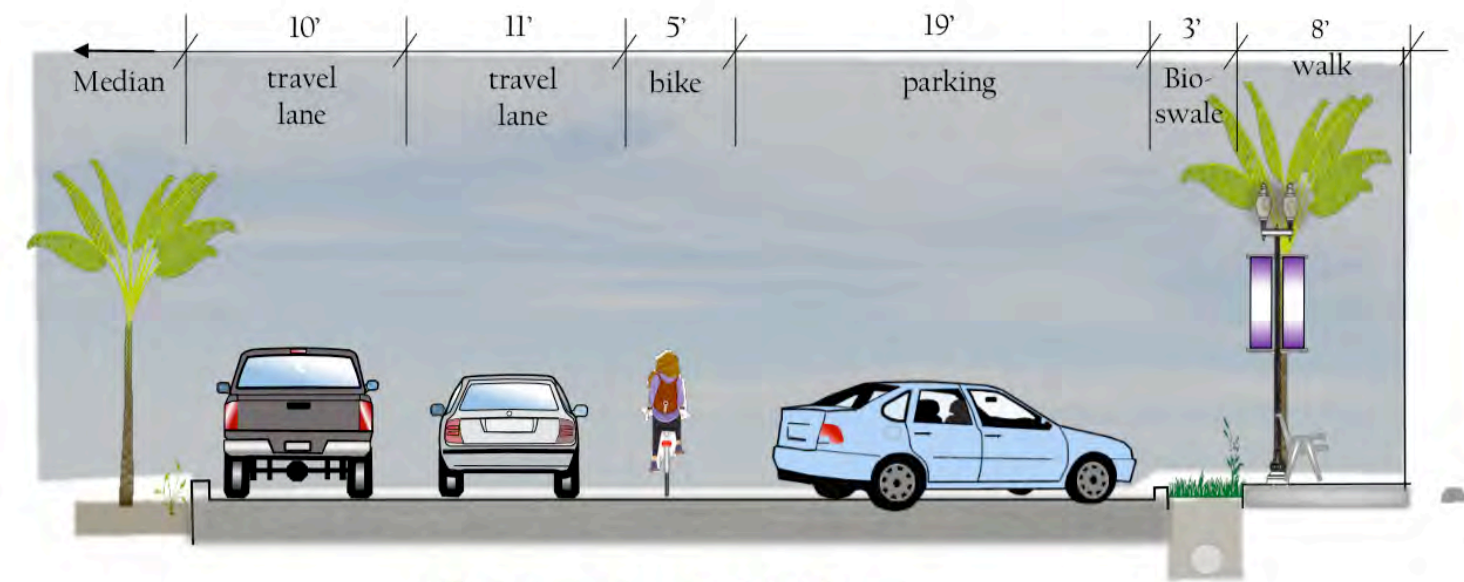
Downtown Living

Characteristics of Downtown Living Streets:

- Reduce Traffic Speeds
- Promote Pedestrian Activity
- Landscape Medians
- Mature Street Trees
- Special Districts
- Transit Connections



- 1 Street Tree
- 2 Landscaped Median
- 3 Decorative Cross Walk
- 4 Decorative Street/Pedestrian Lighting
- 5 Bus Stop with amenities
- 6 Streetscape Bike Racks



Downtown Living
Roadway Half-Section

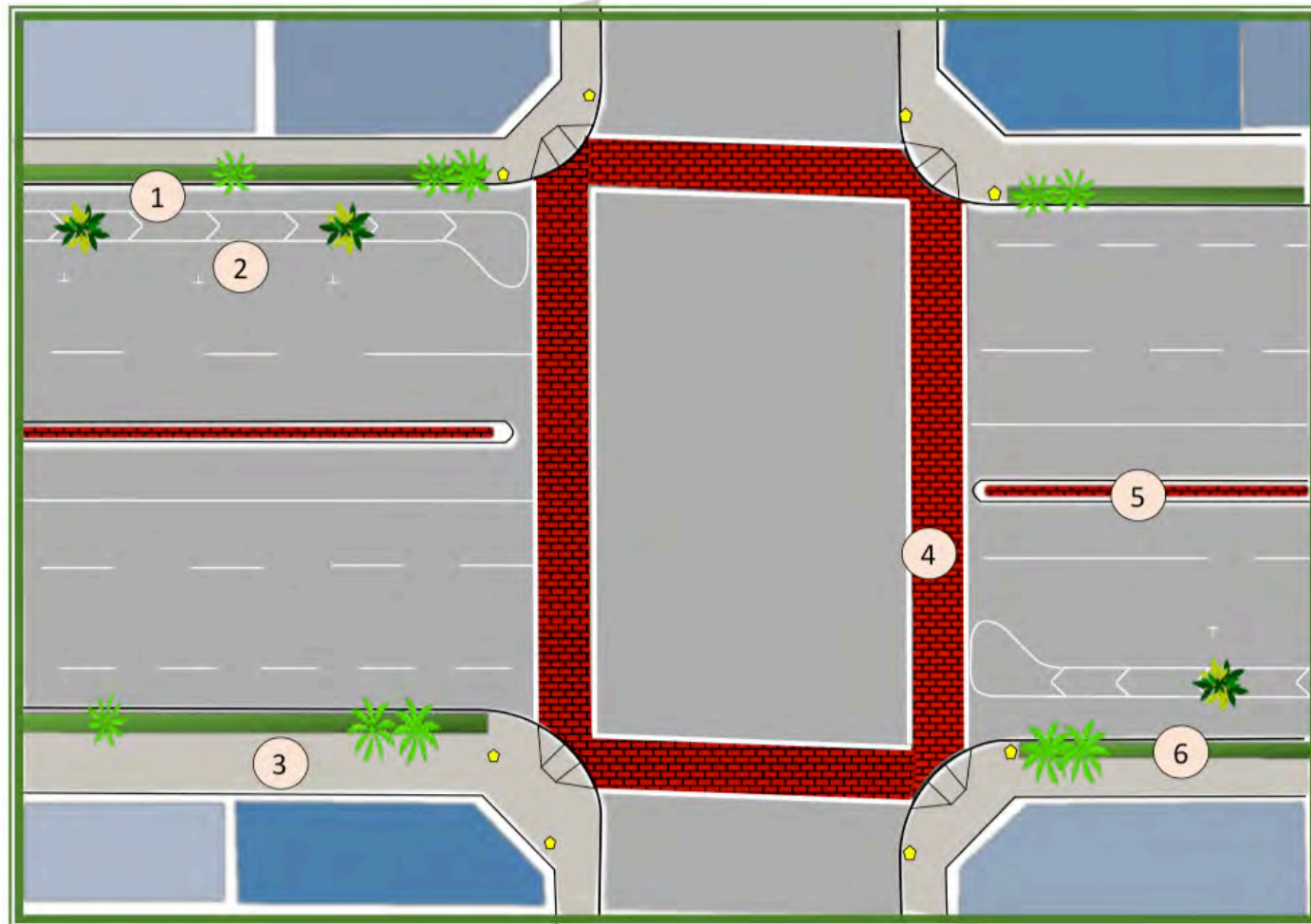
STREET DESIGNATIONS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

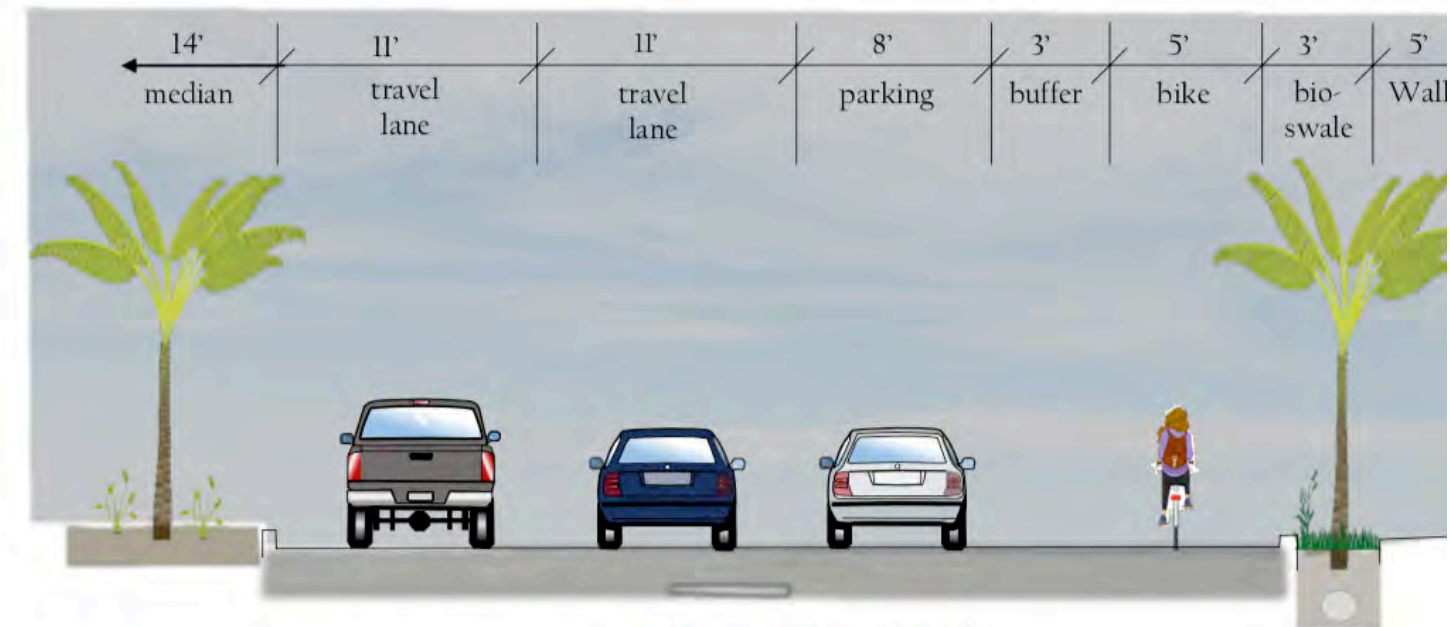
Urban Activity

Characteristics of Urban Activity Streets:

- Promote Active Transportation
- Water Quality Features
- Landscape Medians
- On-street Parking
- Defined Crosswalks



- 1 Bikeway
- 2 Street Parking
- 3 Walkway
- 4 Decorative Cross Walk
- 5 Landscaped Median
- 6 Bio-Swale



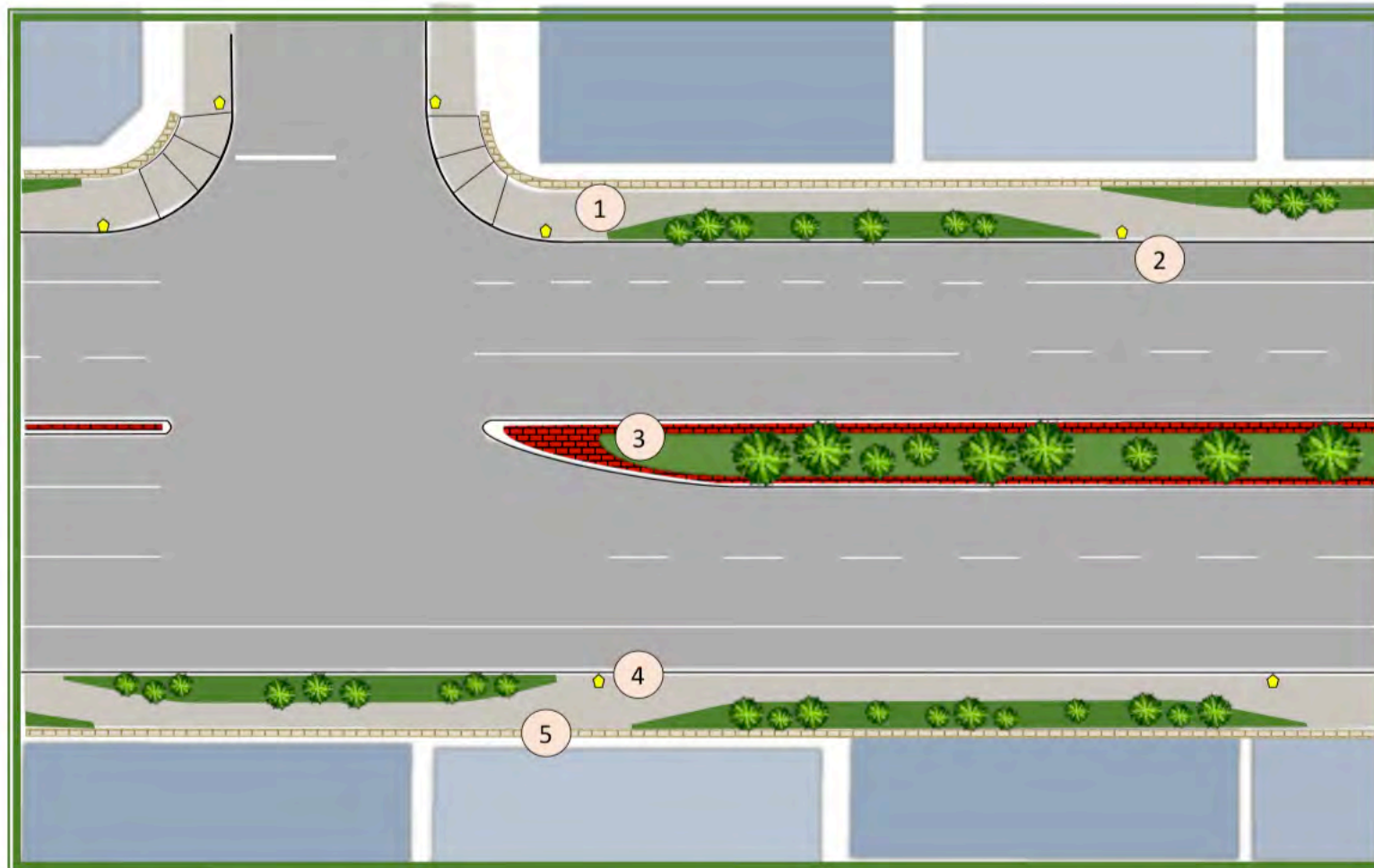
Urban Activity
Roadway Half-Section

STREET DESIGNATIONS

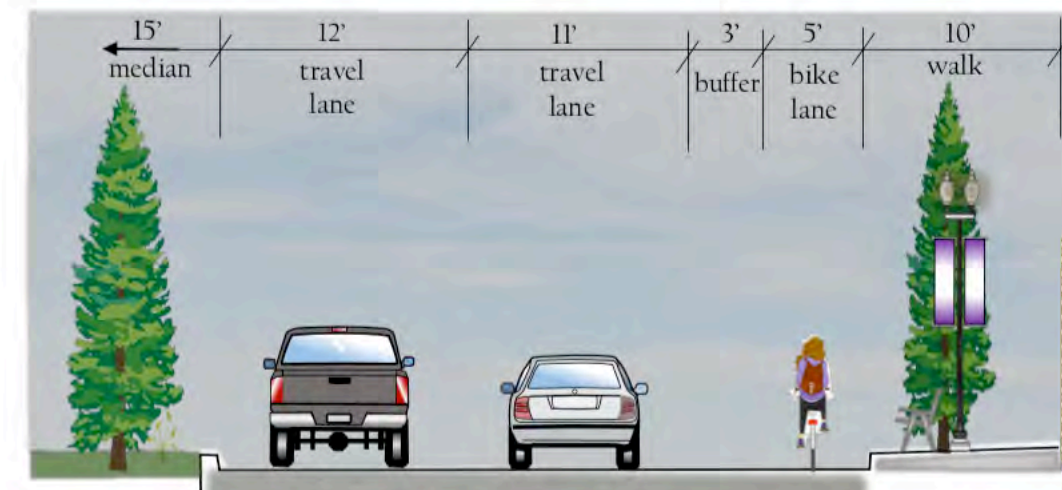
Residential Living

Characteristics of Residential Living Streets:

- Narrower Lanes to Reduce Traffic Speeds
- Promote Bike Activity
- Promote Pedestrian Activity
- Mature Street Trees
- Soundwalls



- ① Meandering Walkway
- ② Bike Lane
- ③ Landscape/Hardscape Medians
- ④ Decorative Street/Pedestrian Lighting
- ⑤ Soundwalls



