

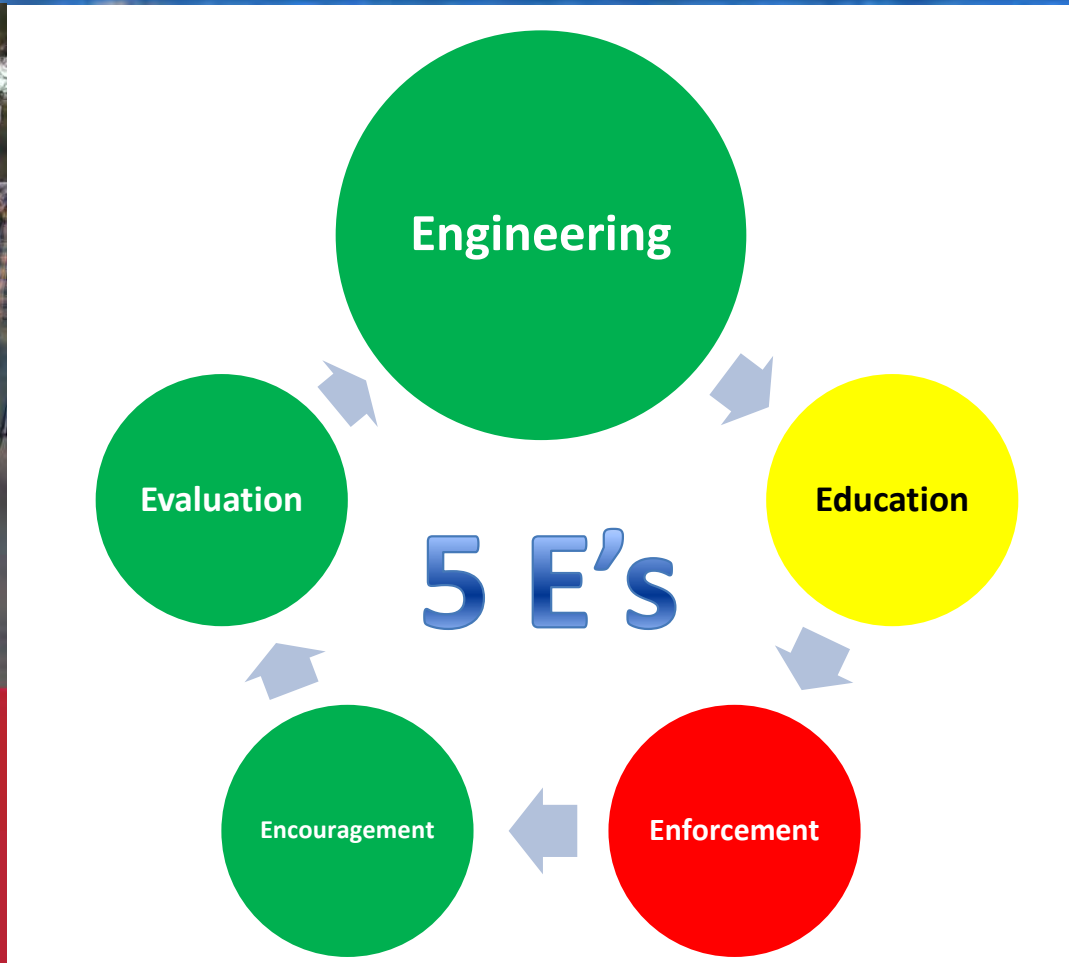
The top of the slide features a banner image of the San Diego skyline across a body of water. On the left side of the banner is the official seal of the City of San Diego, which includes the text "SAN DIEGO STATE OF CALIFORNIA" and "SEMPER VIGILANS".

The City of
San Diego
America's Finest City

Bike Program

Deployment of Innovative Bikeway Solutions

Transportation Engineering Operations



City of San Diego
Bicycle Master Plan
San Diego, California

FINAL – December 2013

PREPARED BY:
Alta Planning + Design
PREPARED FOR:
The City of San Diego





Facility Type	Miles of Existing	Miles of Proposed Unbuilt	Total Miles of Facility
Class I – Bike Path	72.3	94.1	166.4
Class II – Bike Lane	309.4	140.6	450.0
Class III – Bike Route	112.9	171.2	284.1
Class II or III (TBD)	--	143.4	143.4
Freeway Shoulder	16.1	-	-16.1*
Bicycle Boulevard	0	39.4	39.4
Cycle Track	0	6.6	6.6
Totals	510.7	595.3	1,089.9

