



Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
June 6, 2019

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S
APPROVAL

From: Hina Chanchlani, Assistant Regional Planner, Transportation
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Subject: I-105 Corridor Sustainability Study Status Report

RECOMMENDED ACTION:

Receive the study findings and direct staff to finalize the report and transmit the final report to Caltrans, FHWA, Metro and other interested stakeholder agencies.

STRATEGIC PLAN:

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

EXECUTIVE SUMMARY:

SCAG staff in coordination with the consultant team, Cambridge Systematics, will present the final report on the I-105 Corridor Sustainability Study (CSS or Study) which was initiated in summer of 2017. The goal of the Study is to identify a comprehensive set of multimodal solutions to the challenges on this corridor in an effort to reduce overall congestion within the corridor, while promoting long-term sustainability and safety.

BACKGROUND:

In FY 2016-17, SCAG was awarded a Caltrans Sustainable Transportation Planning Grant to examine the multi-modal I-105 corridor and to assess its future potential through a Corridor Sustainability Study. Historically, SCAG, working in partnership with Caltrans, has developed Corridor System Management Plans (CSMPs) for a number of freeway corridors throughout the region. CSMPs have traditionally focused on roadway operation and delay due to congestion along the mainline highway. The I-105 CSS goes beyond the current CSMP framework to examine the entire I-105 corridor from a multi-modal perspective. The Study integrates new planning frameworks and sustainable strategies that go beyond the traditional approach of adding capacity, including, but not limited to: complete streets concepts, the Smart Mobility Framework (SMF), managed lanes and advanced operational strategies (e.g., integrated corridor management, transportation system management and operations (TSMO) strategies) in an effort to improve overall mobility and safety throughout the corridor.

Study Scope and Overview

The scope of the Study includes: information regarding its comprehensive public and stakeholder outreach; purpose and need statement; an assessment of existing conditions and future baseline conditions; development of performance measures; development and evaluation of improvement

scenarios; a series of comprehensive multi-modal recommendations; and associated cost estimates. A project development team (PDT) was formed to provide technical guidance and input to SCAG and its consultant. The PDT includes staff representatives from the Los Angeles County Metropolitan Transportation Authority (Metro) and Caltrans. In addition to the PDT, a technical advisory committee (TAC) was also formed to provide additional technical guidance and input during major project milestones. The TAC is composed of planning staff from local jurisdictions along the corridor (e.g., Norwalk, Bellflower, and Gardena), Los Angeles County, the Los Angeles World Airports (LAWA), Gateway Cities Council of Governments, South Bay Cities Council of Governments, Metro, and Caltrans.

The work completed to support the Study includes defining the study area, comprehensive collection of data related to socio economic/demographic makeup of the study area, current condition data on all modes of transportation within the Study area leading to a completion of a comprehensive current condition report, future baseline condition report which establishes a baseline for developing future improvement scenarios. Emphasis is given to future improvement scenarios built from a collection of projects which are organized by near, mid and long term implementation timeframes. The team assembled a comprehensive list of improvement projects that are planned, programmed or are in implementation phase within the Study area, which serves as a starting point for the improvement scenarios. A total of 425 projects were identified for inclusion in the study through existing planning studies and working with corridor cities and stakeholders. Furthermore, the team developed a framework for evaluating the alternative scenarios that will serve as the foundation for the selection of a preferred alternative scenario.

The project evaluation is categorized by project types such as arterials, transit, active transportation, goods movement, and highway which are used to evaluate the performance by highest performing, the middle tier and lower performing tier of projects. The categorization of projects as near-term, mid-term, and long-term is not intended to be used to prioritize funding and implementation. Instead, the project list is intended to assist decision makers in understanding the relative benefits and challenges associated with types of projects. Ultimately, project implementation will be decided by the project sponsor(s) and jurisdiction(s) that the project is located in. The project information in detail has been provided in the final report and will ultimately be forwarded to the implementing agencies as part of the final report.

More than half of the projects are near term, about a quarter are mid-term, and a small number are defined as long-term projects. Nearly a quarter of projects for near term or midterm are highest performers which means that they are considered likely to better enhance the corridor sustainability. A majority of projects fall in the middle performance evaluation tier in the near and mid-term categories. These highest tier projects include bikeways and trails, complete streets, first/last mile improvements, bridge and grade separation, new bus rapid transit (BRT), transit centers, arterial ITS and operational improvements, and new rail projects. Some of these will take much longer to implement, such as new rail, despite its many benefits. Other projects, such as new Class II bikeways, could be implemented in less time and would thus make an impact in the corridor in the near-term by closing critical gaps and improving non-motorized transportation options in the I-105 Study Area.