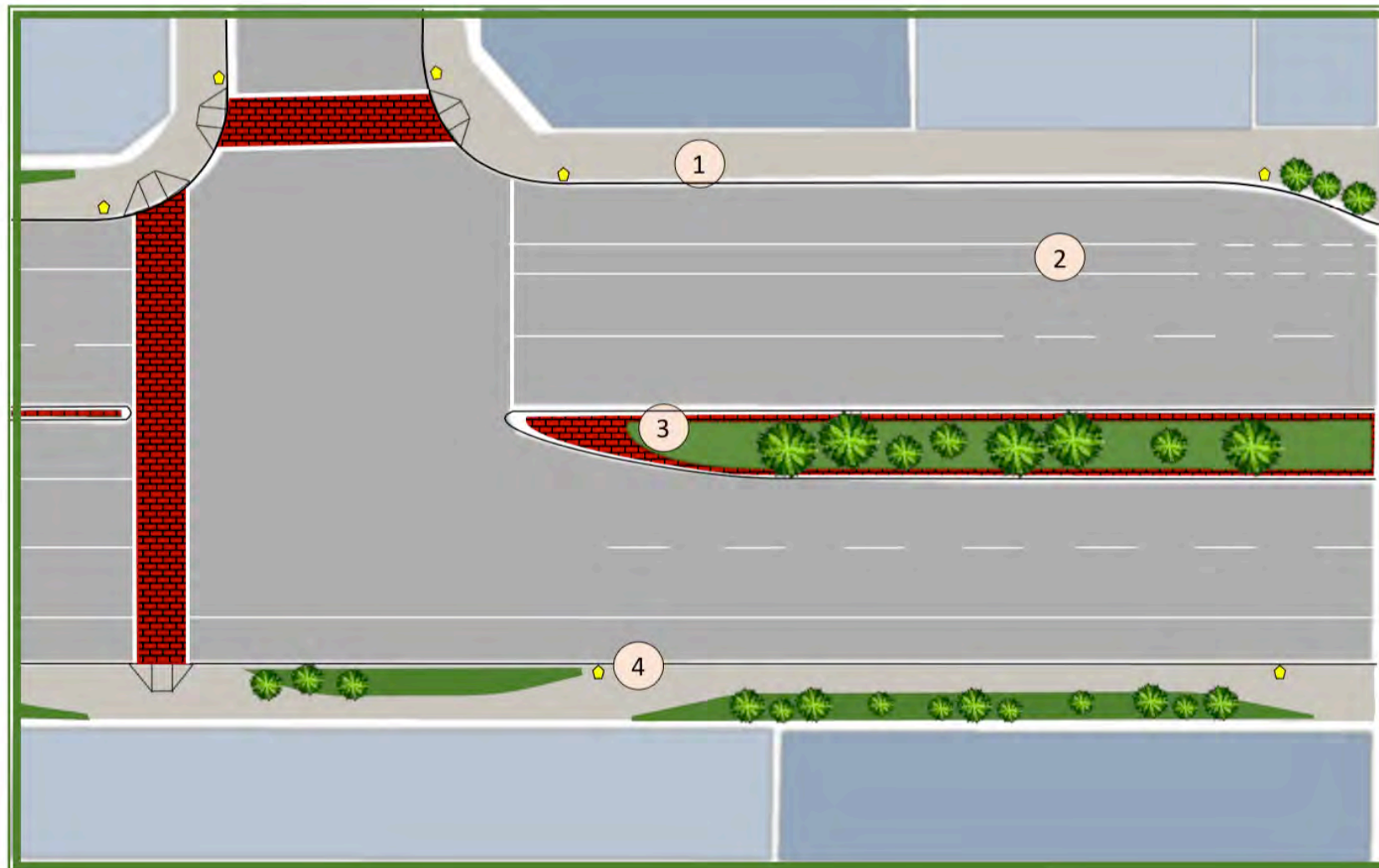
Residential Living
Roadway Half-Section

STREET DESIGNATIONS

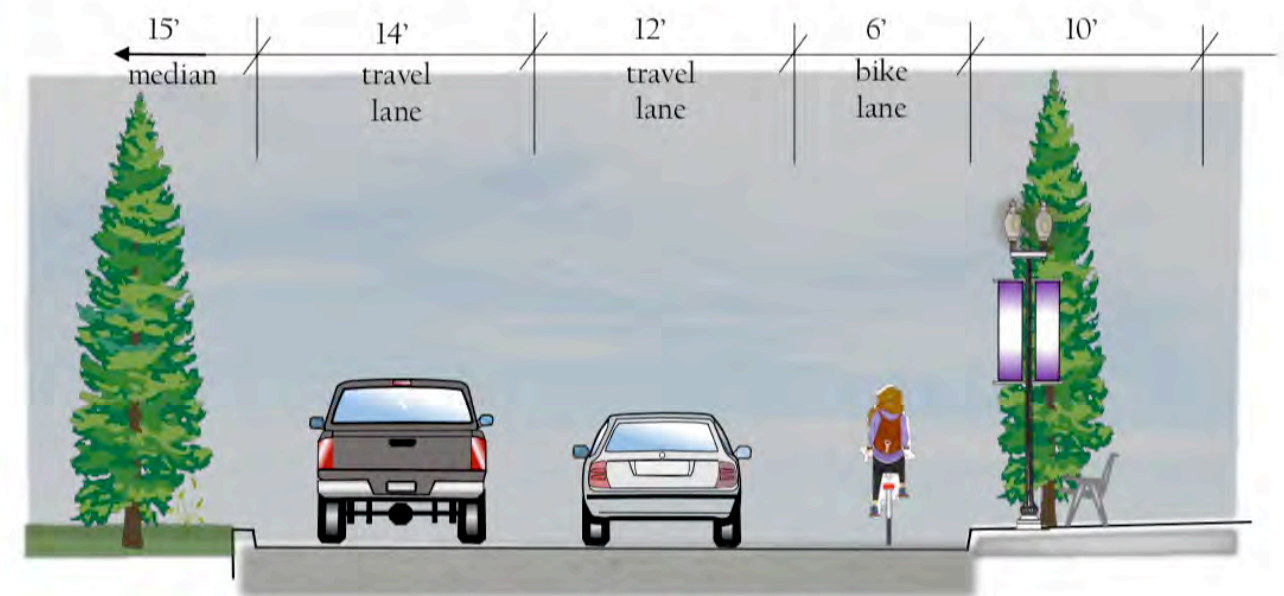
Principle Arterial

Characteristics of Principle Arterial Streets:

- Standard lanes
- Promote Bike Activity
- Promote Pedestrian Activity
- Mature Street Trees
- Transit Connections



- ① Meandering Walkway
- ② Bike Lane
- ③ Landscape/Hardscape Medians
- ④ Decorative Street/Pedestrian Lighting

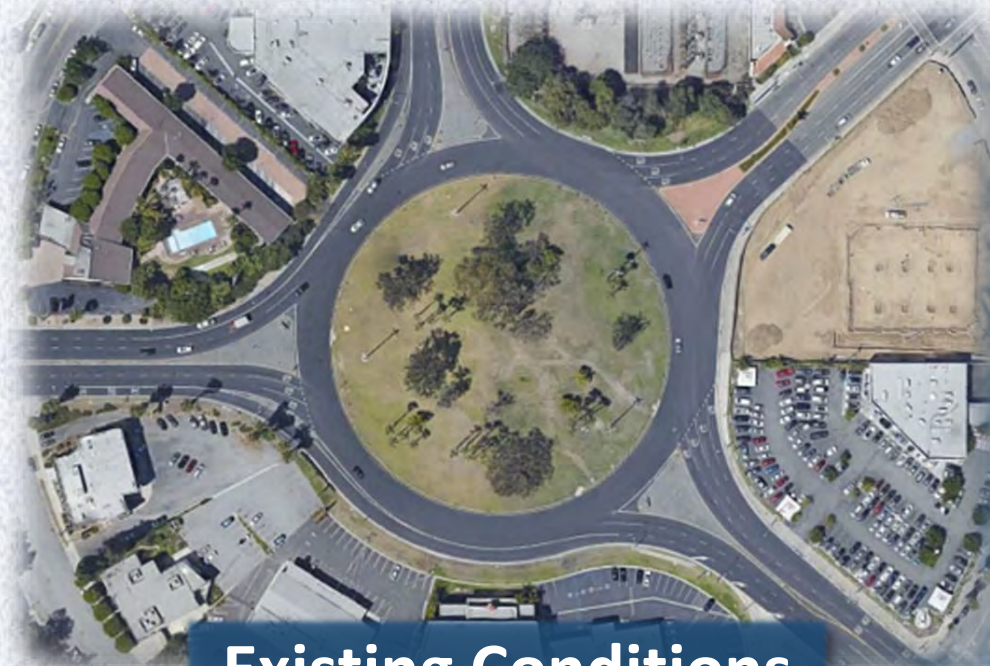


Principle Arterial
Roadway Half-Section

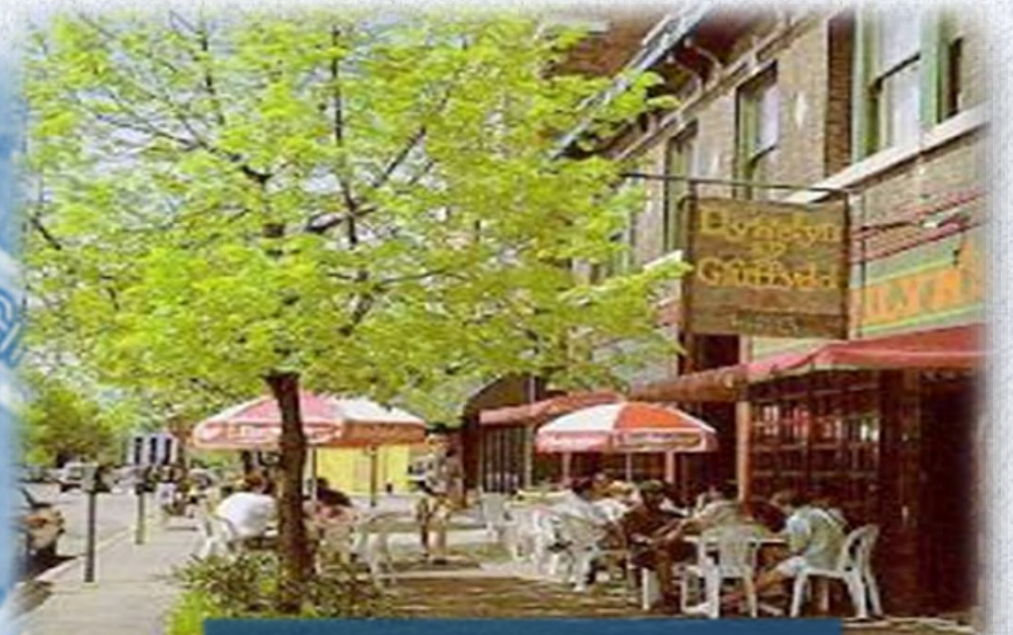
STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-1 City of Long Beach - Lakewood Boulevard at Pacific Coast Highway



Existing Conditions



Sidewalk Parkway



- Improve Operations
- Bicycle & Pedestrian Safety
- Reduce paved areas
- Activate parkways
- Enhance Aesthetics

STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-2 City of Long Beach - Lakewood Boulevard at I-405



C



A



C

B

A

N



D



B

STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-3 City of Lakewood - Lakewood Boulevard at Del Amo Boulevard

The exhibit displays four focus areas along Lakewood Boulevard:

- A:** Residential street view near E Arbor Rd, featuring a Chase bank building.
- B:** Street view showing a dedicated bike lane with a bicycle symbol on the pavement.
- C:** Residential street view near Pimenta Ave, showing a McDonald's restaurant.
- D:** Major intersection view at Del Amo Blvd, showing traffic lights and a McDonald's restaurant.

A central map shows the layout of Lakewood Boulevard between Del Amo Blvd and E Arbor Rd, with focus areas A, B, C, and D marked. A north arrow is also present.

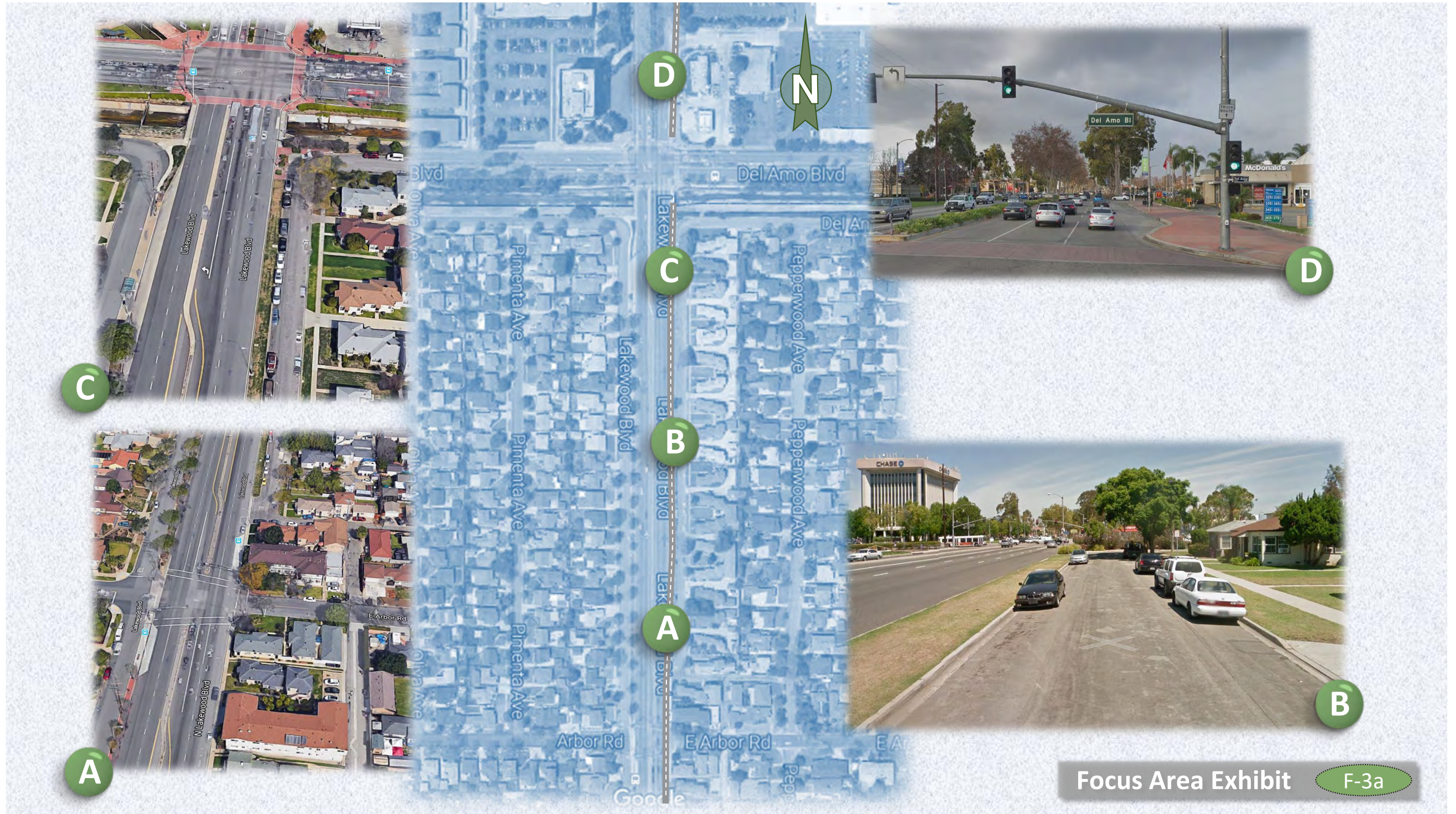
Legend: Car icon, Cyclist icon, Car icon.

Focus Area Exhibit **F-3**

STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-3 City of Lakewood - Lakewood Boulevard at Del Amo Boulevard



STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-4 City of Bellflower and City of Paramount - Lakewood Boulevard at SR-91



C



On-going Construction
Coordination with the
Lakewood Blvd / SR-91
Interchange



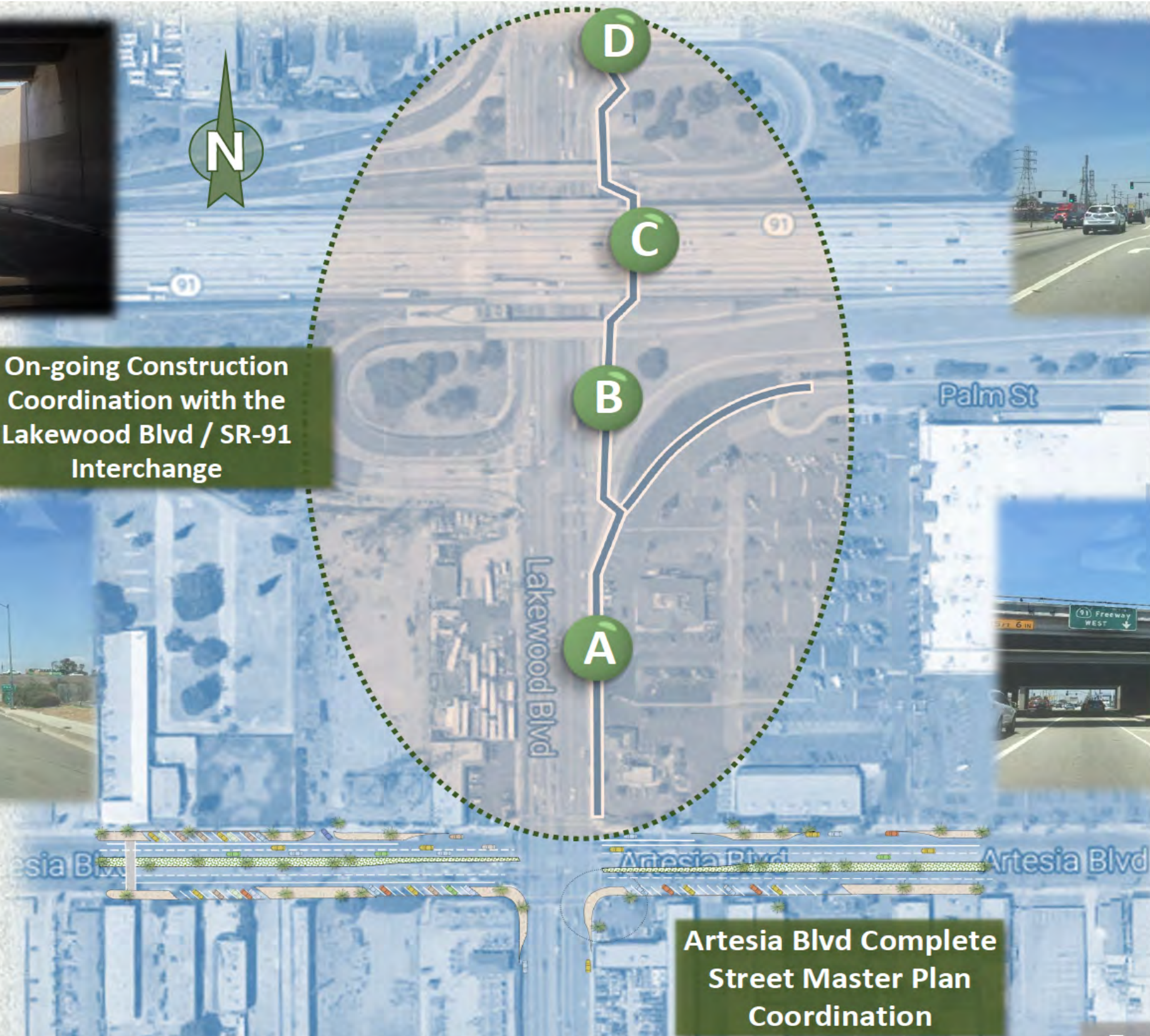
D



A



B



Artesia Blvd Complete
Street Master Plan
Coordination

STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-5 City of Bellflower and City of Paramount - Lakewood Boulevard at Alondra Boulevard

Highways to Main Streets through a Community Health Lens



Brian L. Cole, DrPH; Christina M. Battagete, MPH;

Department of Environmental Health Sciences
Center for Health Advancement
UCLA Fielding School of Public Health

Bellflower City Council
June 6, 2016

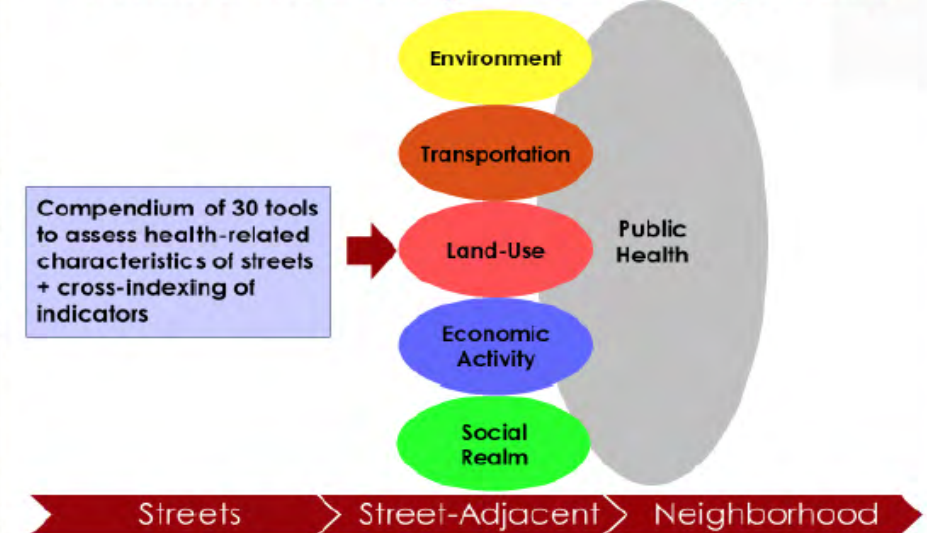
Alondra Blvd.

