TRANSPORTATION WORKSHOP

February 5, 2015

Francisco X. Rivera, P.E., T.E., Principal Civil Engineer
City of Chula Vista Public Works Department

CHULA VISTA TRANSPORTATION PROGRAM UPDATE

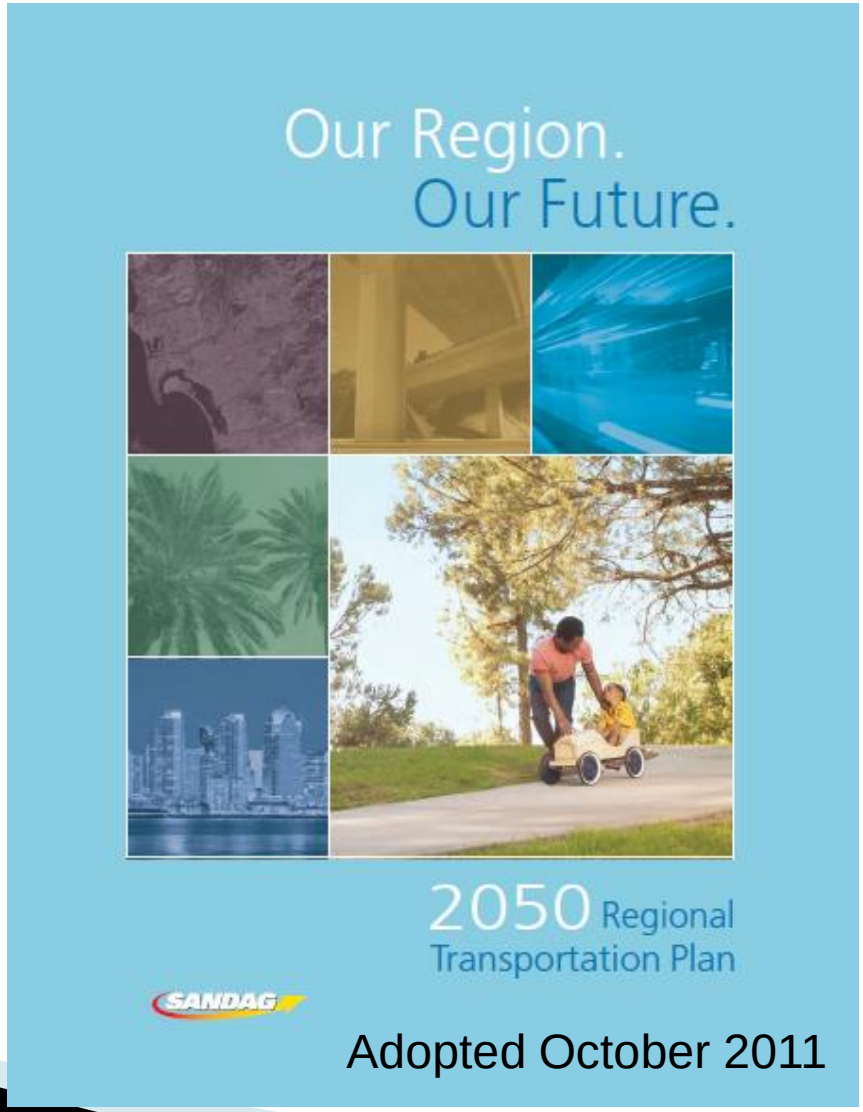
WORKSHOP AGENDA

1. SANDAG 2050 Regional Transportation Plan
2. South Bay Bus Rapid Transit
3. I-805/East Palomar Street Access Ramp
4. Light Rail Trolley & Freight Rail Projects
5. Local Arterial Roadways
6. Bicycle Program
7. Pedestrian Program
8. Next Steps CIP FY 2015-16

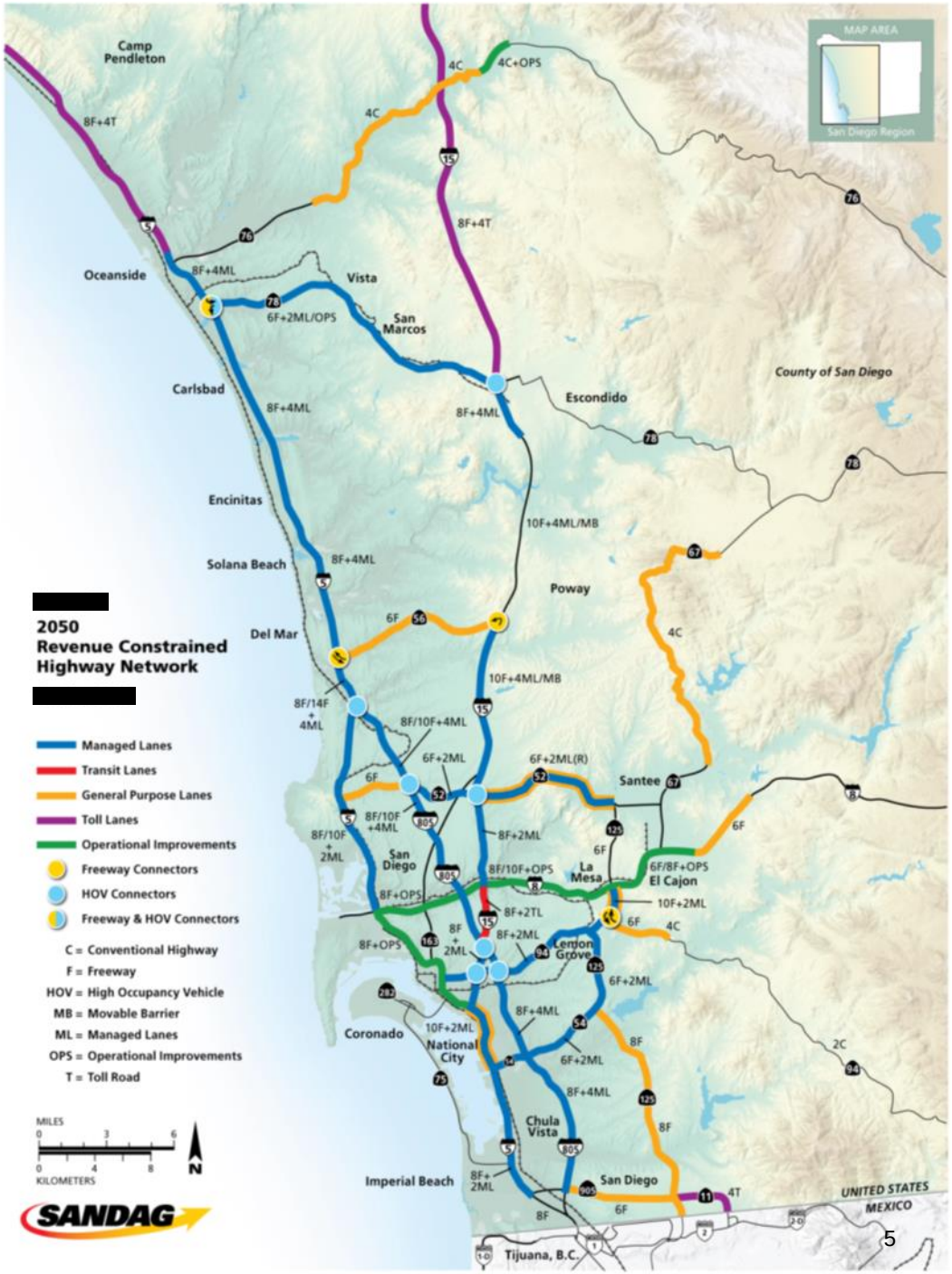
SANDAG'S 2050 REGIONAL TRANSPORTATION PLAN ADOPTION

2050 REGIONAL TRANSPORTATION PLAN

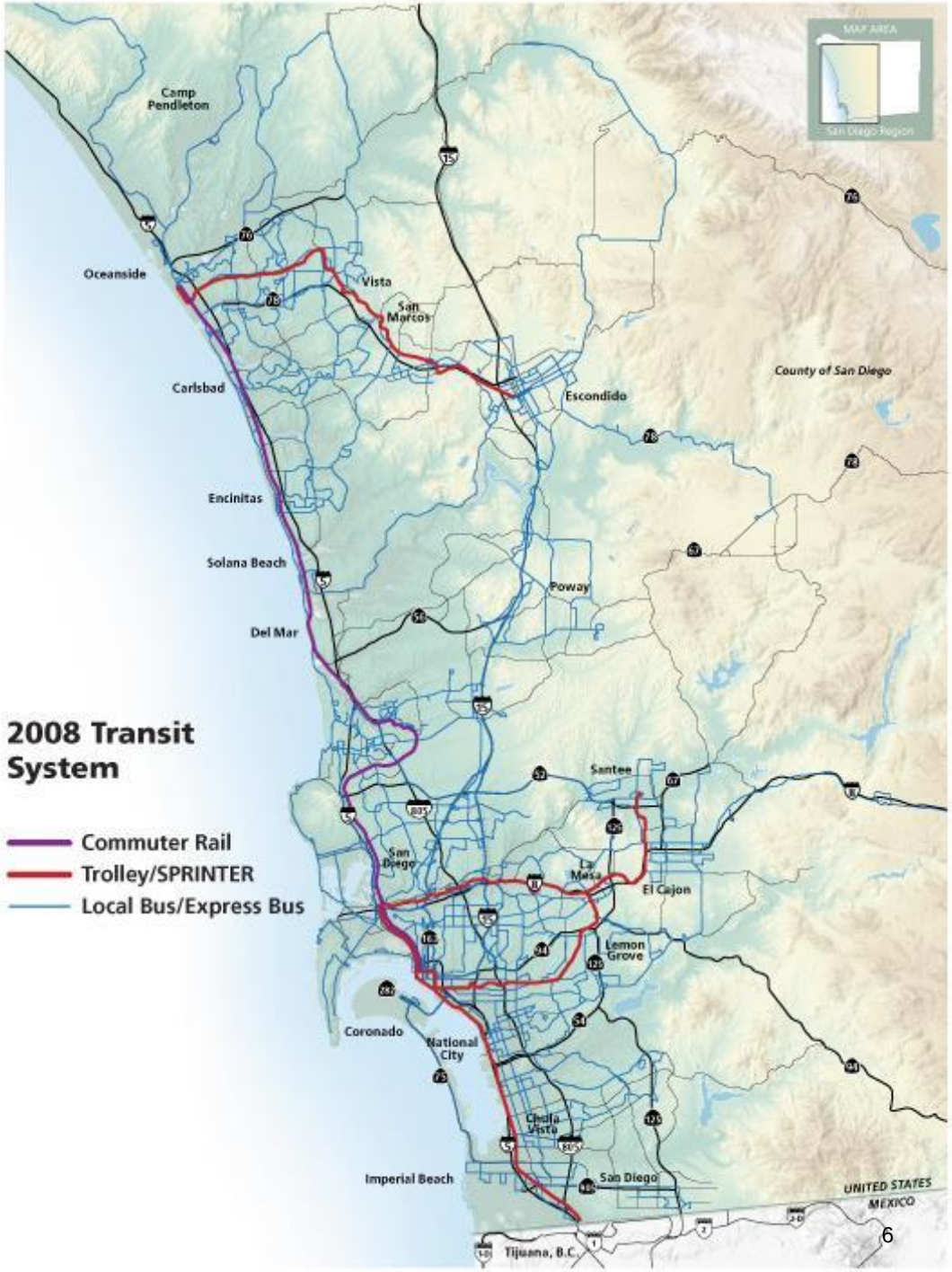
http://www.sandag.org/uploads/2050RTP/F2050rtp_all.pdf



2050 Highway Network



2050 Transit Network



South Bay *Rapid*

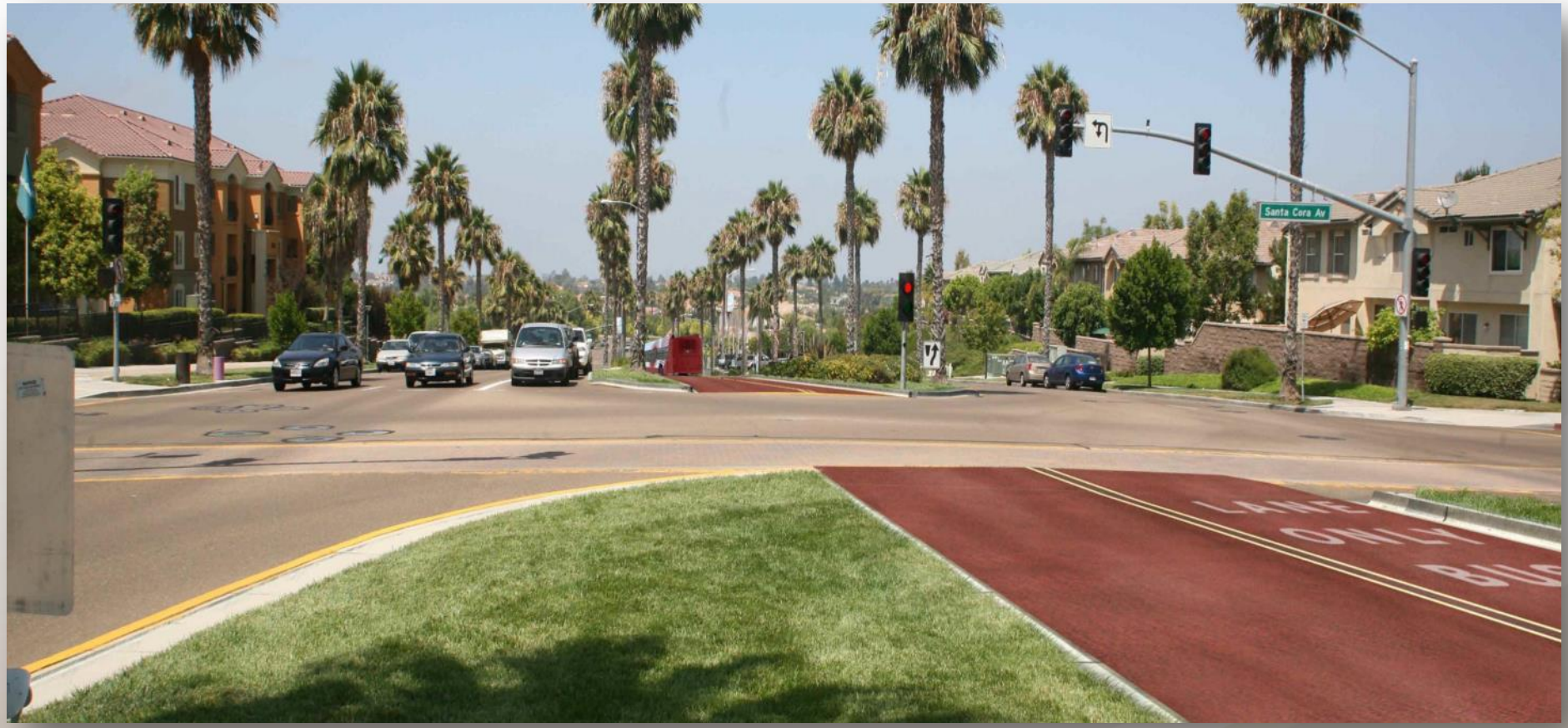
Chula Vista City Council Transportation Workshop
February 5, 2015

