#### **Metro**

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
3rd Floor Board Room



Agenda - Final

Wednesday, July 15, 2015 10:00 AM

One Gateway Plaza, Los Angeles, CA 90012, 3rd Floor, Metro Board Room

#### **Ad-Hoc Sustainability Committee**

Pam O'Connor, Chair, SCAG
Mike Bonin, Vice Chair

Jacki Bacharach, South Bay Council of Governments
John Fasana

Nancy Pfeffer, Gateway Cities Council of Governments
Mark Ridley-Thomas
Hilda Solis
Carrie Bowen, non-voting member
Phillip A. Washington, Chief Executive Officer

#### METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES (ALSO APPLIES TO BOARD COMMITTEES)

#### **PUBLIC INPUT**

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

**CONDUCT IN THE BOARD ROOM** - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

**REMOVAL FROM THE BOARD ROOM** The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course
  of said meeting.
- A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

#### INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

#### **DISCLOSURE OF CONTRIBUTIONS**

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

#### ADA REQUIREMENTS

Upon request, sign language interpretation, materials in alternative formats and other accommodations are available to the public for MTA-sponsored meetings and events. All requests for reasonable accommodations must be made at least three working days (72 hours) in advance of the scheduled meeting date. Please telephone (213) 922-4600 between 8 a.m. and 5 p.m., Monday through Friday. Our TDD line is (800) 252-9040.

#### LIMITED ENGLISH PROFICIENCY

A Spanish language interpreter is available at all <u>Board Meetings</u>. Interpreters for <u>Committee</u> meetings and all other languages must be requested 72 hours in advance of the meeting by calling (213) 922-4600 or (323) 466-3876.

#### HELPFUL PHONE NUMBERS

Copies of Agendas/Record of Board Action/Recordings of Meetings - (213) 922-4880 (Records Management Department)
General Information/Rules of the Board - (213) 922-4600
Internet Access to Agendas - www.metro.net
TDD line (800) 252-9040

#### NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

#### **CALL TO ORDER**

#### **ROLL CALL**

5.	RECEIVE AND FILE report on City of Los Angeles Sustainabilit	y Plan. <u>2015-0817</u>
6.	RECEIVE AND FILE status report on the progress of the Urban Greening Plan for Park and Ride Lots and Station Areas.	<u>2015-0818</u>
	Attachments: Attachment A - MUG TAC 2 Workshop Summary 15042	<u>22</u>
7.	RECEIVE oral report on Sustainability Annual Report performa metrics.	nce <u>2015-0820</u>
	Attachments: Attachment A - Performance Metrics	
8.	RECEIVE oral report of the Chair.	<u>2015-1047</u>
9.	RECEIVE report of the Chief Executive Officer.	<u>2015-1048</u>

#### **Adjournment**

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.



#### **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2015-0818, File Type: Informational Report Agenda Number: 6.

AD-HOC SUSTAINABILITY COMMITTEE JULY 15, 2015

SUBJECT: URBAN GREENING PLAN UPDATE

**ACTION: RECEIVE AND FILE** 

#### **RECOMMENDATION**

RECEIVE AND FILE status report on the progress of the Urban Greening Plan for Park and Ride Lots and Station Areas.

#### **ISSUE**

Metro received a grant from the State Strategic Growth Council to develop an Urban Greening Plan for Park and Ride Lots and Station Areas. Consultants were brought on board in fall and winter 2014. Staff provided the first project status update at the May 20, 2015 Ad-Hoc Sustainability Committee meeting.

#### **DISCUSSION**

Urban Greening is one of the sustainability principles and priorities identified in Metro's Countywide Sustainability Planning Policy and Implementation Plan. Development of the Urban Greening Plan is one step in implementing this sustainability priority for Metro.

The second Technical Advisory Committee meeting was held on April 22, 2015. The TAC members discussed and provided technical input on placemaking and greening strategies in each participant's area of expertise. The plan goals were further refined through group discussion. The TAC also discussed criteria for how to select each greening and placemaking strategy.

The third TAC meeting occurred on June 22, 2015. The next Urban Greening Plan update will include a summary of that meeting summary. The update will be presented at the next Ad-Hoc Sustainability Committee meeting.

#### **NEXT STEPS**

The project team will reconvene the TAC and continue to develop and refine the greening and placemaking strategies for the toolkit. The final Urban Greening Plan is anticipated to be released

Fall 2015.