On-going Coordination with
UCLA Fielding School of
Public Health

Lakewood Blvd.



Aim 1. Identify tools and metrics that capture effects of street design on community health.



Objective Measures

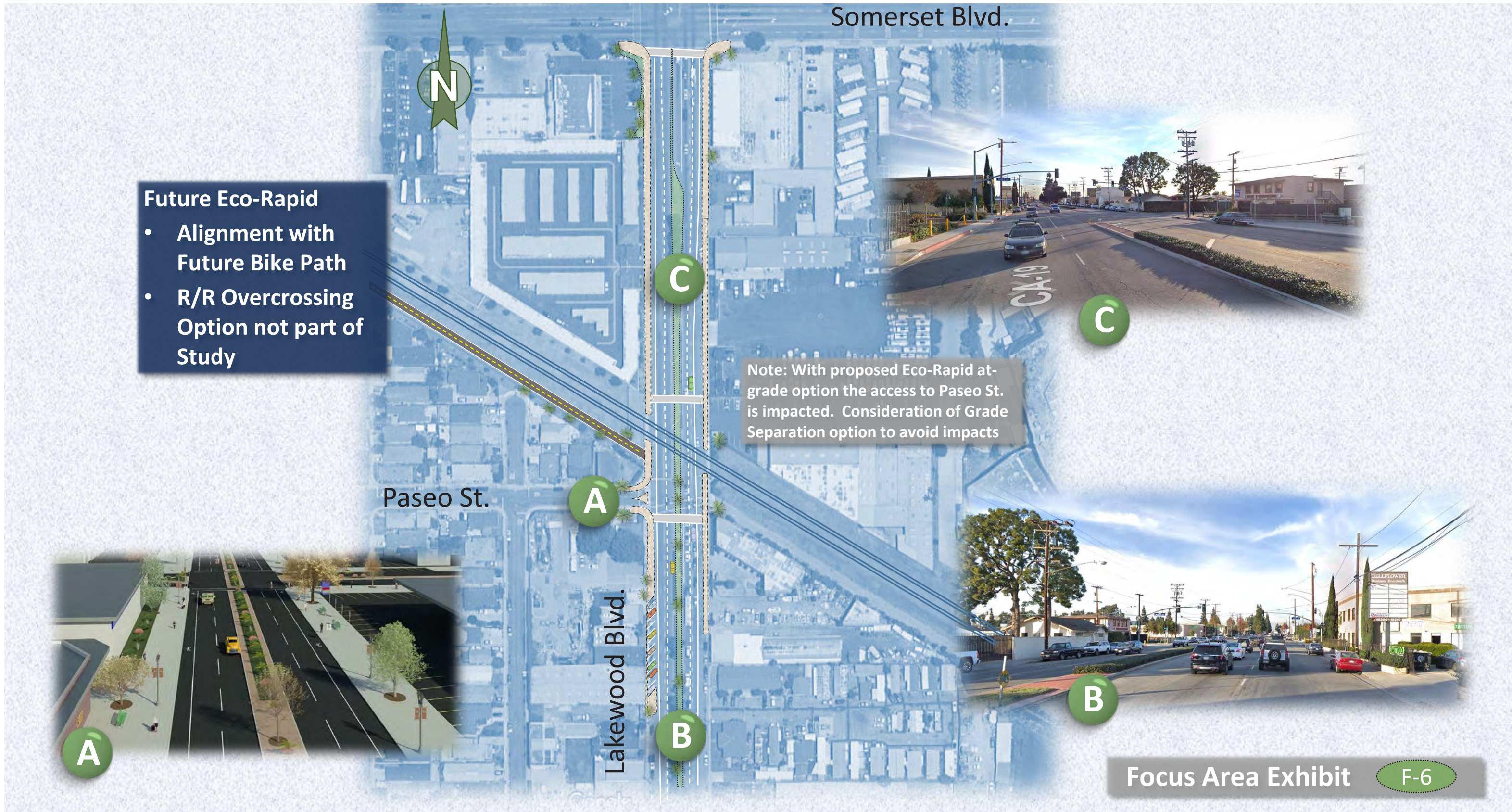
(Lakewood Blvd. examples)



STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-6 City of Bellflower and City of Paramount - Lakewood Boulevard at Somerset Blvd & Future Eco-Rapid Corridor



STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

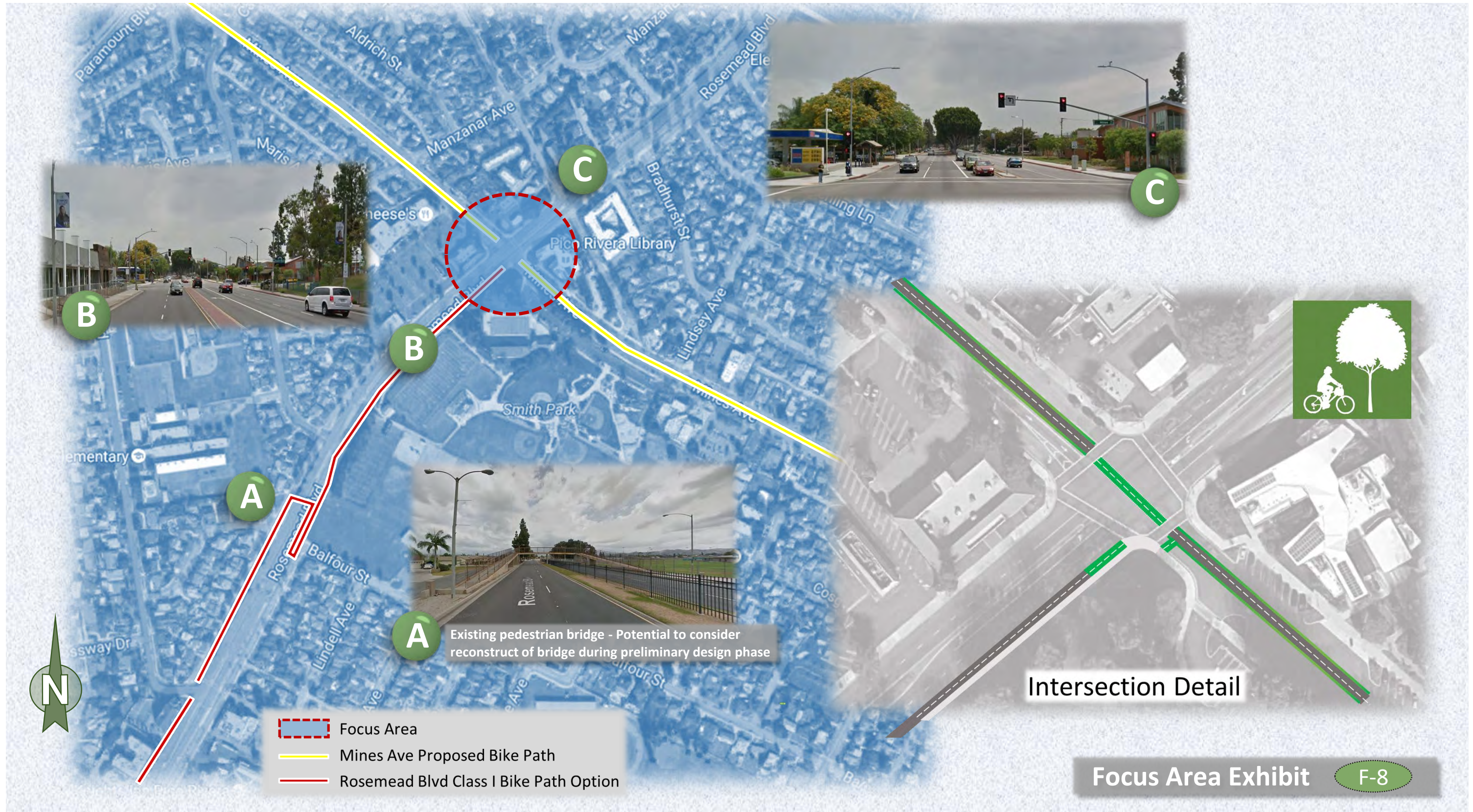
F-7 City of Downey - Lakewood Boulevard at Firestone Boulevard



STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

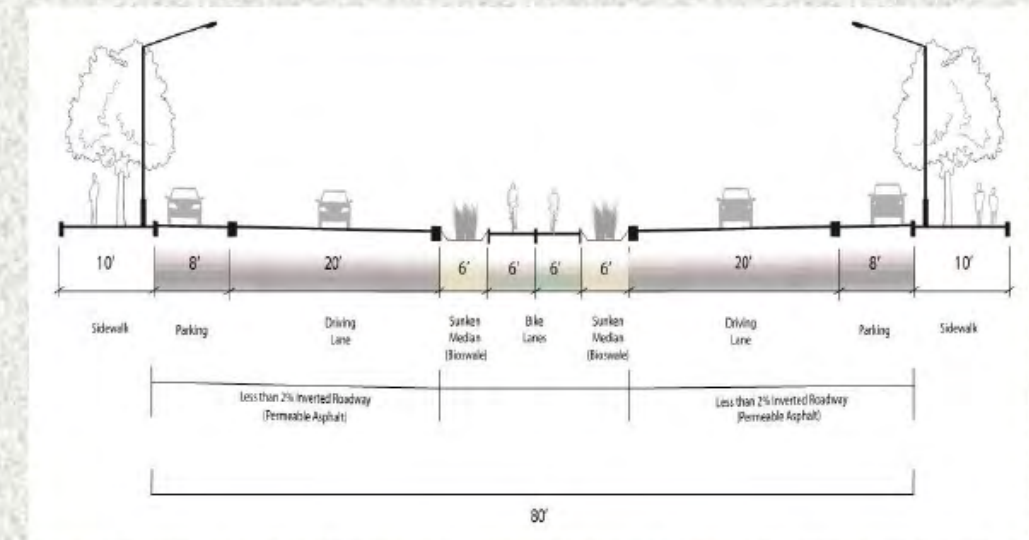
F-8 City of Pico Rivera - Rosemead Boulevard at Mines Ave



STREET FOCUS AREAS

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

F-8 City of Pico Rivera - Rosemead Boulevard at Mines Ave



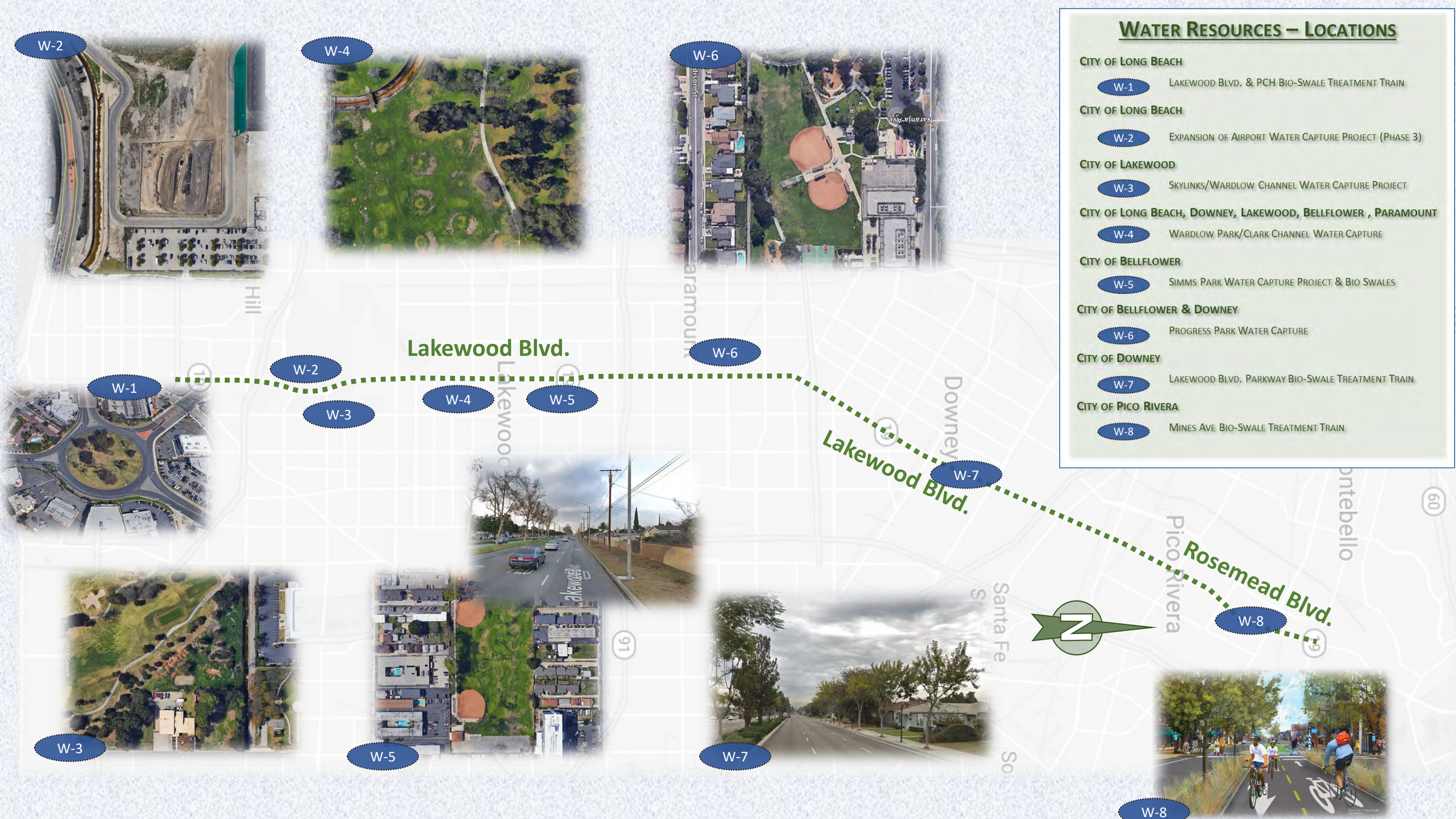
A Mines Ave – Typical Cross Section

Existing Active Transportation Network

WATER RESOURCES

Lakewood/Rosemead Boulevard
Master Plan and Complete Street Evaluation Study

Lakewood Boulevard/Rosemead Boulevard



WATER RESOURCES – LOCATIONS

CITY OF LONG BEACH

W-1 LAKEWOOD BLVD. & PCH BIO-SWALE TREATMENT TRAIN

CITY OF LONG BEACH

W-2 EXPANSION OF AIRPORT WATER CAPTURE PROJECT (PHASE 3)

CITY OF LAKEWOOD

W-3 SKYLINKS/WARDLOW CHANNEL WATER CAPTURE PROJECT

CITY OF LONG BEACH, DOWNEY, LAKEWOOD, BELLFLOWER, PARAMOUNT

W-4 WARDLOW PARK/CLARK CHANNEL WATER CAPTURE

CITY OF BELLFLOWER

W-5 SIMMS PARK WATER CAPTURE PROJECT & BIO SWALES

CITY OF BELLFLOWER & DOWNEY

W-6 PROGRESS PARK WATER CAPTURE

CITY OF DOWNEY

W-7 LAKEWOOD BLVD. PARKWAY BIO-SWALE TREATMENT TRAIN

CITY OF PICO RIVERA

W-8 MINES AVE BIO-SWALE TREATMENT TRAIN



GATEWAY CITIES
COUNCIL OF GOVERNMENTS



TABLE OF CONTENTS

1.0	INTRODUCTION	2	7.3	CITY OF BELLFLOWER	23
1.1	PROJECT GOALS AND OBJECTIVES	2	7.4	CITY OF PARAMOUNT	23
1.2	PROJECT LIMITS	3	7.5	CITY OF DOWNEY	24
1.3	SCOPE OF WORK	3	7.6	CITY OF PICO RIVERA	24
1.4	PROJECT TIMELINE	4	8.0	PRESENTATION TO COMMITTEES AND CITY COUNCILS	25
2.0	DATA COLLECTION AND REVIEW OF EXISTING CONDITIONS	5	9.0	FINALIZED CONCEPTS FOR MASTER PLAN	26
2.2.1	CITY OF PICO RIVERA	6	10.0	STEPS FORWARD	27
2.2.2	CITY OF DOWNEY	7			
2.2.3	CITY OF PARAMOUNT	7			
2.2.4	CITY OF BELLFLOWER	8			
2.2.5	CITY OF LAKEWOOD	8			
2.2.6	CITY OF LONG BEACH	8			
3.0	MULTIMODAL CORRIDOR EVALUATION AND ANALYSIS	10			
3.1	OVERVIEW	10			
3.2	STREET DESIGNATIONS ALONG THE CORRIDOR	10			
3.3	CORRIDOR WIDE CONSIDERATIONS	11			
4.0	COMPLETE STREETS NEEDS ANALYSIS	12			
4.1	TECHNICAL ELEMENTS/FEATURES INCLUDED IN STP	13			
4.1.1	AT-GRADE CROSSING PROPOSED FOR THE WEST SANTA ANA BRANCH LIGHT RAIL LINE AT LAKEWOOD BOULEVARD	13			
4.1.2	ARTERIAL SMART CORRIDOR	14			
4.1.3	TRANSIT/PARK AND RIDE	14			
4.1.4	ACTIVE TRANSPORTATION	15			
4.2	NON-TECHNICAL ELEMENTS/FEATURES OUTSIDE OF STP	15			
4.2.1	ADA	16			
4.2.2	AESTHETICS	16			
4.2.3	UTILITIES	16			
4.2.4	COMMUNITY RESOURCES	16			
4.2.4.1	SCHOOLS	16			
4.2.4.2	PARKS	17			
4.2.5	WATER QUALITY AND SUSTAINABLE STORMWATER DESIGN	17			
4.2.6	SUSTAINABILITY	19			
4.3	MITIGATING HOMELESSNESS	19			
4.4	OBJECTIVES CRITERIA MATRIX	20			
5.0	COMMUNITY AND STAKEHOLDER OUTREACH	21			
6.0	COMPLETE STREETS IMPLEMENTATION	21			
7.0	ORDER OF MAGNITUDE COST ESTIMATES	21			
7.1	CITY OF LONG BEACH	22			
7.2	CITY OF LAKEWOOD	22			



1.0 INTRODUCTION

1.1 Project Goals and Objectives

This report is intended to serve as a guide for implementation of a project that will create a more attractive, livable, and pedestrian and bike friendly environment that operates effectively and efficiently for all modes of transportation along Lakewood/Rosemead Boulevard within the Gateway Cities.

