

Los Angeles County
Metropolitan Transportation Authority

Slow Speed Network Strategic Plan for the South Bay

Sustainability Demonstration Project

SBCCOG Board of Directors Meeting
September 28, 2017



Project Goals



Network strategy for low speed vehicles:

Replicable demonstration of Countywide Sustainability Planning Policy:

A feasible, economically viable, effective system that:

- Promotes neighborhood and regional connectivity.
 - Reduces GHG and pollution.
 - Increases health and safety.
 - Encourages a shift from cars to a wide range of green modes such as walking, biking, and all other zero-emissions non-car modes.
 - Makes the most of emerging technologies.
- Develops methods for project evaluation based on performance measures identified in the Countywide Sustainability Planning Policy (CSPP).

Slow Speed Modes

Pedestrians and Sidewalk Rolling Modes: 0-12.5MPH



On-Street Rolling Modes: 12.5-25MPH



Network Principles

Make the most of existing infrastructure.

Differentiate the network from surroundings through wayfinding and branding.

Make the network practical for accessing jobs, education, shopping, recreation and other destinations through slow modes.

More Complete Complete Streets

For widest range of slow sidewalk and on-street modes.

More diverse the range of modes, the better for pedestrians and transit: roads not exclusively dominated by autos, making other transportation options safer and more viable.



All modes share <25MPH roadway.

NEVs

Present potential benefits/challenges:

Excellent for under 3 miles trips – but vulnerable if mixed with full speed cars.

For commuting not just recreation.

65% of trips in South Bay are within the sub region, average below 7 minutes*.

*Metro 2015 South Bay Cities Mobility Matrix.

Approach to NEVs based on Lincoln CA NEV Plan

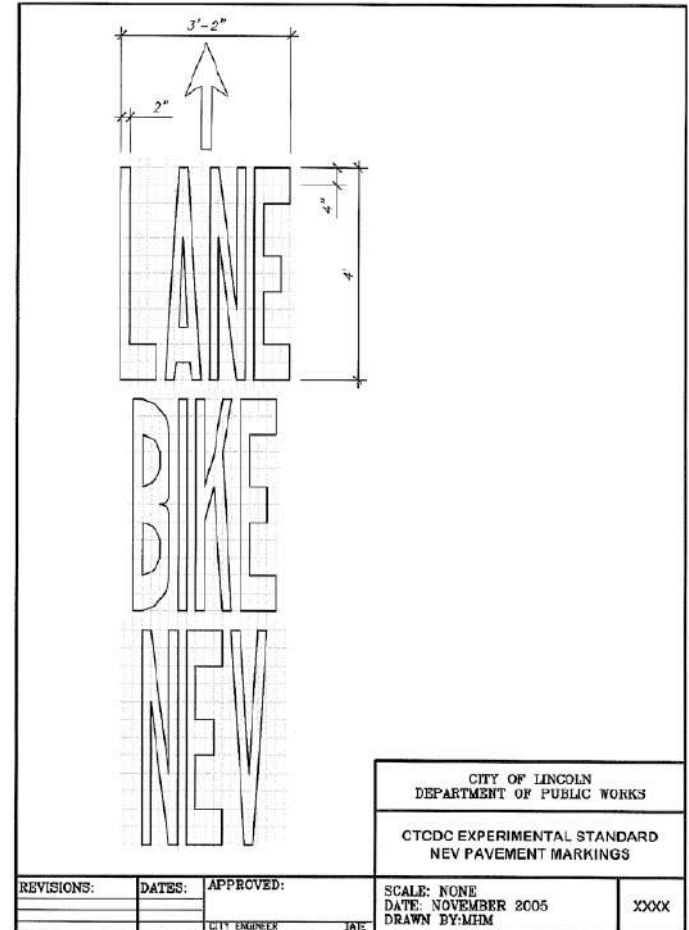
**NEV lane on $< = 35$ MPH
road can be shared with
bikes and other slow
rolling modes.**