#### **ATTACHMENTS**

Attachment A - Urban Greening Plan Technical Advisory Committee Meeting #2 Summary

Prepared by: Katie Lemmon, Transportation Planning Manager (213) 922-7441 Jacob Lieb, Sustainability Policy Manager (213) 922-4132

Diego Cardoso, Executive Officer, Countywide Planning (213) 922-3076

Calvin Hollis, Managing Executive Officer (213) 922-7319

Reviewed by: Martha Welborne, FAIA, Chief Planning Officer, (213) 922-7267

Phillip A. Washington Chief Executive Officer



#### **MEETING SUMMARY**

Metro Headquarters
Union Station Conference Room
April 22, 2015
10:00 AM - 12:00 PM

#### **Summary of Topics:**

This second Technical Advisory Committee (TAC) meeting for the Metro Urban Greening Plan focused on:

- · Verifying project goals & objectives
- Reviewing the "Tool Selection Criteria"
- Discussing what Tools should be in the Toolkit

The TAC broke into three groups by topic area:

- Water
- · Trees, Planting, & Other Greening
- Placemaking

#### **Introductory Presentation and Set Up:**

Melendrez representative Amber Hawkes welcomed the TAC, reviewed the meeting agenda, and those present introduced themselves. Ms Hawkes reviewed the role of the TAC and the goals of the plan

itself. She discussed where the team is in the process of selecting appropriate greening and placemaking Tools and then narrowing down which Tools are most appropriate for inclusion into the Toolkit. The "Tool Selection Criteria" were presented, which were drafted after TAC Meeting #1, based on TAC input and are guiding criteria that all Tools that go into the Toolkit must satisfy.

The full group discussed the Toolkit goals and the Selection Criteria together and then broke up into sub groups (categories listed, left) to talk about the criteria and to look through the draft Tools together.



Project Partners:



## MEMBERS PARTICIPATING

#### **Meeting Participants Included:**

#### Lead Project Team:

- Jacob Lieb, Sustainability Policy Manager, Metro
- Katie Lemmon, Project Manager, Metro
- Edith de Guzman, Director of Research, TreePeople

#### TAC Members:

- Mike Antos, Director, Center for Urban Water Resilience
- Aaron Aulenta, Interim BID
   Director, North Hollywood Business

   Improvement District
- Lena Babayan Facilities Maintenance Manager, Metro
- Deborah Deets, Landscape Architect Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection
- Sherri Franklin, Principal, Urban Design Center, Leimert Park Village
- Cassandra Gogreve, (on behalf of Cory Zelmer), Transportation Planning, Station Design, Metro
- Sherida Jeffrey, Landscape Designer (on behalf of Travis Longcore), The Urban Wildlands Group
- Dan Knapp, Deputy Director of Strategy and Sustainability, LA Conservation Corps
- Helen Leung, Director of Social Impact, LA Más
- Cris Liban, Deputy Executive Officer, Environment, Metro
- Mark Lopez, Director, East Yard Communities for Environmental Justice
- Blair Miller, Pasadena Playhouse District

- Larry Rich, Sustainability Director, City of Long Beach
- Claire Robinson, Managing Director Amigos de los Rios
- Rorie Skei (on behalf of George Lange, Chair, Mountains Recreation and Conservation Authority -MRCA)
- Youn Sim, Sustainability Officer, Dept. of Public Works; Watershed Management
- Linda Taira, Corridor and Special Studies, Caltrans District 5
- Rafael Villegas, Civil Engineer, Los Angeles Department of Water & Power, Watershed Management Water Resources
- Carla Walecka, Pasadena Playhouse District
- Will Wright, Hon. AIA | LA, Director of Government and Public Affairs, American Institute of Architects

#### Consultant / Partners Team:

- Melani Smith, Meléndrez
- Amber Hawkes, Meléndrez
- David Koo, Meléndrez
- Kevin Poffenbarger, EPD Consultants
- David, EPD Consultants
- Walker Wells, Global Green
  - Placemaking Group Member
  - Greening Group Member
  - Water Group Member

# GOALS DISCUSSION SUMMARY

The draft goals presented for the project are:



Provide technical, policy, and best practices tools to foster sustainable and creative development and redevelopment adjacent to transit, through greening and placemaking



Help achieve environmental and ridership goals



Improve the transit "experience"



Foster collaborations and synergies between interested parties

#### Summary TAC Commentary:

- » Add a goal that states the Metro will work on an "anchor" project, a green and/or placemaking project that sets a precedent for the region. This would show a commitment by Metro that they are demonstrating the Tools, not just providing them to the community.
- » The Metro board has directed the development of the Toolkit and is committed to the idea of Greening and Placemaking.
- » Revise the first goal so that it doesn't sound like building development / redevelopment, rather focuses on the public realm and outdoor improvements.
- » Collaboration is critical and needs to be better highlighted in the goals.
- » Metro is already implementing many Greening Tools at various properties and stations. These activities already underway need to be highlighted.