In the near term project improvements, majority are active transportation and arterial improvement projects. Fifty one (51) projects are in the top tier. The mid-term project scenario includes projects such as adding express lanes, ramp improvements, and sound walls which are larger infrastructure undertakings that require numerous levels of approval, years of planning, environmental review and major construction. Fifty two percent (52%) of mid-term projects includes transit projects such as Metro link commuter rail enhancements, new BRT, and transit centers and park and ride facilities. The top tier projects that will improve accessibility, mobility, sustainability, and safety of the corridor and could likely be completed in five to fifteen years include a new BRT, HOV/Express lanes, bridge and grade separation, new sidewalk/ trail, complete streets and class one or four bikeways. About 20 projects are long term which could take more than 15 years to implement. The projects include major highway capacity enhancements, grade separations and crossings, and new rail projects. New rail facilities are placed in higher performing category despite their longer timeframe for implementation because they address the multi-modal objectives of the study and on the other hand, capacity enhancement projects generally fall in the lower tier because they do not tend to advance sustainability in the same way as alternative modes.

Next Steps

Upon acceptance of this Study by this committee, staff will finalize the report and the associated technical documents for transmittal to Caltrans, LA Metro and other interested stakeholders. Many of the projects identified in the report are already in SCAG's planning and programming documents (2019 FTIP and 2016 RTP/SCS). Staff will review options for incorporating those additional projects that are not currently in SCAG's planning and programming documents, for inclusion in the Connect SoCal (2020 RTP/SCS), at least as unconstrained strategic projects. As with most planning studies prepared by SCAG, SCAG will work with the implementing agencies to support their implementation as funding and opportunities arise. Prioritizing funding for these projects will be solely at the discretion of the implementing agencies that have the jurisdiction over the project implementation for each of the projects identified in the Study.

The link for a draft study can be found on SCAG's website <http://scag.ca.gov/I-105-Corridor-Study>.

FISCAL IMPACT:

The I-105 Corridor Sustainability Study is funded by a Caltrans Sustainable Transportation Planning Grant in the amount of \$500,000 and Local Match of \$125,000. The funds are programmed in SCAG's Overall Work Program (OWP), project number 145-4425.01.

ATTACHMENT(S):

1. PowerPoint Presentation - I 105 Corridor Sustainability Study

I-105 Corridor Sustainability Study

SCAG Transportation Committee

June 6, 2019

Presented By:

Gary Hamrick, Cambridge Systematics



Project History and Background

- 2016 Caltrans Sustainable Transportation Planning Grant
- **Purpose of the Study:**
 - » Examine *multi-modal* I-105 corridor conditions
 - » Go beyond traditional freeway planning
 - » Integrate Caltrans Smart Mobility Framework
 - » Include key stakeholders

Multi-Modal Corridor Plan Guidelines

➤ Caltrans Corridor Planning Guidebook

- » To replace Transportation Concept Report (TCR) guidelines
- » Public draft released in December, 2018

➤ CTC Comprehensive Multi-Modal Corridor Plan Guidelines

- » California Transportation Commission guidelines for eligibility of **plans** under Congested corridors program (SB1)
- » Final guidelines approved December 5, 2018
- » Agencies beginning to create plans now