Google Car

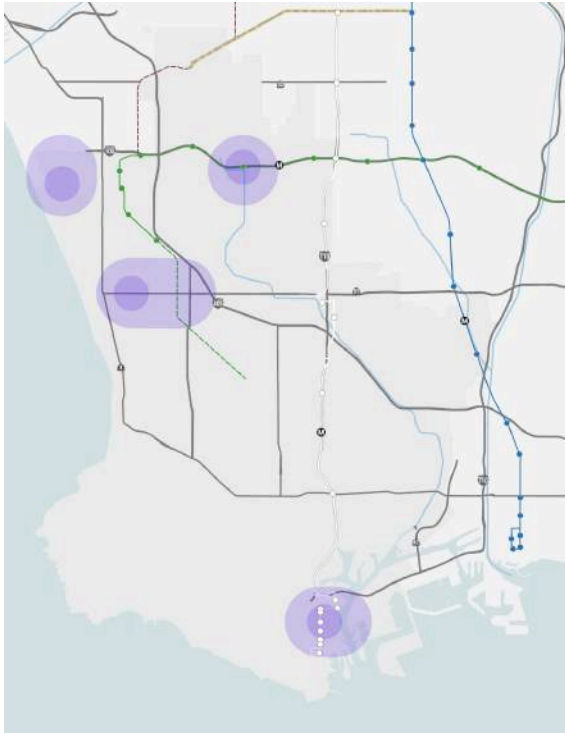


Polaris GEM

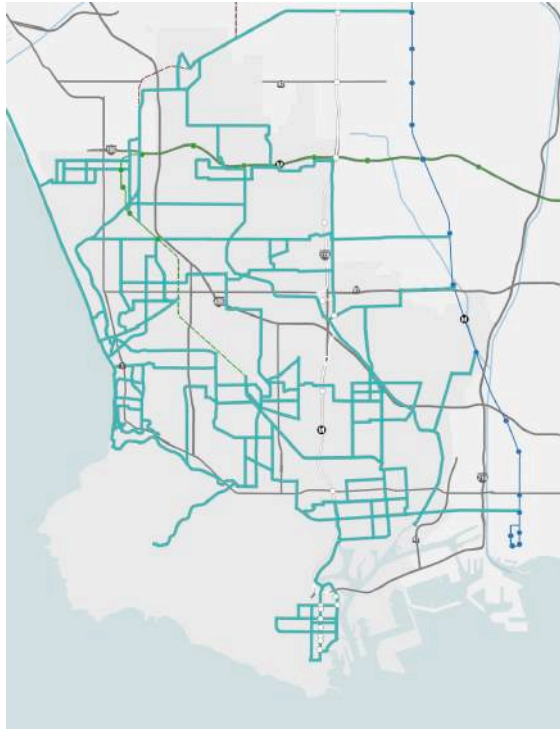


**Roadway marking
Lincoln, CA**

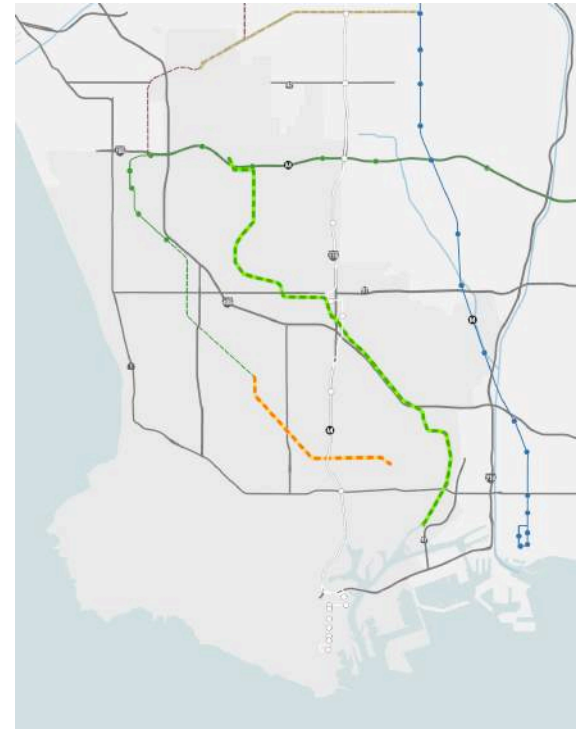
3 Interconnected Networks



**Local
Slow Zones**



**Sub-regional
On-street
Network**

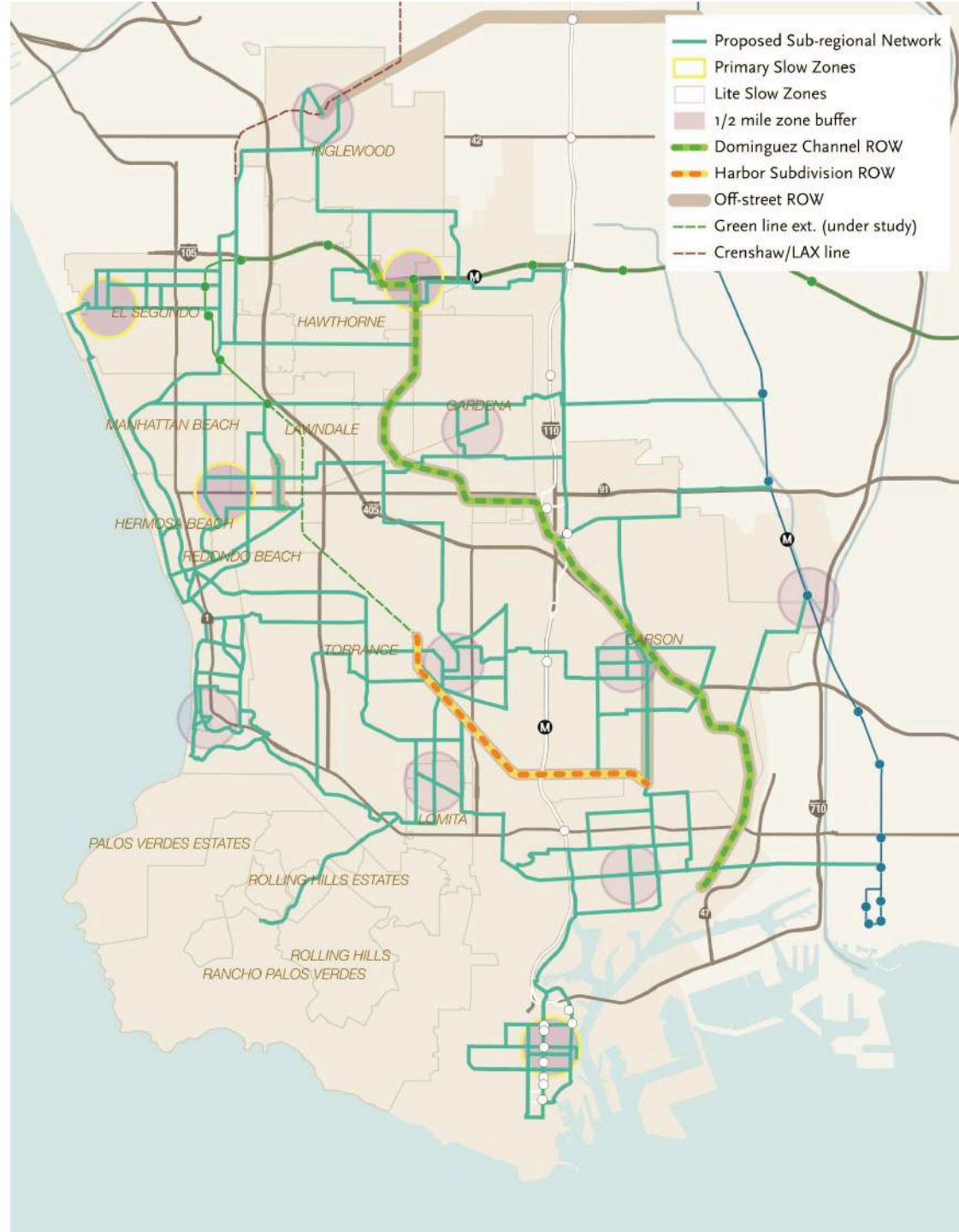


**Regional
Slow Speed
Thruways**

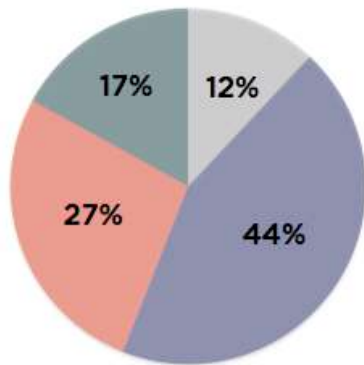
Sub-regional Network

Connects Slow Zones.