Jennifer Williamson
Senior Transportation Planner

Project Overview

- 21-mile corridor
- Dedicated transit guideway
- 12 stations (first phase) 15 at full build out.
- Service every 10-15 minutes
- Included in ***TransNet***

Typical Guideway

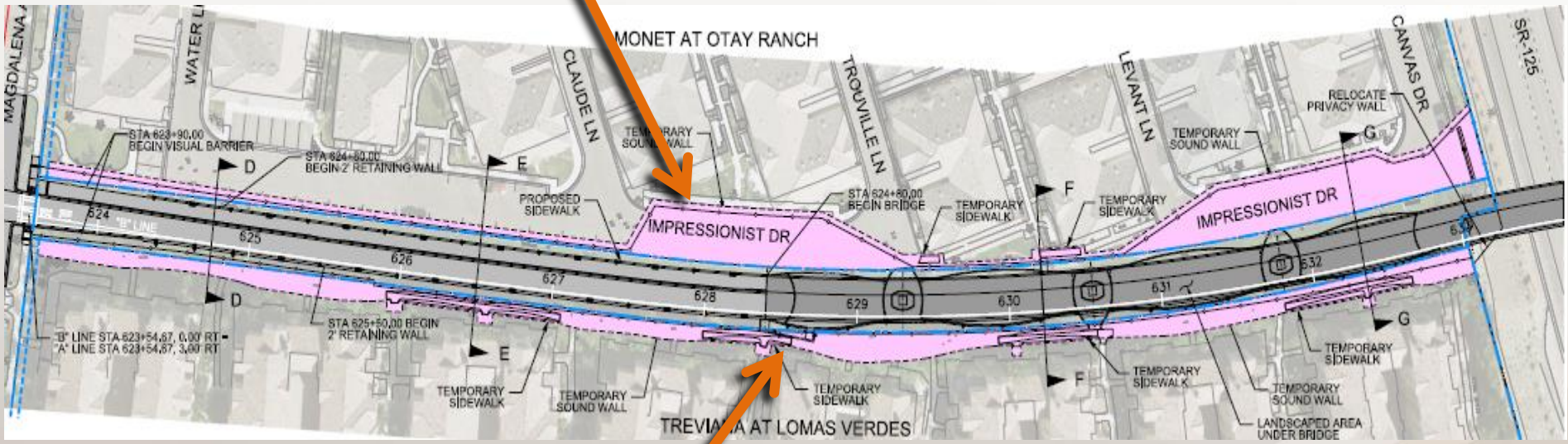


Approved Alignment Across SR 125

Guideway Simulation

Temporary Construct Easements (TCEs)

Monet TCE Acquisition - 14,828 sf



Treviana TCE Acquisition - 10,603 sf

Otay Ranch Town Center Station

Otay Mesa Border Station

Current Status

July 2013: SANDAG Board of Directors certified the Final Environmental Impact Report (EIR) for the South Bay BRT project.

October 2013: Public workshops soliciting community feedback on design options.

Mid-2015: Construction on the guideway is scheduled to begin.

Mid-2017: Service starts.

SOUTH 805 Express Lanes
Building Choices for South County

I-805 South Project

BUILDING CHOICES FOR SOUTH COUNTY

Ramon Martinez P.E. Project Manager, Caltrans

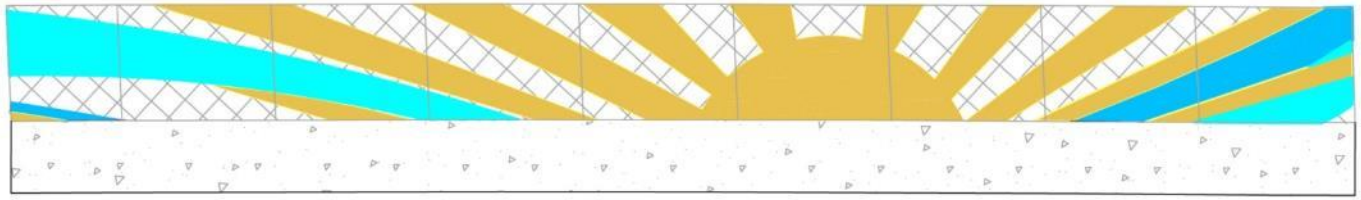
SANDAG TransNet Caltrans 511 MOVE OVER

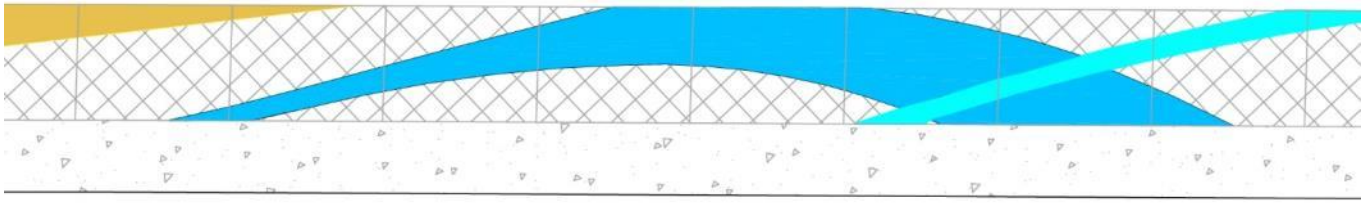
DAR/Transit Station and Park & Ride

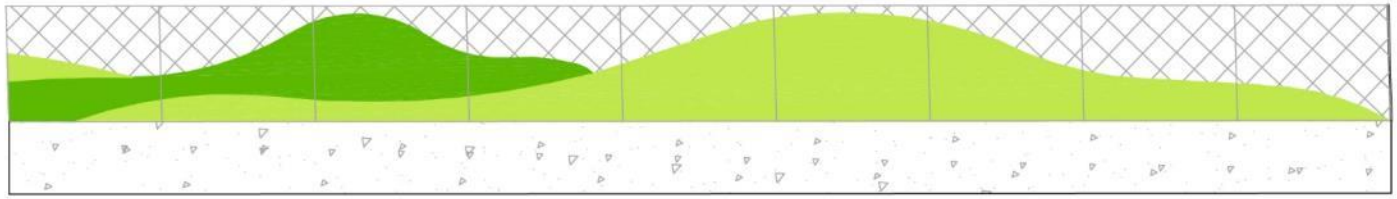
Construction Update

- Completed in 2014:
  - Eight miles of new HOV lanes (one in each direction) between East Naples Street in Chula Vista and State Route 94 in San Diego opened in March 2014
  - Ten sound walls built along route to reduce freeway noise and improve quality of life for nearby residents
- Currently Underway:
  - Construction of East Palomar Street DAR, Transit Station and Park & Ride in Chula Vista
  - Addition of a northbound auxiliary lane and southbound outside through lane between State Route 54 and East Plaza Boulevard in National City

East Palomar Street Bridge
Fence Enhancement Theme







East Palomar Street Direct Access Ramp and Transit Station

For More Information

Websites:
KeepSanDiegoMoving.com
511sd.com
dot.ca.gov/dist11

Social Media:
@SDCaltrans
@SANDAG
SANDAGregion
SANDAGREGION

Construction Hotline:
1 (888) 941-5005

Email:
I-805South@KeepSanDiegoMoving.com

Palomar Street
Rail Grade Separation Study

John Dorow, P.E. Senior Engineer, SANDAG

RAIL GRADE SEPARATION RANKINGS

- 2050 RTP (Oct. 2013)
- #4 – Palomar Street
- #5 – H Street
- #6 – E Street

- SANDAG Update (June 2014)
- #1 – Palomar Street
- #4 – H Street
- #6 – E Street

AT GRADE CROSSING LOCATION	RANK	VEHICLE PER DAY ADT	TRAINS PER DAY	ACCIDENTS	TOTAL POINTS	ESTIMATED COST TO GRADE SEPARATE ($2010) (MIL)	ASSUMPTIONS
Washington, Laurel, Hawthorn, Grape, Ash, and Broadway Streets, San Diego	1	263,945	137	8	80.8	$2,200	see note (1)
Taylor Street, San Diego	2	42,670	195	4	62.8	$110	see note (4)
Broadway, Lemon Grove Ave, Lemon Grove	3	40,403	144	2	57.8	$80	light rail only (4)
Palomar Street, Chula Vista	4	59,337	206	0	55.5	$40	light rail only (4)
H Street, Chula Vista	5	47,596	206	0	53.3	$40	light rail only (4)
E Street, Chula Vista	6	45,658	206	1	50.3	$40	light rail only (4)
Euclid Avenue, San Diego	7	37,000	144	0	46.3	$40	light rail only (4)
Washington St./Sassafras St., San Diego	8	30,345	206	0	46.3	$150	light rail only (4)
Vista Village Drive/Main Street, Vista	9	61,698	67	0	46.0	$60	light rail only (2)
Civic Center Drive, Vista	10	40,782	67	0	46.0	$40	light rain only
28th Street, San Diego	11	33,225	206	0	44.8	$40	light rail only (4)
Ash Street, San Diego	12	30,575	206	0	44.0	$100	light rain only
Broadway, San Diego	13	27,845	144	0	43.3	$110	light rain only
32nd Street, San Diego	14	32,470	206	0	42.5	$40	light rail only (4)
Allison Ave/University Ave/La Mesa Blvd, La Mesa	15	24,700	144	0	40.3	$100	light rain only
Severin Drive, La Mesa	16	13,611	288	2	40.3	$40	light rail only (4)
Sorrento Valley Blvd, San Diego	17	37,990	51	1	39.5	$130	
Melrose Drive, Vista	18	25,921	67	0	31.8	$40	light rail only (2)
El Camino Real, Oceanside	19	35,911	67	0	31.7	$40	light rail only (2)
North Drive, Vista	20	8,793	67	0	29.5	$30	light rain only
Mar Vista Drive, Vista	21	9,665	67	0	28.8	$30	light rain only
Los Angeles Drive, Vista	22	4,291	67	0	28.8	$30	light rain only
Grand Avenue/Carlsbad Village Drive, Carlsbad	23	21,113	51	0	28.3	$110	
Guajome Street, Vista	24	4,152	67	0	28.0	$30	light rain only
Tamarack Avenue, Carlsbad	25	10,568	51	0	23.8	$90	
Cannon Road, Carlsbad	26	12,434	51	0	22.3	$90	
Leucadia Blvd., Encinitas	27	34,000	51	1	22.0	$90	see note (3)
						$3,940	

Revised Draft Rail Grade Separations Project Rankings

Attachment 1

Name	City	Discontinued Cost ($2014) (millions)	Average Daily Traffic	Trains Per Day	[1] FRA Factor [10]	[2] POB Factor [10]	[3A] Ped & Bike [3]	[3B] Community of Concern (yes) [3]	[4] Bus Ops Benefit [4]	[5] Benefit to Emergency Services [4]	[6] Accident History [10]	[7] Proximity to Noise Sensitive Receptors [4]	[8] GHG Reduction [4]	[9] Service RCP Goals Growth Areas [7]	[10] Truck Freight Ops [3]	[11] Funding Required [4]	[12] Project Cost Effectiveness [8]	[13] Risks [10]	Total Score	SANDAG San Diego Forward Draft Rank	May 14 San Diego Forward Draft Rank	Rail Designation
Palomar Street	Chula Vista	$41	44,384	206	8	11	3	3	3	1	0	4	4	4	3	3	8	15.03	62.63	1	2	Light Rail
Broadway/Lemon Grove Ave	Lemon Grove	$80	40,403	144	4	11	1.5	3	3	4	3	3	3	4	1	1	8	17.00	65.16	2	3	Light Rail
Ash Street	San Diego	$110	30,575	195	3	11	0	3	0	4	3	3	3	7	1	3	8	10.01	66.81	3	4	Light/Heavy Rail
H Street	Chula Vista	$41	47,596	206	8	11	3	3	3	3	0	4	4	3	3	3	8	15.03	66.63	4	5	Light Rail
Washington Street	San Diego	$41	30,345	195	3	8	1	1	1	4	8	0	3	1	1	3	8	10.01	66.81	5	6	Light Rail
E Street	Chula Vista	$41	45,658	206	7	11	1	3	3	3	0	3	4	4	3	3	8	15.03	66.63	6	8	Light Rail
Broadway	San Diego	$110	27,845	195	1	7	3	3	3	4	3	0	3	7	1	3	8	10.01	66.81	7	7	Light Rail
Taylor Street	San Diego	$110	42,670	195	4	11	3	1	4	1	3	0	4	3	1	3	4	10.01	66.81	7	7	Light/Heavy Rail
Euclid Ave	San Diego	$41	37,000	144	3	8	3	3	3	4	0	3	3	3	1	3	3	10.01	66.81	9	9	Light Rail
28th Street	San Diego	$41	33,225	206	4	11	3	1	1	3	1	0	3	3	1	3	4	10.01	66.81	10	10	Light Rail
32nd Street	San Diego	$41	32,470	206	3	11	3	3	1	1	1	0	3	3	1	3	4	10.01	66.81	11	11	Light Rail
Civic Center Drive	Vista	$41	34,918	68	3	8	1.5	1	3	1	1	4	3	3	3	3	8	11.04	64.44	12	12	Light Rail
Auto Parkway and Mission Avenue	Escondido	$38	37,825	68	3	8	1.5	1	1	3	1	3	3	3	3	3	3	15.03	62.13	13	13	Light Rail
Sorrento Valley Blvd	San Diego	$130	37,990	51	3	3	1	3	3	1	4	0	1	3	1	3	8	10.01	65.81	14	14	Heavy Rail
Allison Ave/University Ave	La Mesa	$100	24,700	144	3	4	1.5	1	3	4	3	4	3	4	3	1	3	13.00	65.00	15	15	Light Rail
North Drive	Vista	$30	8,793	68	1	1	3	3	1	4	3	4	1	1	3	3	8	11.04	64.44	16	16	Light Rail
Vista Village Drive/Main Street	Vista	$60	24,827	68	3	3	1.5	3	4	4	3	0	1	4	3	3	3	11.04	64.44	17	17	Light Rail
Severin Drive	La Mesa	$41	8,311	288	1	3	3	1	0	3	3	4	1	3	3	1	8	11.04	37.84	18	18	Light Rail
El Camino Real	Oceanside	$41	35,911	68	3	3	3	1	1	4	3	0	1	1	3	1	3	14.04	36.96	19	19	Light Rail
Grand Ave/Carlsbad Village Drive	Carlsbad	$110	21,113	51	3	3	3	1	1	3	7	4	1	3	1	3	8	0.00	35.00	20	20	Heavy Rail
Melrose Drive	Vista	$41	25,921	68	3	8	3	1	1	3	3	0	3	3	3	3	4	11.04	31.84	21	21	Light Rail
Mar Vista Drive	Vista	$31	9,665	68	1	1	3	1	1	4	3	4	1	3	3	3	3	11.04	28.84	22	22	Light Rail
Los Angeles Drive	Vista	$31	4,291	68	1	1	3	3	1	3	3	4	1	3	3	3	1	11.04	28.84	22	22	Light Rail
Guajome Street	Vista	$31	4,152	68	1	1	3	1	0	4	3	3	1	1	3	3	1	11.04	28.84	24	24	Light Rail
Leucadia Blvd	Encinitas	$90	34,000	51	1	3	1.5	1	1	3	3	4	1	3	3	3	3	0.00	19.50	25	25	Heavy Rail
Tamarack Avenue	Carlsbad	$90	10,568	51	1	3	1	3	3	1	1	4	1	3	1	3	1	0.00	19.50	26	26	Heavy Rail
Cannon Road	Carlsbad	$90	8,418	51	1	1	1	1	1	3	3	3	1	3	1	3	1	0.00	13.50	27	27	Heavy Rail