The goal of this project is to improve the Corridor by promoting a balanced, comprehensive multimodal transportation system in an effort to enhance sustainability of the communities that it serves and to address local and regional transportation needs. The study results and the Complete Street Master Plan are expected to lead to the programming, development, and construction of a Complete Street along Lakewood/Rosemead Boulevard. Specific goals are to: 1) improve the multimodal mobility and access, 2) promote and preserve multimodal transportation system, 3) improve safety and security, 4) foster livable and healthy communities, 5) promote social equity and environmental justice, 6) improve the air quality, and 7) support economic vitality and quality of life of its communities.

Objectives of this report include:

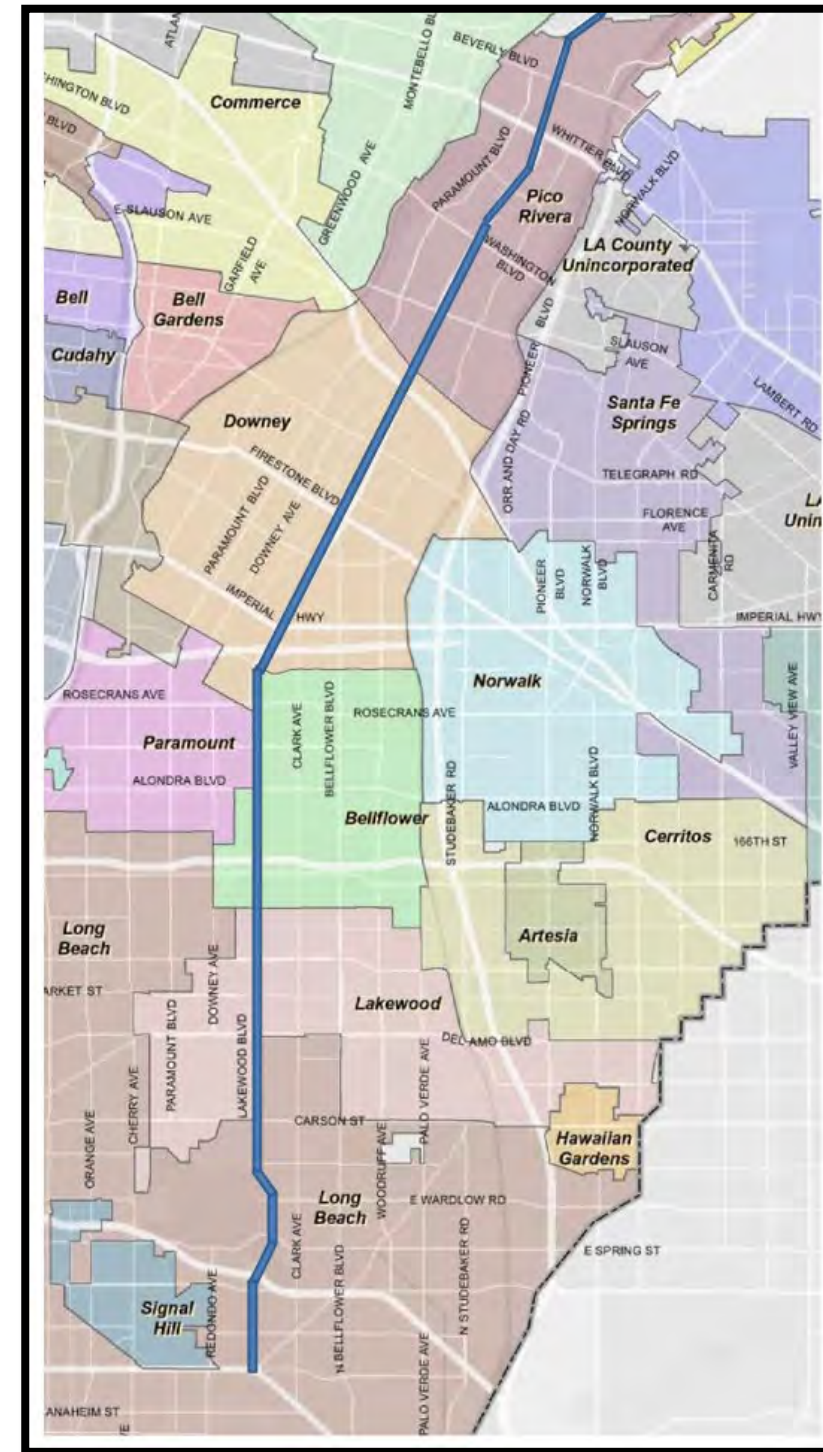
- Identify improvements to reduce transportation related greenhouse gases
- Identify concepts for creating sustainable communities
- Identify and develop community to school or safe routes to school plans
- Identify and develop Complete Street plans and streetscapes plans
- Identify and develop bike and pedestrian safety enhancement plans
- Identify traffic operations and safety enhancements opportunities

In addition, this report will evaluate:

- Corridor enhancements for multimodal mobility, access, safety, and linkages
- Transit improvement opportunities to preserve transit facilities and optimize transit infrastructure
- Accessibility and connectivity of the multimodal transportation network

The presence of a Master Plan provides opportunities to revitalize the Corridor through urban design; diversity of higher density mixed use development; and improved transit, bike, and pedestrian connectivity. The higher densities of populations in the areas results in higher volumes of traffic and transit. The “new” street will attract development to the areas because of the improved access to the larger markets of Los Angeles and Orange County. Specific areas along the Corridor may become destinations as more commercial businesses are attracted to the area.

In addition, residential growth, via multi-use or live-work space, can be expected as a result of increases in retail, nightlife, and improved multimodal connectivity, which may lessen the desire of residents to commute to Los Angeles, Orange or Riverside Counties.





1.2 Project Limits

The planning area is located on Lakewood Boulevard/Rosemead Boulevard within the Gateway Cities Council of Governments (GCCOG). The southerly limit of the Corridor begins at Pacific Coast Highway (PCH) in Long Beach and extends northerly for 16.7 miles to Gellatin Road.

The project limits, broken by jurisdiction and distance, of the study are the following:

<i>Jurisdiction</i>	<i>Limits along the Corridor</i>	<i>Length along the Corridor</i>
Long Beach	Pacific Coast Highway to E Carson St.	3.0 Miles
Lakewood/Long Beach	E Carson St. to 175' South of Del Amo Blvd.	1.0 Mile
Lakewood	175' South of Del Amo Blvd. North to 400' North of Ashworth St.	1.5 Miles
Bellflower	400' North of Ashworth St. to Alondra Blvd.	1.4 Miles
Paramount/Bellflower	Alondra Blvd. to Century Blvd.	0.9 Miles
Downey/Bellflower	Century Blvd. to Foster Rd.	0.6 Miles
Downey	Foster Rd. to Telegraph Rd.	4.0 Miles
Pico Rivera	Telegraph Rd. to Gallatin Rd.	4.3 Miles
Total		16.7 Miles

Within each city, Concept Focus Areas have been developed, and are detailed in this report, that provide typical sections, street designations and other area specific information. This report includes eight (8) Focus Areas, including one (1) at as minimum for each city.

1.3 Scope of Work

This report generally follows the scope tasks included in the GCCOG Implementation agreement, which is consistent with the initial kick-off meeting and scope of work provided and presented at that time. The tasks necessary to create a Master Plan for Lakewood/Rosemead Boulevard is as follows:

- Data Collection and Review of Existing Conditions
 - Field Review
 - Meet with each jurisdiction/stakeholder
 - Gather relevant document and literature for review
- Multimodal Corridor Evaluation and Analysis
 - Evaluate the existing conditions Corridor
 - Develop and provide a high-level analysis of a future Corridor
- Complete Streets Needs Analysis
 - Conduct a needs analysis for Complete Streets and multimodal Corridor, and identify constraints/opportunities
- Community and Stakeholder Outreach
- Complete Streets Implementation
 - Quantify the Unconstrained Condition concept
 - Develop areas of focus concept plans for each jurisdiction
 - Demonstrate achievement of a Multi-modal Corridor with Consistency Across the Sub-Region
- Order of Magnitude Cost Estimates
- Presentations to Committees and City Councils
- Finalized Corridor Master Plan



1.4 Project Timeline

The project schedule was planned in a manner to allow for ample research/outreach working directly with public works and planning departments. The creative approach of the vision building was the product of not rushing the concept development phase.

In short, the schedule was perfect.

The major project milestones include the following:

<i>Major Scope Milestones</i>	<i>Date</i>
NTP - Master Plan and Complete Street Evaluation Study	
Data collection, field reviews and one-on-one meetings	September 2016 - September 2018
Corridor Evaluation and Analysis – Existing and Future Conditions	January 2017 – January 2018
Conduct Complete Streets Needs Analysis	January 2017 – January 2018
Community/Stakeholder Outreach/Public Works	October 2018 – January 2019
Complete Street Implementation Alternatives	October 2018 – January 2019
Prepare Conceptual Design of Complete Street Master Plan	January 2018 – December 2018
Develop Conceptual Design with Cost Estimates	January 2018 – December 2018
Finalize Conceptual Design of Complete Streets Corridor Master Plan	August 2019
Presentation to Committees and City Councils	September/October 2019



2.0 DATA COLLECTION AND REVIEW OF EXISTING CONDITIONS

2.1 Existing Conditions by Jurisdiction (Field Review)

As part of this project, extensive data was collected, along the Corridor. A detailed field review was completed along the Corridor, which included both driving and walking the entire project limits. The field reviews included a general inventory of the overhead utilities, landscaped medians, ADA access, the changes in land uses, transit facilities and drainage/ponding during the few rain events.

2.1.1 Existing Conditions by Jurisdiction (Roadway Features)

The Existing Conditions Data Summary tables for each city, include all the roadway features along the Corridor including lane widths, information on medians, sidewalks, approximately right of way widths and if there are bicycle lanes. These tables are included in the Conceptual Planning Exhibits Section in the main document.

In addition to the roadway/Corridor features detailed in the Existing Condition Data Summary table, additional information regarding overhead utilities, ADA access and transit facilities was also collected.

2.1.2 Existing Conditions by Jurisdiction (ADA Deficiencies)

Several ADA deficiencies were noted along the Corridor and are summarized below.

The Corridor generally has sufficient sidewalk widths and ADA ramps to street level, with a few exceptions:

City of Long Beach:

- Wheelchair ramp is missing on the easterly side of the frontage road north of E Arbor Road

City of Lakewood:

- Insufficient ADA clearance on the westerly side between E Carson Street and 600 feet north of Harvey Way
- Wheelchair access is missing at the southerly pedestrian crosswalk on Lakewood Boulevard at E Arbor Road
- Sidewalk missing on the westerly side from Del Amo Boulevard to about 500 feet northerly
- Sidewalk missing on the easterly side from Del Amo Boulevard northerly along the shopping center
- Sidewalk missing on the easterly side from Andy Street to Ashworth Street

City of Bellflower:

- Insufficient ADA clearance on the southwest corner of Lakewood Boulevard and Artesia Boulevard
- Insufficient ADA clearance on the westerly side south of Alondra Boulevard
- Insufficient ADA clearance on the easterly side from north of Paseo Street to Somerset Boulevard

City of Paramount:

- Insufficient ADA clearance on the westerly side from north of Paseo Street to Somerset Boulevard

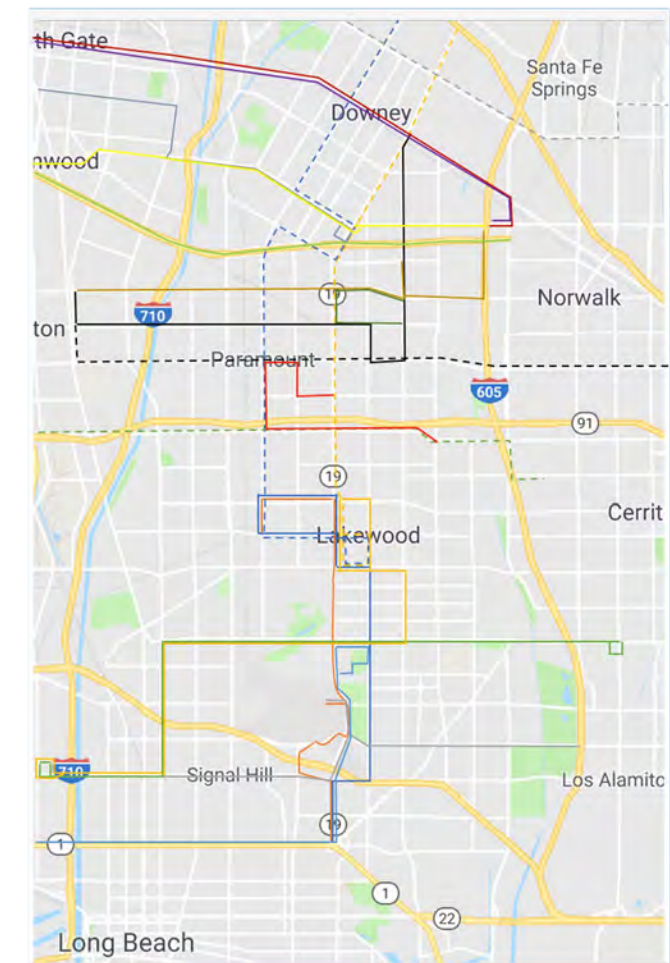
City of Downey:

- Insufficient ADA clearance on the westerly side from south of Deming Avenue to south of Gardendale Street

2.1.3 Existing Conditions by Jurisdiction (Transit Facilities)

Several transit lines existing along the Lakewood Boulevard/Rosemead Corridor. These lines are summarized below in the following list, along with graphical presentation.

LBT Line 111:	
LBT Line 112:	
LBT Line 101:	
LBT Line 103:	
LBT Line 102:	
LBT Line 176:	
Metro Line 266:	
Metro Line 265:	
Metro Line 130:	
Metro Line 128:	
Metro Line 127:	
Metro Line 125:	
Metro Line 117:	
Metro Line 121:	
Metro Line 115:	
Metro Line 315:	
Metro Line 111:	
Metro Green Line:	
Bellflower South Route:	
Bellflower North Route:	





2.1.4 Existing Conditions by Jurisdiction (Utilities Facilities)

Overhead utilities on poles exist for a significant length of the Corridor. These facilities include communication and transmission/distribution lines for electrical power.

City of Long Beach:

In the city of Long Beach, these utilities primarily run on poles along the west side of the Corridor between SR-1 roundabout to 500 feet south of Willow Street and along the east side from 400 feet north of Stearns Street to 200 feet north of Willow Street.

City of Lakewood:

In the city of Lakewood, utility poles generally run along the west side of Lakewood Boulevard through the City of Lakewood and run along the east side between 600 feet north of South Street to northerly city limit with carrier poles occasionally crossing the street.

City of Bellflower:

In the city of Bellflower, utility poles continue to run along the west side of Lakewood Boulevard through the City of Bellflower between the southerly City limit and Alondra Boulevard and run on the easterly side of Lakewood Boulevard between the southerly City limit and Artesia Boulevard and continues between Alondra Boulevard and Paseo Street.

City of Paramount:

In the city of Paramount, utility poles run along the westerly side of Lakewood Boulevard between Alondra Boulevard and Summerset Boulevard with carrier poles occasionally crossing the street.

City of Downey:

In the city of Downey, the utility poles run along the westerly side of Lakewood Boulevard between Century Boulevard and 200 feet south of Gardendale Street with carrier poles occasionally crossing the street and it continue between 900 feet north of Florence Avenue to 100 feet south of Lubec Street. Along the easterly side of Lakewood Boulevard, the power poles run between Florence Avenue to the I-5.

City of Pico Rivera:

In the city of Pico Rivera, the utility poles run along the westerly side of Rosemead Boulevard between Manzanar Avenue and Rex Road and continue between Whittier Boulevard and 500 feet north of Beverly Boulevard. Along the easterly side of Rosemead Boulevard poles run between 100 feet north of Maxine Street to Danbridge Street and continue between Olympic Boulevard and 200 feet south of Beverly Road. Poles again resume along the easterly side between 200 feet north of Beverly Boulevard and Gellatin Road.

2.2 Existing Conditions by Jurisdiction (Meetings)

Individual jurisdictional meetings were held to better understand the existing conditions and to obtain perspective regarding the deficiencies, constraints and opportunities along the Corridor. The various existing transportation modes were discussed, and missing modes were identified and documented as part of the existing condition summaries.

The following are summaries of the meetings conducted with each jurisdiction.

2.2.1 City of Pico Rivera

On September 29, 2017, a meeting was held with the City of Pico Rivera staff to discuss the GCCOG Master Plan and Complete Street study for the Lakewood/Rosemead Corridor. Current projects noted along the Lakewood/Rosemead Boulevard Corridor included the following 91/405/605 Hot Spots:

1. Rosemead Boulevard at Beverly Boulevard, anticipated completion September 2019
2. Rosemead Boulevard at Whittier Boulevard, anticipated completion April 2019
3. Mines Avenue pedestrian project, design funds only February 2018
4. Rosemead Boulevard at Washington Boulevard, anticipated completion April 2019
5. Rosemead Boulevard at Slauson Avenue, anticipated completion April 2019
6. Rosemead Boulevard at Telegraph Road, completed October 2016

These projects all have some level of funding and are in the project development phase, with many in construction. City staff indicated that they had concerns with adding a dedicated bicycle lane to the Rosemead Corridor due to the high volume of traffic including vehicular and trucks. The City does not have a bike master plan at this time. The Corridor is a designated truck route which generally three lanes in each direction. There is a mixture of residential and commercial mixed use. While there are bus stops along the Corridor, the utilization of the transit systems was unclear, and additional research is required to determine if enough transit is offered to the community, or if it's being utilized in a way that would require service modifications. Safety of the bus shelters can always be improved.

City Interests:

- Obtaining funds to construct a more livable/walkable Corridor, including wider sidewalks.
- Connecting the various pedestrian routes over to the San Gabriel River as well as the Rio Hondo.
- Treating stormwater runoff in ways that can also beautify the Corridor.