Adapted from
regional Active
Transportation
Network (ATN).

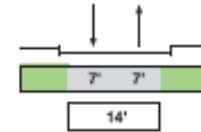


Facilities



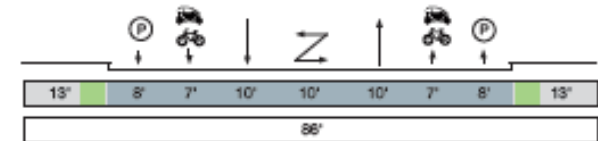
- Slow Speed Thruway **Class I**
- Shared Residential Street **Class III**
- Shared striped bike/NEV lanes **Class II**
- protected bike lanes/lower speed **Class IV**

CLASS I SLOW SPEED PATH - OFF STREET MULTI-USE PATH, SHARED BY ALL SLOW MODES.



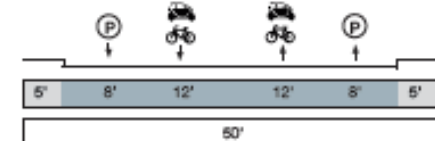
Adapted from City of Lincoln.

CLASS II SLOW SPEED LANE - STRIPED, DEDICATED ON-STREET LANE SHARED BY ON-STREET SLOW MODES.



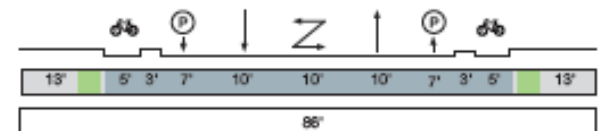
Adapted from LA Complete Streets Manual and City of Lincoln.

CLASS III SLOW SPEED ROUTE - SHARED BY ALL ON-STREET MODES.



Adapted from NACTO, LA Complete Streets Manual and City of Lincoln.

CLASS IV - PROTECTED LANE FOR BIKES AND NON-NEV ON-STREET SLOW MODES; 35 MPH ROADWAY SHARED BY CARS AND NEVs.



Adapted from LA Complete Streets Manual and City of Lincoln.

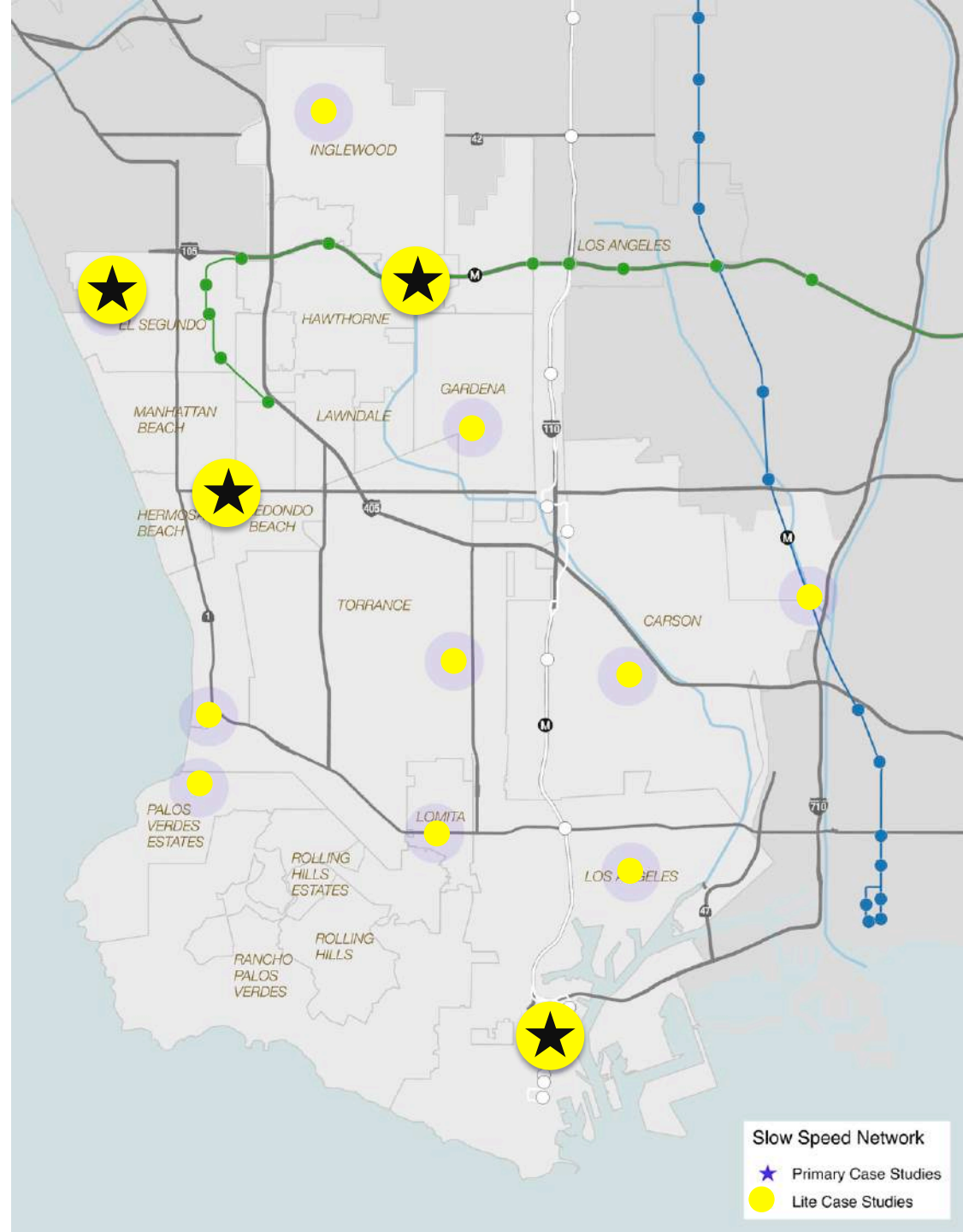
Slow Zones

Local Network

San Pedro
North Redondo
El Segundo
Hawthorne

(& Nine Lite Slow Zones)