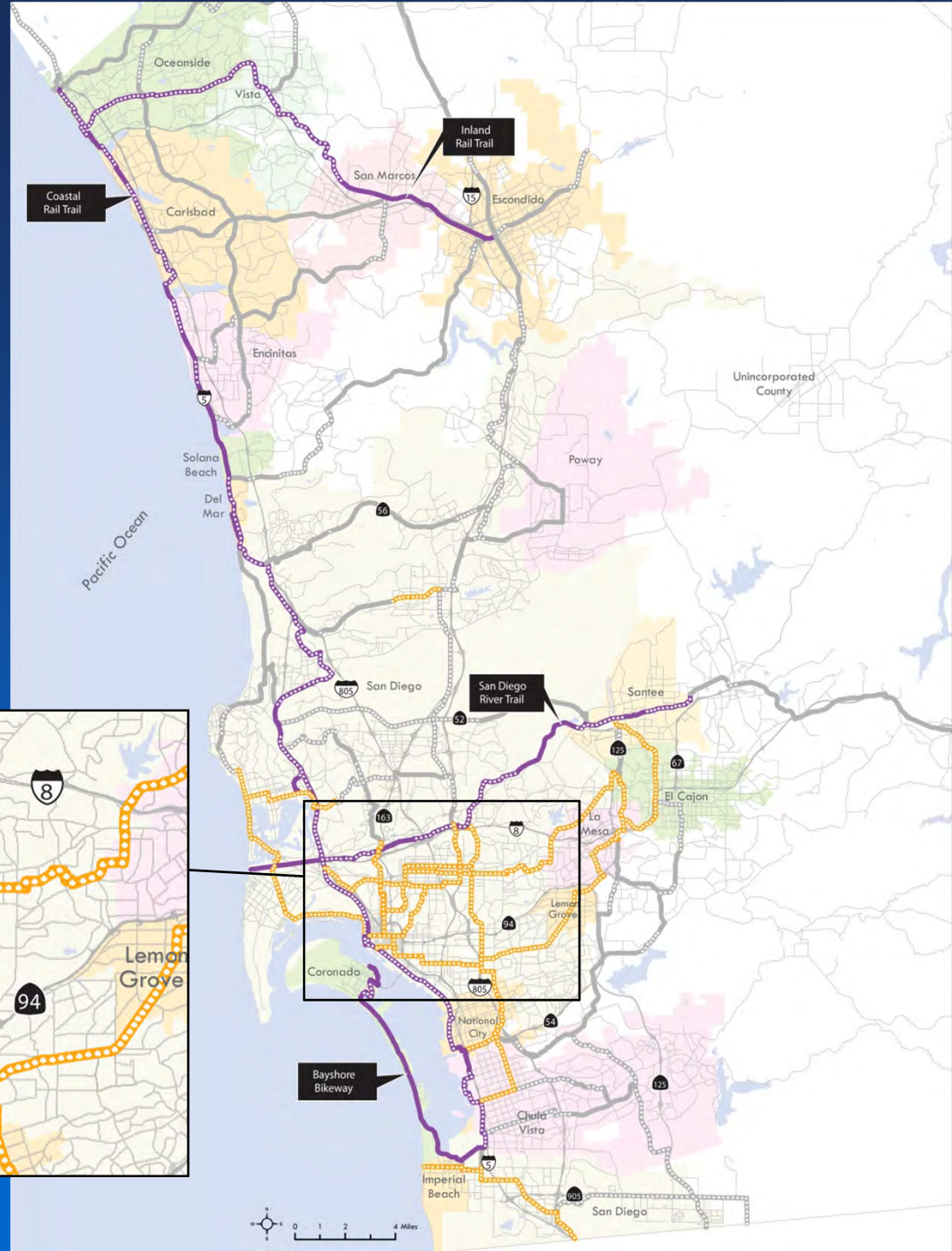
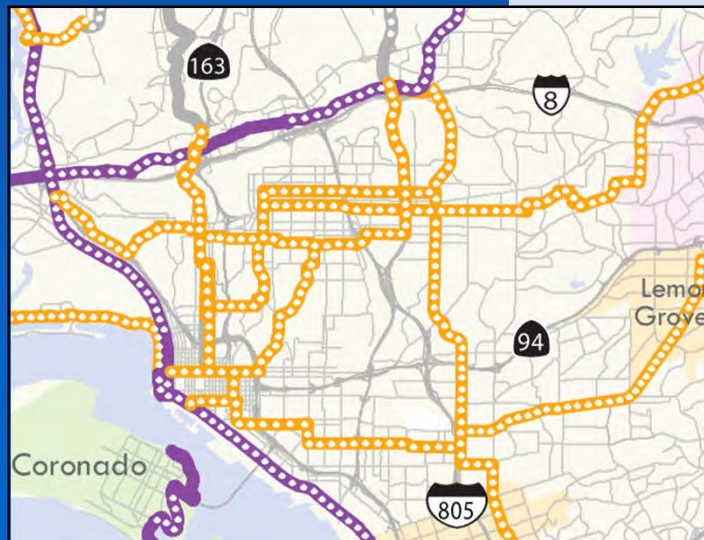