- Pursuing, in the next 5-10 years, the relocation of their City Hall to the corner of Mines Avenue and Rosemead Boulevard which would create a destination area that includes new mixed use and residential development surrounding the City's Park and City Hall.

Deficiencies include:

- The Corridor does not currently have bicycle lanes.
- There are also a few variables which remain unclear such as the fate of California High Speed Rail as well as the potential Gold Line Extension.

2.2.2 City of Downey

In October 2016, a meeting was held with the City of Downey to discuss the Lakewood Corridor from the southern city limit at Century Blvd. to the northern limit at Telegraph Road. Generally, the Corridor has been improved to 3 lanes in each direction based on recent projects funded by Measure R. The Corridor does not currently have bicycle lanes and is a designated truck route. The City has two (2) 605 Hot Spots on Telegraph and Lakewood. These Hot Spots are identified what improvements are needed to improve the operational analysis and level of service (LOS). At the Lakewood/I-105 Interchange, there is a Metro Greenline Station that includes two surface parking lots with inadequate parking spaces. The City is interested in a parking structure to help minimize the neighborhood impacts resulting from excess street parking. Long term, the City is interested in pursuing a master plan that is consistent with the Corridor GCCOG-wide including the potential for Class 4 Bike lanes. Based on this plan, a lane reduction could be feasible along various stretches, but would have to be transitioned back to a class within the major intersections to be sure to meet levels of service.

City Interests:

- Constructing a parking structure at the Greenline Station to help minimize the neighborhood impacts resulting from excess cars parking on the street.
- Long term, the City is interested in pursuing a master plan that is consistent with the Corridor GCCOG-wide including the potential for Class 4 Bike lanes.

Deficiencies include:

- The Corridor does not currently have bicycle lanes.

2.2.3 City of Paramount

On February 1, 2017, a meeting was held with the city of Paramount staff to discuss the GCCOG Master Plan and Lakewood/Rosemead Boulevard Complete Streets Corridor Study. Within the city of Paramount's jurisdiction, Lakewood Boulevard is approximately 0.9 mile in length, from Alondra

Boulevard north to Century Boulevard. The City only has frontage along the Corridor on the west side of the street, behind the back of curb. Major Intersections include the Alondra Boulevard and the Sumerset Boulevard intersections along Lakewood Boulevard, with the city limit terminus at Century Boulevard, just south of Rosecrans Avenue. The Corridor also crosses the San Gabriel River, with includes the Bellflower Bike Trail about 1/10 mile south of Sumerset Boulevard, and an additional signalized intersection at Paseo Street.

At the southern end, the City has developed commercial property including notables such as CVS and Starbucks, but others including Mid-Cities Honda, a variety of small businesses, retail shopping centers, a storage facility, and Paramount Petroleum.

North of Sumerset Boulevard and south of the San Gabriel River, Paramount Petroleum occupies a large active facility with considerable acreage that has been recently sold. It's anticipated that over the coming years, all or parts may be redeveloped. The land is currently zoned as multifamily residential.

Paramount Place is also a signalized intersection that provides entrance to a large commercial development including a Wal-Mart, a grocer, and a variety of other commercial stores, fast food, etc.

From Alondra to San Gabriel River trail, reclaimed water exists, and is being utilized in the medians for landscaping. North of the San Gabriel River, there is not reclaimed water along Lakewood Boulevard, and would be a good candidate from the San Gabriel River up to the city limit at Century.

The Corridor is a designated truck route from Long Beach all the way to Pasadena and may be a defined Smart Corridor in the GCCOG STP.

Deficiencies include:

- The Corridor does not currently have bicycle lanes, and would like to incorporate Class 2 bike lanes, including a reduction in median width, if necessary.



2.2.4 City of Bellflower

A meeting was held with the city of Bellflower on September 26, 2018 to discuss the progress of the Lakewood/Rosemead Boulevard Complete Streets Corridor Study.

It was noticed that State Route 19 was officially relinquished to the city of Bellflower in late 2017 and funds were provided to the city to assist in bringing the street to meet ADA standards.

City Interests:

Various existing conditions were discussed including features of the Corridor. The major areas of interest, to further develop Concept Focus Areas (FA) with an emphasis on a dedicated bikeway/trail includes the 91/Lakewood interchange area, the Lakewood/Alondra intersection and that Eco Rapid Transit Corridor traversing the city.

A funding agreement with Metro was executed for the construction at the Lakewood/Alondra intersection, as design is nearly complete, via Metro, and the intersection will be constructed in the near future.

Additionally, southbound Lakewood from Gardendale to Rosecrans Avenue belongs to the city of Downey and a relinquishment process has begun to transition that portion of the street, so that the entire street is within the city of Bellflower jurisdiction.

Challenges include:

It was noted that the southeast corner of the 91 interchange includes a privately-owned cul-de-sac which connects to the Virginia/Palm intersection within the City's jurisdiction. Graphically showing an active transportation Corridor through this area is acceptable to the City, in concept, however it is a privately own parcel that would need to be negotiated with the owner.

UCLA funded a study regarding Fit and Healthy Cities and a number of meetings were conducted which the GCCOG attended. The results of this effort have not been folded into the complete Street study draft report yet.

Opportunities include:

The City will look at the various Street designations provided at the meeting to determine either a specific typical section or hybrid typical section to be utilized along the Corridor, connecting the concept focus areas. This is needed for developing the high-level cost estimates for the Corridor.

2.2.5 City of Lakewood

On September 8, 2016, a meeting was held with the City of Lakewood staff to discuss the GCCOG Master Plan and Complete Street study for the Lakewood/Rosemead Corridor. Current projects noted along the Lakewood/Rosemead Boulevard Corridor included the following 91/405/605 Hot Spots:

1. Lakewood - Del Amo Project
2. Lakewood Blvd Regional Capacity Enhancement Project

These projects each have some level of funding and are in the project development phase. The projects will help reduce traffic by constructing Class 2 bicycle lanes and enhanced transit infrastructure including Metro and LBT, as well as constructing bicycle storage areas. The project(s) also intend to treat Stormwater via filtration systems including recessed/swales. While the Corridor is a designated Truck Route, the City doesn't feel that there are significant impacts due to the alternative freeway options for trucks and that most trucks entering into the City have local destinations.

The City didn't feel that they had any missing visionary components that we are missing as part of the master plan and complete street evaluation effort. They wished to provide their plans developed to date to the other Corridor cities as a template for a complete street, along the Lakewood/Rosemead Corridor.

City Interests:

- The City is interested in obtaining funds to reduce the burden of Measure R funds needed to complete the construction phases.
- The City is also interested in potential for Union Funding/Grant opportunities for infrastructure projects that would require labor agreements to use union labor.

2.2.6 City of Long Beach

On September 8, 2016 a meeting was held with the City of Long Beach to discuss the Lakewood/Rosemead Boulevard Corridor Master Planning and Complete Street Study effort.

Within the City of Long Beach, Lakewood Boulevard is approximately 3 miles in length, from the Pacific Coast Highway traffic circle north to the City of Lakewood city limit, with an additional 1 mile being shared with the City of Lakewood, from Carson Street north to Del Amo Boulevard.



From the Lakewood traffic circle to Willow Street, there are no bicycle lanes, with limited ability to provide them. Bicycle lanes will not fit into the existing typical section north of Willow Street due to the tunnel under the Long Beach Airport, as well as safely being able to navigate through the I-405 ramps, both adjacent to each other. This section has high truck traffic and reducing lane widths to accommodate bicycle lanes should only be considered south of Willow Street. Lakewood Boulevard along this stretch also appears to be a designated truck route as well as a State Route 19 (SR-19) which requires Caltrans approval for design/construction changes. This section should be considered for relinquishment by Caltrans to the City of Long Beach. There is also no on-street parking throughout this section of the Corridor.

North of the airport tunnel and north of Spring Street, the section of roadway is industrial on the west with a golf course on the east side, to Wardlow Road. North of Wardlow Road to Carson Street, the typical section continues as a 6-lane divided, including three lanes in each direction, with medians and intermittent left turn lanes, which is a heavy truck Corridor. North of Carson Street, Long Beach jurisdiction runs on the east side of the Corridor, while the City of Lakewood is on the west side of the Corridor. The character turns residential north of Carson Street to Del Amo Boulevard, where the City of Long Beach jurisdiction limit terminates. There is on-street parking throughout this section of the Corridor.

City Interests:

- The City is interested in focusing the Study efforts near the Lakewood Boulevard/PCH traffic circle.

Deficiencies include:

- The section south of Spring Street will not likely be able to accommodate bicycle lanes, due to the hard constraints of the airport tunnel and the I-405 interchange (which will be evaluated within the study including a high-level cost estimate).
- The City should consider the City's bicycle plan to ensure the bicycle network and mobility needs are met, possibly outside of the Lakewood Corridor.

3.0 MULTIMODAL CORRIDOR EVALUATION AND ANALYSIS

3.1 Overview

This section evaluates the existing conditions and findings that develops a variety of multimodal Corridor improvements bundled into four proposed Street Designations, which are then used to develop the Specific Areas of Focus for each jurisdiction, as part of the overall creation of the Lakewood/Rosemead Boulevard Complete Streets Corridor Study. The various possible street designations were shown during original scoping of the project, and further discuss during the jurisdictional meetings. The Areas of Focus are specific locations, or nodes, that are modified and developed for each jurisdiction to provide a concept plan illustrating a multimodal Complete Street concept. Using the “Tool Kit” of Street Designation that would be applied to other parts of the Corridor. The Street Designations are used as a baseline to illustrate and provide the high-level future Corridor concept.

3.2 Street Designations along the Corridor

The existing Corridor street design standards vary from location to location, but in general the street design and engineering were all about moving traffic from their origins to their destinations. For decades, the purpose and goal of the street design has been to move motorized traffic as expeditiously as possible, however developing a transportation system primarily for motorized vehicular traffic has failed to meet the traveling needs and preferences of a large population of the region.

STREET DESIGNATIONS		
No	Type	Description
1	Downtown Lifestyle	Street designed to serve retail and mixed land uses, promoting walking, bicycling, and transit within an attractive landscaped corridor.
2	Urban Activity	Street designed to serve mixed use commercial, retail and residential areas with active transportation activities.
3	Community Gateway	Street designed to promote slowing traffic.
4	Principal Route	Multi-lane facility designed to serve higher volume traffic corridor movements.

Our focus is ensuring that the road will provide safe mobility for all travelers, not just motor vehicles, by envisioning and planning our Corridor as a complete Corridor. This Corridor will address the needs of public health and fitness, creating vibrant neighborhoods, reducing fossil fuel emissions, adopting greener and more sustainable communities and accommodating the needs of our aging population.

Complete streets policies help communities make clear the commitment to planning future transportation improvements and to provide for safe travel of everyone using the road. The street designations provide transportation choices; support communities through transit oriented, mixed-use development and activation of abandoned, vacant and underused properties; invest in healthy, safe and walkable neighborhoods. Visually documenting these goals along the Corridor

so city Planners and engineers have a clear direction to develop solutions is a difficult task because of the length of the project (11.75).

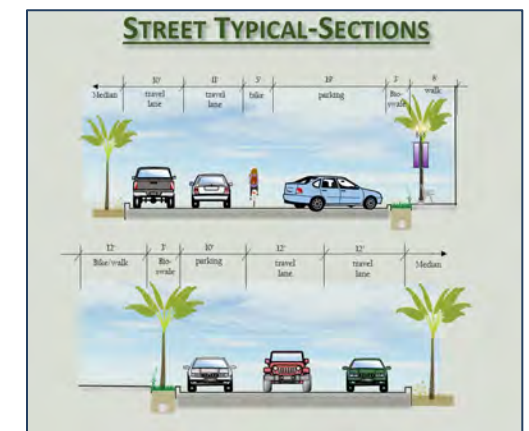
To accommodate the complete streets approach, we begin by breaking down the Corridor into Specific Street Designations so that the strategies and stakeholder partnerships can successfully develop and manage the public spaces in the neighborhoods and bordering connections to this major east-west Corridor. The Street Designations we developed along the Corridor provide a “tool box” of options to apply at specific street limits. We applied these Street Designations along the entire Corridor and also focused on how the various designations transitions between one another.

The Street Designations principles below were developed through our outreach to capture the key civic goals and objectives that should shape the creation of the “new” roadway footprint, public spaces and expand on established principles from existing city policies and civic efforts.

Street Designations Principles

Create a public asset for all

The Complete Street Master Plan engages the entire community along the Corridor. It is a public asset and should remain focused on public use and activities that attract people from all walks of life. It should be a place for locals and visitors alike – a place where everything comes together effortlessly. The process for developing a Complete Street Master Plan will draw on the goals and dreams of the entire community along the Corridor. The resulting public spaces and surrounding development will engage through a range of planned activities as the program develops.



Street Designations - Define Context Sensitive Solutions

Applying Context Sensitive Solutions (CSS) to the Corridor confirms that indeed it is “complete” in the sense of being appropriate for the area in which the project is planned. A collaboration of stakeholders and interdisciplinary mix of members from all cities formed the visioning team to provide the concepts that fit its setting. Using design visualization to focus on areas that enhance the scenic view shed and aesthetics; bringing the community and history of the Corridor together; activate and enhance the environmental resources and open space; improving safety, mobility for all users. Develop of multiple alternatives and review with public officials and community, to optimize the opportunities and build a



consensus. All of which will provide an emphasis of enhancing the uniqueness of the area and the sense of place in this urban environment that will be viewed as a valued resource.

Innovative and sustainable design at the forefront

The Street Designations are the basis for developing visual urban design principles that bring people to the focus areas allowing them to experience the unique planning, geography and ecology of the area. At the same time, we must take steps to improve the natural environment and ecology while also preserving and enhancing the activities that remain central to the Corridor cities. The complete streets should, in its planning and visioning, reflect GCCOG's commitment to sustainability, innovation and responding to climate change and air quality improvements.

3.3 Corridor Wide Considerations

Corridor wide transportation strategies include not only the GCCOG STP but also various "Livability" considerations, which are generally described as the non-technical features outside the STP, detailed later in this report. These will be applied to the Areas of Focus, or Nodes, and will also be considered as part of the order of magnitude cost estimates.

Additionally, strategies to create space for Corridor wide improvements and benefits must be considered. Ways to justify and create space include but are not limited to streetscape and stormwater treatment measures; active transportation features such as a potential Class 1 bicycle facility; and median, center divider or traffic separation operational improvements. It would likely be necessary to underground a vast majority of the overhead utilities that exist on both sides of the roadway for nearly the entire length of the Corridor. Other considerations to create space also include narrowing existing traffic lanes, which could affect the operational efficiency of the Corridor, or the purchase or right-of-way to accommodate widening. These three strategies, underground utilities, narrowing lanes and or purchase of right-of-way will be evaluated along the Corridor to determine which combination, if any, are most prudent in each of the areas of focus.

Create a bold vision that is adaptable over time.

The project will come together over time, being implemented in phases based on funding received. Many complex infrastructure and engineering elements must be completed before the Corridor becomes a complete street. The vision developed now should clearly define an overall framework for how the Corridor will take shape, what the key elements will be, and define their essential character. At the same time, the vision must be flexible enough to adapt as conditions inevitably change.



4.0 COMPLETE STREETS NEEDS ANALYSIS

This section includes a description of the criteria used to document the existing technical, non-technical, and featured elements along the Corridor. The evaluation and analysis of the features will be identified for consideration as part of a Complete Street Needs Analysis. The Evaluation Criteria Matrix will identify the Corridor elements and features for each jurisdiction and the transitions from the various concept alternatives. The goal is to incorporate as many of the improvements into the Corridor Concept Plan via the Focus Areas, defined for each jurisdiction. Embracing the Complete Streets approach will provide a framework to foster a more livable community. The analysis to follow will document the process on building this framework and defining the evaluation factors. Restating what a complete street involves will help define the elements evaluated in the needs analysis.

The guiding principle per FHWA for a complete street is to create roadways and related infrastructure that provide safe travel for all users, each complete street must be customized to the characteristics of the area that street serves. A complete street also must accommodate the needs and expectations of the travelers who want to access or pass through the surrounding neighborhoods, community, and region.

Areas of the roadway needs analysis include: median islands and enhancements, traffic calming, added bike lanes, shared use paths, sidewalks, safe crossing location for pedestrians, pedestrian signal improvements, transit enhancements and fixed rail services (LBT, Metro and Bellflower Transit), curb extension for added public space, parking, planting & linear forests, and water quality.

Needs Analysis topic area goals.

Reconnect the public to its city's open spaces and activate unused resources. The Corridor is the gateway to the neighborhoods and the community. It will connect and build a network of green connections and public spaces that connect visually and physically, to vital civic and commercial destinations, nearby neighborhoods and the larger urban pockets (focus areas), city and regional open spaces. This will allow a phased approach that is implemented over a longer timeframe, but the big picture (master plan) needs to be in view from the beginning.

Improve access and mobility.

The Corridor is and will remain a crossroads, as Corridor users rely on safe and efficient access to provide an important connection for moving people and goods between the east and west. At the same time, the Corridor will be an increasingly attractive place for walkers, bicyclists, joggers, recreational and other uses. The future Corridor will accommodate safe, comfortable and efficient

travel by pedestrians, bicyclists, vehicles and freight. The interactions among these many modes of travel must be designed carefully for the safety, comfort, and efficiency for all.

Needs Analysis and Context Sensitive Solutions.

Improving the appearance and image of the Corridor is a primary goal of the community. Focus on the viewshed beyond the right-of-way which has an influence on the perception of the community and traveling public. The visual elements need to be responsive to the local values and concerns. The various elements need to provide Corridor consistency while enhancing individual community identity. Innovative inclusive approaches that integrate and balance community, aesthetics, historic and environmental values with transportation safety, maintenance and performance goals. These planning goals are reached through a collaboration, interdisciplinary approach involving all stakeholders with the goal of improving the boundary between the transportation Corridor and the communities and people that share the common open space. Embrace and celebrate the region's past, present and future.

4.1 Technical Elements/Features included in STP

The GCCOG STP followed a similar strategy to this effort, as shown in the Exhibit 5.1a. The technical information from the STP components was readily available and extracted relative to the Corridor. The study used the STP as a baseline and built upon it based on project specific Corridor needs. The GCCOG, via Metro Measure R funds, conducted the largest multi-model transportation planning effort second to only New York City, to create a unified long-term Strategic Transportation Plan (STP). This large-scale effort was able to quantify significant baseline conditions along the Corridor that are incorporated into the Master Plan and Complete Street evaluation criteria, and do not require additional analysis effort.