- » Showcase the successes (e.g. Metro Orange Line as LID case study)
- » Make it clear in the goals that Metro is not responsible for implementing these improvements, rather it is the community partners that Metro is empowering with this Toolkit to make changes happen.
- » State in the goals, who the intended audiences are for the Toolkit.
- » State in the goals that Metro will work with the communities to identify what matters to them in each particular location. In other words assure that the Tools are place-specific and relevant to local contexts.
- » Collaboration should be facilitated within Metro itself and also between Metro and local jurisdictions.
- » Metro should be responsible for facilitating this collaboration.

## SELECTION CRITERIA DISCUSSION SUMMARY

\* The Selection Criteria are intended to be used to chose the Tools that go into the Toolkit. Given the wide range of "Tools" that exist for greening and placemaking improvements, the Selection Criteria will help the TAC and planning team narrow down the Tools into the most appropriate set. The TAC was asked to discuss the validity of this approach, and fine-tune and edit the Selection Criteria.

The draft Selection Criteria\* presented for the project are:

"The Givens"



Be compatible with Metro's guiding sustainability policy



Link to and be consistent with ongoing Metro initiatives



Be compatible with guiding policy & compliance needs region-wide



Have measurable results

Encourage Metro ridership

Improve the transit

experience for Metro

"The Extras"

patrons



Be recognized as a best practice



Provide an educational & "collaborative" component



Continue to place Metro at the forefront as a Green Transit Agency



Elevate Metro's role as a "placemaker"

#### Summary Commentary:

- » The use of Selection Criteria makes sense in this process and is a good method to narrow down the Tools for the Toolkit.
- » Do not label the Criteria "Givens" vs "Extras." All of the "Extras" should be requirements for the Tools.
- » Instead of "Givens" and "Extras" consider striating the Criteria by those that respond to existing regional context / background versus those that pertain to outcomes and benefits.
- » Separate "collaborative" from "education." Collaboration is critical and needs to be highlighted on its own.
- » All the Tools should include a description of how community partners can collaborate and work with Metro.
- » The Toolkit should consistently highlight how there can be synergies between

- improvements. For example improvements introduced could be Water, Greening, and Placemaking. A rain garden that is planted (Water) could include educational signage (Greening) and then host a native plant sale (Placemaking).
- » Add a Criterion: "Tool must be complementary to the neighborhood, in that it fills a particular need / void in that community" Context-sensitivity.
- » The Tools should not only encourage Metro ridership, but also encourage Active Transportation use.
- » Add a Criterion: "Assure operations and maintenance capability."

# PLACEMAKING GROUP SUMMARY

#### **Major Themes:**

- The prime goal of this section of the Toolkit is to make people feel at home in the public realm and on Metro property.
- » All of the Placemaking Tools presented at the TAC meeting are applicable. The Toolkit should not select a smaller subset to include while not including others. The widest range possible is good.
- » The Toolkit should address both the physical environments that are conducive to Placemaking as well as the programming that should take place within them.
- » Placemaking Tools should have measurable results.
- The Tools should be categorized so that people can understand when and where each might be appropriate. Use a matrix so that people can evaluate the Tools with a variety of considerations as everyone using the Toolkit will be using it for different reasons. For each Tool, the matrix can list: what category it is in, what goals it solves, where it's appropriate to be used, what sorts of collaborations are ideal, when permits are or aren't necessary.

#### Other Ideas:

- » Where does water fit into Placemaking? There should be Tools that cross-over between the categories (eg that both achieves water goals and achieve a Placemaking result).
- » All stations and station areas have different needs. Improvements related to Placemaking should be place-specific.
- » Tools should be applicable to the retrofit of existing spaces as well as the creation of new spaces.

- » The Toolkit should lay out how this would be implemented; what is the process by which someone can throw an event or host a "happening?" How will Metro maintain the spaces provided?
- » There are certain policy and regulatory obstacles to making realm Placemaking happen. These need to be highlighted and addressed in the Toolkit. Examples: Metro policy for no food on the trains or against buskers.
- » Let people "create their own Tool" if it satisfies the Selection Criteria.