THE CITY OF SAN DIEGO BICYCLE PROGRAM

- | Existing Bike Network | Planned Bike Network |
|------------------------|------------------------|
| Class I - Bike Path | Class I - Bike Path |
| Class II - Bike Lane | Class II - Bike Lane |
| Class III - Bike Route | Class III - Bike Route |
| Freeway Shoulder | Class II or III |
| | Bicycle Boulevard |
| | Cycle Track |

High Priority Projects

Regional Bike Network



Everyday People, Everyday Trips

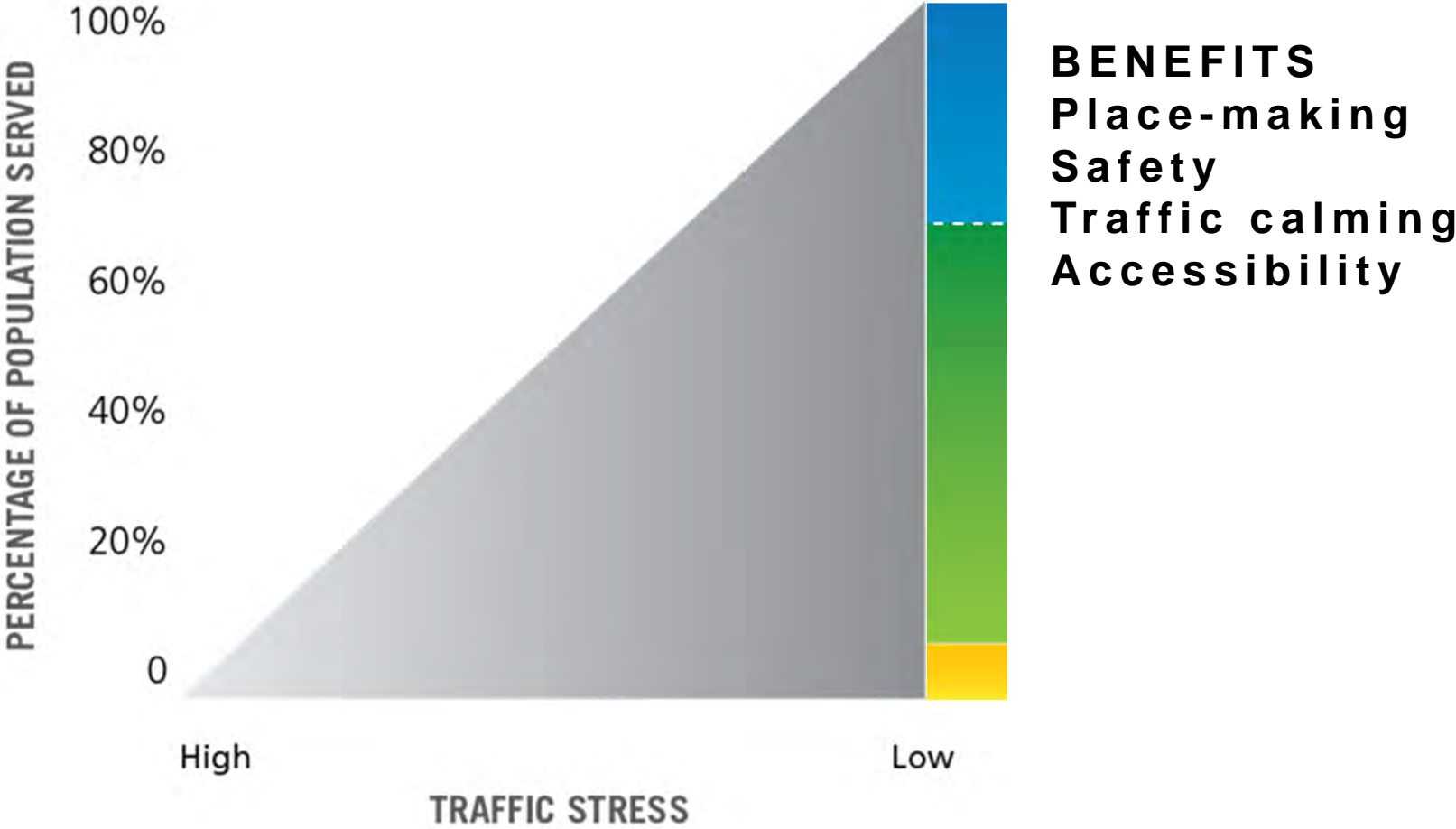
No Way

Interested,
but Concerned
(potential bikeway users)

Anywhere, Anytime



Low Stress Streets Benefit All Users



Bikeway Design Treatments

BIKE LANES

- Conventional Bike Lanes
- Left-side Bike Lanes
- Contra-Flow Bike Lanes
- Buffered Bike Lanes

CYCLE TRACKS

- One-way Protected Cycle Tracks