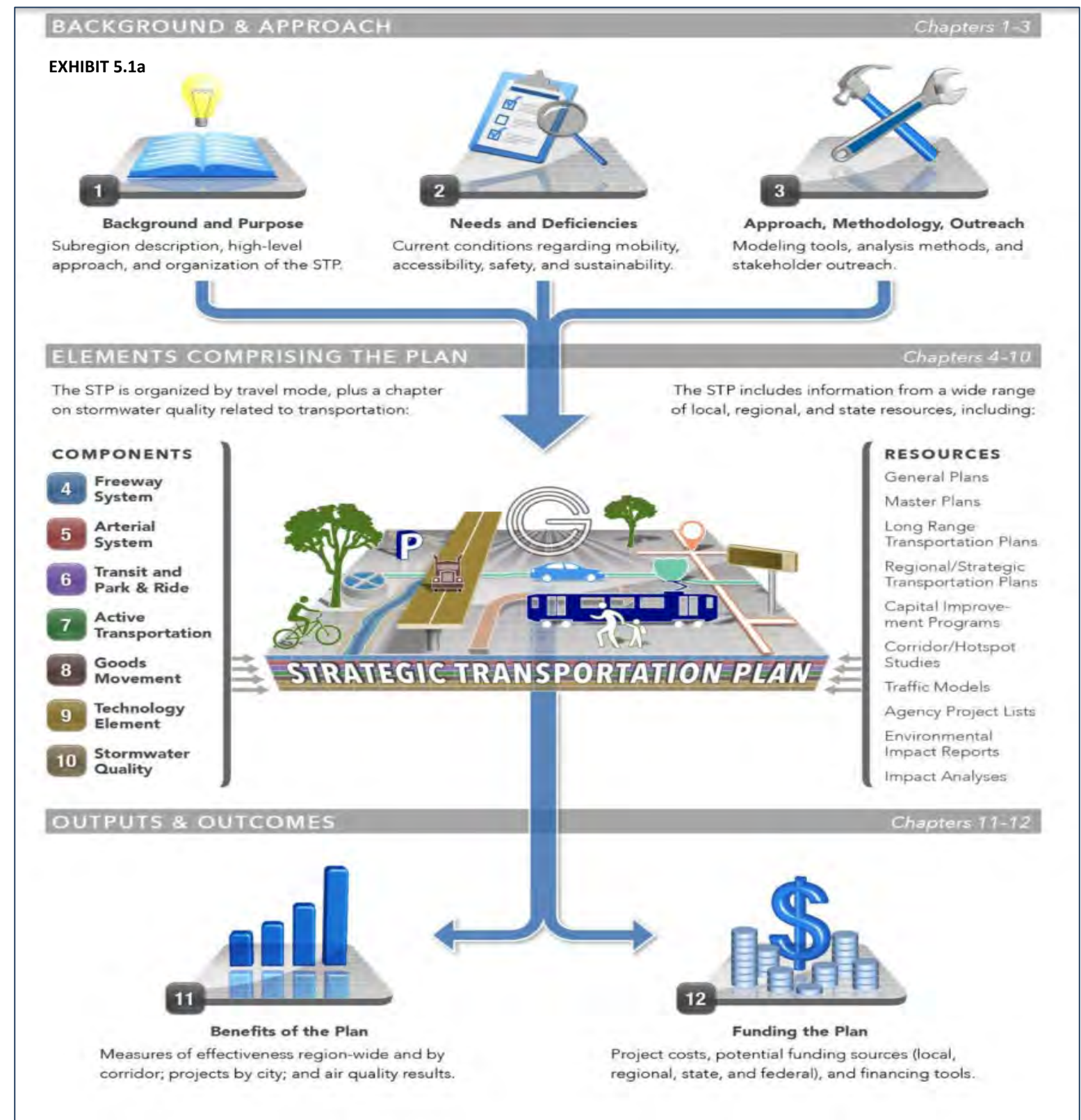
Lakewood/Rosemead Boulevard is considered a sub-regional facility that runs through I-405, SR-91, I-105, and I-5 is utilized as a relieve arterial in addition to the city specific land uses and functions along the Corridor.

This Master Plan has a goal of reducing the Corridor's use as an I-405, SR-91, I-105, and I-5 relieve arterial and maximizing its ability to serve the communities as a complete street with enhanced/increased development.

4.1.1 At-Grade Crossing Proposed for the West Santa Ana Branch Light Rail Line at Lakewood Boulevard

In a letter dated August 22, 2018 the City of Paramount expressed concerns regarding the Lakewood Boulevard Grade crossing with the West Santa Ana Branch Light Rail project. Metro began the environmental phase of the West Santa Ana Branch Light Rail project, a 20-mile light rail system that will run from the City of Artesia, through the City of Bellflower, with a termination point in Downtown Los Angeles in 2016. The West Santa Ana Branch, or the Eco-Rapid project, crosses Lakewood Boulevard just north of Paseo Street and south of Somerset Boulevard. Based on preliminary analysis done by the City of Bellflower and supported by Paramount, this Corridor has approximately 40,000 ADT and the Eco Rapid proposes approximately 16 crossings per hour in each direction, with each needing approximately 45 seconds for the gates to lower, the train to cross and the gates to raise, allowing traffic to cross the tracks. The operation proposed by Metro will cause 24 minutes in delay for each hour of train operation. This appears to well justify a grade separation, but Metro has not agreed to mitigating the Corridor impacted by the train crossings.

This report supports both Cities of Bellflower and Paramount in their request to grade separate Lakewood Blvd from the West Santa Ana Branch light rail line.





4.1.2 Arterial Smart Corridor

Out of the 25 corridors considered and ranked, according to variables that included truck volumes, V/C ration, SCAN, on-street parking, freeway access, connectivity, safety, truck route, and community sensitivity, the Lakewood/Rosemead Corridor ranked 10th (with 5 other tied Corridors) with a total score of 20 out of 25 being the highest score. While the Corridor is parallel to I-605 and I-710 and would seem to be an intuitive choice for a Smart Corridor, the reason why Lakewood/Rosemead Boulevard was NOT selected was primarily due to the lack of trucks using it, as well as, a generally acceptable Volume over Capacity Ratio, compared to others GCCOG corridors, which deemed that the spending funds on the Smart Corridor technology could be better spent elsewhere within the sub region.

Per the GCCOG STP, the Smart Corridor(s) have 6 primary objectives:

1. Reduce recurrent intersection delay and improve travel time reliability and information, fuel consumption, and emissions on designated truck route arterials through cross-jurisdictional signal coordination and updated signal controllers and systems
2. Fill ITS coverage gaps along identified truck route arterials for freight traffic management and traveler information
3. Generate data for the provision of real-time traveler information to drivers and freight operators through the use of mid-block detection or other enhanced detection
4. Generate data for ongoing performance measurement/management of the regional arterial network
5. Improve incident detection and management on arterials, as well as improve freight traffic management and traveler information, in response to freeway incidents and emergency situations
6. Utilize a variety of ITS and technology improvements to accomplish these, including, but not limited to, adaptive signal control, detection, closed-circuit television (CCTV) cameras, changeable message signs (CMS), communications, blue-tooth technology, third-party transportation data, etc.

4.1.3 Transit/Park and Ride

The Gateway Cities will see steady growth in both population and jobs between now and 2035, which will put more strain on the already overburdened transit network. Average weekday transit ridership in the subregion is projected to increase by 11% by 2035 even if no additional transit improvements



are made. Currently, many municipal transit operators report limited seated capacity at bus stations and on several high-demand bus routes. Expansion of services is already needed to meet current demand.

Various local and regional transit facilities run along the Corridor. The following graphic highlights the major facilities along or crossing the Corridor area.

The Gateway Cities currently has 18 park-and-ride lots with approximately 7,100 spaces. These facilities provide access to Metrolink, Metro Blue and Green Lines, and local and express bus routes. Currently one-third of park-and-ride lots operate at or near capacity. If no additional improvements are made by 2035, roughly half of the Gateway Cities park-and-ride facilities will be operating at or over capacity. To meet this demand, additional park-and-ride facilities are needed. ¹

The existing public transit infrastructure that serves the Corridor will become more accessible with improved connectivity of streets, sidewalks and green space that encourage residents to walk and bike to transit stops. A neighborhood with a strong network of internal streets and good connections to surrounding area, allows pedestrians, bicyclists, and drivers to move more safely and efficiently. This will reduce vehicle trips, which will in turn reduce the carbon footprint of the community. The success of improved neighborhood connectivity through this Corridor Concept Plan will also strengthen the sustainable opportunities for future developments in the various Cities.

Focus will be on the connectivity and relationship between the various transit lines. Proper evaluation of the transit connectivity relies on overall public circulation. Attention will be directed to the following planning elements:

- Pedestrian pathways, such as sidewalks, need to occur throughout the community in order to effectively connect neighborhoods with facilities and amenities, such as parks, schools, businesses and social locations.
- Sidewalks and/or trails are to be separated from adjacent streets by parkways and infiltration planters as presented in the streetscape, which are consistent with the Sustainable Strategies.
- Crosswalks are to be clearly delineated and shall include paving enhancements for easy identification and traffic calming.



Dedicated bicycle lanes discussed in Section 4.2.4.1 provide safe routes for bicyclists and encourage alternative transportation modes. Bicycle storage should be made available at key transit stops.

4.1.4 Active Transportation

While regional centers, within any jurisdiction, are largely dependent on automobile travel, designing them within the context of adjoining neighborhoods has the potential to encourage alternative travel modes such as walking and bicycling. The quality of pedestrian environments also plays a critical role in the success of centers that serve multiple neighborhoods and the region. These centers typically offer retail, employment, cultural activates and transit.

Walkable mixed-use neighborhoods represent the most basic places that are economically stable and environmentally sustainable. Walkable districts mix complementary uses, maintain reasonable distances, and bring building entrances and facades to the streets.



One of the most critical elements of designing Pedestrian, Bicycle and Trail Corridors is safety. Due to the parallel nature of Corridors and adjacent trail, visibility and access, as well as arterial street crossings, need special attention to optimize safety to the users. Warning devices, signage and striping need to properly advise users.



The existing bicycle network in the Gateway Cities Subregion has primarily been developed through individual city or county efforts, and also by regional efforts supported by Metro and other multi-jurisdictional agencies. The area provides an opportunity to create an environment for bicycling, including a temperate climate, a network of schools and open space, a major university and community college, a well-connected street grid, and relatively flat terrain. Despite the fact that bicycling is increasingly popular in Southern California, a safe, well-connected and accessible bicycle network remains a significant challenge for many bicyclists in the Gateway Cities.

The STP contains fifty-five (55) significant bicycle Corridor project ideas. While the Lakewood/Rosemead Corridor is not one of the 55 significant Corridors, as part of this Master Planning effort, and with the coordination of each jurisdiction, the Corridor will still benefit from a

Bicycle facilities are divided into four Classifications as defined by Caltrans:

Class 1 Bikeway (Bike Path): A shared use bike path is entirely separate from the road. No motor vehicles are allowed on or near these paths, which also serve as multi-use pathways. **For example, along the Rio Hondo Channel.**

Class 2 Bikeway (Bike Lane): A bike lane marked in the road is four feet wide, or five feet wide if adjacent to parked cars. **For example, along on Del Amo Boulevard.**

Class 3 Bikeway (Bike Route): A bike route is simply a route without any designated striping for bikes but has signs that designate it as a bicycle route. These facilities are usually on neighborhood streets without heavy traffic. **For example, along sections of the Pacific Coast Highway.**

Class 4 Bikeway (Separated Bikeway): A separated bikeway or cycle track, which provide an alternative to other bikeways that may minimize interactions with other modes of travel. A bikeway for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. The City of Long Beach has an example as shown in the photo on the right. The objective is to foster bicycling as a means of transportation, in a manner that improves safety for all users, including motorists, transit users, and pedestrians, including persons with disabilities.

contiguous Class 1, or at minimum Class 2 bicycle facility for the entire length. Additionally, through this effort, the bicycle facility that is developed as part of the Corridor Concept Plan should be incorporated in upcoming STP updates.

The GCCOG member cities have developed all of the above-listed bicycle facility types along Lakewood/Rosemead Boulevard, but the plan isn't complete. This report identifies the deficiencies along the Corridor and incorporates full connectivity along the Corridor and is demonstrated within the concept plans as well as incorporated into the cost estimates.

4.2 Non-Technical Elements/Features Outside of STP

The following list of non-technical elements and features were not generally considered as part of the GCCOG STP and are specific and integral to creating a Complete Street Master Plan for Lakewood/Rosemead Boulevard.





4.2.1 ADA

Americans with Disabilities Act (ADA) requirements were considered as part of the study. The goal is to identify deficiencies and opportunities to improve pedestrian access. The Corridor will be well served by improving ADA pedestrian walking access conditions along the entire stretch and incorporating sidewalks where there are gaps in coverage.

4.2.2 Aesthetics

Aesthetics are integral features that can provide an overall theme to a Corridor. Incorporating various features **including enhancing aesthetics**:

- Undergrounding of existing overhead utilities
- Creatively using storm water treatment options such as sidewalk planters, permeable pavement or pavers that reduce standing water and hydroplaning while at the same time adding “Green Pockets” along the Corridor.
- Provide additional pedestrian enhancements such as intersection bulb-outs which could require a change in parking to an angled layout to make sufficient room.
- Including reclaimed water piping throughout the Corridor to that enhanced landscaping can be provided to add beauty to the Corridor.
- Provide outdoor dining along miscellaneous limits.

Streets throughout the plan area serve different purposes and have variable capacities. The context of the land use along a Corridor heavily influences the design concept of the Corridor. One of the key components of the Corridor Concept Plan is that the Corridor will be multi-modal, meaning it will balance the needs of multiple modes of travel and provide the traveling public the option to walk, bike, take transit or drive.

Streetscape elements will be developed to compliment the character and scale of each street designation distinguish unique areas of the cities and Corridor and create an identifiable sense of space. Elements such as enhanced landscape, signing, pavement, and lighting to establish an experience along the Corridor.

4.2.3 Utilities

The Corridor has extensive utility facilities along it including overhead and underground. In order to create more usable space within the city right of way, considerations will be given to undergrounding overhead utility poles.

4.2.4 Community Resources

The Corridor contains several community resources, which were inventoried and considered as part of ensuring a Complete Street, can be incorporated. Schools, parks, open space and river crossings require safe access to and from these locations to other destinations along the Corridor.

4.2.4.1 Schools

Creating safe routes to school for children enables and encourages children to walk or ride their bikes to school. This helps reduce traffic and air pollution, reducing the need for parents to drive their children, which reduces traffic consistency within the vicinities of the school, and simultaneously improves the well-being of the children by encouraging a healthy and active lifestyle.

The following schools are located in close proximity of Lakewood/Rosemead Boulevard:

CITY	SCHOOLS
City of Pico Rivera	Ruben Salazar High School, Rio Vista Elementary School, St. Hilary Elementary School, North Ranchito Elementary School
City of Downey	Kirkwood Christian School, Downey High School, Alameda Elementary School, Sussman Middle School
City of Bellflower	Albert Baxter Elementary School, Somerset Continuation High School
City of Long Beach	Marina Montessori School

Every pedestrian crossing at major road intersections requires a safe and visible crosswalk and sometimes traffic controls and/or crossing guards. Reduced vehicular speeds can create a meaningful improvement of safety for pedestrians and bicyclists. A cost-effective way to reduce speeds is to utilize the concept of “traffic calming” along the Corridor.

Examples of this include the following features:

- Raised crosswalks and intersections
- New medians
- Curb extensions

These features have been incorporated into the Corridor Concept Plan in a variety of locations. Continuous bicycle facilities are to be provided along all routes to schools.



4.2.4.2 Parks

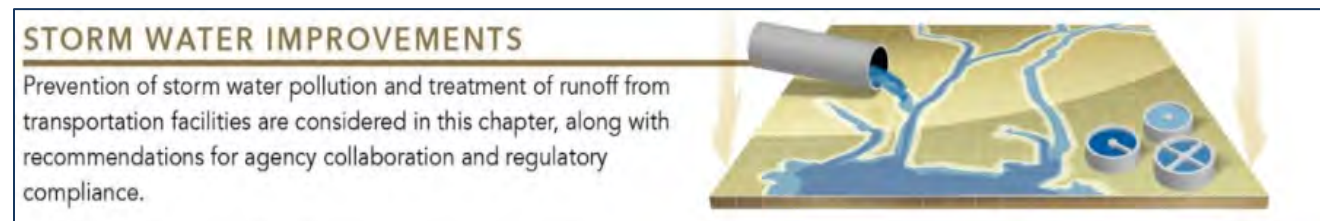
There are several parks either along or near the Corridor that have also been inventoried and considered as part of the Corridor Concept Plan. These include:

CITY	PARKS
City of Bellflower	Constitution Park
City of Downey	Dennis the Menace Park, Golden Park
City of Lakewood	Lakewood Golf Course
City of Long Beach	Skylinks at Long Beach Golf Course Stearns champions park
City of Pico Rivera	Smith Park, Streamland Park

Additionally, to enhance the use of a Complete Street, jurisdictions are encouraged to require new developments that provide usable open space for recreations demands.

4.2.5 Water Quality and Sustainable Stormwater Design

The Master Plan provides an opportunity to introduce sustainable stormwater and urban design into an evolving major arterial roadway. Recognizing that healthy water quality is an essential component of quality of life of this region, the state has mandated steps be taken to improve water quality. A focus on contamination prevention at entrances to rivers and streams through storm drain runoff is a complicated effort. Treatment of the runoff from storm drains, which has been identified as a public nuisance and health threat, to produce reclaimed water that can be used for landscape irrigation and other reclaimed water uses is a mutually beneficial strategy.



There are three major watershed areas tributary to the Lakewood Rosemead Corridor within the Gateway Cities. These waterways are:

The **LA River** is a waterway that begins in the Simi Hills and Santa Susana Mountains. It extends approximately 48 miles to its mouth in Long Beach. The LA River is, for the most part, a concrete-

lined channel. Portions of the river have earthen bottoms and restored habitat. The basin area of the river is approximately 827 square miles.