Connected by
Sub-regional network



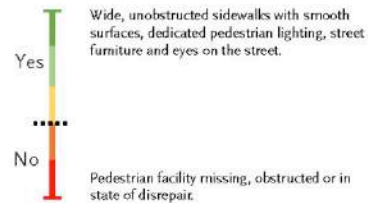
North Redondo Slow Zone pt.1

Pedestrian area and adjacent regional destination accessible from South Bay
Slow speed network

On-street sub-regional network compact around pedestrian core.



Supports pedestrian modes?



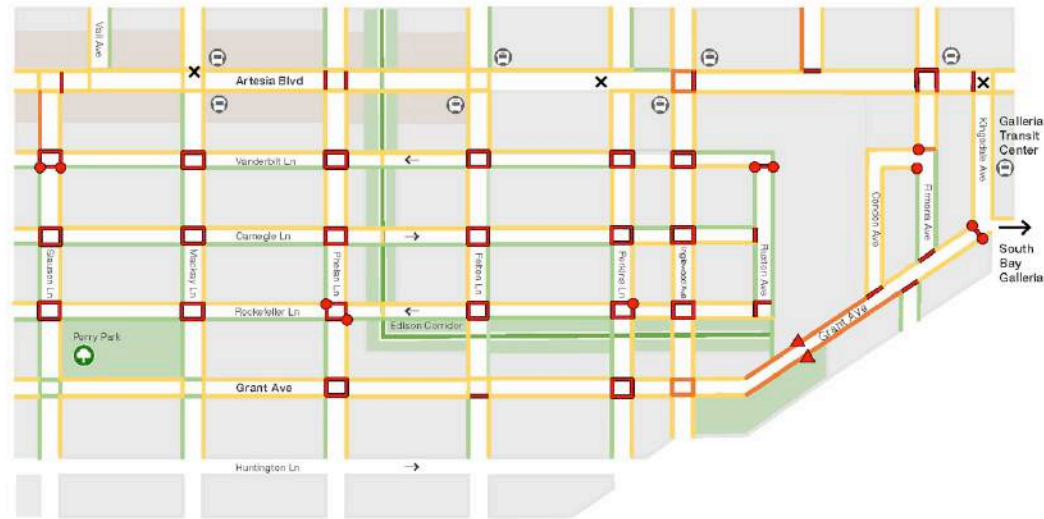
- No ADA ramp
- No crosswalk
- ▲ Obstruction (e.g. tree, utility pole, etc.)
- ✕ Fatal crash location (ped/bike vs car)
2005-2014 SWITRS data



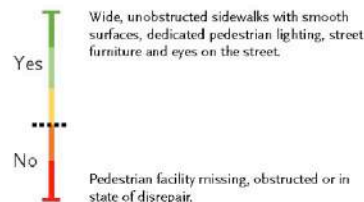
North Redondo Slow Zone pt.2

Pedestrian area and adjacent regional destination accessible from South Bay
Slow speed network

On-street sub-regional network compact around pedestrian core.



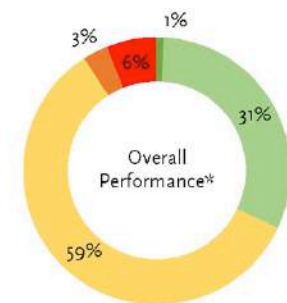
Supports pedestrian modes?



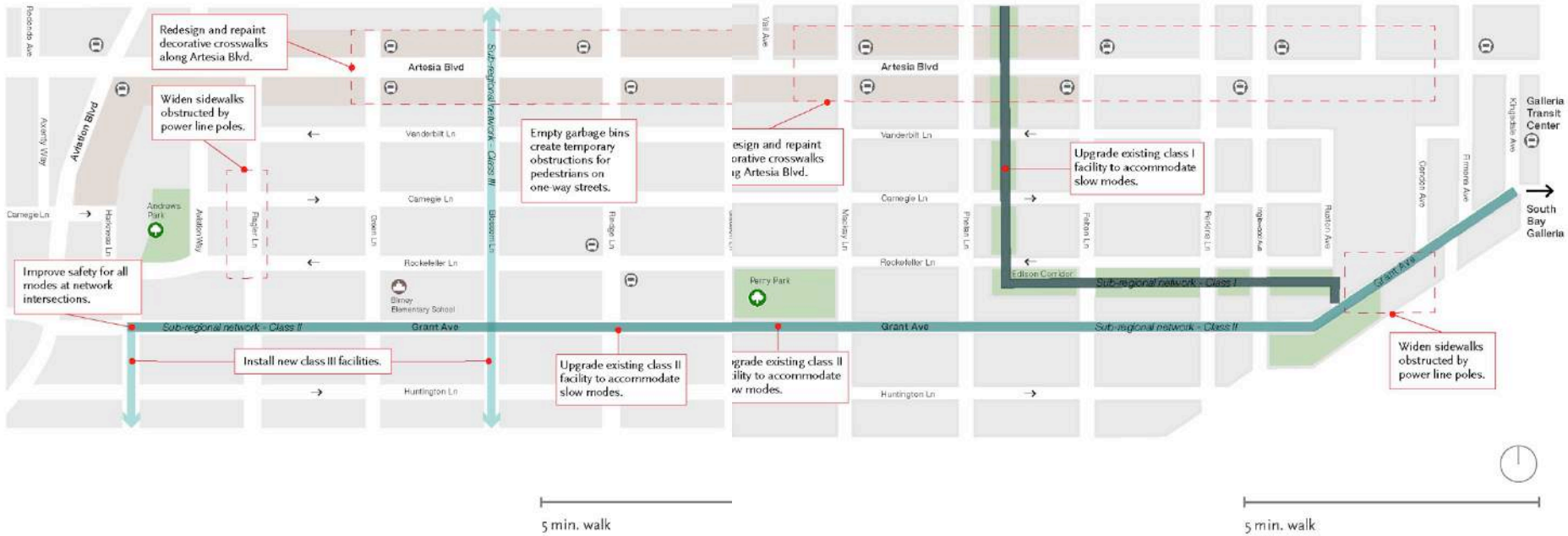
- No ADA ramp
- No crosswalk
- ▲ Obstruction (e.g. tree, utility pole, etc.)
- ✕ Fatal crash location (ped/bike vs car) 2005-2014 SWITRS data