#### **Example Categories for Placemaking Tools:**

- » Short vs long term
- » Metro property vs non-Metro property
- » Temporary vs permanent interventions
- » Infrastructure vs program
- » A spectrum of intensity of cost and collaboration. How difficult it is to implement?
- Scale of the intervention
- » Active vs passive
- » Complementary vs competitive
- » Fills a void in the neighborhood vs furthers an existing initiative or mission

#### Ways to Measure Success:

- » Numbers of people using the space
- » Numbers of social media tags
- » Sales tax data
- » Numbers of conversations
- » Length that people stay in the space
- » Repeat visits
- » Satisfaction surveys
- » Sign ups / screenings (e.g. for health assessment events)
- » Investors in the events
- » Longevity of the event

### GREENING GROUP SUMMARY

#### Major Themes:

- » Consider which Tools are appropriate for Metro right-of-ways and properties, and which Tools are more suitable for the 1/4 or 1/2 mile areas around the stations.
- » Identify community-specific issues that can be solved through Greening. For example if the problem is urban heat island then the solution could be cooling corridors leading to cooling centers and the Tools would then be trees, native and drought-tolerant vegetation, etc.
- » Make sure that any Tool included is visible, accessible and serves a purpose in that particular neighborhood. What service or amenity does it provide? This must exceed the cost of this Tool, including maintenance.
- The Toolkit should identify the benefit of the Tools, which would be helpful to obtain funding.
- » Native / adaptive planting should be the default.

#### Other Ideas:

- » Metro should collaborate with the community on greening opportunities and synergies wile planning lines and stations (e.g. Crenshaw).
- "Reduction of emissions," "carbon sequestration," "biosequestration," and "pollution-scrubbing plants" are not Tools, rather are outcomes.
- » Look at extending Tools/systems from Metro properties beyond into the neighborhoods. Metro cannot be asked to maintain systems not located on their property.

- » Portal canopies are already required at all outdoor station portals / escalators and elevators. Shade should be added elsewhere.
- » Green alleys require community participation for maintenance.
- » Metro is already working with DPW, DWP, Edison, Pasadena Water and Power; this should continue.

#### Metro's Ongoing Greening:

- » Metro is already doing the following:
  - » Bioretention / rain garden, filter strips, bioswale
  - » Cool roof (at Division 2)
  - » Daylighting (at Division 9)
  - » Drought tolerant planting (See LA City LID Ordinance)
  - » Greenwall (Orange Line soundwall example: landscaping maintained by Metro)
  - » Green roof (Must address maintenance issues. Green roofs are not as appropriate in the LA context)
  - » Habitat / ecosystem restoration
  - » Lighting design to minimize impact
  - » Motion sensor path lights
  - » Native / adaptive planting
  - » Passive site design for sustainability
  - » Pollution-scrubbing plants
  - » Preferred parking for earth-friendly transportation
  - » Preservation and introduction of greenspace
  - » Reduction of emissions and carbon sequestration

- » Shade
- » Shared parking
- » Solar panels (at Metro maintenance sites)
- » Solar water heater (Division 10)
- » Tree planting
- » Tree reuse (not always feasible)
- » Xeriscaping
- » Metro is piloting the following:
  - » Community garden
  - » Cool pavement
  - » Kinetic paving
  - » Geothermal energy (Capturing heat /energy from elevator bank at Metro headquarters to run other systems)
  - » Infiltration planter
  - » Recycled materials
  - » Recycled rubber paving (North Hollywood station)
  - » Reduction of impervious surfaces
  - » Vegetated stormwater curb extension
  - » Wind generation

#### Resources Identified:

- » LA City LID Ordinance
- » LA City Sanitation Standards and proposed / pilot design

## WATER GROUP SUMMARY

#### Major Themes:

- » Basic LID tools are already established and it is the Toolkit's job to direct people to the right resources relating to water. These tools should be "givens". Stop wasting water.
- » The Toolkit should reference what already exists, for example in relation to filtration, rain gardens, etc. It must build off of what has been done before, especially by Metro.
- » Beyond basic LID tools, there is a huge push for capture and reuse - maximizing non-potable water irrigation (captured stormwater, captured runoff, or recycled water).
- » Non-potable water reuse is difficult to implement (costly and current regulations are onerous). Regulations lead to very extensive systems.
- » Non-potable water-related regulations can be a threat to public water supply if managed incorrectly.
- » The regulations for water reuse were written a long time ago and they are prohibitively strict. We need to explain how the regulations need to change and the obstacles. We can point out how other jurisdictions and states facilitate it.
- » Toolkit needs to include a template for capture and reuse. The existing templates are relatively general and not thorough.
- » Native landscaping is a starting point. More water-intensive landscaping is not justified, unless non-potable water is an option.
- » Show riders the value of the Tools, so consider how they can also use the Tools at home or in their lives.