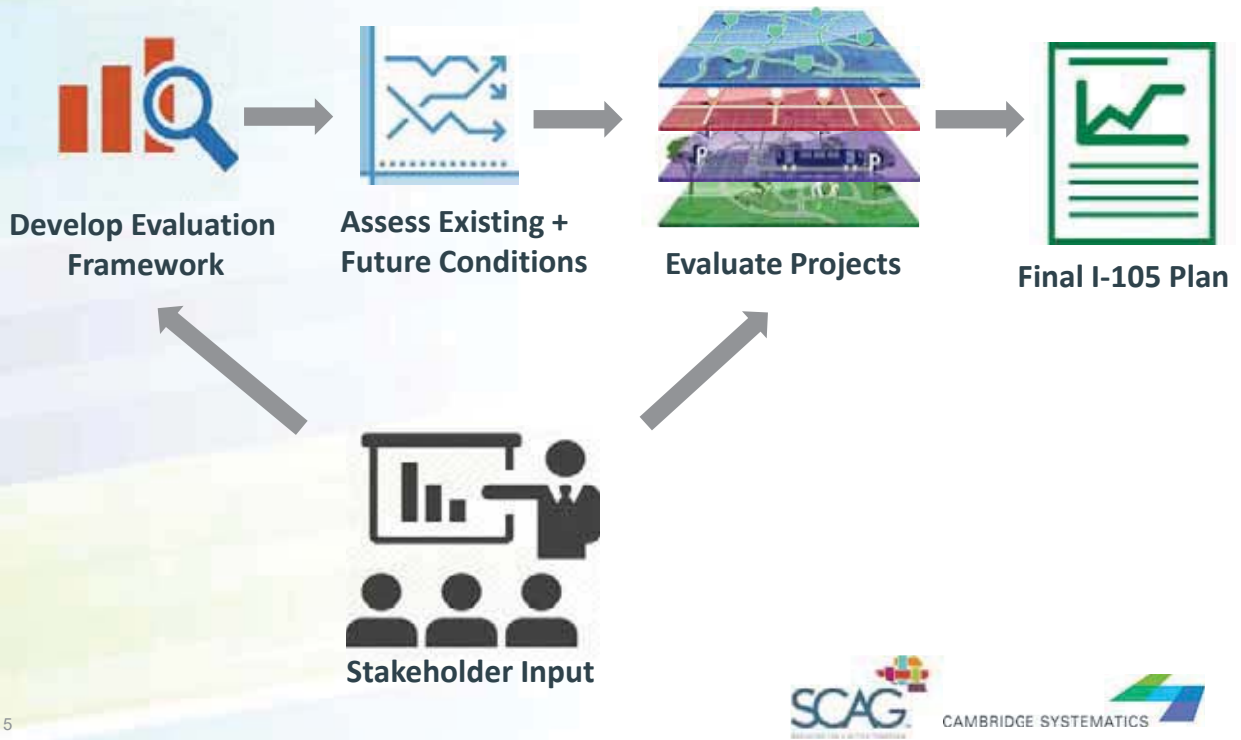
Project Objectives

➤ **Not simply Level of Service for Autos!**

- » Reduce **delay** per capita;
- » Reduce **vehicle miles traveled (VMT)** per capita;
- » Improve **connectivity** between modes;
- » Increase **mode share** for transit, walking, and bicycling;
- » Improve **system conditions** (preservation);
- » Improve **system efficiency** (operations);
- » **Reduce serious and fatal collisions**; and
- » **Support Senate Bill 375** and **greenhouse gas reduction**



Process



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Project Study Area



➤ **3 Miles around all sides of I-105 Freeway**

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Attachment: PowerPoint Presentation - I 105 Corridor Sustainability Study (I-105 Corridor Sustainability Study Status Report)

Evaluation Framework

Goals	Objectives	Performance Measures
Mobility 	<ul style="list-style-type: none"> • Improve multimodal system efficiency • Improve transit ridership • Reduce congestion 	<ul style="list-style-type: none"> • Transit ridership/mode share • High-occupant vehicle (HOV) mode share • Total person throughput • Travel time by mode • Vehicle/person hours of delay (VHD/PHD) • Truck VHD
Accessibility & Equity 	<ul style="list-style-type: none"> • Improve system connectivity and access to non-SOV modes • Increase service to social equity focus (SEF) populations • Promote geographic equity throughout the corridor 	<ul style="list-style-type: none"> • Households within 1/2-mile of high quality transit access • Jobs within 1/2-mile of high quality transit access • Bicycle facility density within 1/2-mile of high quality transit access • Healthcare, schools and activity centers accessible by low-stress bicycle/pedestrian facilities • Travel time by mode for social equity focus (SEF) populations • SEF households with access to high quality transit • Geographic equity

Evaluation Framework

Goals	Objectives	Performance Measures
Safety 	<ul style="list-style-type: none"> • Reduce safety collisions and hazards 	<ul style="list-style-type: none"> • Serious injury crash rates (by mode) • Fatal collision rate (by mode)
State of Good Repair 	<ul style="list-style-type: none"> • Improve & preserve system conditions 	<ul style="list-style-type: none"> • Pavement in good, fair, and poor condition • NHS bridges in good, fair, and poor condition
Sustainability 	<ul style="list-style-type: none"> • Improve air quality and public health • Reduce emissions 	<ul style="list-style-type: none"> • Greenhouse gas (GHG) emissions • Air quality criteria pollutant emissions • Bicycle and walk mode share • Non-single occupant vehicle (SOV) mode share • Parks, recreation & open space accessible by low-stress bike/ped facilities, complete streets, and/or high quality transit • Vehicle miles traveled (VMT)

Significant Stakeholder Outreach Effort

- **Project Develop Team**
 - » SCAG, Caltrans, Metro
- **Technical Advisory Committee**
 - » Cities/county
 - » Transit providers
 - » Interest groups
- **Stakeholder Interviews**
 - » Transit providers,
 - » Active transportation groups
 - » Cities
- **Infographics**
- **Project Website**
- **Online Public Survey**



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Public Engagement



Four public events:

- Downey
- El Segundo
- Lynwood
- Hawthorne

Public survey:

- 124 responses

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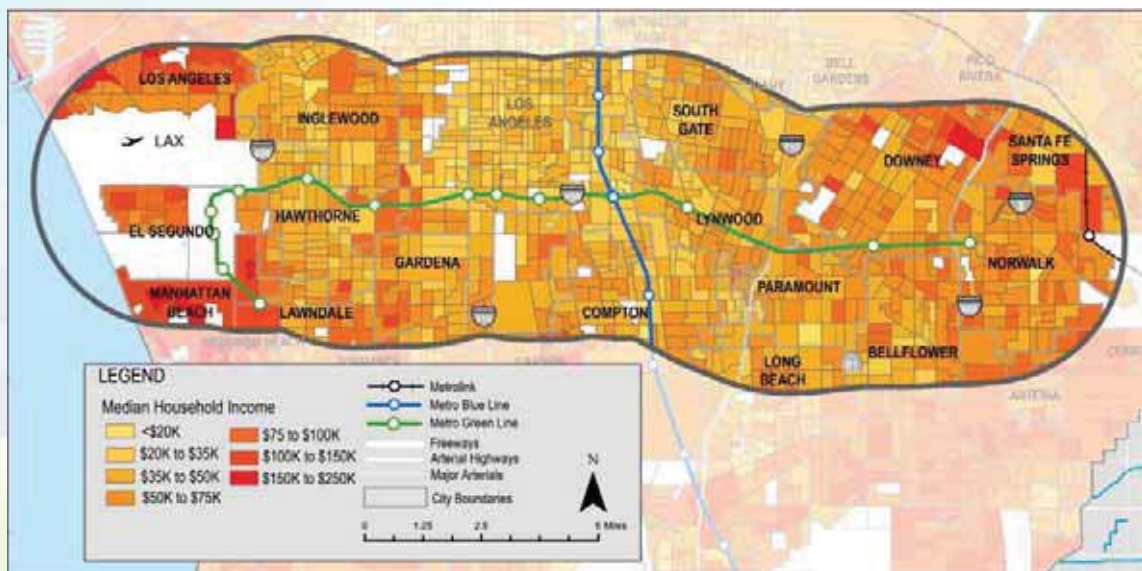
Packet Pg. 15