The deficiencies shown above, coded in red and orange, need to be addressed to bring the North Redondo Slow Zone pedestrian core to a state of good repair.



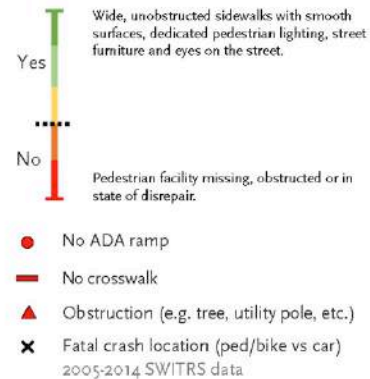
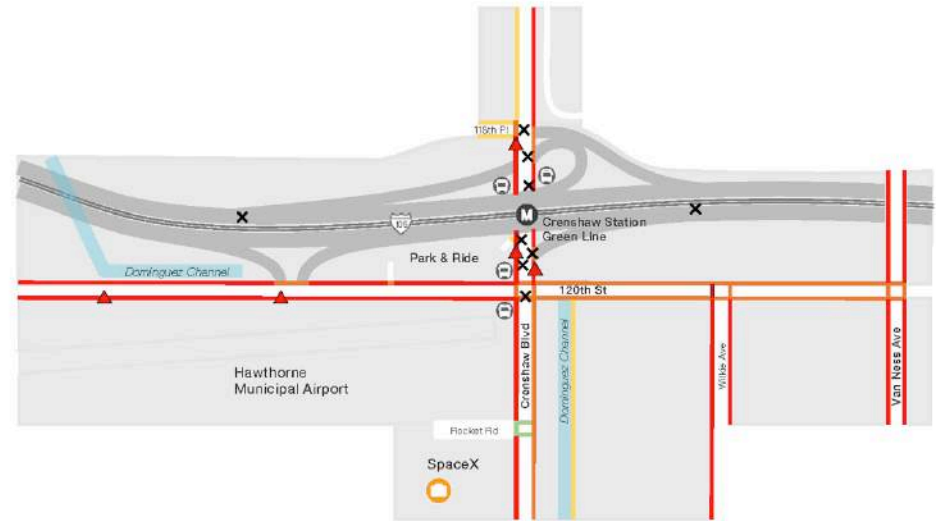
* percent of total road miles in each category



North Redondo Slow Zone



Hawthorne Slow Zone



The deficiencies shown above, coded in red and orange, need to be addressed to bring the Hawthorne pedestrian core to a state of good repair.