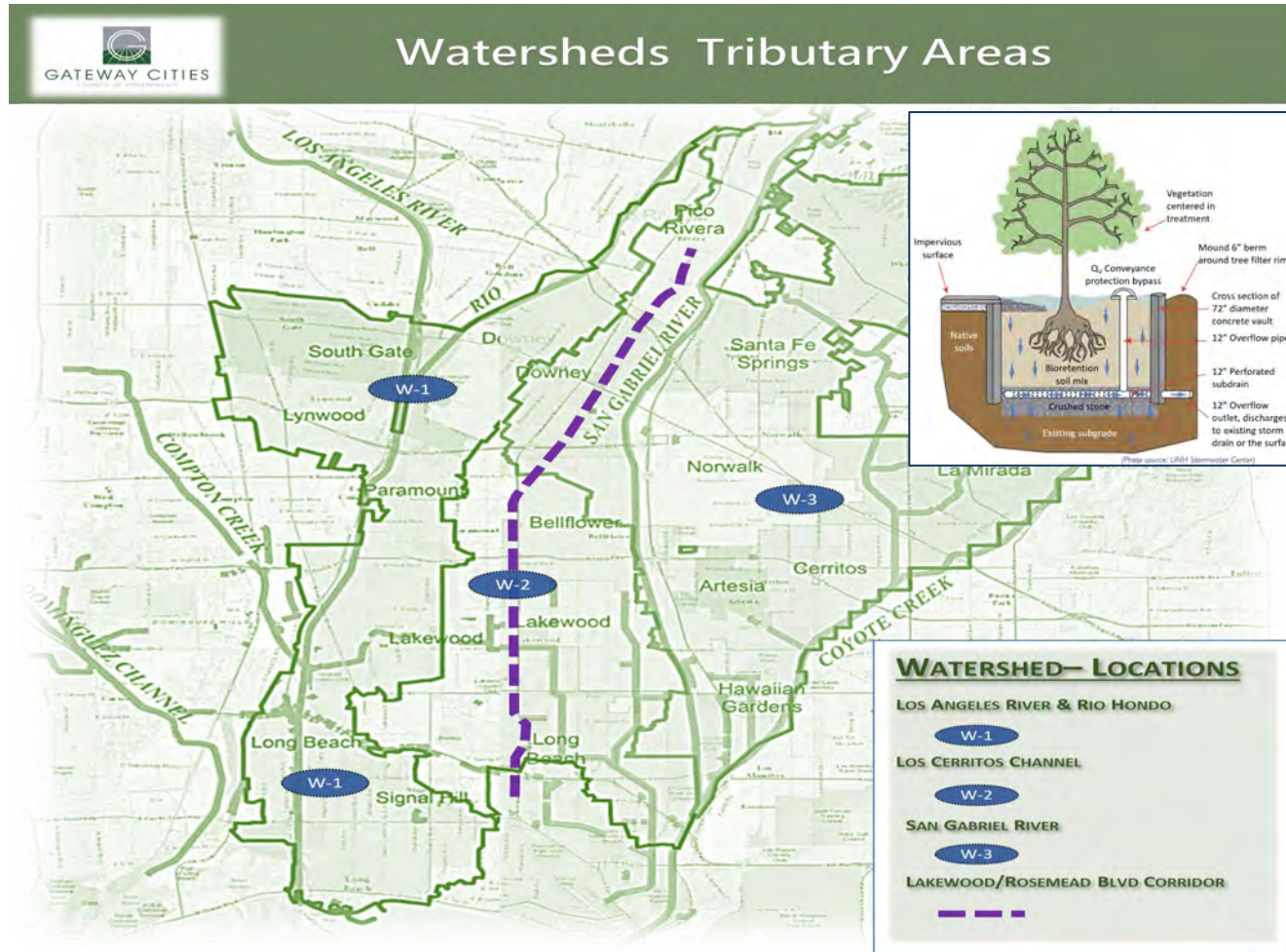
The **San Gabriel River** is approximately 60 miles long, extending from the San Gabriel Mountains to the Pacific Ocean. Majority of the river is restrained in a concrete flood control channel. Its basin area is approximately 713 square miles.

The **Los Cerritos Channel** is approximately 7 miles long and extends from the City of Lakewood, at the northeast corner to the converge into ocean parallel to San Gabriel River in Long Beach.

Mitigating the water quality impacts of transportation-related development with “Green Streets” techniques is a logical step to protect the watershed, groundwater and neighborhood livability.

Existing Water Quality

Most of the watershed areas within the limits of the Corridor are considered impaired due to a variety of point and nonpoint sources. Some of these constituents are of concern throughout the length of the waterways while others are of concern only in certain reaches. Impairment may be due to water column exceedances, excessive sediment levels of pollutants, or bioaccumulation of pollutants. Common pollutant impairments are: Chlordane (sediment), DDT (sediment), Lead (sediment), PCBs (Polychlorinated biphenyls) (sediment), Sediment Toxicity, Trash and Zinc (sediment).



Pollutants from dense clusters of residential, industrial and other urban activities have impaired water quality in the watershed areas of the river. Added to this complex mixture of pollutant sources (in particular, pollutants associated with urban and stormwater runoff), is the high number of wastewater discharge permits with their constituent loadings that include excessive nutrients, coliform, and heavy metals.

A “Green Street” is designed to slow the flow of stormwater down in order to essentially pre-treat the dry and low flows prior to entering the storm drain. In other words, to simply reduce the volume of stormwater by utilizing low impact development (LID) practices such as the use of porous pavement to allow water to percolate to the soils, designing a network of tree wells, Bio-swales and rain gardens to slow down

- Common sustainable stormwater design features include, but are not limited to:**
- Sidewalk planters and street trees reducing the urban heat island effect,
 - Vegetated curb extensions to promote greenery,
 - Permeable pavement or pavers that reduce standing water,
 - Storm drain stenciling,
 - Storm drain inserts that filter waste to help reduce the amount of trash entering the system

and treat stormwater, and planting and/or preserving street trees.

Green Street practices that direct runoff to vegetated areas or areas with porous materials can help recharge groundwater supplies – particularly where drought-tolerant plants and trees are incorporated into the design. This can be particularly important in areas to within the Gateway Cities where water resources are one of the important elements in daily life. As the Gateway Cities population continues to grow and water resources remain fixed, the need to offset potable water use is increasing.



The effects of Global warming and existing and future droughts put a strain on the ability to maintain the levels of water enjoyed today. Forecasting the water needs of the future brings awareness of the lingering problem of an inadequate water supply.

Ultimately, when there is funding available to incorporate part or all of the Corridor Concept Plan, it should be noted that Federal agencies, such as the U.S. Fish and Wildlife Service (USFWS) and the U.S. Environmental Protection Agency (USEPA), will provide recommendations concerning whether or not permits should be issued and identify any conditions with the issuance of the permit.

Possible recommendations:

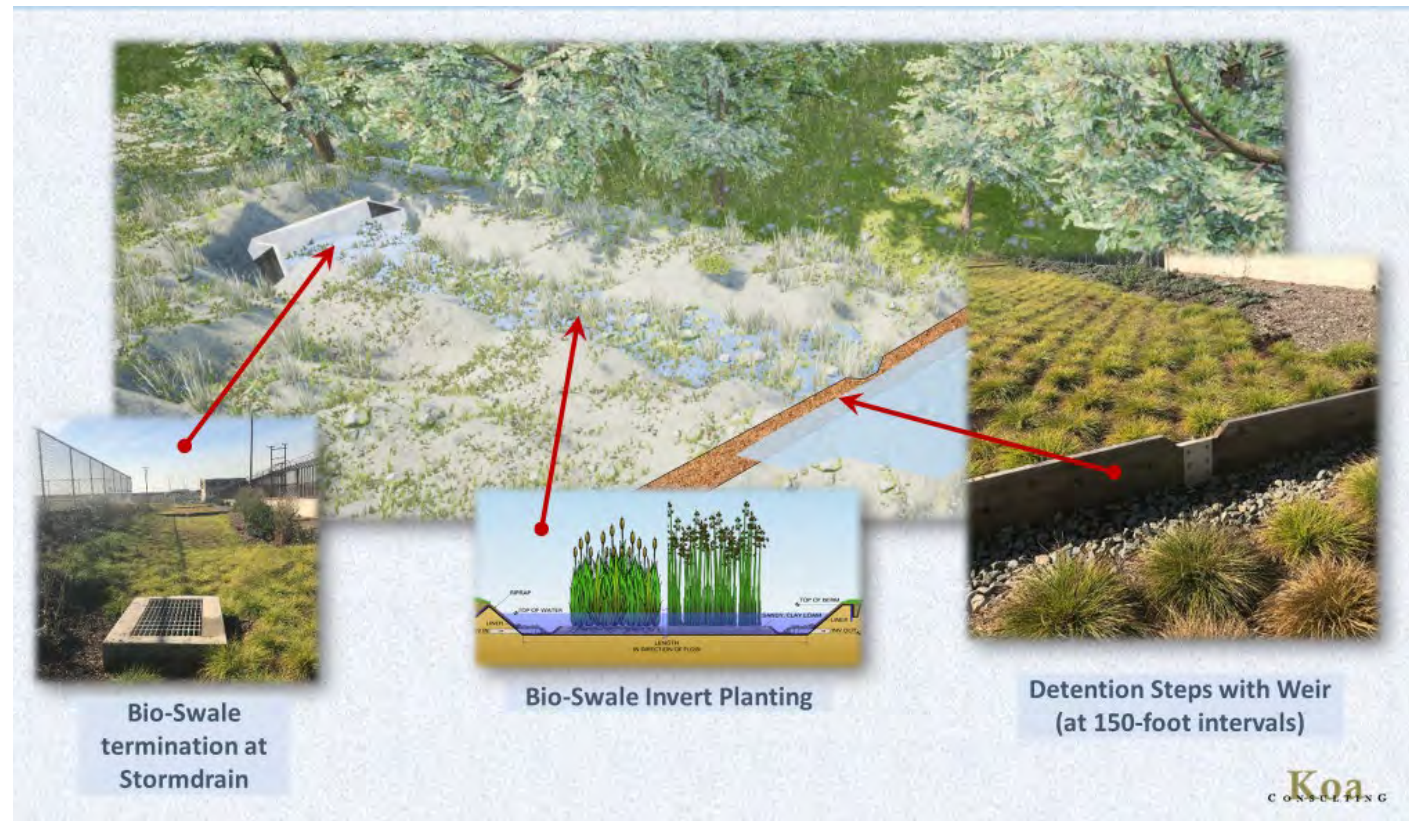
****See Water Resources Programs on the next page****

A great deal of land area is devoted to hard, typically impervious surfaces such as sidewalks, parking lots, roads and buildings. Surface runoff from rain and irrigation contributes to pollution, which eventually finds its way to the pertinent watersheds. Parks, schools, open spaces and parking lots can provide stormwater mitigation by incorporating the following strategies:

- Permeable paving that allows water to filter into the ground as recharge
- Implement vegetated bioswales/cells to capture runoff flowing from parking lot surfaces
- Utilize tree pallets that include large canopy shade trees to reduce heat and provide shade



- Parkways that collect street runoff into infiltration planters



4.2.6 Sustainability

The Southern California Association of Governments (SCAG) created the Sustainable Communities Strategy (SCS) within our region. The Sustainable Communities Strategy (SCS) is a required element of the Regional Transportation Plan (RTP) intended to integrate land use and transportation strategies that will achieve greenhouse gas emissions reduction targets.

The GCCOG subsequently created a Sustainability Committee on November 5, 2014 as directed by the board. Similar to the Southern California Associated Governments (SCAG), the GCCOG also has a Sustainability Committee; the primary goal is to work with our “communities and stakeholders to create a dynamic regional growth vision based on the principles of mobility, livability, prosperity and sustainability. The program’s work focuses on implementing the region’s Sustainable Communities



Strategy (SCS), the state-mandated plan for reducing greenhouse gas emissions from cars and light trucks through integrated transportation, land use, housing, and environmental planning.”²

The California legislation SB 375 included a unique provision for the 14 subregions that make up the vast six-county Southern California Association of Governments (SCAG) region. According to the legislation, a subregion within SCAG may take delegation from SCAG to prepare its own SCS. Two of the fourteen subregions within the SCAG MPO, the Gateway Cities Council of Governments (GCCOG) and Orange County, exercised this option.³

The combination of all of the GHG reduction strategies and their synergies should enable the subregion as a whole to reduce GHG per capita from the benchmark in 2005 by approximately 8.5 percent in 2020 and just over 15 percent in 2035, which exceeds the regional targets.⁴

The Lakewood/Rosemead Master Plan as proposed, in concept, is consistent with the Gateway Cities SCS, and should be modeled, when funds are available to demonstrate the GHG reduction, so that it can be a viable choice for Cap & Trade grant funds.

4.3 Mitigating homelessness

The Gateway Cities Council of Governments is leading an effort to address homelessness within our region. By action of the Board of Directors, policy direction was given to seek funding and collaboration in developing a plan to advance individuals from homelessness to a stabilized and productive life. Existing models of success have been identified in the work of the Gateway Cities Ad Hoc Committee on Homelessness. Certain programs within our region and elsewhere in Los Angeles County have a success record as high as 80% in moving an individual from being homeless to being stable and productive for over 3 years. The Gateway Cities COG appreciates the cooperation and partnership of the County of Los Angeles in making the homeless initiative a reality.¹

² SCAG Sustainability Definition from their website -<http://scag.ca.gov/programs/Pages/Programs/Sustainability.aspx>

³ Gateway Cities Subregional Sustainable Communities Strategy, Extended Abstract #58, by Nancy Pfeffer, Network Public Affairs, LLC

⁴ Gateway Cities Council of Governments. Gateway Cities Council of Governments Sub regional Sustainable Communities Strategy: In Accordance with California Senate Bill 375, 2011. See <http://gatewaycog.org/sb375.html>.

¹ <http://www.gatewaycog.org/who-we-are/committees/committee-on-homelessness/?cat=Committee+on+Homelessness+Agendas>



4.4 Objectives Criteria Matrix

A primary measure of success is when a study meets the objectives outlined in the scope of work.

The following table summarizes the success of the project with remarks that demonstrate how these objectives were met.

OBJECTIVES	OBJECTIVE MET?	REFERENCED SECTION IN THE REPORT
Identify improvements to reduce transportation related greenhouse gases	✓	Section 4.2.6
Identify concepts to creating sustainable communities	✓	Section 4.2.6
Identify and develop community to school or safe routes to school plans	✓	Section 4.2.4.1
Identify and develop Complete Street plans and streetscapes plans	✓	Section 4.0, Section 6.0
Identify and develop bike and pedestrian safety enhancement plans	✓	Section 4.1.3
Identify traffic operations and safety enhancements opportunities	✓	Section 3.2, Section 4.0, Section 4.1.1, Section 4.1.3
Evaluate for Corridor enhancements for multimodal mobility, access, safety, and linkages	✓	Section 3.0, Section 4.1.2, Section 4.2.2
Evaluate transit improvement opportunities to preserve transit facilities and optimize transit infrastructure	✓	Section 4.1.2
Evaluate accessibility and connectivity of the multimodal transportation network	✓	Section 4.1.1, Section 4.1.2, Section 4.1.3



5.0 COMMUNITY AND STAKEHOLDER OUTREACH

This section summarizes the various community and stakeholder outreach activities that can engage the community to support the study. Each city has specific methodology in mind for how they would want to complete community and stakeholder outreach along the Corridor. Meetings may include a combination of an initial meeting to listen and provide a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, a second meeting to discuss proposed ideas and recommendations and to receive feedback, and a third meeting provided the capital project list.

6.0 COMPLETE STREETS IMPLEMENTATION

The intent of the Key Concepts illustrated as focus areas is to provide a high-level concept that can be used as a potential template for the greater area surrounding the node. It can be also used to create the order of magnitude cost estimates.

Upon approval of the report, the implementation phase will begin which includes a menu of competitive funding options available that would require that GCCOG staff work with the Cities to help identify pieces or portions of the Corridor that fit within the requirements of the funding opportunity. GCCOG staff will identify opportunities and coordinate with the City a strategy for being able to submit the necessary justification for funds.

7.0 ORDER OF MAGNITUDE COST ESTIMATES

The intent of the high-level cost estimates is to provide a general magnitude of capital cost necessary to plan, design and construct the projects.

The Order of Magnitude cost estimates are based on

1. Street Designations
2. The specific improvements that each jurisdiction wishes to incorporate
3. Current/recent bid packages from Paramount, Bellflower and Lakewood improvements that have similar bid items were utilized in the calculation the cost estimates

These high-level estimates include the necessary planning, environmental, design and construction costs to construct the Corridor improvements for each city.

The following is a summary of the order of magnitude cost estimate for each jurisdiction:

CITY	SUPPORT	CAPITAL	TOTAL
Long Beach	28,858,125	\$ 115,432,500	\$ 144,290,625
Lakewood	5,755,919	\$ 23,023,676	\$ 28,779,595
Bellflower	6,596,950	\$ 26,387,800	\$ 32,984,750
Paramount	1,985,270	\$ 7,941,078	\$ 9,926,348
Downey	14,720,597	\$ 58,882,389	\$ 73,602,986
Pico Rivera	22,002,369	\$ 88,009,478	\$ 110,011,847
TOTALS FOR ALL CITIES	\$ 79,919,000	\$ 319,677,000	\$ 399,596,000
<i>Note - Total Structures Construction Costs Estimated At: \$ 119,500,00</i>			

7.1 City of Long Beach

F-1 Lakewood Boulevard at PCH

This focus area is generally consistent with the “Residential Calming” street designation.

F-2 Lakewood Boulevard at Interstate 405

This focus area is generally consistent with the “Principal Route” street designation.

The cost estimate for this section included these types of features, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	620,000	\$ 2	\$ 1,240,000
Pavement - Widening	SF	100,000	\$ 15	\$ 1,500,000
Enhanced Pavement	SF	13,000	\$ 20	\$ 260,000
Curb and Gutter Removal	LF	12,000	\$ 5	\$ 60,000
Curb and Gutter Construction	LF	12,000	\$ 30	\$ 360,000
Median Curbs including removal	LF	4,300	\$ 35	\$ 150,500
Curb Ramps	EA	17	\$ 3,500	\$ 59,500
Driveways	SF	18,000	\$ 8	\$ 144,000
Sidewalk	SF	55,000	\$ 6	\$ 330,000
Enhanced Sidewalk	SF	13,000	\$ 12	\$ 156,000
Sidewalk Railing	LF	900	\$ 50	\$ 45,000
Tree Removal	EA	375	\$ 500	\$ 187,500
Tree Replacement	EA	375	\$ 2,500	\$ 937,500
Power Line Undergrounding				
Transmission Undergrounding Power Polls	LS	1	9,780,000	\$ 9,780,000
Distribution Undergrounding Utilities	LS	1	3,600,000	\$ 3,600,000
Street Light Replacement	EA	140	5,000	\$ 700,000
Traffic Signal Mod.	EA	4	150,000	\$ 600,000
Grading	CY	10,000	15	\$ 150,000
Drain Inlets - Includes Connector Pipe	EA	50	10,000	\$ 500,000
Transit Stops	EA	10	15,000	\$ 150,000
Bike Lockers	EA	3	10,000	\$ 30,000
Landscape and Irrigation (drought tolerant)	SF	72,000	25	\$ 1,800,000
Signing and Striping	LF	17,000	10	\$ 170,000
Monument Signage	EA	2	20,000	\$ 40,000
Storm Water Treatment	LS	1	300,000	\$ 300,000
Widen I-405 UC Structures	LS	1	26,000,000	\$ 26,000,000
Widen 1,000ft OC Structure (LB Airport Runways)	LS	1	42,000,000	\$ 42,000,000
Widen Drainage Structures near Del Amo	LS	1	2,500,000	\$ 2,500,000
			Subtotal	\$ 93,750,000
Traffic Control	LS	2.5% total cost		\$ 2,343,750
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 96,193,750
				\$ 19,238,750
			Subtotal Construction Capital	\$ 115,432,500
Preliminary Engineering & Environmental	3%			\$ 3,462,975
PS&E	9%			\$ 10,388,925
Construction Management	8%			\$ 9,234,600
Admin	5%			\$ 5,771,625
Subtotal Soft Costs	25%			\$ 28,858,125
				\$ 144,290,625

7.2 City of Lakewood

F-3 Lakewood Boulevard at Del Amo Boulevard

This focus area is generally consistent with the “Downtown Lifestyle” street designation.