#### Other Ideas:

- Five categories of Water Tools ("Toolsets"): 1) native planting, 2) infiltration,
   3) capture, 4) water-related signage, 5) connective tissue greening.
- » There are opportunities for Metro to pilot a project or projects to showcase the Tool(s).
- » Collaboration should start earlier in terms of solving water issues. Often experts are brought in to solve problems, rather than plan right from the outset.
- » The Toolkit should include lists of who to collaborate with.
- » Rain barrels are not appropriate in this context (at transit stations), except perhaps as a one-off installation or installations for educational purposes. Rain barrels can be made artfully and attractively.
- » Need to be clear who the Toolkit is for.
- » With this Toolkit, Metro has the potential to set precedent and spread best practices.
- » Native plant sale at station.
- » Potential for telling the "water story" through art; great opportunity for dissemination of story.
- » Add a Tool: water-efficient drip-irrigation.
- » Permeable paving should be a default / mandatory.
- » Add a Tool: water storage

#### Resources Identified:

- » Stormwater Capture Master Plan, City of Los Angeles, LADWP
- » Green Alleys Plan, Trust for Public Plan
- » Green Alley Program, Los Angeles

- » Greenways to Rivers Arterial Stormwater System (GRASS Plan)
- » Emerald Necklace Plan
- » SCE Tree giveaway program
- » Metro has infiltration projects and a 600,000 gallon cistern in place at Division 13 collecting runoff. Also, each line has a sustainability plan.
- » The Metro Orange Line sets a precedent and the Foothill Extension presents a model that can be replicated.
- » LA City, LA County standard plans, among others.



#### **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2015-0820, File Type: Oral Report / Presentation Agenda Number: 7.

### AD-HOC SUSTAINABILITY COMMITTEE JULY 15, 2015

RECEIVE oral report on Sustainability Annual Report performance metrics.

#### **DISCUSSION**

The board-adopted Countywide Sustainability Planning Policy (CSPP) and Implementation Plan tasked staff with evaluating and reporting on progress toward achieving sustainability goals by preparing an annual report. On May 20, 2015 staff presented the first Sustainability Annual Report to the Ad-Hoc Sustainability Committee. The Committee requested an in-depth discussion of the performance metrics section included in the Sustainability Annual Report.

The CSPP identified metrics for inclusion in the Sustainability Annual Report. The performance metrics include:

- Vehicle Miles Traveled
- Total Person Trips for Carpool and Active Transportation
- Number of Jobs within a Half Mile Radius of Station
- Population within a Half Mile Radius of Station
- Pedestrian and Cyclists Killed or Injured in Car Crashes
- Daily Total CO2 Emissions for LA County
- Daily Total Vehicle Delay for LA County
- Average Trip Lengths for Auto Trips
- Average Trip Lengths for Total Trips
- Metro Transit Ridership Total Annual Boardings