* percent of total road miles in each category

Low Speed Thruways

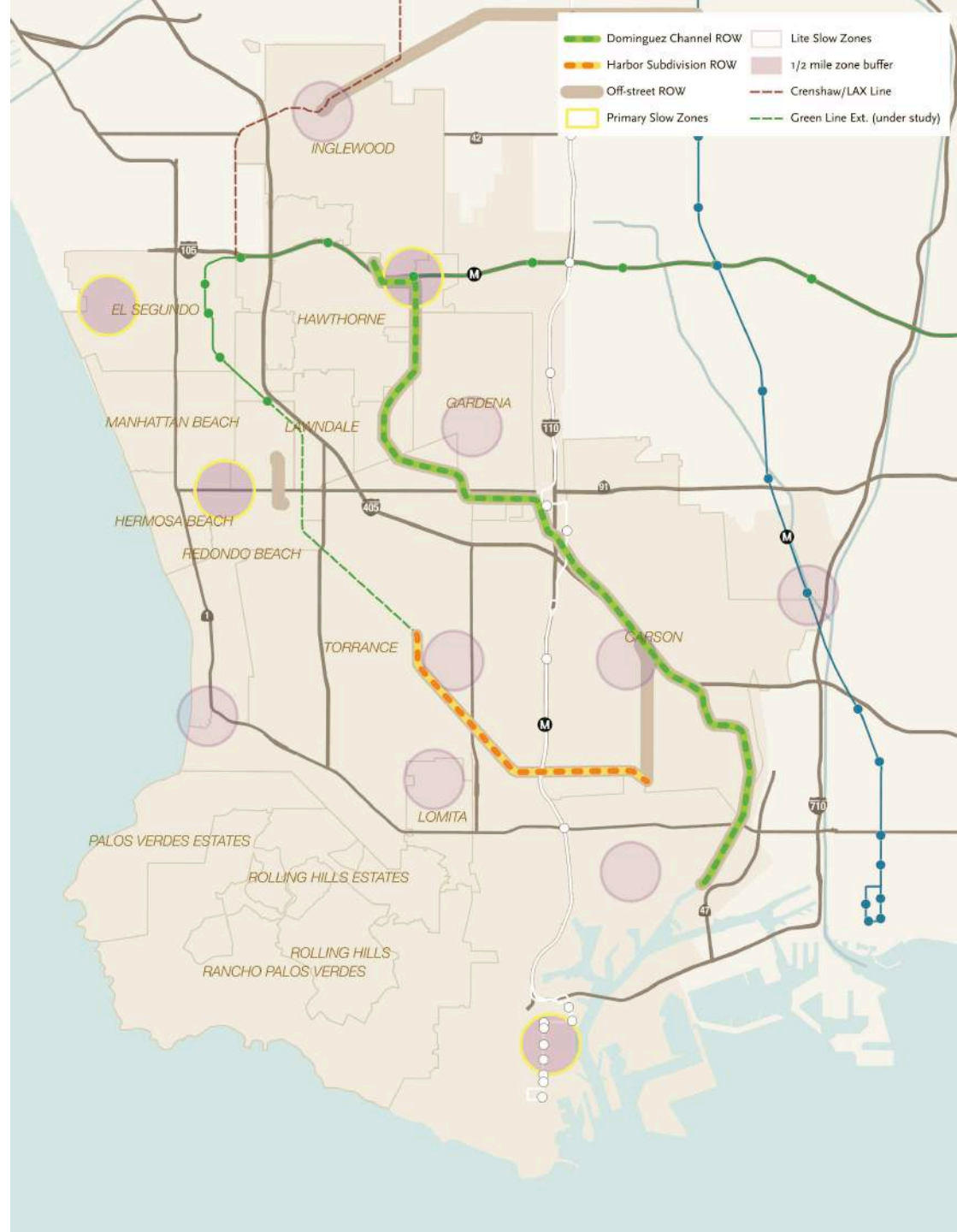
Regional Network

ROWs for non-car modes including NEVs

ie: Dominguez Channel

Hawthorne to the Port.
16 miles.

Access from arterials,
CalState Dominguez
Hills, El Camino
College, UCLA Harbor
Med.



Multi-Modal Path Dominguez Channel

For all slow modes including NEVs, bikes, pedestrians and others.

Access points from arterial and local streets

In RFP phase for widening

Evaluation Framework

Enumerates sidewalk and roadway improvements.

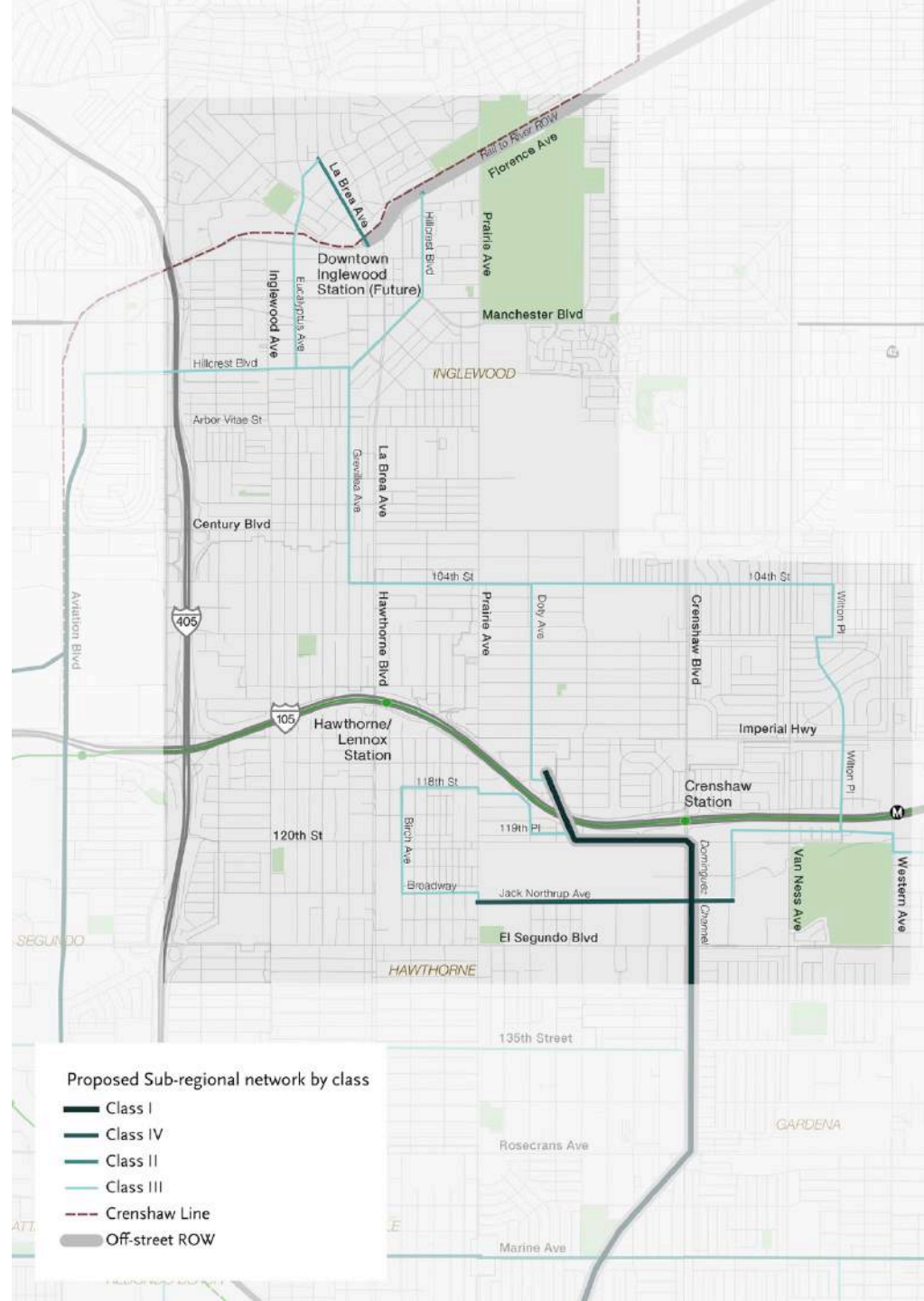
Compares impact on sustainability between Slow Zones.