The cost estimate for this section included these types of features, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	470,000	\$ 2	\$ 940,000
Pavement - Widening	SF	70,000	\$ 15	\$ 1,050,000
Enhanced Pavement	SF	10,000	\$ 20	\$ 200,000
Curb and Gutter Removal	LF	9,000	\$ 5	\$ 45,000
Curb and Gutter Construction	LF	9,000	\$ 30	\$ 270,000
Median Curbs including removal	LF	3,225	\$ 35	\$ 112,875
Curb Ramps	EA	13	\$ 3,500	\$ 45,500
Driveways	SF	14,000	\$ 8	\$ 112,000
Sidewalk	SF	41,000	\$ 6	\$ 246,000
Enhanced Sidewalk	SF	10,000	\$ 12	\$ 120,000
Sidewalk Railing	LF	680	\$ 50	\$ 34,000
Tree Removal	EA	281	\$ 500	\$ 140,500
Tree Replacement	EA	281	\$ 2,500	\$ 702,500
Power Line Undergrounding				
Transmission Undergrounding Power Polls	LS	1	8,150,000	\$ 8,150,000
Distribution Undergrounding Utilities	LS	1	19,000,000	\$ 19,000,000
Street Light Replacement	EA	110	5,000	\$ 550,000
Traffic Signal Mod.	EA	3	150,000	\$ 450,000
Grading	CY	7,500	15	\$ 112,500
Drain Inlets - Includes Connector Pipe	EA	40	10,000	\$ 400,000
Transit Stops	EA	10	15,000	\$ 150,000
Bike Lockers	EA	2	10,000	\$ 20,000
Landscape and Irrigation (drought tolerant)	SF	54,000	25	\$ 1,350,000
Signing and Striping	LF	13,000	10	\$ 130,000
Monument Signage	EA	2	20,000	\$ 40,000
Storm Water Treatment	LS	1	250,000	\$ 250,000
			Subtotal	\$ 34,620,875
Traffic Control	LS	2.5% total cost		\$ 865,522
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 35,586,397
				\$ 7,117,279
			Subtotal Construction Capital	\$ 42,703,676
Preliminary Engineering & Environmental	3%			\$ 1,281,110
PS&E	9%			\$ 3,843,331
Construction Management	8%			\$ 3,416,294
Admin	5%			\$ 2,135,184
Subtotal Soft Costs	25%			\$ 10,675,919
				\$ 53,379,595

7.3 City of Bellflower

F-4 Lakewood Boulevard at SR-91.

F-5 Intersection of Lakewood Boulevard and Alondra Boulevard

F-6 Lakewood Boulevard at Somerset Boulevard & Future Eco Rapid Corridor

These focus areas are generally consistent with the “Residential Calming,” “Principle Route,” and “Urban Activity” street designations.

The cost estimate for this section included these types of features, in addition to incorporating the reconstruction of the bridge over the LA River, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	540,000	\$ 2	\$ 1,080,000
Pavement - Widening	SF	80,000	\$ 15	\$ 1,200,000
Enhanced Pavement	SF	11,000	\$ 20	\$ 220,000
Curb and Gutter Removal	LF	10,000	\$ 5	\$ 50,000
Curb and Gutter Construction	LF	10,000	\$ 30	\$ 300,000
Median Curbs including removal	LF	3,741	\$ 35	\$ 130,935
Curb Ramps	EA	15	\$ 3,500	\$ 52,500
Driveways	SF	16,000	\$ 8	\$ 128,000
Sidewalk	SF	48,000	\$ 6	\$ 288,000
Enhanced Sidewalk	SF	12,000	\$ 12	\$ 144,000
Sidewalk Railing	LF	780	\$ 50	\$ 39,000
Tree Removal	EA	326	\$ 500	\$ 163,000
Tree Replacement	EA	326	\$ 2,500	\$ 815,000
Power Line Undergrounding				
Transmission Undergrounding Power Poles	LS	1	9,450,000	\$ 9,450,000
Distribution Undergrounding Utilities	LS	1	3,480,000	\$ 3,480,000
Street Light Replacement	EA	120	5,000	\$ 600,000
Traffic Signal Mod.	EA	3	150,000	\$ 450,000
Grading	CY	8,700	15	\$ 130,500
Drain Inlets - Includes Connector Pipe	EA	40	10,000	\$ 400,000
Transit Stops	EA	10	15,000	\$ 150,000
Bike Lockers	EA	3	10,000	\$ 30,000
Landscape and Irrigation (drought tolerant)	SF	63,000	25	\$ 1,575,000
Signing and Striping	LF	15,000	10	\$ 150,000
Monument Signage	EA	2	20,000	\$ 40,000
Storm Water Treatment	LS	1	290,000	\$ 290,000
Subtotal				\$ 21,355,935
Traffic Control	LS	2.5% total cost		\$ 533,898
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 21,989,833
				\$ 4,397,967
Subtotal Construction Capital				\$ 26,387,800
Preliminary Engineering & Environmental	3%	\$		791,634
PS&E	9%	\$		2,374,902
Construction Management	8%	\$		2,111,024
Admin	5%	\$		1,319,390
Subtotal Soft Costs				\$ 6,596,950
				\$ 32,984,750

7.4 City of Paramount

F-4 Lakewood Boulevard at SR-91

F-5 Intersection of Lakewood Boulevard and Alondra Boulevard

F-6 Lakewood Boulevard at Somerset Boulevard & Future Eco Rapid Corridor

These focus areas are generally consistent with the “Residential Calming,” “Principle Route,” and “Urban Activity” street designations.

The cost estimate for this section included these types of features, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	120,000	\$ 2	\$ 240,000
Pavement - Widening	SF	20,000	\$ 15	\$ 300,000
Enhanced Pavement	SF	3,000	\$ 20	\$ 60,000
Curb and Gutter Removal	LF	2,000	\$ 5	\$ 10,000
Curb and Gutter Construction	LF	2,000	\$ 30	\$ 60,000
Median Curbs including removal	LF	860	\$ 35	\$ 30,100
Curb Ramps	EA	3	\$ 3,500	\$ 10,500
Driveways	SF	4,000	\$ 8	\$ 32,000
Sidewalk	SF	11,000	\$ 6	\$ 66,000
Enhanced Sidewalk	SF	3,000	\$ 12	\$ 36,000
Sidewalk Railing	LF	180	\$ 50	\$ 9,000
Tree Removal	EA	75	\$ 500	\$ 37,500
Tree Replacement	EA	75	\$ 2,500	\$ 187,500
Power Line Undergrounding				
Transmission Undergrounding Power Poles	LS	1	3,260,000	\$ 3,260,000
Distribution Undergrounding Utilities	LS	1	1,200,000	\$ 1,200,000
Street Light Replacement	EA	30	5,000	\$ 150,000
Traffic Signal Mod.	EA	1	150,000	\$ 150,000
Grading	CY	2,000	15	\$ 30,000
Drain Inlets - Includes Connector Pipe	EA	10	10,000	\$ 100,000
Transit Stops	EA	-	15,000	\$ -
Bike Lockers	EA	1	10,000	\$ 10,000
Landscape and Irrigation (drought tolerant)	SF	14,000	25	\$ 350,000
Signing and Striping	LF	3,000	10	\$ 30,000
Monument Signage	EA	-	20,000	\$ -
Storm Water Treatment	LS	-	100,000	\$ -
Subtotal				\$ 6,358,600
Traffic Control	LS	2.5% total cost		\$ 158,965
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 6,617,565
				\$ 1,323,513
Subtotal Construction Capital				\$ 7,941,078
Preliminary Engineering & Environmental	3%	\$		238,232
PS&E	9%	\$		714,697
Construction Management	8%	\$		635,286
Admin	5%	\$		397,054
Subtotal Soft Costs				\$ 1,985,270
				\$ 9,926,348

7.5 City of Downey

F-7 Lakewood Boulevard at Firestone Boulevard

This focus area is generally consistent with “Residential Calming” street designations.

The cost estimate for this section included these types of features, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	990,000	\$ 2	\$ 1,980,000
Pavement - Widening	SF	150,000	\$ 15	\$ 2,250,000
Enhanced Pavement	SF	20,000	\$ 20	\$ 400,000
Curb and Gutter Removal	LF	18,000	\$ 5	\$ 90,000
Curb and Gutter Construction	LF	18,000	\$ 30	\$ 540,000
Median Curbs including removal	LF	6,880	\$ 35	\$ 240,800
Curb Ramps	EA	27	\$ 3,500	\$ 94,500
Driveways	SF	29,000	\$ 8	\$ 232,000
Sidewalk	SF	88,000	\$ 6	\$ 528,000
Enhanced Sidewalk	SF	21,000	\$ 12	\$ 252,000
Sidewalk Railing	LF	1,440	\$ 50	\$ 72,000
Tree Removal	EA	600	\$ 500	\$ 300,000
Tree Replacement	EA	600	\$ 2,500	\$ 1,500,000
Power Line Undergrounding				
Transmission Undergrounding Power Polls	LS	1		\$ -
Distribution Undergrounding Utilities	LS	1	4,800,000	\$ 4,800,000
Street Light Replacement	EA	230	5,000	\$ 1,150,000
Traffic Signal Mod.	EA	6	150,000	\$ 900,000
Grading	CY	16,000	15	\$ 240,000
Drain Inlets - Includes Connector Pipe	EA	80	10,000	\$ 800,000
Transit Stops	EA	20	15,000	\$ 300,000
Bike Lockers	EA	5	10,000	\$ 50,000
Landscape and Irrigation (drought tolerant)	SF	115,000	25	\$ 2,875,000
Signing and Striping	LF	28,000	10	\$ 280,000
Monument Signage	EA	3	20,000	\$ 60,000
Storm Water Treatment	LS	2	400,000	\$ 800,000
Structures Widening at I-105 (330' OC)	LS	1		\$ -
			Subtotal	\$ 20,734,300
Traffic Control	LS	2.5% total cost		\$ 518,358
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 21,352,658
				\$ 4,270,532
			Subtotal Construction Capital	\$ 25,623,189
Preliminary Engineering & Environmental	3%	\$		768,696
PS&E	9%	\$		2,306,087
Construction Management	8%	\$		2,049,855
Admin	5%	\$		1,281,159
Subtotal Soft Costs	25%	\$		6,405,797
			\$	32,028,986

7.6 City of Pico Rivera

F-8 Rosemead Boulevard at Mines Avenue. This focus area is generally consistent with “Residential Calming” street designations.

The cost estimate for this section included these types of features, which should be considered as part of the Master Plan.

	UNIT	QUANTITY	Unit PRICE	AMOUNT
Pavement Grind and Overlay (2.5")	SF	1,070,000	\$ 2	\$ 2,140,000
Pavement - Widening	SF	160,000	\$ 15	\$ 2,400,000
Enhanced Pavement	SF	22,000	\$ 20	\$ 440,000
Curb and Gutter Removal	LF	20,000	\$ 5	\$ 100,000
Curb and Gutter Construction	LF	20,000	\$ 30	\$ 600,000
Median Curbs including removal	LF	7,396	\$ 35	\$ 258,860
Curb Ramps	EA	29	\$ 3,500	\$ 101,500
Driveways	SF	31,000	\$ 8	\$ 248,000
Sidewalk	SF	95,000	\$ 6	\$ 570,000
Enhanced Sidewalk	SF	23,000	\$ 12	\$ 276,000
Sidewalk Railing	LF	1,550	\$ 50	\$ 77,500
Tree Removal	EA	645	\$ 500	\$ 322,500
Tree Replacement	EA	645	\$ 2,500	\$ 1,612,500
Power Line Undergrounding				
Transmission Undergrounding Power Polls	LS	1	14,020,000	\$ 14,020,000
Distribution Undergrounding Utilities	LS	1	5,160,000	\$ 5,160,000
Street Light Replacement	EA	250	5,000	\$ 1,250,000
Traffic Signal Mod.	EA	7	150,000	\$ 1,050,000
Grading	CY	17,200	15	\$ 258,000
Drain Inlets - Includes Connector Pipe	EA	90	10,000	\$ 900,000
Transit Stops	EA	20	15,000	\$ 300,000
Bike Lockers	EA	5	10,000	\$ 50,000
Landscape and Irrigation (drought tolerant)	SF	124,000	25	\$ 3,100,000
Signing and Striping	LF	30,000	10	\$ 300,000
Monument Signage	EA	3	20,000	\$ 60,000
Storm Water Treatment	LS	2	430,000	\$ 860,000
Widen RR UP between Slauson & Washington	LS	1	35,000,000	\$ 35,000,000
			Subtotal	\$ 71,454,860
Traffic Control	LS	2.5% total cost		\$ 1,786,372
Signal Interconnect Synchronizing	EA	1	\$ 100,000	\$ 100,000
				\$ 73,341,232
				\$ 14,668,246
			Subtotal Construction Capital	\$ 88,009,478
Preliminary Engineering & Environmental	3%	\$		2,640,284
PS&E	9%	\$		7,920,853
Construction Management	8%	\$		7,040,758
Admin	5%	\$		4,400,474
Subtotal Soft Costs	25%	\$		22,002,369
			\$	110,011,847



8.0 PRESENTATION TO COMMITTEES AND CITY COUNCILS

The Study included a series of independent meetings with each City/Jurisdiction as well as a series of meetings with the Lakewood/Rosemead Boulevard Technical Advisory Committee (TAC) and Policy Committee (PC).

- A first meeting was held with the TAC to outline the scope of work and goals of the study and to provide them with schedule.
- A series of initial independent meetings were conducted with each community to listen and provide a Strengths, Weaknesses, Opportunities, and Constraints.
- A second meeting with each City/Jurisdiction was held to discuss proposed ideas and recommendations and to receive feedback.
- A second meeting with the TAC was held on February 26, 2019 to present and provide the Conceptual Planning Exhibits for review and comment.
- A final meeting with the joint TAC and PC (will be) was held to finalize the study and approve the report. A strategy discussion and next steps for implementation of the Master Plan (will be) was also included.



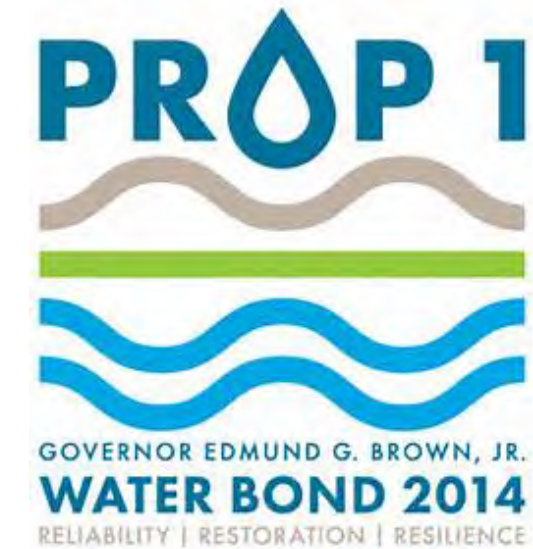


9.0 FINALIZED CONCEPTS FOR MASTER PLAN

The next steps include an implementation strategy necessary to secure funding for the project. Building the project can be completed in a variety of ways, including the following:

General Funding Opportunities	How Funds can be used: Phases & Eligibility
Caltrans Sustainability	Planning Phase Only
Caltrans Active Transportation Program	Planning Phase Only, can be specific to Safe Routes to School
California Cap & Trade	All Phases, per submission requirements, Construction Phase
LA-River (AB-530)	Could be used to improve accessibility near the LA River, all Phases
Gateway Urban Greening (WCA)	Could be used to improve accessibility near the watersheds, all Phases
RMC Prop 1	Could be used to improve accessibility near the watersheds, all Phases
Caltrans Highway Safety Improvement Plan (HSIP)	Improves Traffic Safety, Construction Phase
City Specific Prop. A	For all Phases, along Transit Related Improvements
City Specific Prop. C	Flexible use for all phases along High-Quality Transit Line
Metro Call for Projects	Flexible Use, speculative if "Call" will be announced including timing
Local Return Measure R	Flexible use for all phases
Local Return Measure M	Flexible use for all phases
Federal Programs such as the TIGER Grant	Flexible use for Construction Phase

The competitive funding options available will be monitored by GCCOG staff work, who will coordinate with the cities. Once a source is identified, coordination will take place regarding the pieces or portions of the Corridor that fit within the requirements of the funding opportunity. GCCOG staff will identify opportunities and coordinate with the city a strategy for being able to submit the necessary justification for funds.





10.0 STEPS FORWARD

Steps forward can include a variety of options. From a general standpoint, the project will follow the traditional project development process, as included in section 2.4. Additionally, the project will need to be broken into components by mode or by specific geographical section depending on the funding opportunity. Because the Corridor is large and the cost estimate is high, a multi variable funding plan is necessary in order to implement the master plan. Possible funding options were included in Section 9.0.

Several examples of how the project could be implemented are as follows:

Option 1	Fund a geographical section of the master plan including all concept characteristics shown in the master plan.
Option 2	Fund only a portion, such as aesthetically consistent bus shelters, for the overall Corridor.
Option 3	Fund the full concept for intersections only, and tie in to the Lakewood/Rosemead Mainline until additional funding becomes available.

There are likely many options to implementing the Master Plan and the Gateway Cities is available to identify funding opportunities consistent with the Corridor Master Plan.