EXISTING AND FUTURE DEFICIENCIES



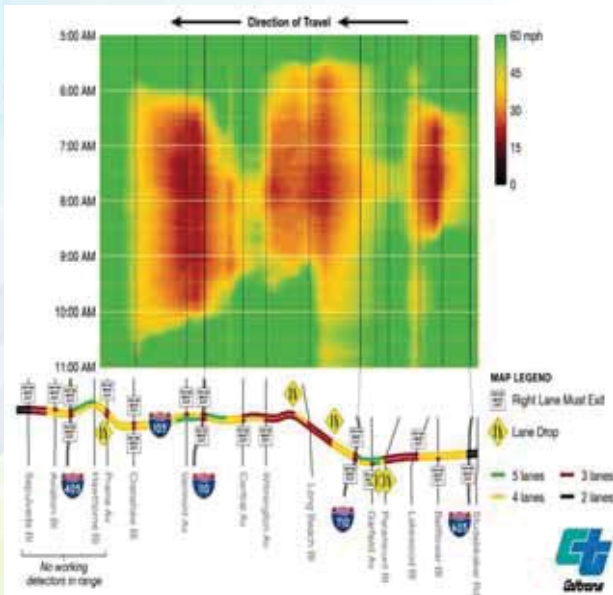
Land Use and Demographics

Median Household Income

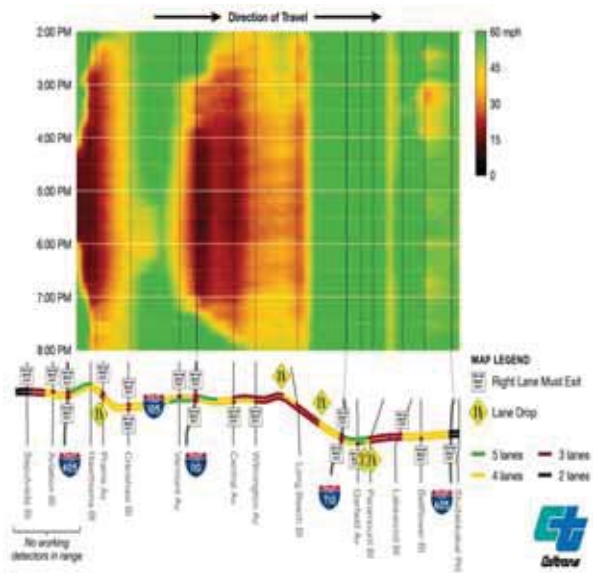


Freeway

AM Westbound Speed Contours

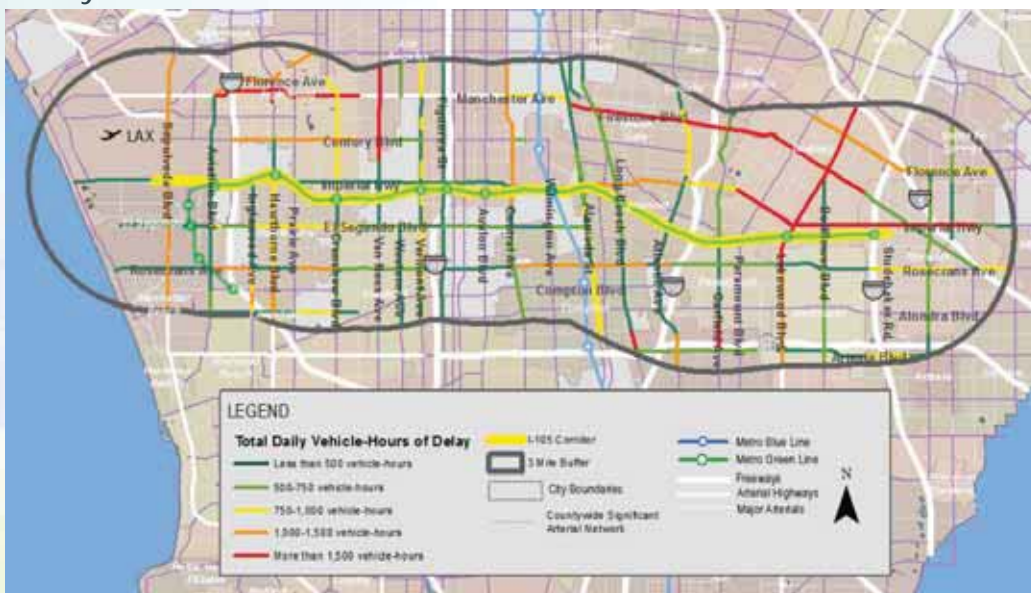


PM Eastbound Speed Contours



Arterials

Daily Vehicle Hours Traveled



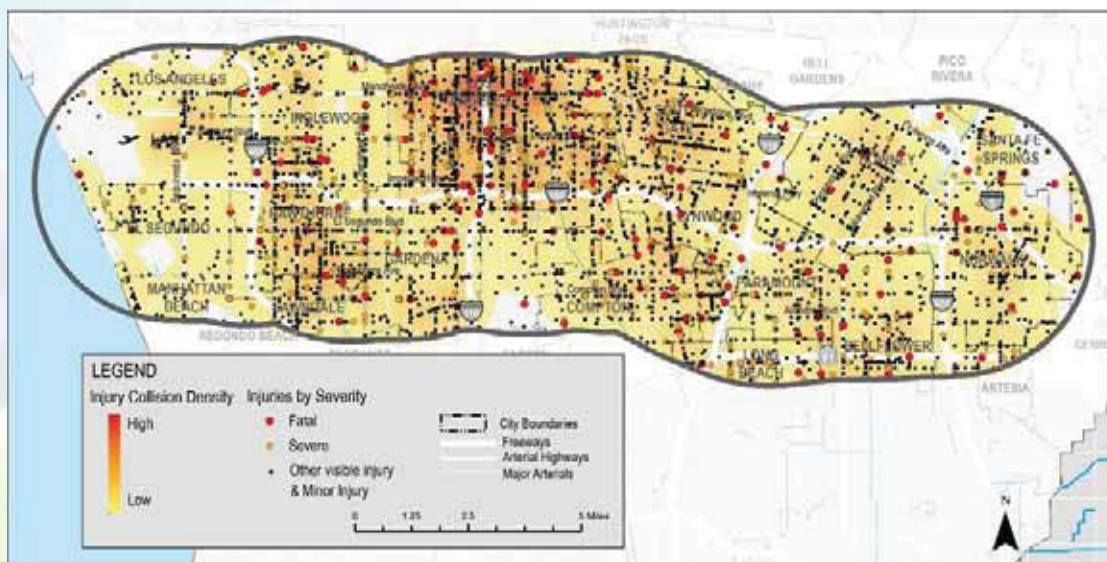
Transit

Metro Bus Ridership by Stop



Safety

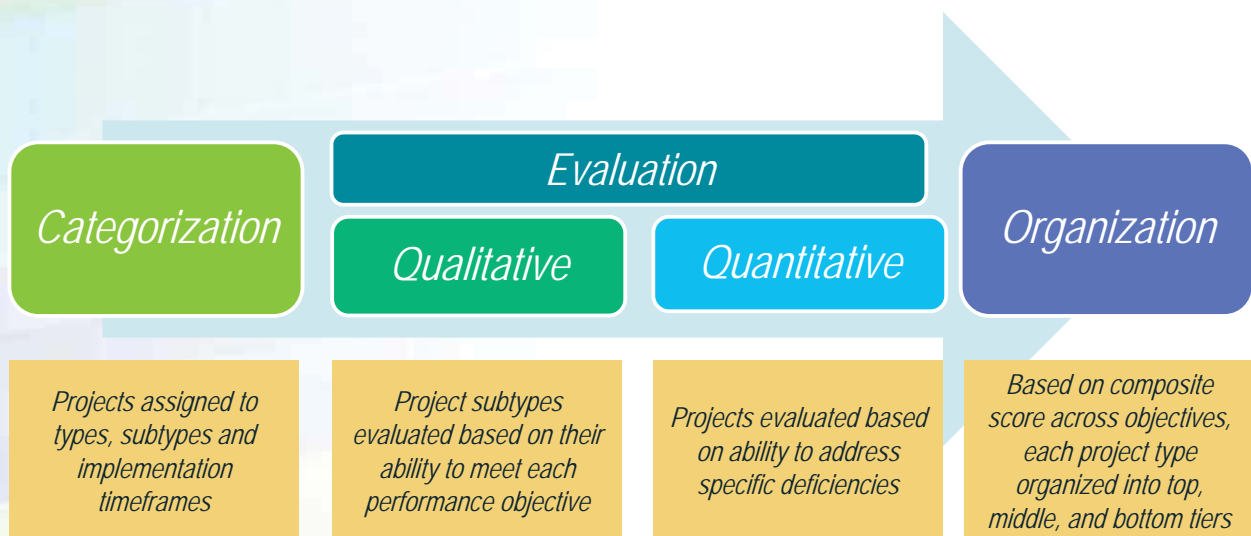
Bicycle and Pedestrian Collisions



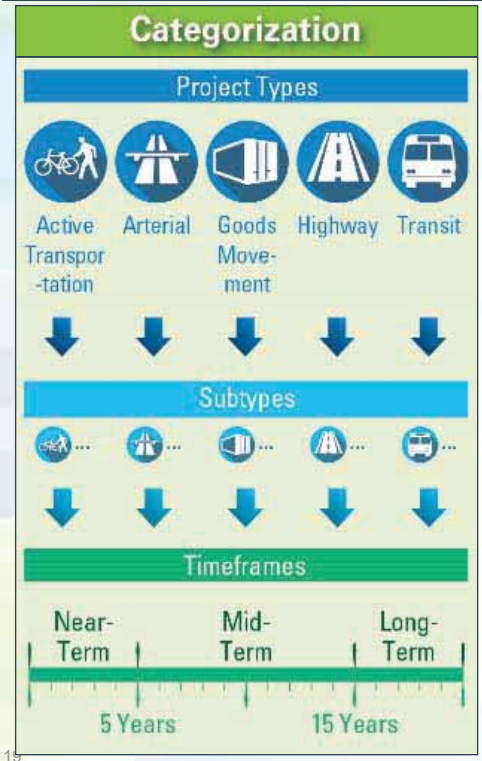
SCENARIO EVALUATION



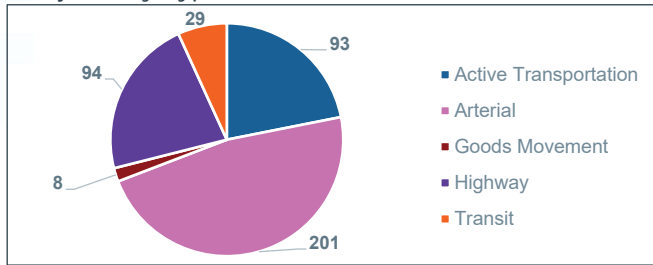
Project Evaluation Process



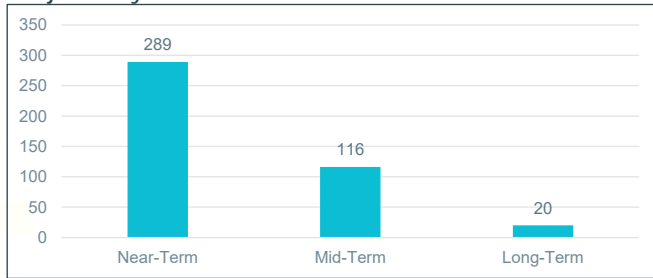
Evaluation Process: Categorization



Projects By Type



Projects By Timeframe



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Evaluation Process: Qualitative and Quantitative Evaluation

Evaluation: Qualitative

Goals and Measures	Scoring Range
Mobility	[Visual gauge]
Accessibility & Equity	[Visual gauge]
Safety	[Visual gauge]
State of Good Repair	[Visual gauge]
Sustainability	[Visual gauge]

Evaluation: Quantitative

- Addresses high collision locations
- Serves disadvantaged communities
- Serves high employment, residential, or destination density
- Addresses highly congested areas

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Qualitative Evaluation; Active Transportation

Type	Subtype	Mobility & Connectivity	SOGR	Accessibility & Equity	Safety	Sustainability
Active Transportation	Bikeshare	Green	Yellow	Green	Green	Green
	Bikeway—Class 2	Yellow	Yellow	Green	Green	Green
	Bikeway—Class 3	Yellow	Yellow	Green	Green	Green
	Education and Promotion	Yellow	Yellow	Green	Green	Green
	Beautification/ Open Space	Yellow	Yellow	Green	Yellow	Green
	Pedestrian Improvements	Yellow	Yellow	Green	Green	Green
	1 st / Last Mile	Green	Green	Yellow	Green	Green
	Bikeway—Class 1 or 4	Yellow	Yellow	Green	Green	Green
	Bike/ ped Bridges	Yellow	Yellow	Green	Green	Green
	Complete Streets	Green	Green	Yellow	Green	Green
	New Sidewalk/ Trail	Yellow	Yellow	Green	Green	Green