Palomar Street Project Location

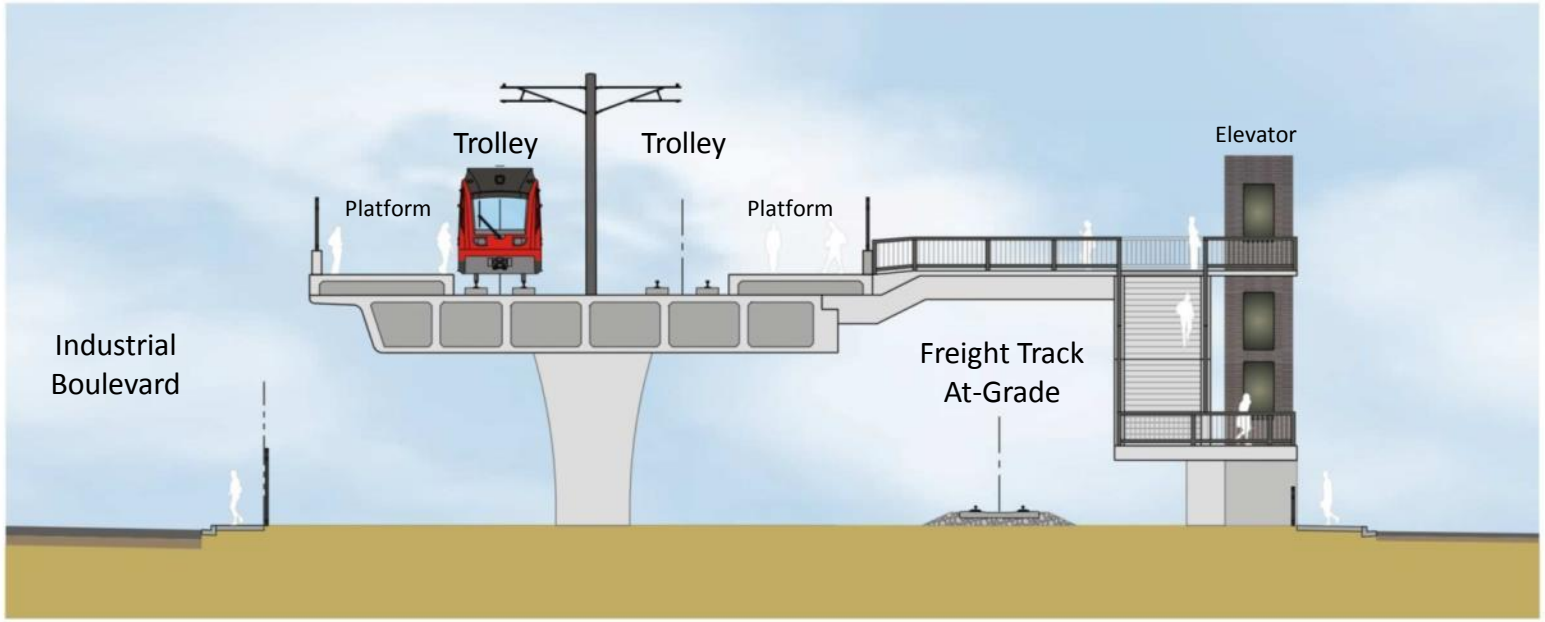
Existing Project Site

Alternative P2: Raise Trolley over Palomar Street

Plan View

Alternative P2: Raise Trolley over Palomar Street

Typical Sections



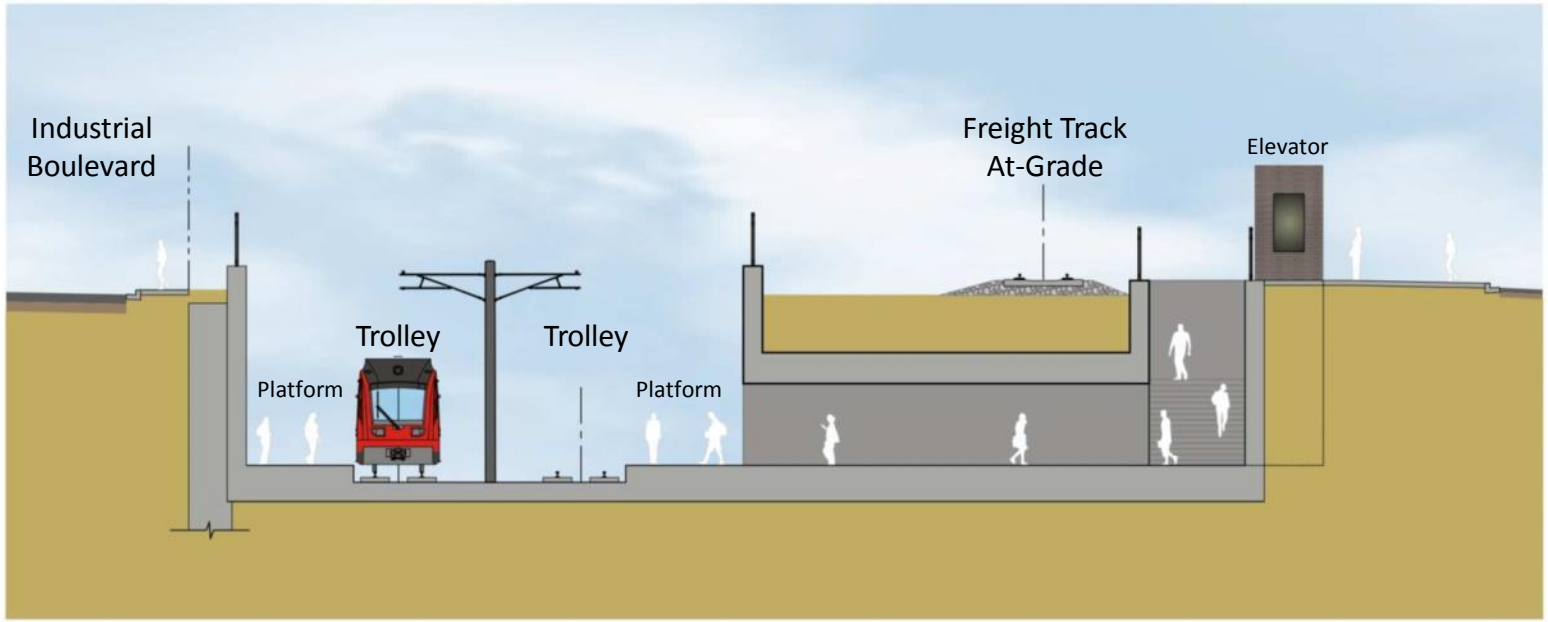
Bridge Section at Trolley Station

Alternative P4: Lower Trolley under Palomar Street

Plan View

Alternative P4: Lower Trolley under Palomar Street

Typical Sections



Trench Section at Trolley Station

SANDAG South Line Freight Rail Capacity Project

- $51M Project
- Requires two tracks to accommodate increased capacity
- Construction completion: Anticipated 2016

Alternative P5: Lower Palomar Street Under Trolley

Plan View

Alternative P5: Lower Palomar Street Under Trolley

Typical Section

Palomar Street Roadway Undercrossing

Existing view from Palomar Street

Alternative P5: Lower Palomar Street Under Trolley

View Looking West on Palomar Street

Existing view from Industrial Blvd

Alternative P5: Lower Palomar Street Under Trolley

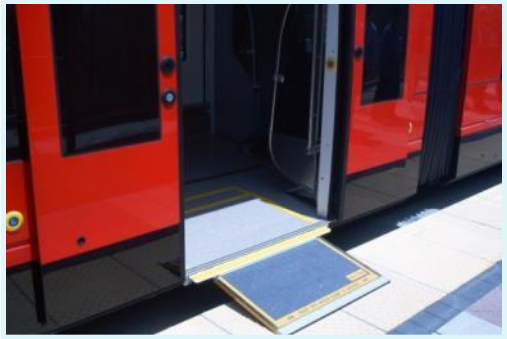
View Looking North on Industrial Blvd

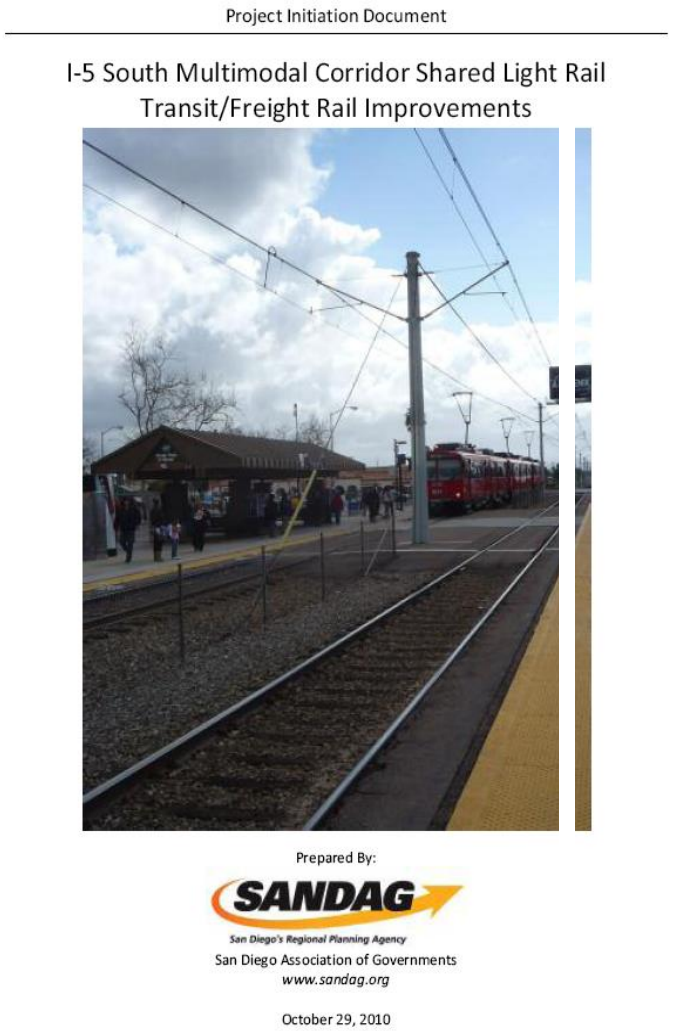
Next Steps

- Over the next 12 months:
  - Refine Palomar Street roadway undercrossing alternative
  - Prepare Palomar Street Project Report
  - Prepare Environmental Document
  - Develop funding and implementation plan

Light Rail / Freight Rail Corridor Improvements

- At grade crossing improvements
- Low floor vehicle procurement
- Freight Rail improvements
- E Street grade separation study
- H Street grade separation study
- Palomar Street grade separation study





Project Initiation Document

I-5 South Multimodal Corridor Shared Light Rail Transit/Freight Rail Improvements

Prepared By:

SANDAG

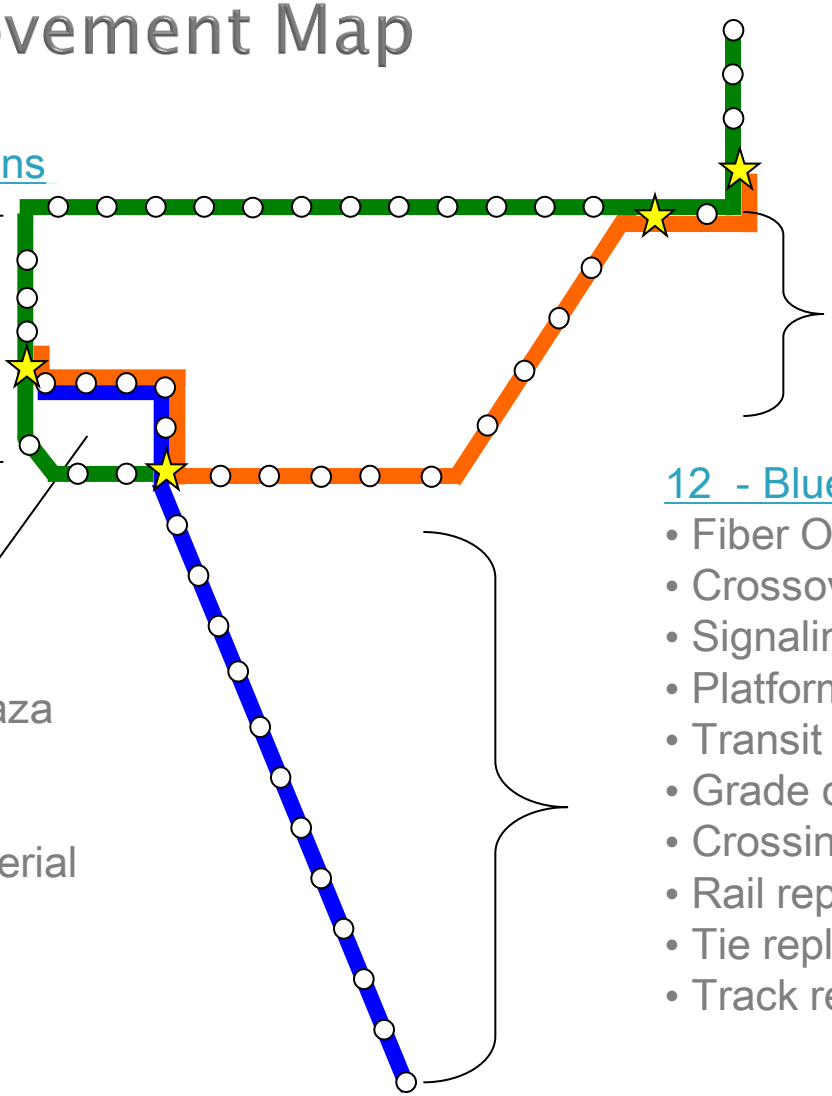
San Diego's Regional Planning Agency

San Diego Association of Governments

www.sandag.org

October 29, 2010

Trolley Improvement Map



7 Green Line Ext. Stations
- 8” Platforms
- Shelters
- Electrical
- Communications

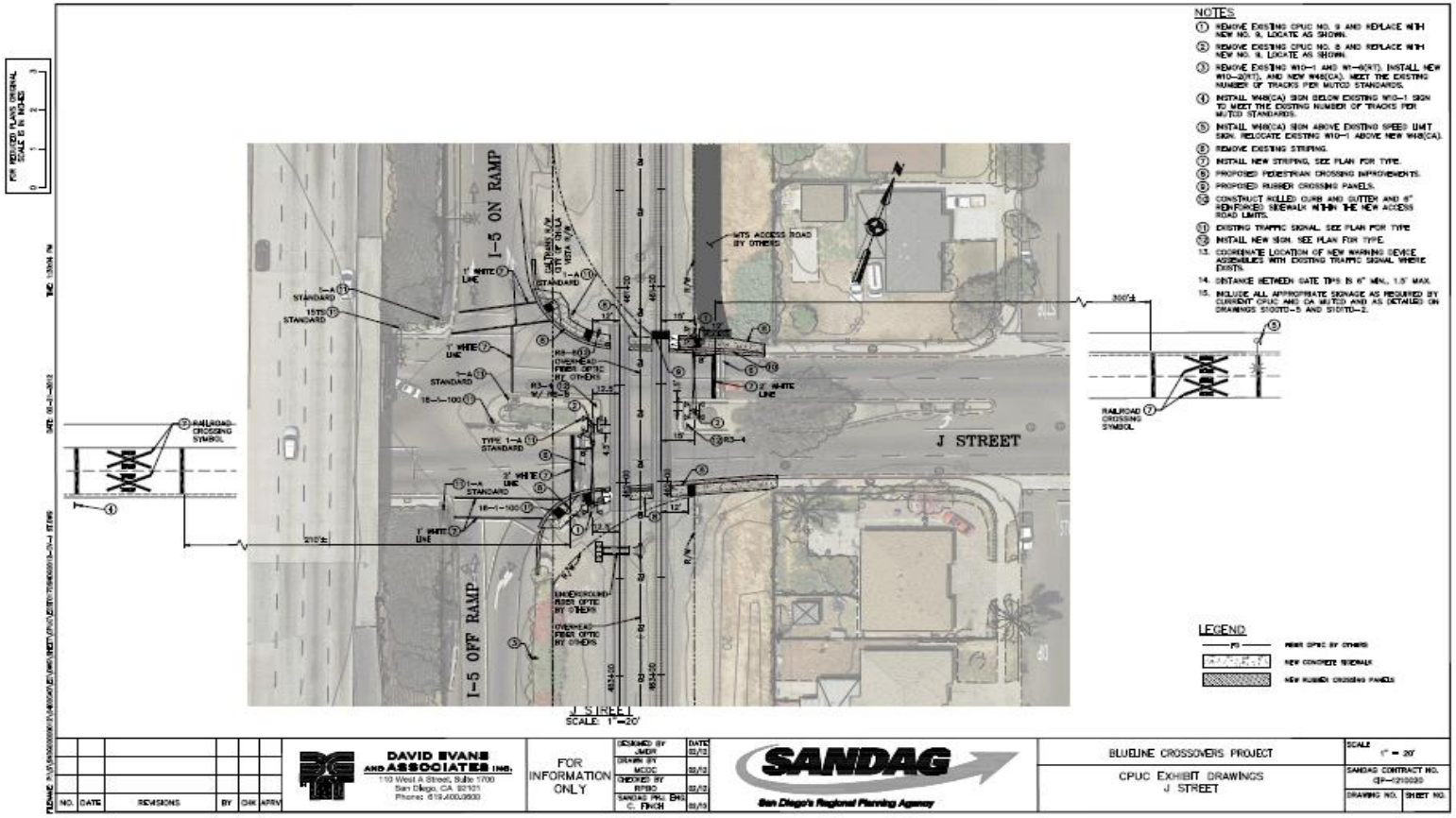
9 - Orange Line Stations
- 8” Platforms
- Shelters
- Rail Replacement
- Electrical
- Communications

6 Downtown Stations
- 8” Platform
- Crossover America Plaza
- Electrical
- Communications
- Switches at 12th & Imperial

12 - Blue Line Stations
- Fiber Optic
- Crossovers
- Signaling System
- Platform Re-construction
- Transit Centers
- Grade crossings
- Crossing Gates
- Rail replacement
- Tie replacement
- Track replacement

BLUE LINE AT-GRADE RAIL CROSSING IMPROVEMENTS

- E Street
- F Street
- H Street
- J Street
- L Street
- Moss St.
- Naples St.
- Anita St.
- Main St. Freight Bridge