..Attachments

#### **ATTACHMENTS**

Attachment A - Sustainability Annual Report Performance Metrics Presentation

Prepared by: Katie Lemmon, Transportation Planning Manager, (213) 922-7441

Jacob Lieb, Sustainability Policy Manager, (213) 922-4132

Diego Cardoso, Executive Officer, Countywide Planning (213) 922-3076

Calvin Hollis, Managing Executive Officer, (213) 922-7319

Reviewed by: Martha Welborne, FAIA, Chief Planning Officer), (213) 922-7267

Los Angeles County Metropolitan Transportation Authority

**Sustainability Annual Report** 

**Performance Metrics** 

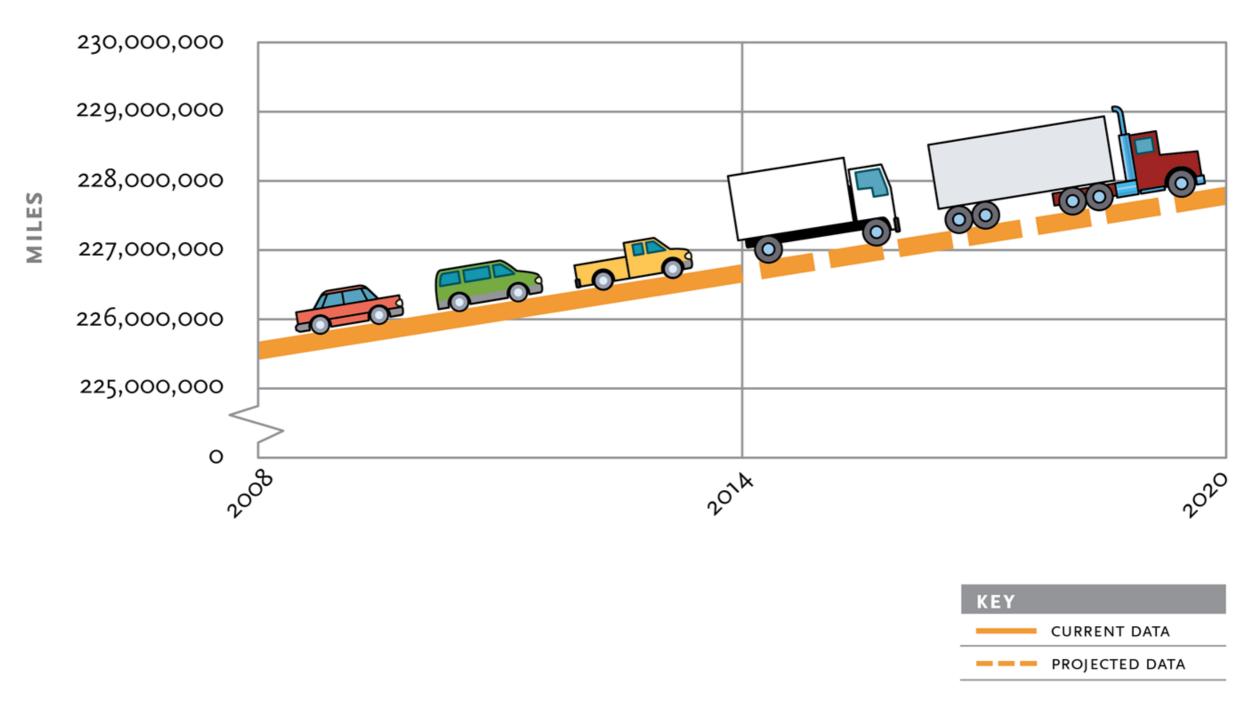




## Background

- Guided By the Metro Countywide Sustainability Planning Policy (CSPP)
- First Report Released on Earth Day
- Staff presented report at Ad-Hoc Sustainability Committee on May 20, 2015
- Committee requested discussion of performance metrics
- Sources for the metrics are listed on each slide

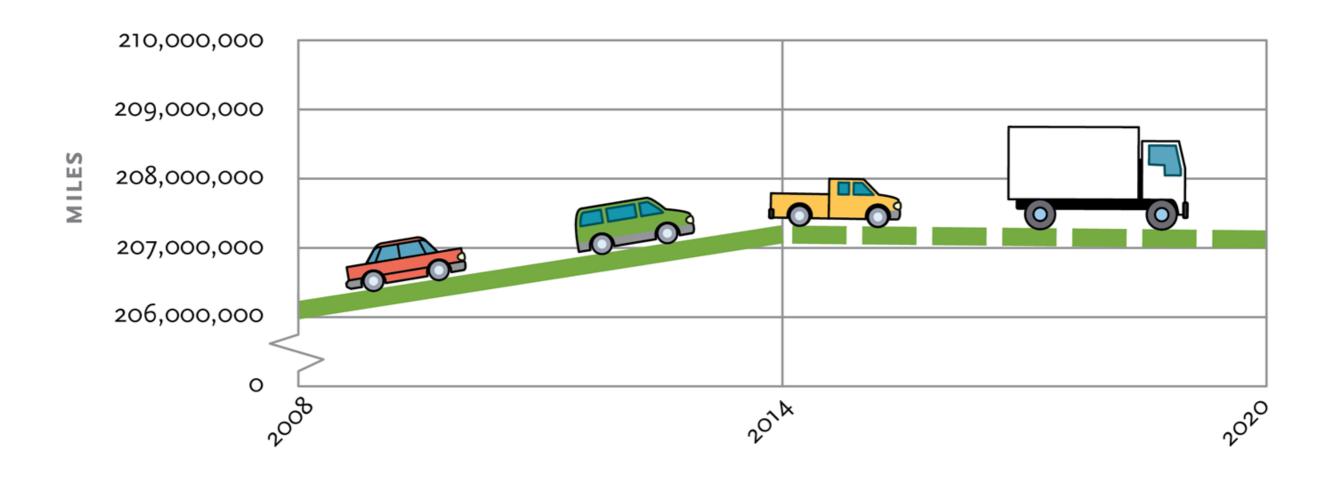
# Vehicle Miles Traveled (VMT) DAILY TOTAL VMT