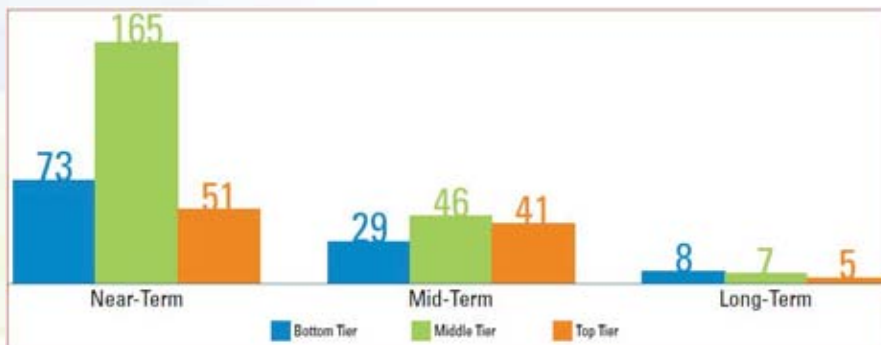
GIS Locational Analysis; Projects Receive Detailed Score

Type	Extra Scoring
Active Transportation	Within a half mile of a BRT or rail station
	Intersects a CalEnviroScreen disadvantaged Census tract
	Intersects a quarter-mile buffer around schools, intersects a half-mile buffer around hospitals and medical centers, intersects a commercial center
Arterial	Project on east/ west corridor
	Vehicle hours of delay > 1,000
	VMT over 150,000 miles
Transit	Employment Density > 15 jobs per acre, intersects a commercial center
	Intersects a CalEnviroScreen disadvantaged Census tract
	Population density > 20,000 people per square mile

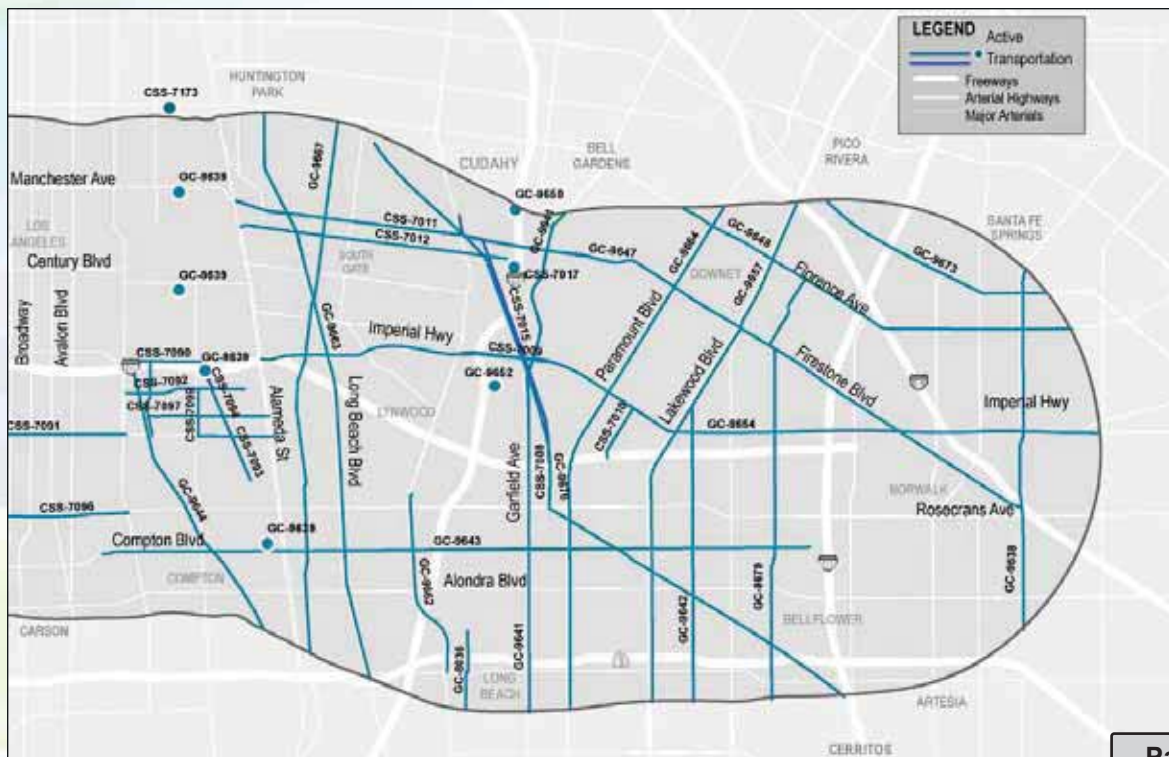
Evaluation Process: Organization



Projects By Timeframe and Tier



Active Transportation Projects (eastern)



Highway Projects (western)



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Arterial Projects (eastern)