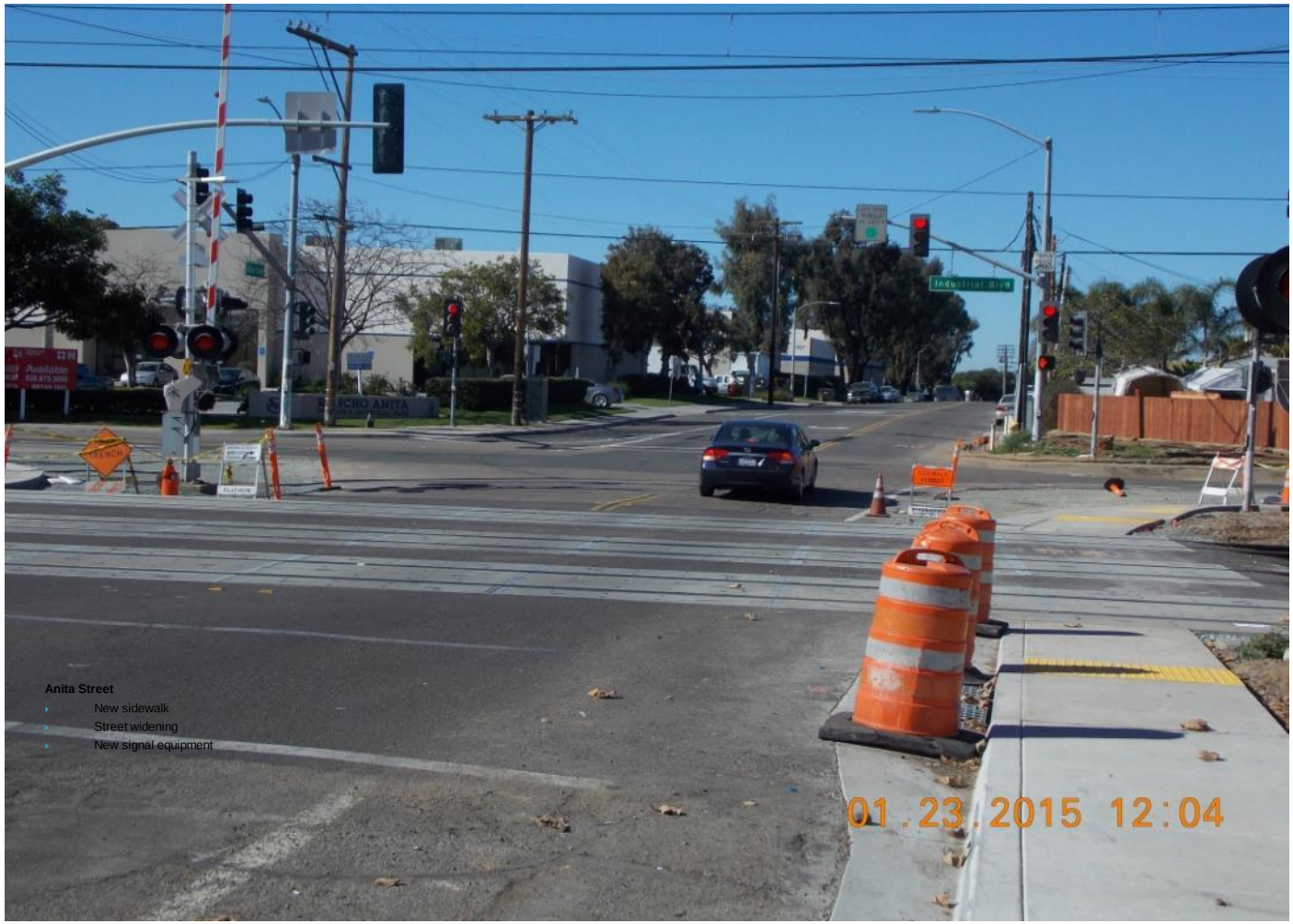
Rail Crossing Improvements

E Street

L Street

H Street

Rail Crossing Improvements



Anita Street

- New sidewalk
- Street widening
- New signal equipment

Anita Street Widening

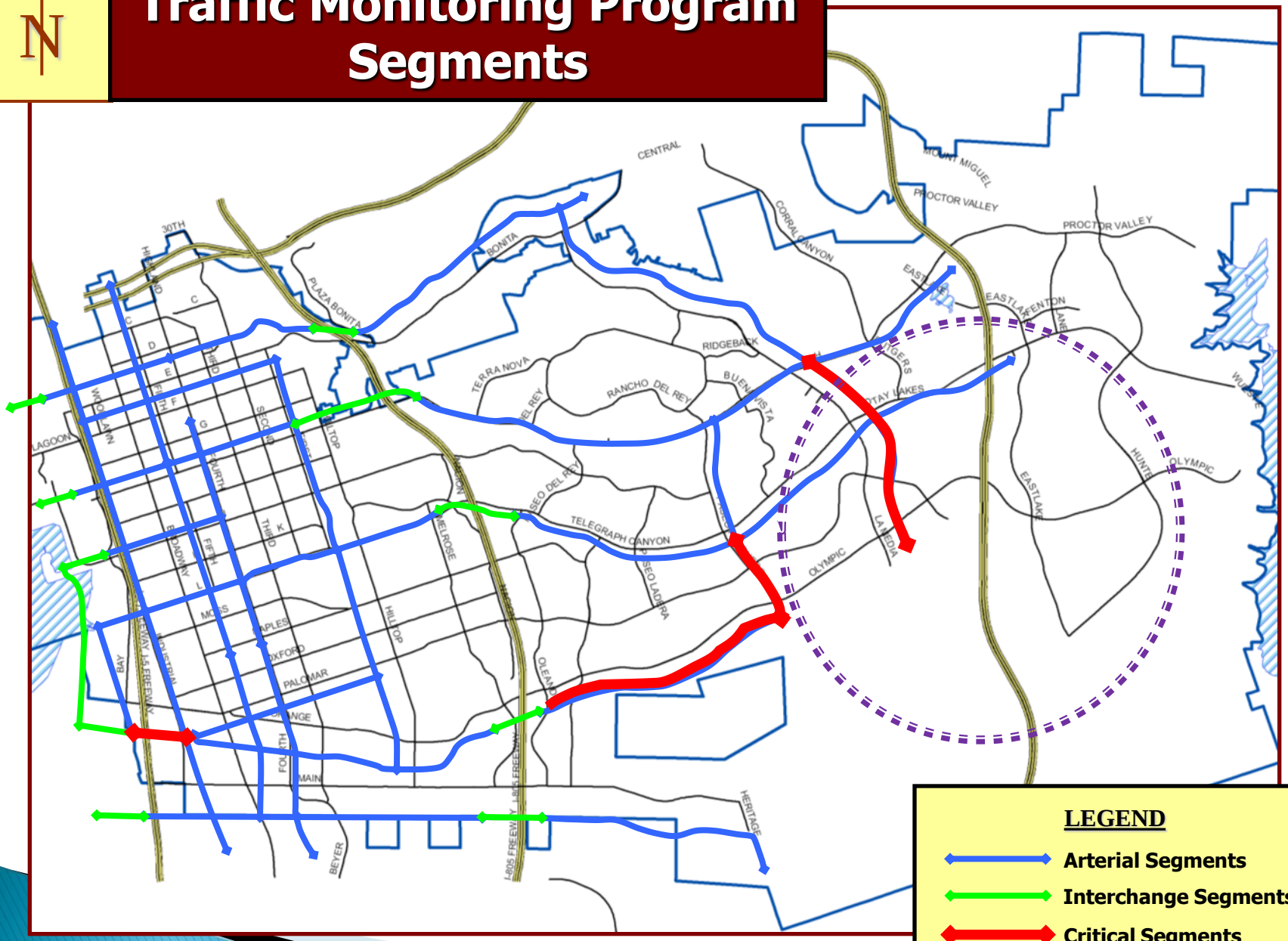
Rail Crossing Improvements

Main Street

- New Main Street Freight Rail Bridge

LOCAL ARTERIAL ROADWAYS

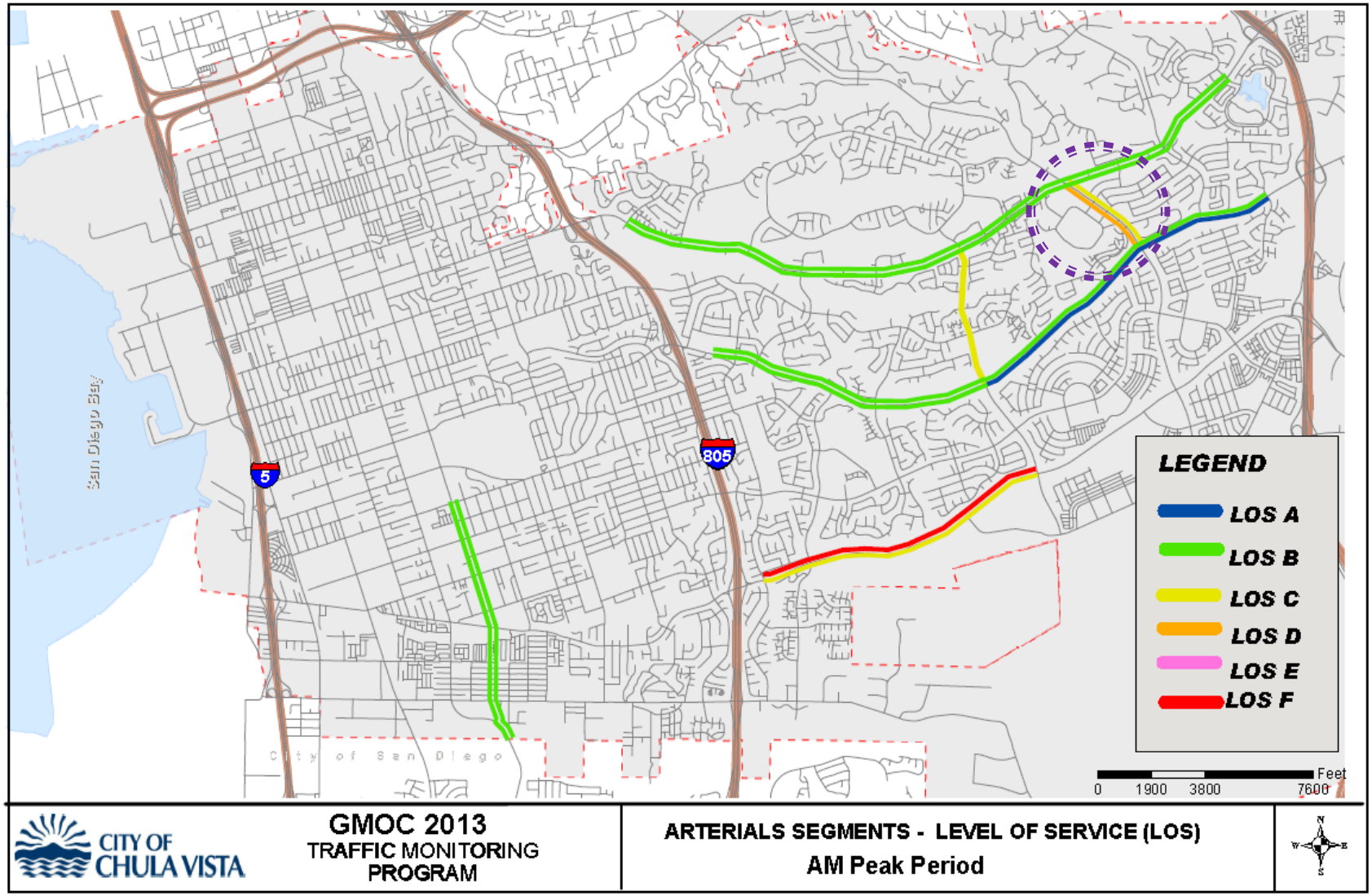
Traffic Monitoring Program Segments



LEGEND

- Arterial Segments
- Interchange Segments
- Critical Segments

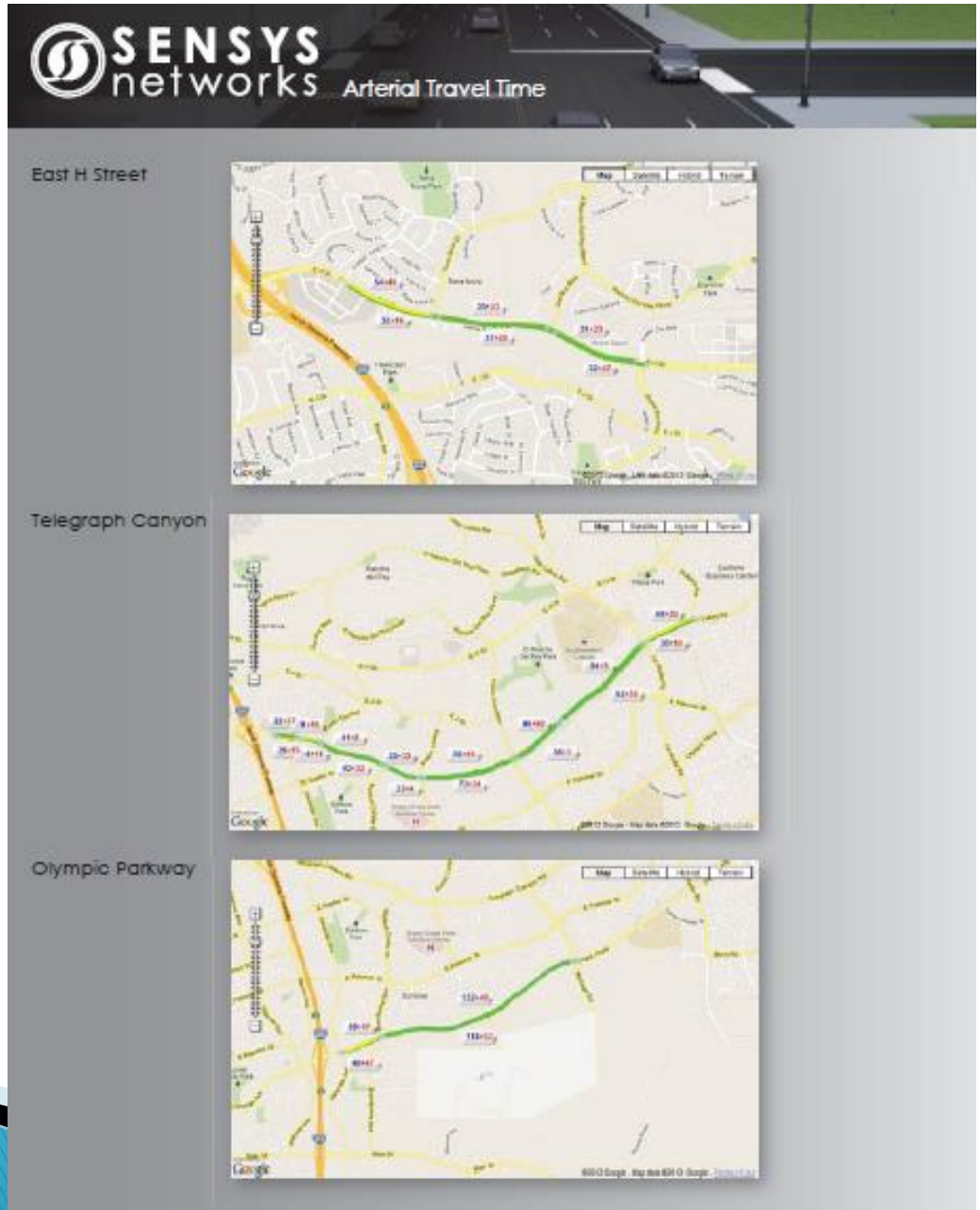
GMOC ANNUAL REPORT



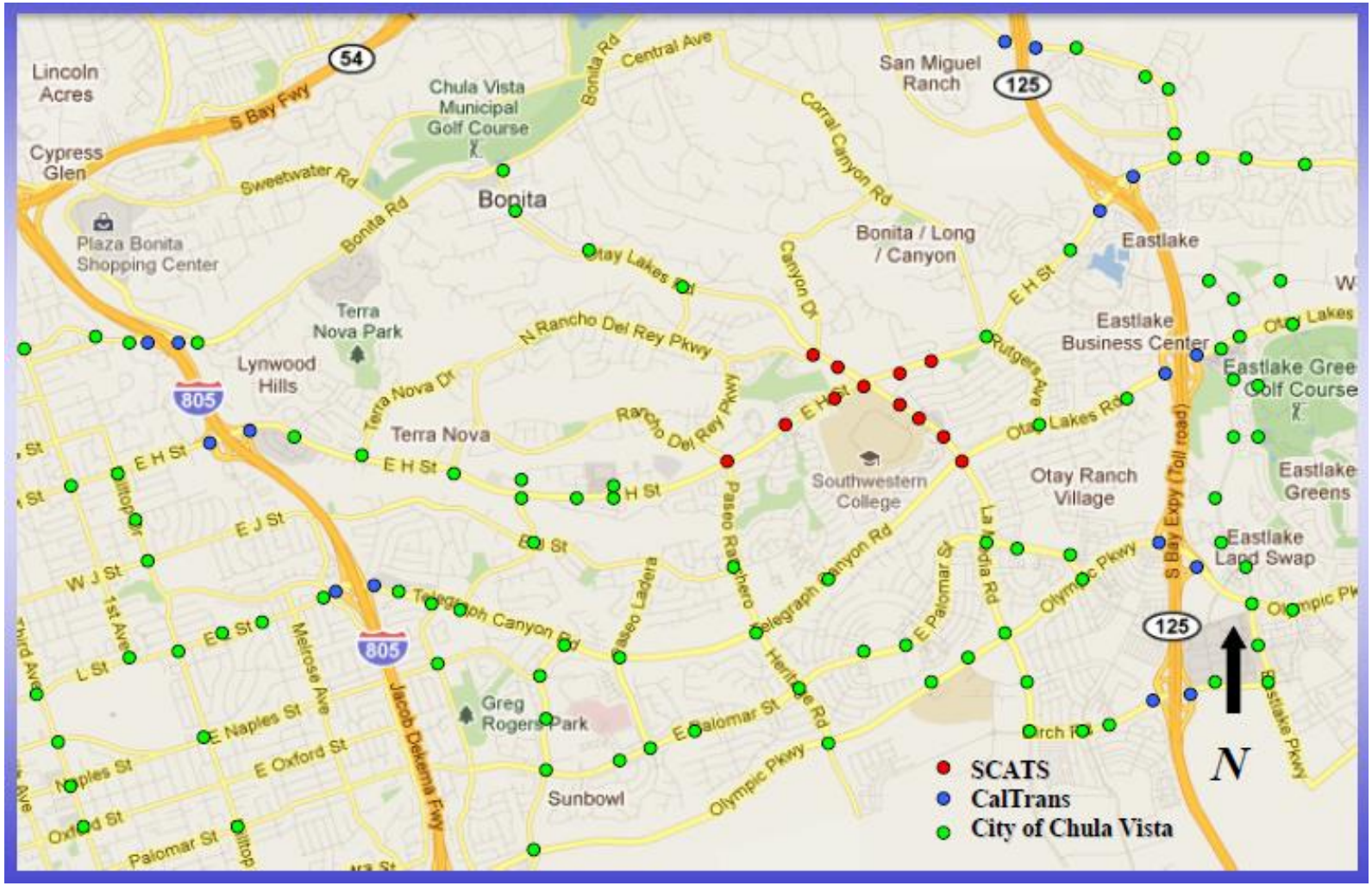
ARTERIAL DETECTION PROGRAM

Wireless detector installation on East H Street, Telegraph Canyon Rd and Olympic Parkway