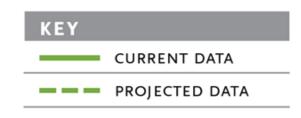


Data and future projections provided by SCAG

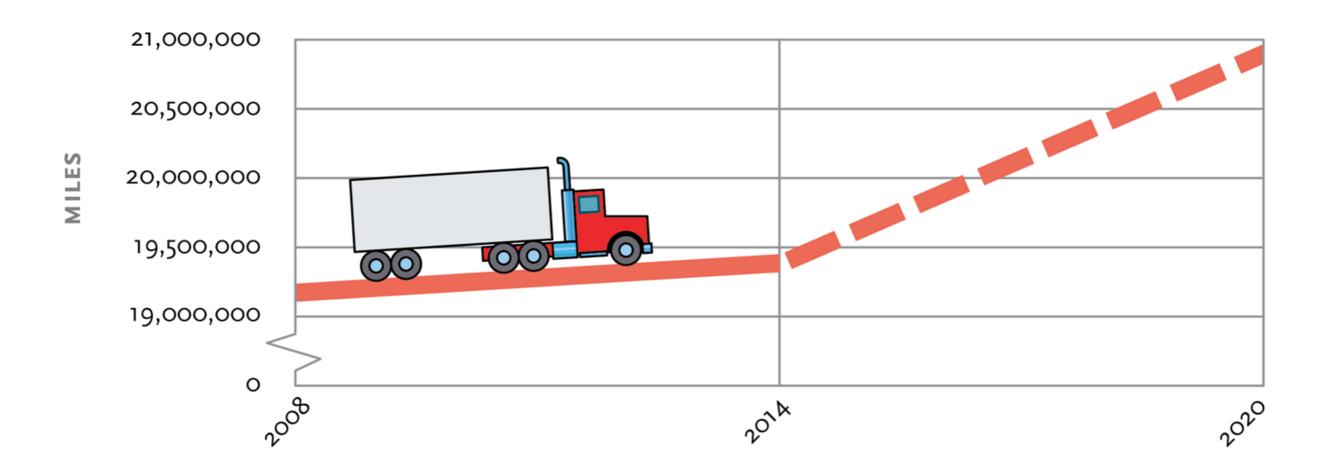
## **Vehicle Miles Traveled (VMT)**

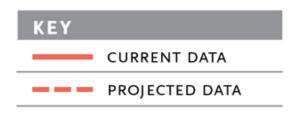
### DAILY TOTAL VMT - LIGHT & MEDIUM DUTY VEHICLES INCLUDING ALL PASSENGER CARS





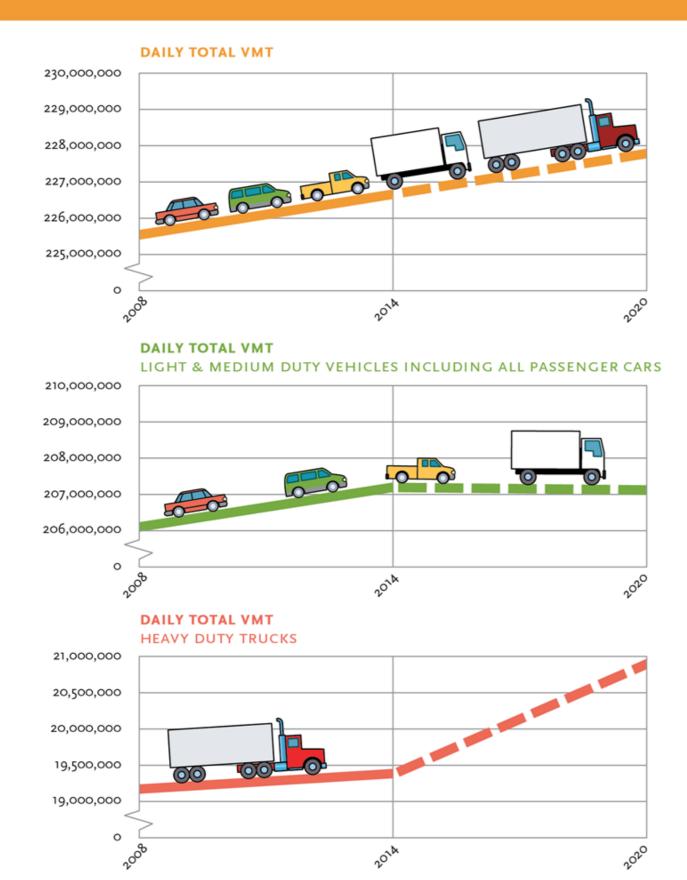
# Vehicle Miles Traveled (VMT) DAILY TOTAL VMT — HEAVY DUTY TRUCKS