2025 Scenario demonstrates potential of switching to low speed zero emissions modes for 20% of short trips.

290 tons/day of CO₂

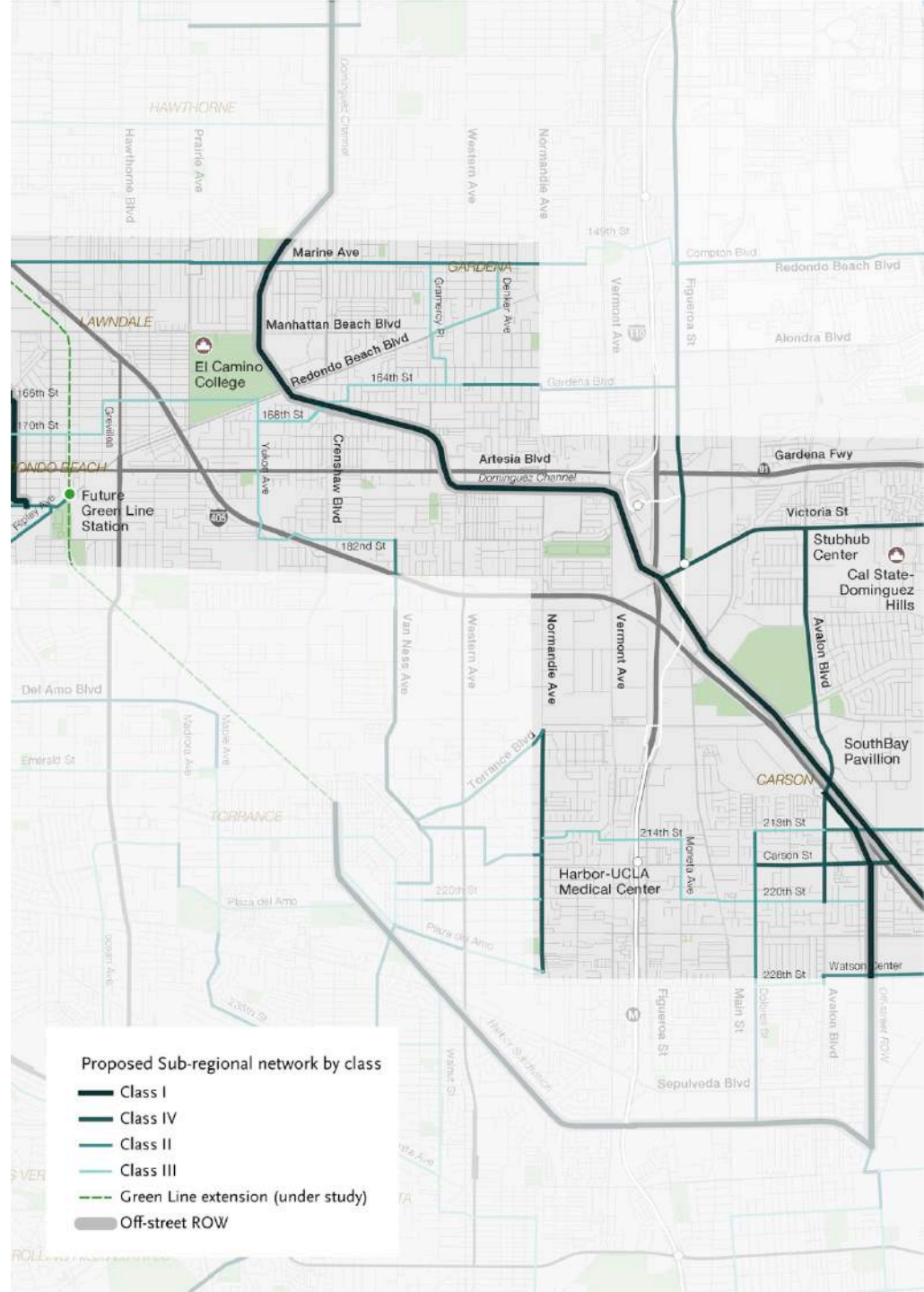
= 30,000 gallons of gasoline.