- Raised Cycle Tracks
- Two-way Cycle Tracks

SIGNING & MARKING

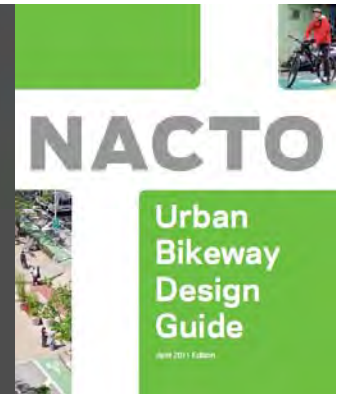
- Bike Route Wayfinding Signage and Markings System
- Colored Bike Facilities
- Shared Lane Markings

SIGNALS

- Bicycle Signal Heads
- Signal Actuation and Detection
- Active Warning Beacon for Bike Route at Unsignalized Intersection
- Hybrid Signal for Bike Route Crossing of Major Street

INTERSECTIONS

- Bike Boxes
- Intersection Crossing Markings
- Two-stage Turn Queue Boxes
- Median Refuge Island
- Through Bike Lanes
- Combined Bike Lane
- Cycle Track Intersection Approach



Striping, Markings, & Signs

- Improve Safety
- Highlight Conflict Areas
- Improve
 - Awareness of Motorists
 - Awareness of Cyclists
 - Cooperation of Motorists & Cyclist