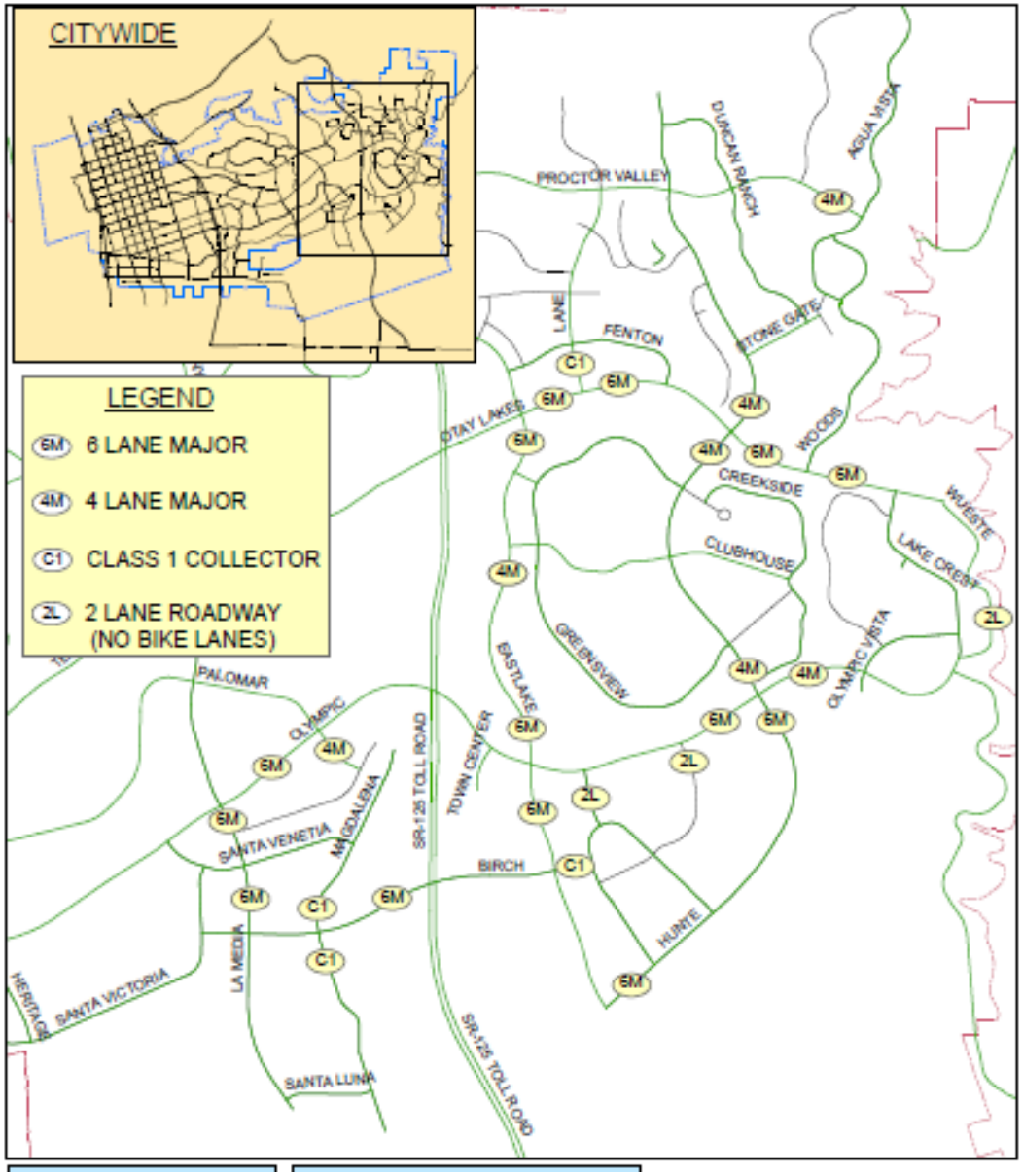
ARTERIAL REAL TRAVEL TIME MAPS



TRAFFIC SIGNALS WITHIN CHULA VISTA

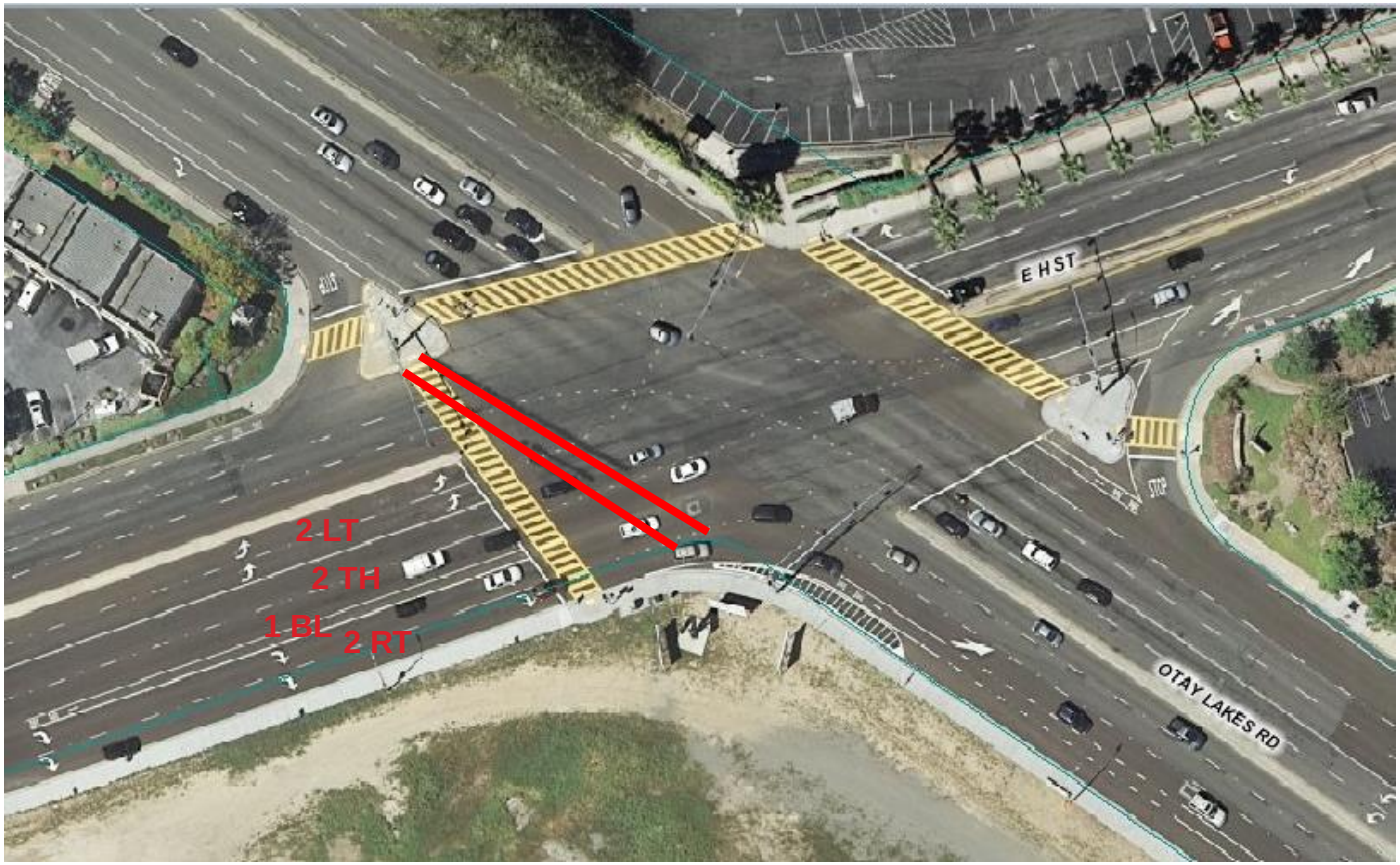


TRAFFIC COUNT STATIONS



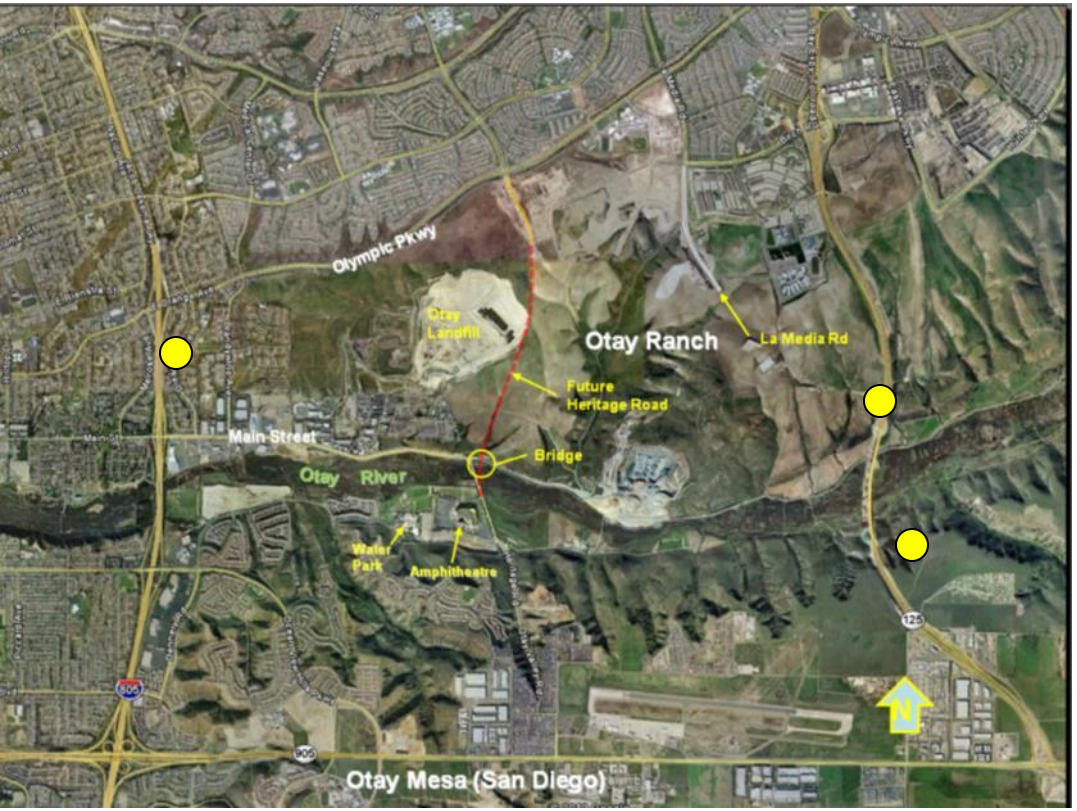
BEFORE STREET IMPROVEMENTS INTERSECTION OF OTAY LAKES ROAD AND EAST “H” STREET

AFTER STREET IMPROVEMENTS INTERSECTION OF OTAY LAKES ROAD AND EAST “H” STREET



AFTER STREET IMPROVEMENTS INTERSECTION OF OTAY LAKES ROAD AND EAST “H” STREET

HERITAGE RD BRIDGE UPDATE

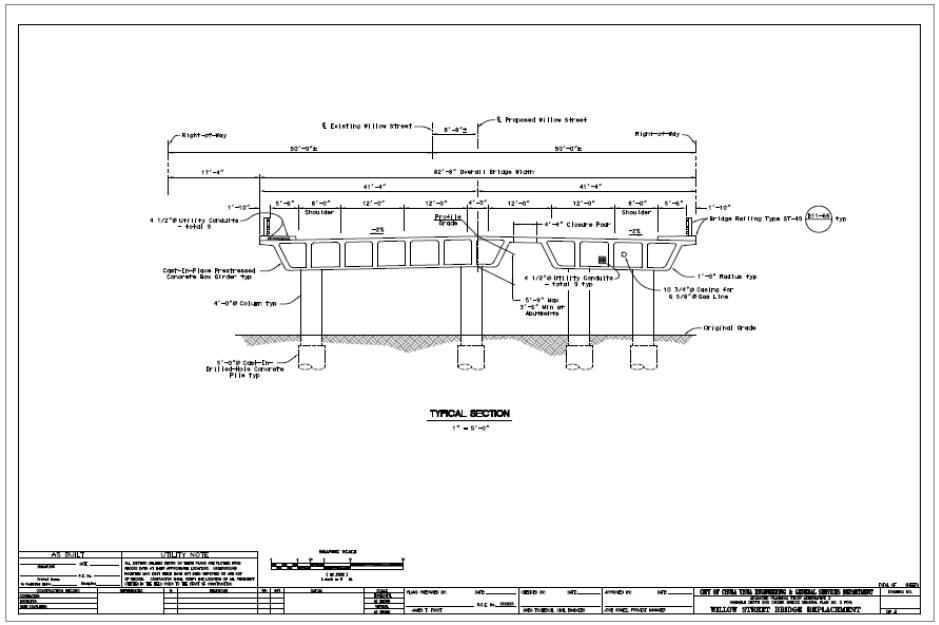


Advertise: July 2016

Construction: November 2016

Completion: January 2018

WILLOW ST BRIDGE UPDATE



Advertise: June 2015

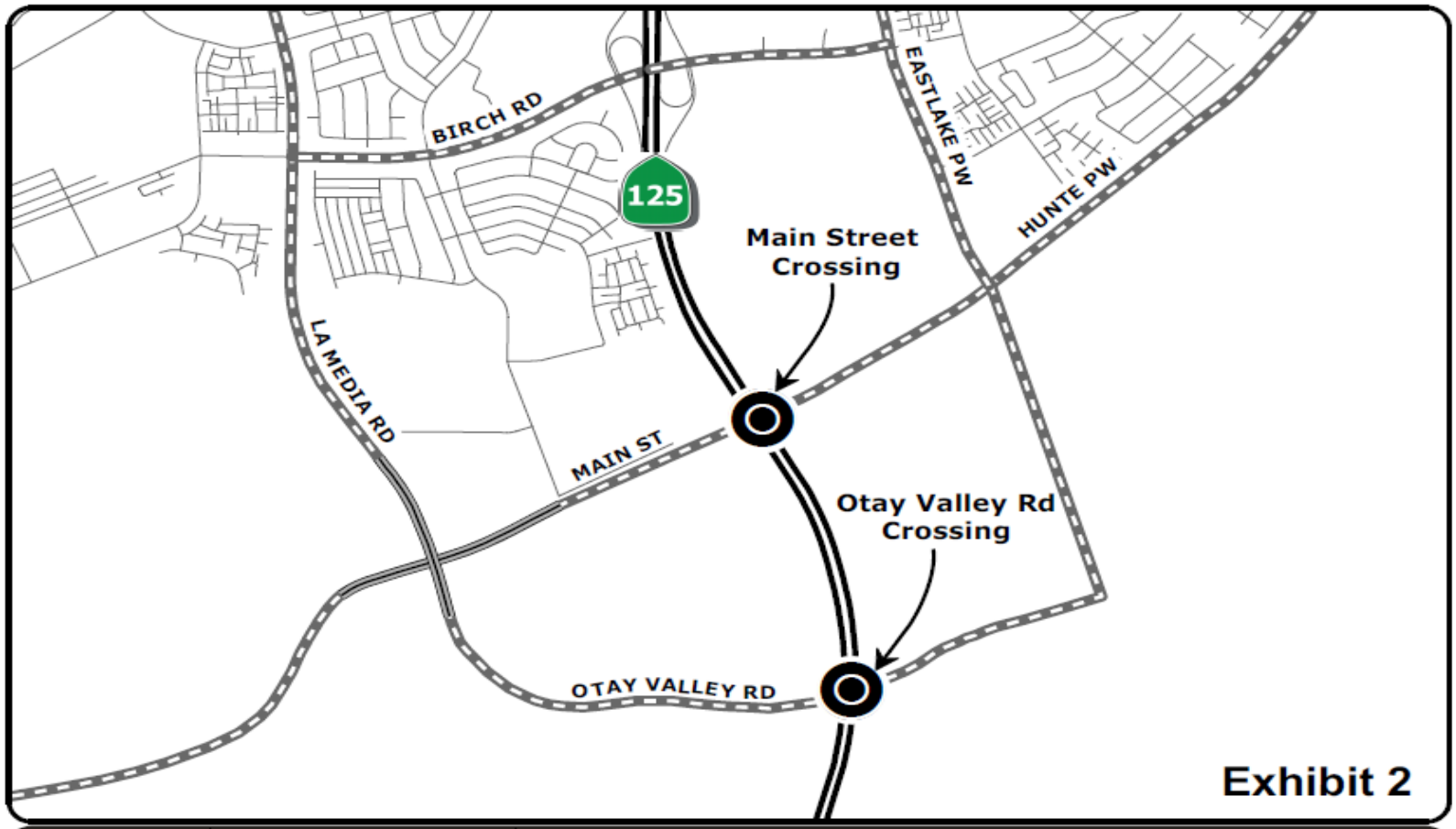
Construction: November 2015

Completion: October 2017

Jose Gomez, P.E., P.L.S.
Principal Civil Engineer
Public Works Department

FUTURE ROADWAY PROJECTS

Future SR-125 Interchanges

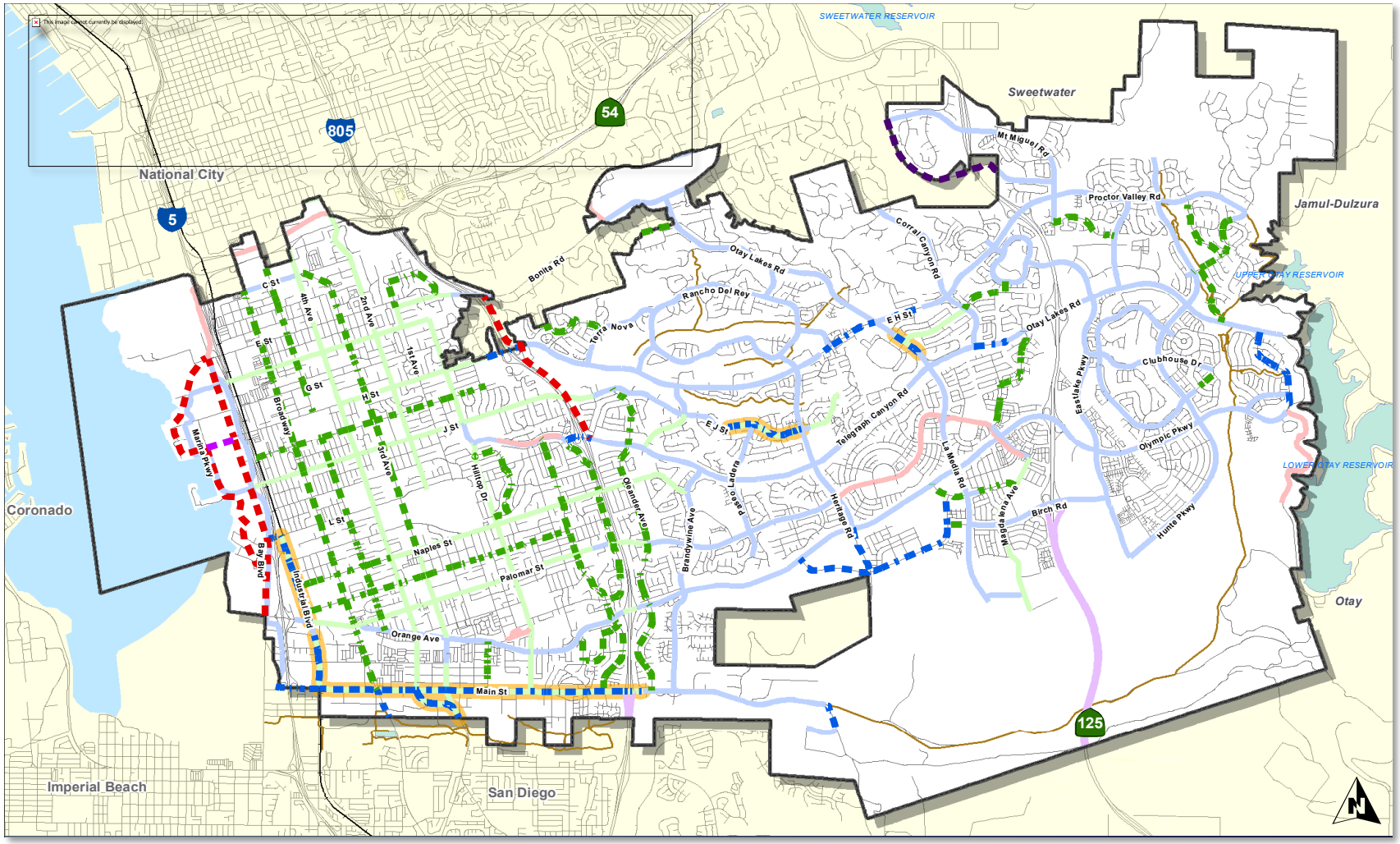


LOCATOR NORTH	Locator Map	SR - 125: Main Street and Otay Valley Road Crossing
	Project Site	

BICYCLE PROGRAM

http://www.chulavistaca.gov/City_Services/Development_Services/Engineering/BikewayMasterPlan.asp

PROPOSED BICYCLE FACILITIES



City of Chula Vista Bikeway Master Plan 2011

Bicycle Friendly Community

- Bronze level award
- 303 Bicycle Friendly Communities in 48 states across America
- 120 miles dedicated bike paths, lanes and routes.
- Over 45 additional miles proposed Bikeway Master Plan.