Rail to River Terminus to the Dominguez Channel, via Inglewood and Hawthorne



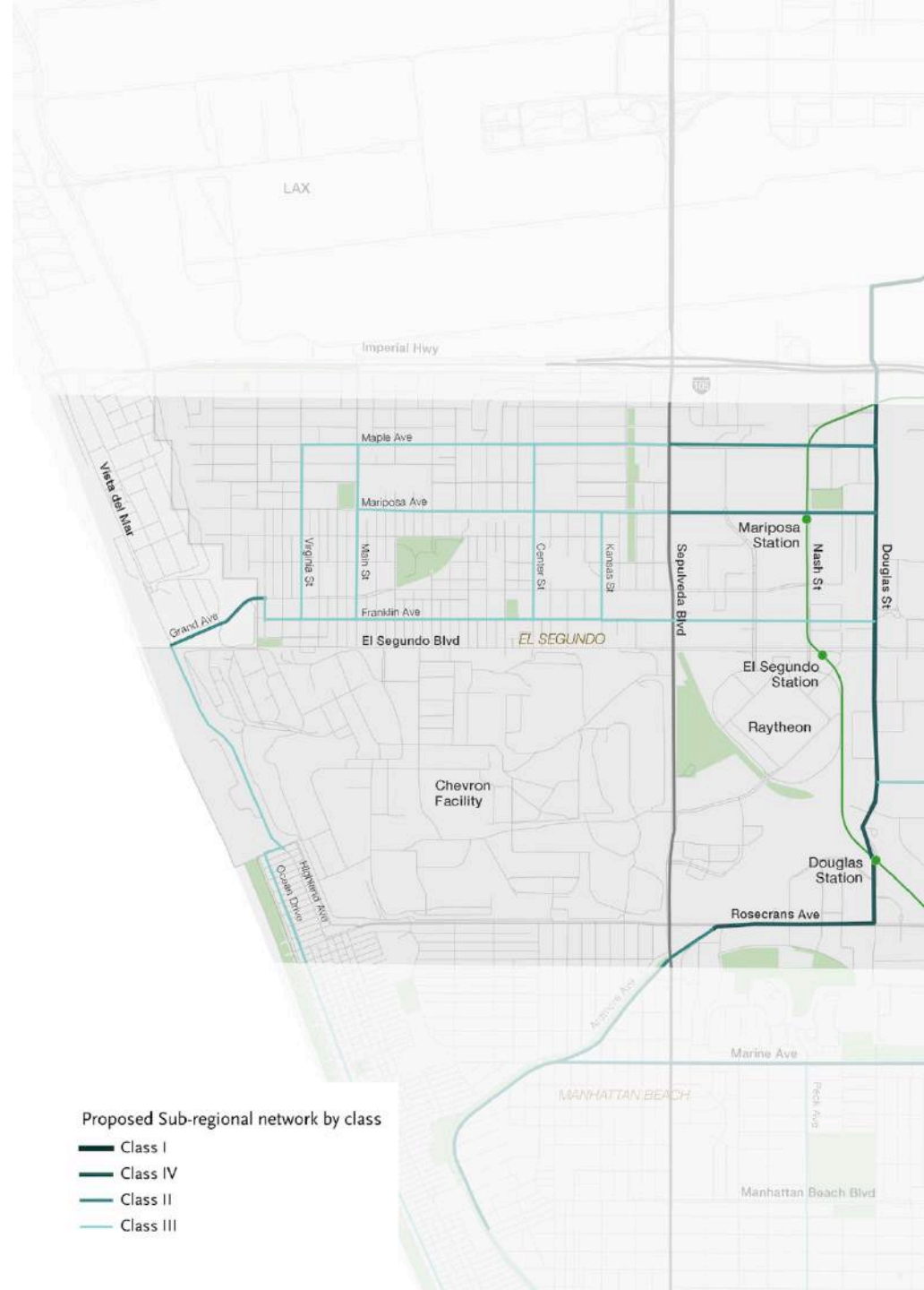
Pilot Projects

North Redondo Transit Center to El Camino College to Carson Slow Zone



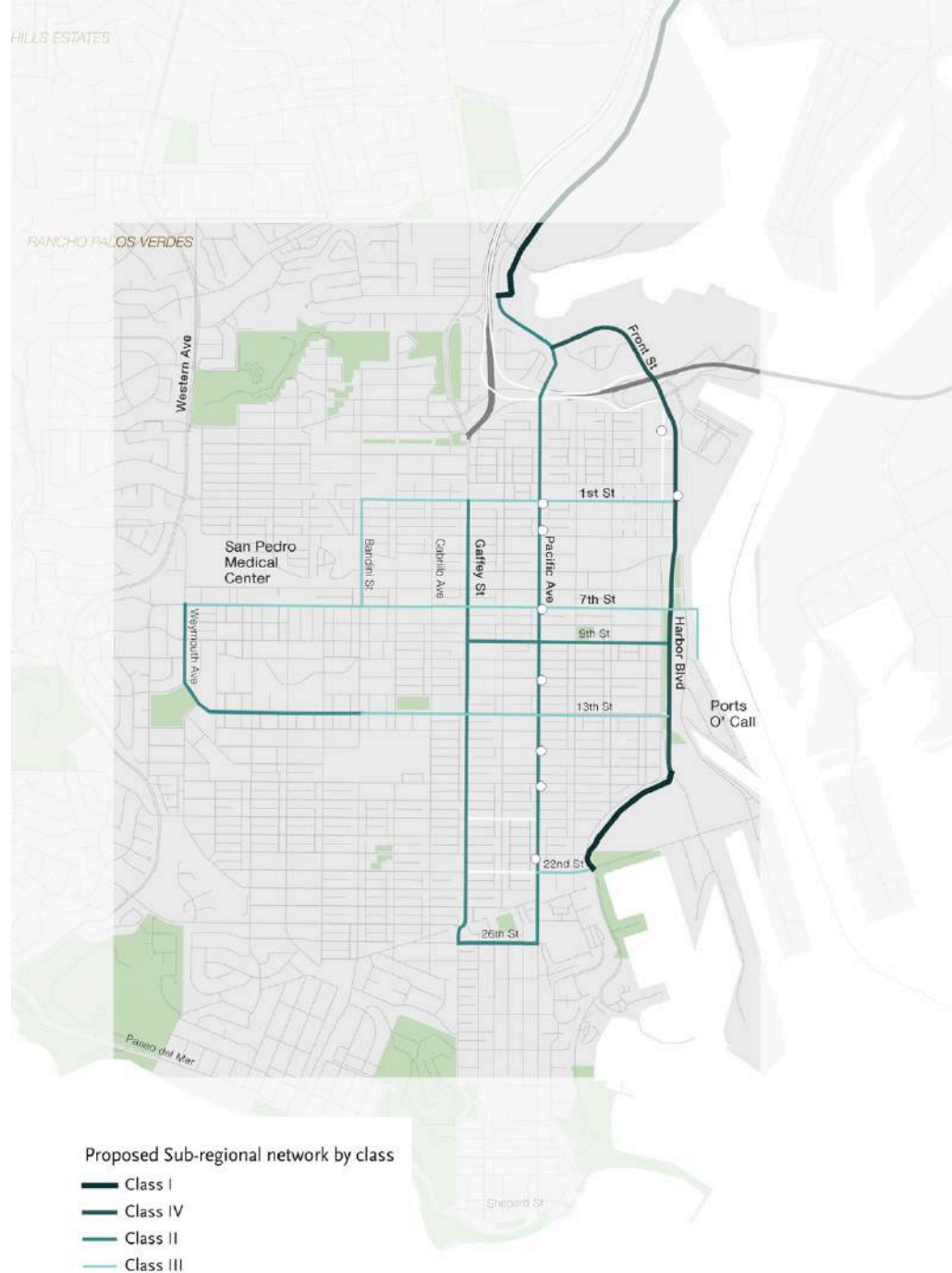
Pilot Projects

El Segundo



Pilot Projects

San Pedro



Thank You



Link to full report:

https://media.metro.net/projects_studies/sustainability/images/Metro_SlowSpeedNetwork_2017-0920.pdf

More info:

info@civicprojects.org

Questions/Discussion