Coordination with Street Resurfacing Projects

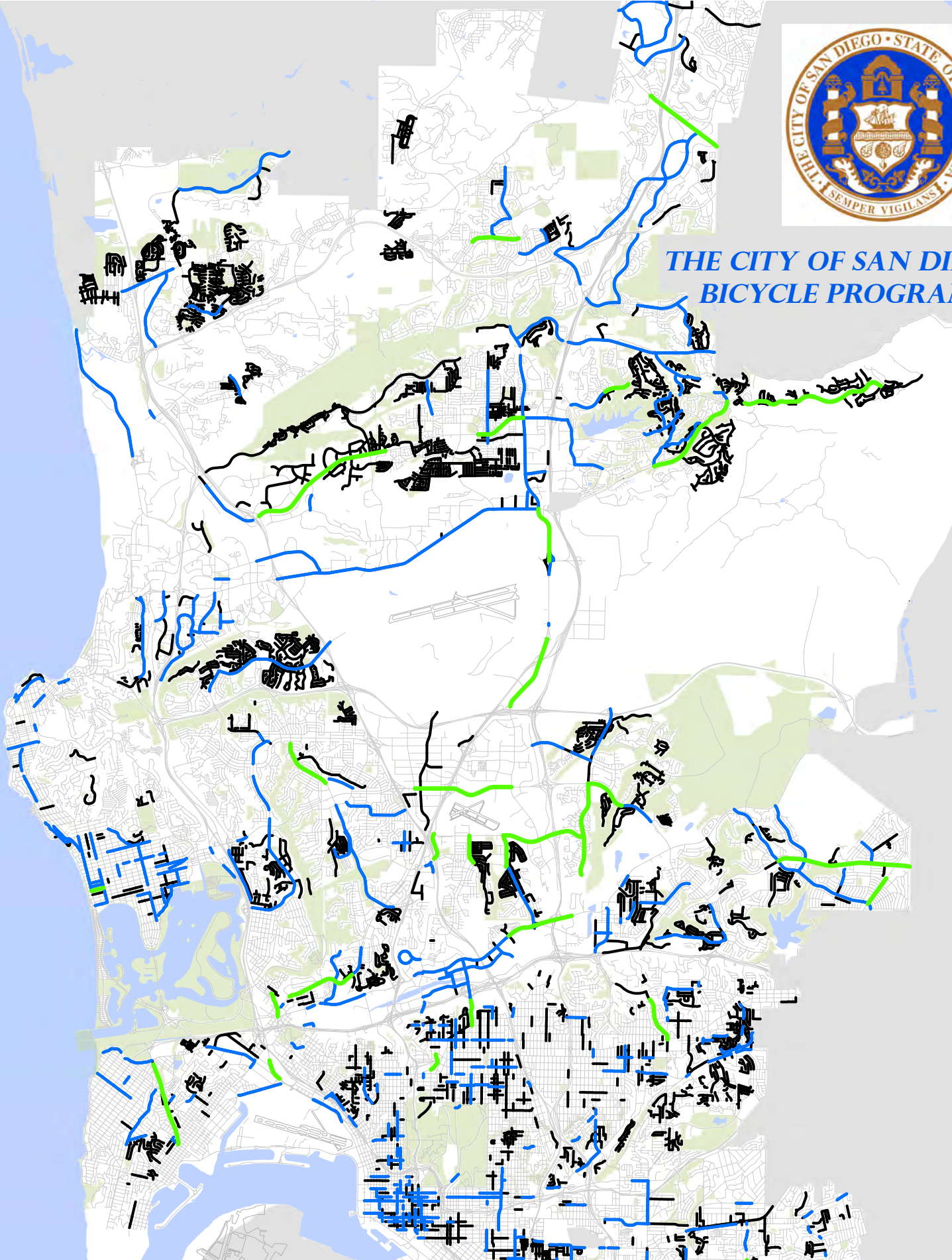
Street Preservation Program

Water and Sewer Program

Underground Utility Program



THE CITY OF SAN DIEGO BICYCLE PROGRAM



- Roadway Network
- Resurfacing Program Schedule (2013-2017)
- Existing/Proposed Bike Network (To Be Resurfaced)
- In Design/Implemented Bike Facility Improvements (Resurfaced)