THE LEAGUE
OF AMERICAN BICYCLISTS
since 1880

is pleased to designate

CHULA VISTA, CA

as a

BICYCLE FRIENDLY COMMUNITY

in recognition of your outstanding efforts to encourage bicycling in your community

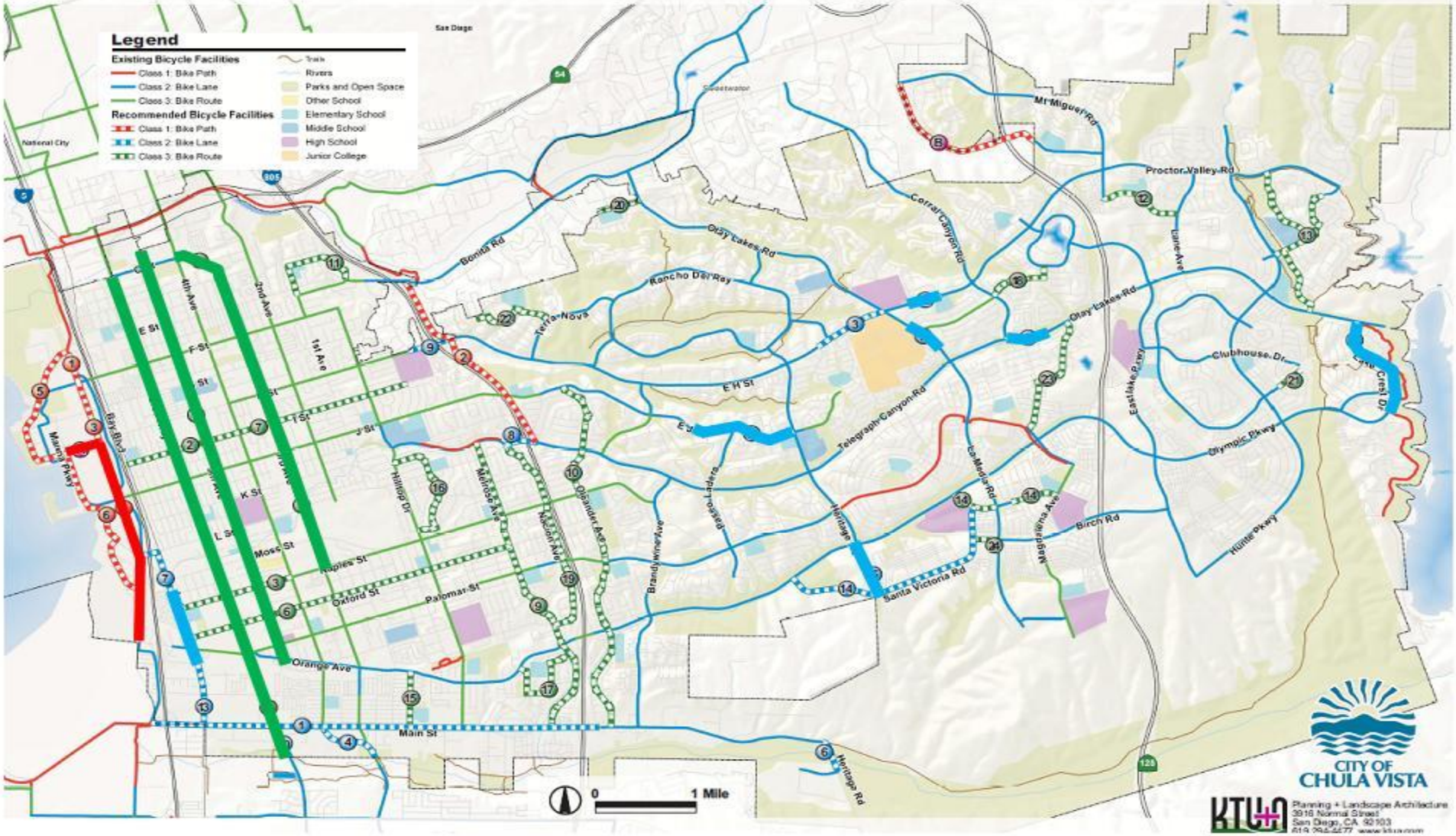
2014-2018 » BRONZE

PRESIDENT

THE LEAGUE » BICYCLE FRIENDLY AMERICA

CHAIR, BOARD OF DIRECTORS

City of Chula Vista - Bikeway Master Plan Update - 2011



Capital Improvement Projects

Total Projects **48**

- **Completed** 16, 33%

Class I (Bike Paths)

8 projects → 2 completed, 25%

Class II (Bike Lanes)

16 projects → 9 completed, 56%

Class III (Bike Routes)

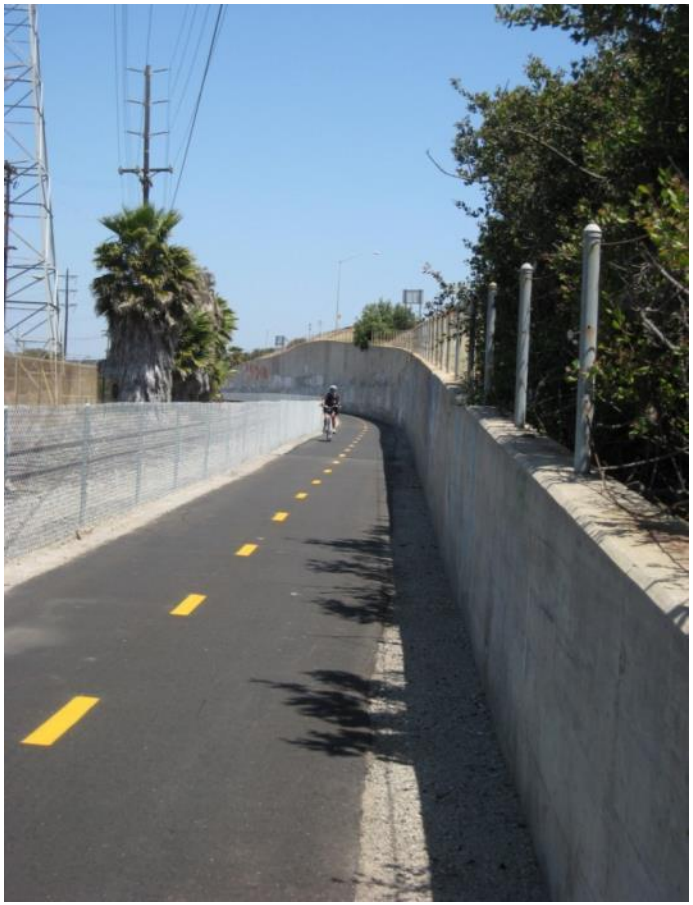
24 projects → 5 completed, 21%

Bayshore Bikeway

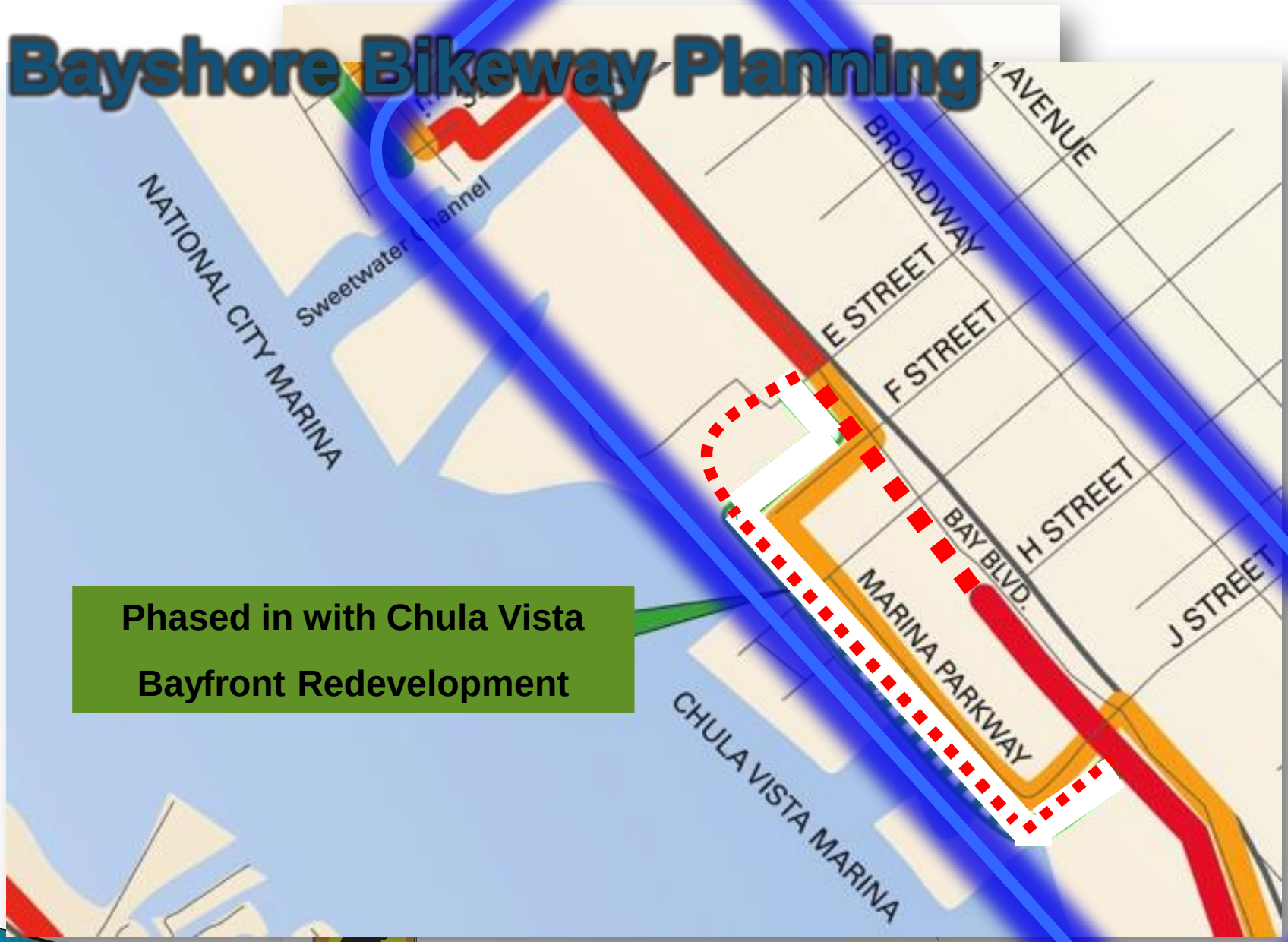
Before

After

Bayshore Bikeway



Bayshore Bikeway Planning



Phased in with Chula Vista Bayfront Redevelopment

and Oregon

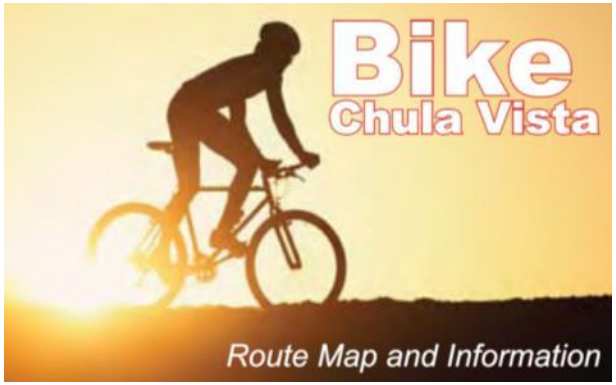
E-H Street – Intersections/Segments

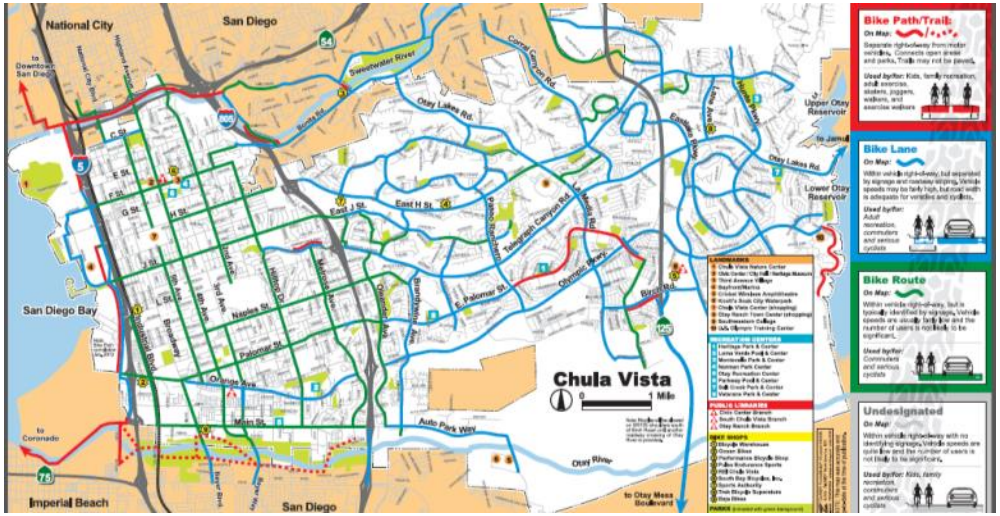
Bayshore Bikeway

E-H Streets • Chula Vista

CITY OF CHULA VISTA

KTU+A Planning + Landscape Architecture





PERFORMANCE BICYCLE

McMillin Communities

Pacific Southwest Association of REALTORS® Your LOCAL Voice

SOUTH BAY BICYCLES INC.