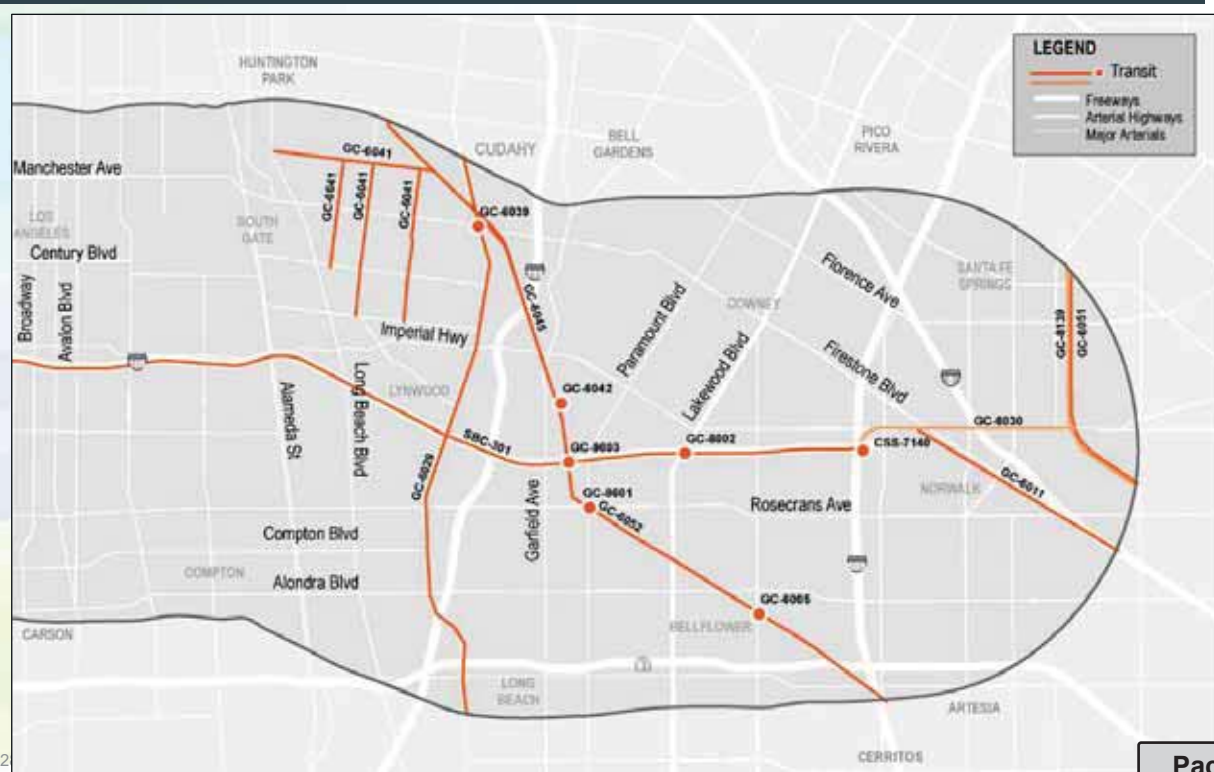


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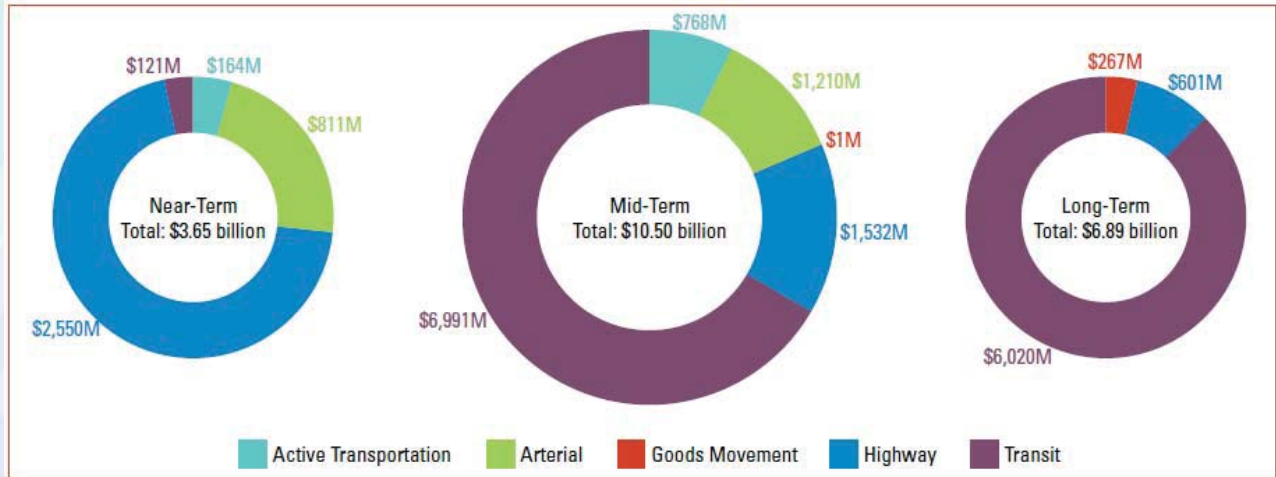
Goods Movement Projects (western)



Transit Projects (eastern)



Funding Need



Draft Report



<http://scag.ca.gov/I-105-Corridor-Study>



Questions

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