YOUR SPEED
36
LIMIT 35

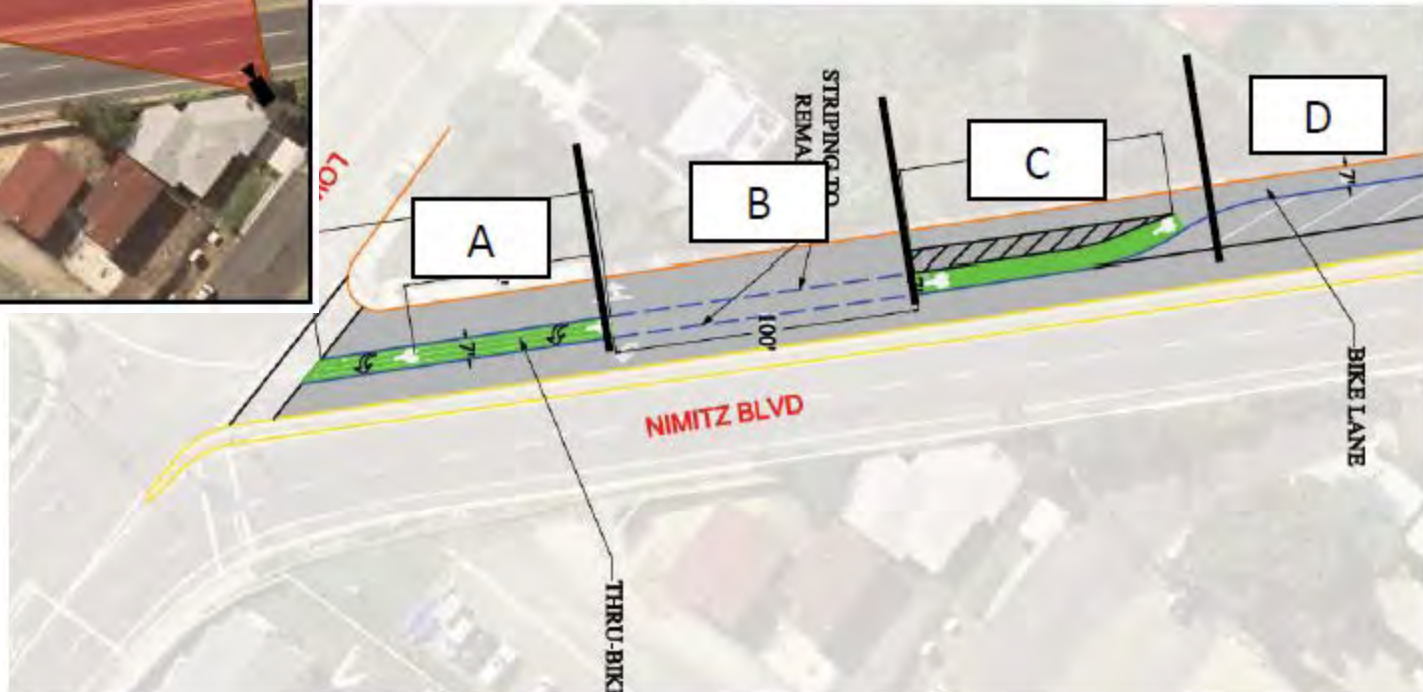


KEEP CLEAR
KEEP



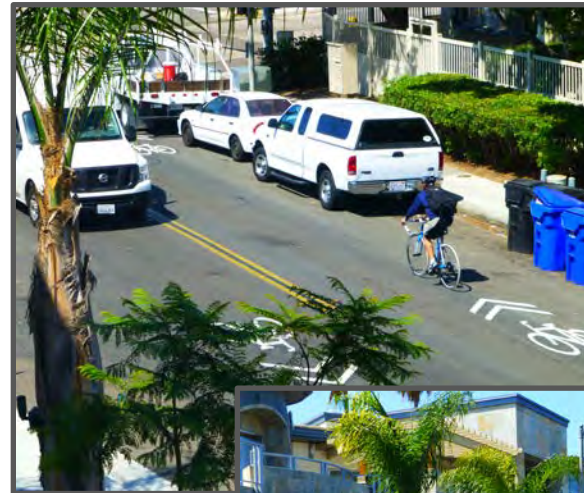


Before and After Studies





Shared Lane Marking or “Sharrows”



Scott St, Point Loma Community

Wayfinding Pavement Marking

- 1' in diameter
- 2 Pavement Markings Per Block (Beginning/End)
- Used to guide bicyclists through designated route





High intensity Activated crossWalk (HAWK): Also known as a Pedestrian Hybrid Beacon.



How does a **HAWK Signal** operate?

INSTRUCTIONS

Drivers		Pedestrians	
.. will see this	.. will do this	.. will see this	.. will do this
	Proceed with Caution		Push the Button to Cross
	Slow Down (Pedestrian has activated the push button)		Wait
	Prepare to Stop		Continue to Wait
	STOP! (Pedestrian in Crosswalk)		Start Crossing
	STOP! Proceed with Caution if Clear		Continue Crossing (Countdown Signal)
	Proceed if Clear		Push the Button to Cross

Bicycle Detection: Microwave and Video



VANTAGE[®] SMARTCYCLE[™]

All the power of Vantage video detection for bicycle applications

Superior performance in a demanding situation

Cyclists are becoming more prevalent across the country and extra phase time is needed to allow them to safely exit the intersection. When no bicyclists are present the additional cycle time is wasted reducing efficiency of the traffic network. Reclaiming this unused time can greatly improve traffic flow while still ensuring the safety of the cycling public.

No need for additional equipment

The Vantage SmartCycle solution requires no additional detection systems or manual call buttons placed at the signal. SmartCycle combines video vehicle detection and bicycle detection in one. Multiple outputs allow precision cycle timing depending on whether a bicycle is present or not.