Ocean Bikes

PEDESTRIAN PROGRAM

PEDESTRIAN MASTER PLAN

CITY OF CHULA VISTA
PEDESTRIAN MASTER PLAN

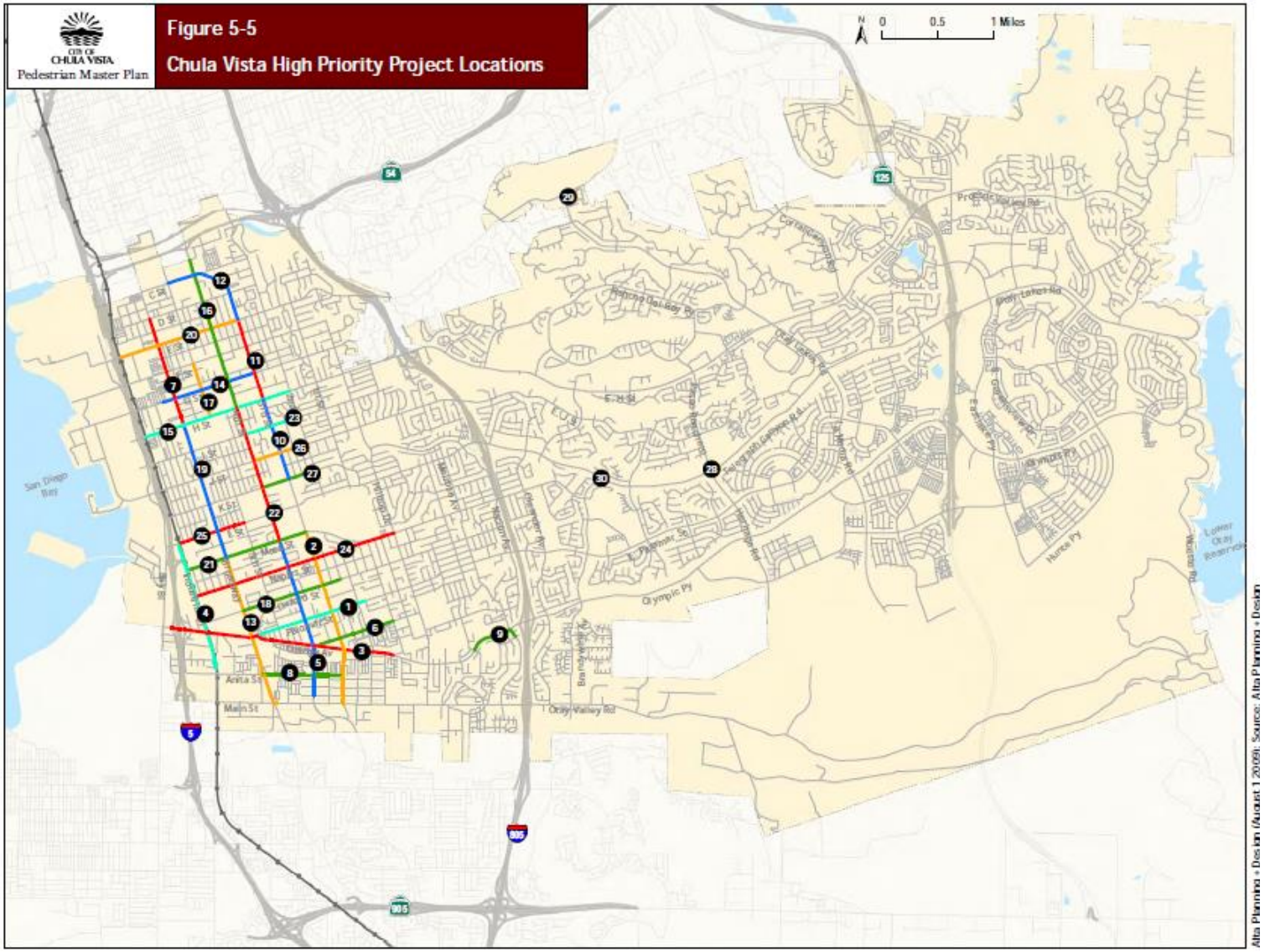
CHULA VISTA, CALIFORNIA

June 15, 2010

CITY OF CHULA VISTA

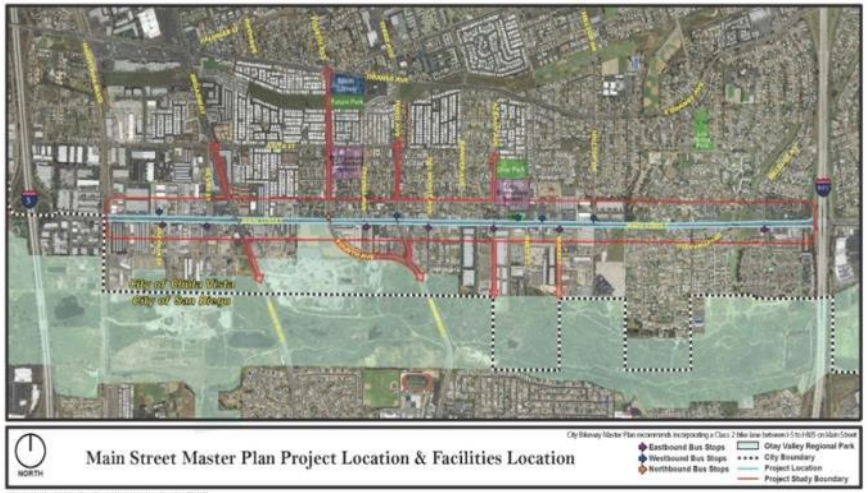
alta PLANNING + DESIGN

30 HIGH PRIORITY PROJECT LOCATIONS



Local Streets Corridor Studies

- F Street Promenade Study
- East H Street Pedestrian Study
- Main Streetscape Plan



Montgomery Elementary School High-Intensity Activated Crosswalk (HAWK)

HAWK – Mid-block pedestrian hybrid beacon system located on Fourth Avenue just south of Tremont Street and Montgomery Street

Studies show:

- Red signal produces up to 97% driver compliance
- Better rate than other devices at pedestrian crossings.

The new system was the first in the state of California

Safe Routes to School Project

- Montgomery Elementary School – New Crosswalk
- HAWK – Pedestrian Hybrid Beacon system

SENIORS, SIDEWALKS AND THE CENTENNIAL

SENIORS, SIDEWALKS AND THE CENTENNIAL

CITY OF CHULA VISTA
CITY COUNCIL MEETING
JANUARY 24, 2012

Made possible by funding from the U.S. Department of Health and Human Services, through the County of San Diego.

CITY OF CHULA VISTA

WALK SanDiego

SAFE & HEALTHY COMMUNITIES CONSULTING

healthy WORKS Paths to Healthy Living

SANDAG

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

WALKABILITY & ROLLABILITY ARE CRITICAL TO SENIOR HEALTH AND WELLBEING

- Reduces risk of heart disease, diabetes, and other chronic diseases.
- Increases flexibility, muscle strength, balance, and bone density.
- Improves access to basic necessities, healthcare services, and social interaction.

STUDENTS TAKING ACTIVE TRANSPORTATION TO SCHOOLS

CITY OF CHULA VISTA

Students Taking Active Transportation to Schools (STARTS)

Improving Conditions to and From School

Conservation Section
Engineering Division
Department of Public Works

STUDENTS TAKING ACTIVE TRANSPORTATION TO SCHOOLS

STARTS PROJECT

- Project Goal
  - Improve conditions for children commuting to school
- Objectives
  - Evaluate Infrastructure; Route Audits; Determine Travel Patterns; Develop Suggested Routes Map
- Active Transportation Benefits

STUDENTS TAKING ACTIVE TRANSPORTATION TO SCHOOLS

Travel Patterns

- City review 6 middle schools
- Community outreach 6 middle schools
- On – site visual observations (6 MS)
- PTSO's outreach
- Elementary SRTS
- Other

Middle Schools

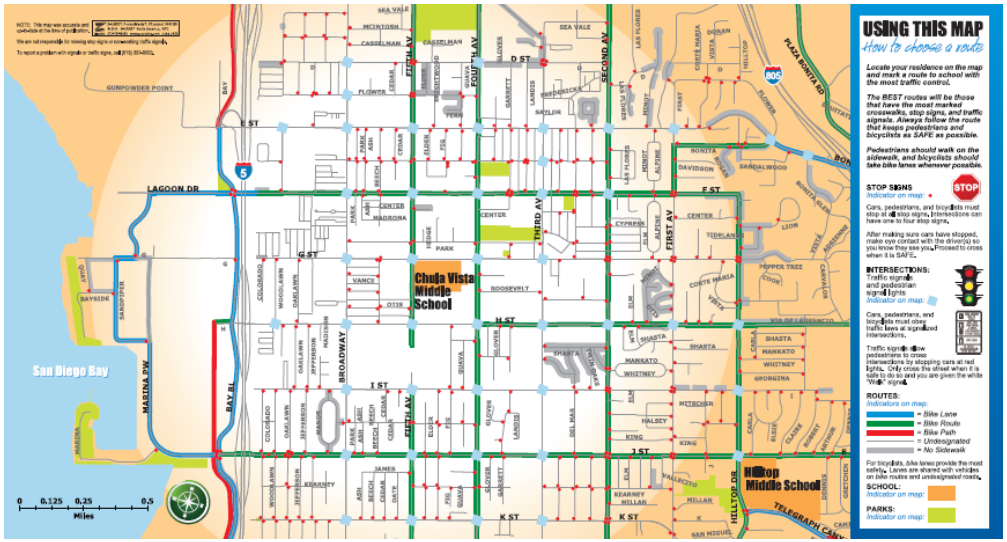
- **Bonita Vista**
- **Castle Park**
- **Chula Vista**
- **Eastlake**
- **Hilltop**
- **Rancho Del Rey**

Sweetwater Union High School District

Bonita Vista Middle School
Home of the Crusaders
650 Otay Lakes Rd.
Chula Vista
(619) 397-2500

Castle Park Middle School
Home of the Knights
160 Quintard Street
Chula Vista
(619) 498-6000

Chula Vista Middle School
Home of the Cavaliers
415 Fifth Avenue
Chula Vista
(619) 498-6800



EastLake Middle School
Home of the Tritons
900 Duncan Ranch Rd.
Chula Vista
(619) 591-4000

Hilltop Middle School
Home of the Falcons
44 East J Street
Chula Vista
(619) 498-2700

Rancho Del Rey Middle School
Home of the Royals
1174 East J Street
Chula Vista
(619) 397-2500

DRAFT COMPLETE STREETS POLICY
LAND USE AND TRANSPORTATION ELEMENT

P.1. Update City of Chula Vista Subdivision Manual and other relevant City roadway standards to incorporate senior pedestrian design needs and to reflect proposed Complete Streets policy.

"Complete Streets are safe, comfortable and convenient streets for everyone. "

Dan Burden, Walkable and Livable Communities Institute, Inc.

PROPOSED FY15-16 CAPITAL IMPROVEMENT PROGRAM

CAPITAL IMPROVEMENT PROJECTS FY 2014-15

Chula Vista Capital Improvement Program (CIP) Map

This map displays both active and proposed Capital Improvement Projects. Select the options at right to query by project phase, project type, funding source or geographic area. Learn more about each CIP by clicking on the map icon or select the more info link in the table below.

Select options below, then click "Show Projects"

Select Project Phase(s) ..

- ☑ **Construction**
- ☑ **Design**
- ☑ **Programmed**

Select Project Type ..

local streets

Select Funding Source..

all funding sources

Select Geographic Area ..

all areas

Show Projects

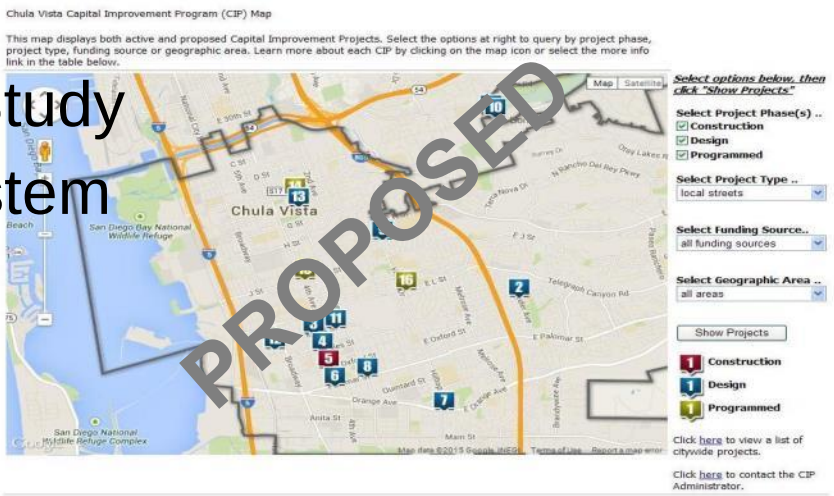
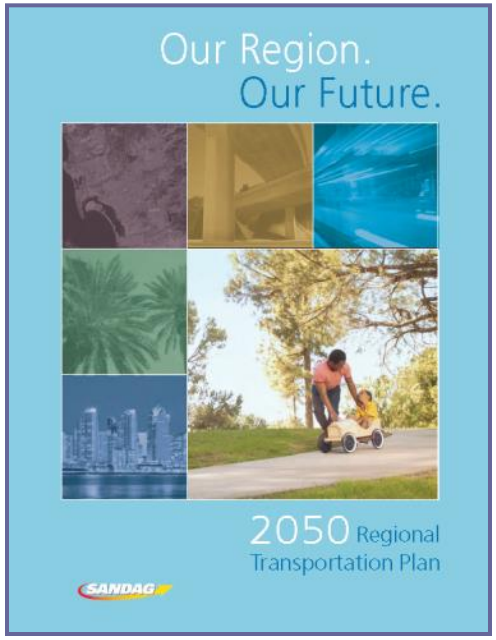
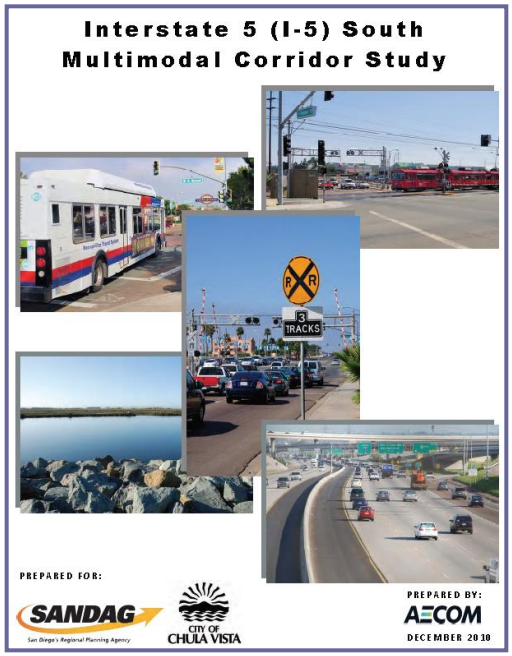
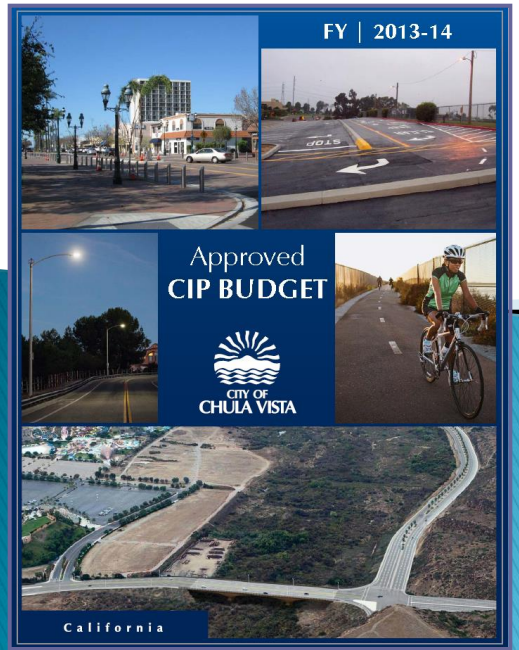
- 1 **Construction**
- 1 **Design**
- 1 **Programmed**

Click here to view a list of citywide projects.

Click here to contact the CIP Administrator.

PROPOSED FY15-16 CIP

- Bikeway-Pedestrian Master Plan Update
- Parkside Drive Wastewater Lift Station Upgrades
- Pavement Rehabilitation
- Pedestrian Crosswalk improvements
- Roadway Sign Reflectivity Replacement
- Sewer Rehabilitation
- Storm Drain Rehabilitation
- Sweetwater River Pathway Study
- Traffic Signal Fiber Optic System



Comments & Questions