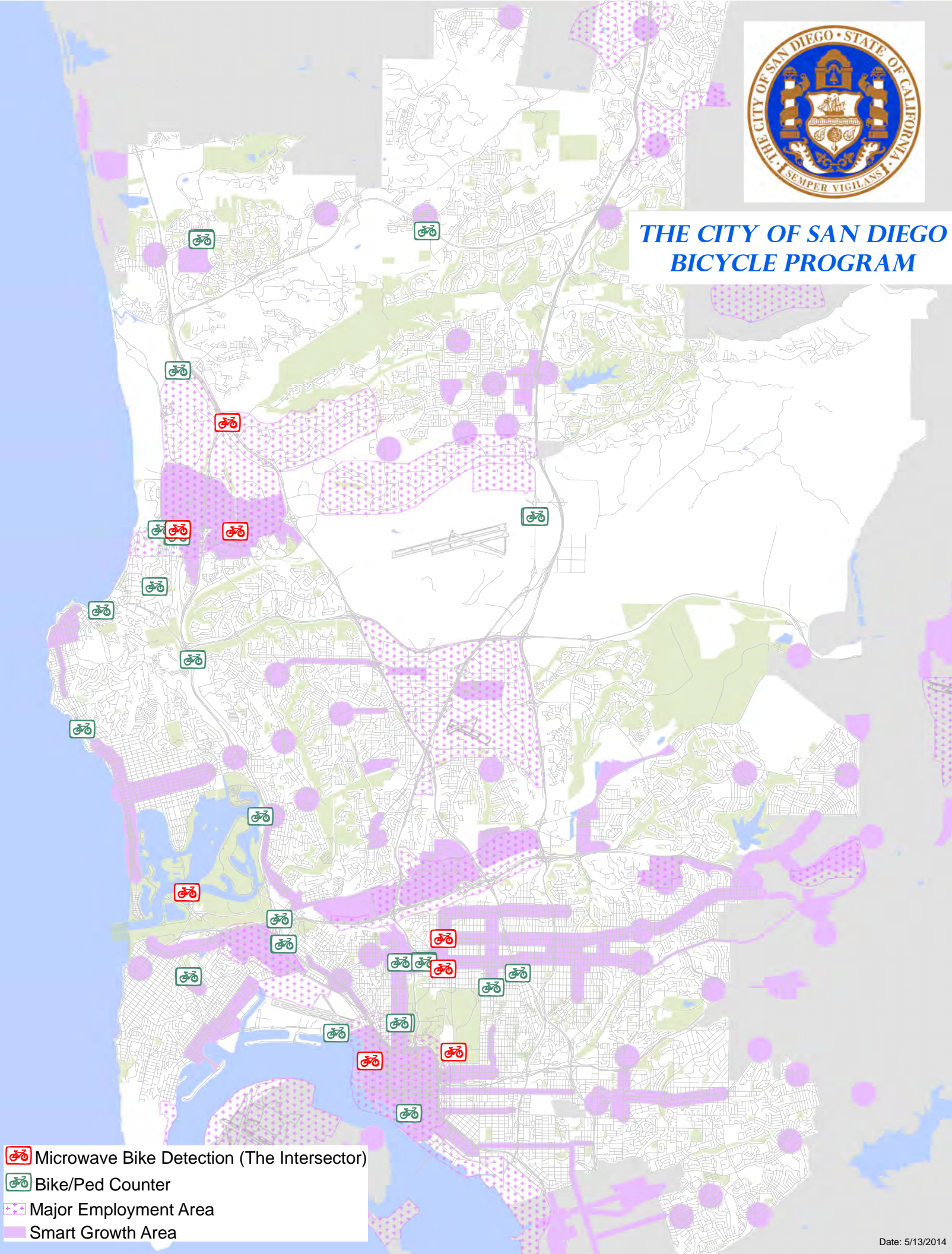
Simple to install and setup





Adding this function to existing deployments is a simple firmware upgrade. Additional zones can then be drawn to separate bicycle detections from vehicle detections. Existing Vantage users as well as those new to the technology will be up and running quickly.





THE CITY OF SAN DIEGO BICYCLE PROGRAM



-  Microwave Bike Detection (The Intersector)
-  Bike/Ped Counter
-  Major Employment Area
-  Smart Growth Area

The City of
San Diego
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Bike Racks & Corrals



The City of
San Diego

America's Finest City



Bike Sharing



HELLO SAN DIEGO!

WE'RE SO EXCITED TO BE HERE!

JOIN

Ride for an hour, a day or a month

SELECT

From 1800 bikes

ENJOY

San Diego and all it offers

RETURN

To any station

SO WHAT EXACTLY IS DECOBIKE?

**THE FASTEST & MOST CONVENIENT
WAY TO GET AROUND THE CITY**

DECOBIKE is the Official Bikesharing Provider of the City of San Diego. It is your new alternative mode of transportation that is green, healthy & fun! It's for residents. It's for visitors. Most importantly, it's for you! At full operation, the Program features a network of over 180 solar-powered bike rental & sharing stations with a fleet of more than 1,700 custom DECOBIKES accessible from dozens of locations 24 hours per day. Come enjoy San Diego as you never have before!

Check out a bicycle for an exhilarating ride, tour historic San Diego, meet friends, run errands or get to your office or hotel. DECOBIKE is here to help you save time, money, your body and of course the environment. There are **two distinct ways** to utilize the DECOBIKE program, either as a **Bike Share Membership** or an **Hourly Rental**. Here's [how it works](#)

**San Diego**

California

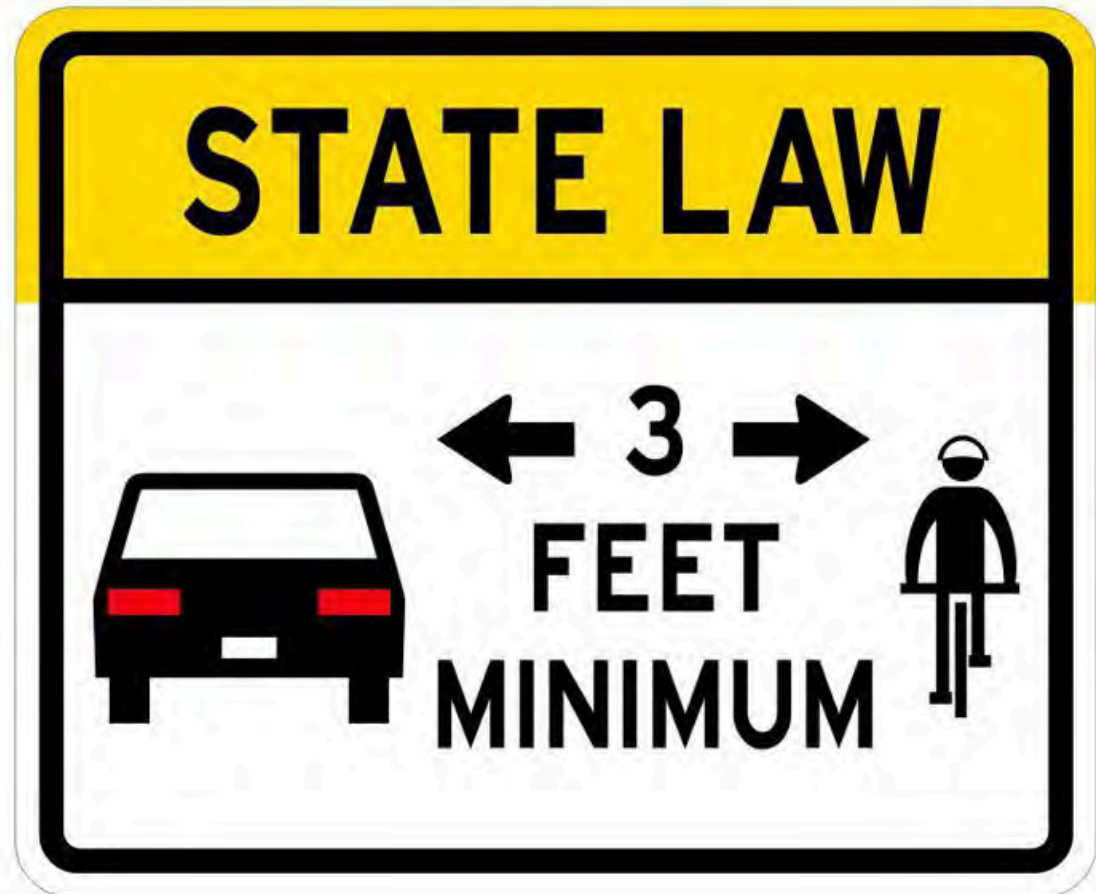
82.6° FPartly Cloudy
5.6 mph WNW



AB 1371: 3 Feet for Safety Act – CVC 21750



3 FEET TO PASS BIKES SAFELY



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Questions?