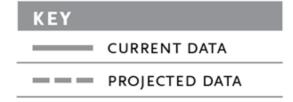




## **Vehicle Miles Traveled (VMT)**

#### **DAILY TOTAL VMT**



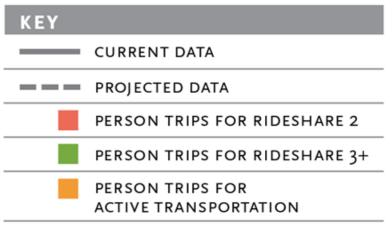


Data and future projections provided by SCAG

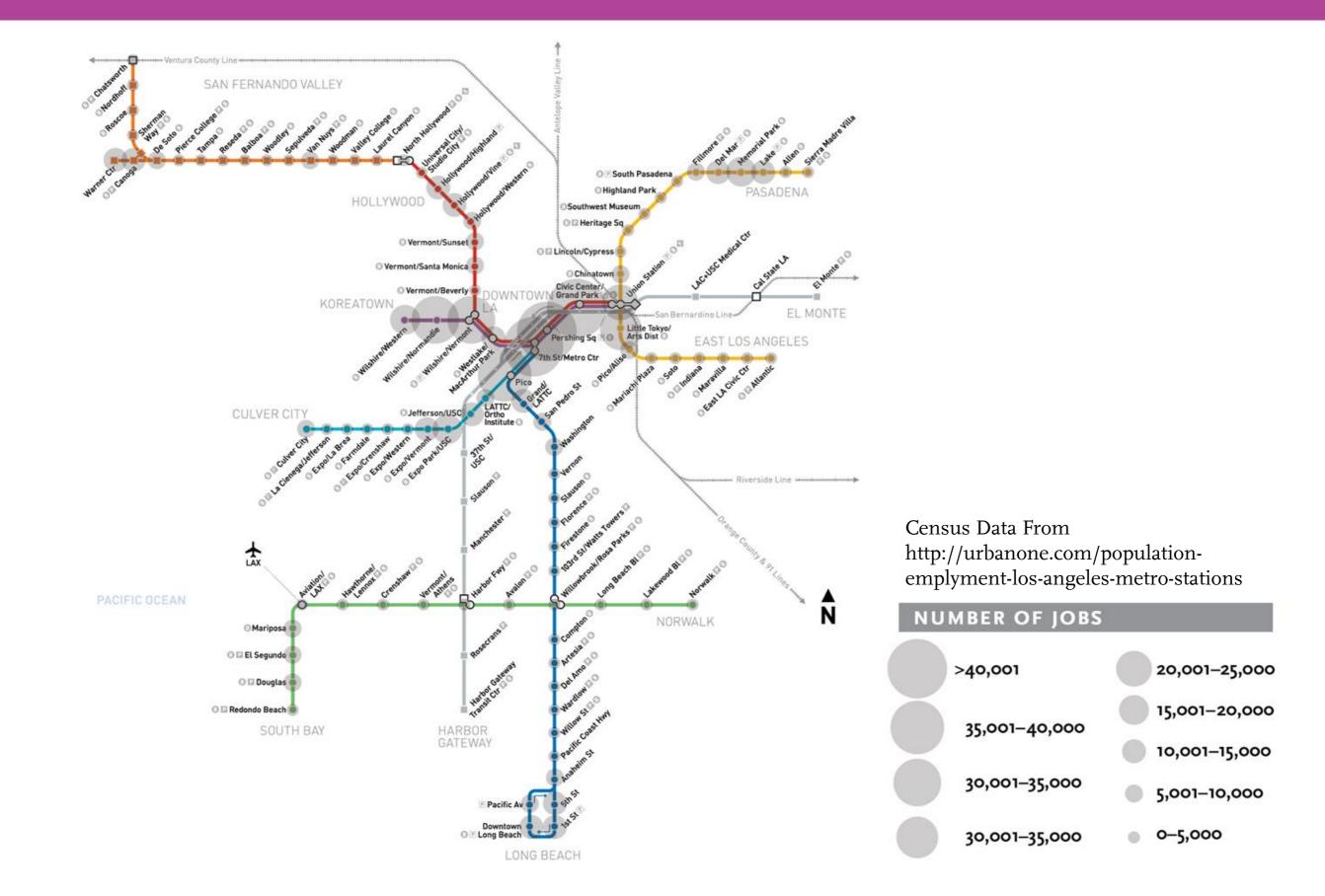
## **Total Person Trips for Carpool and Active Transportation**



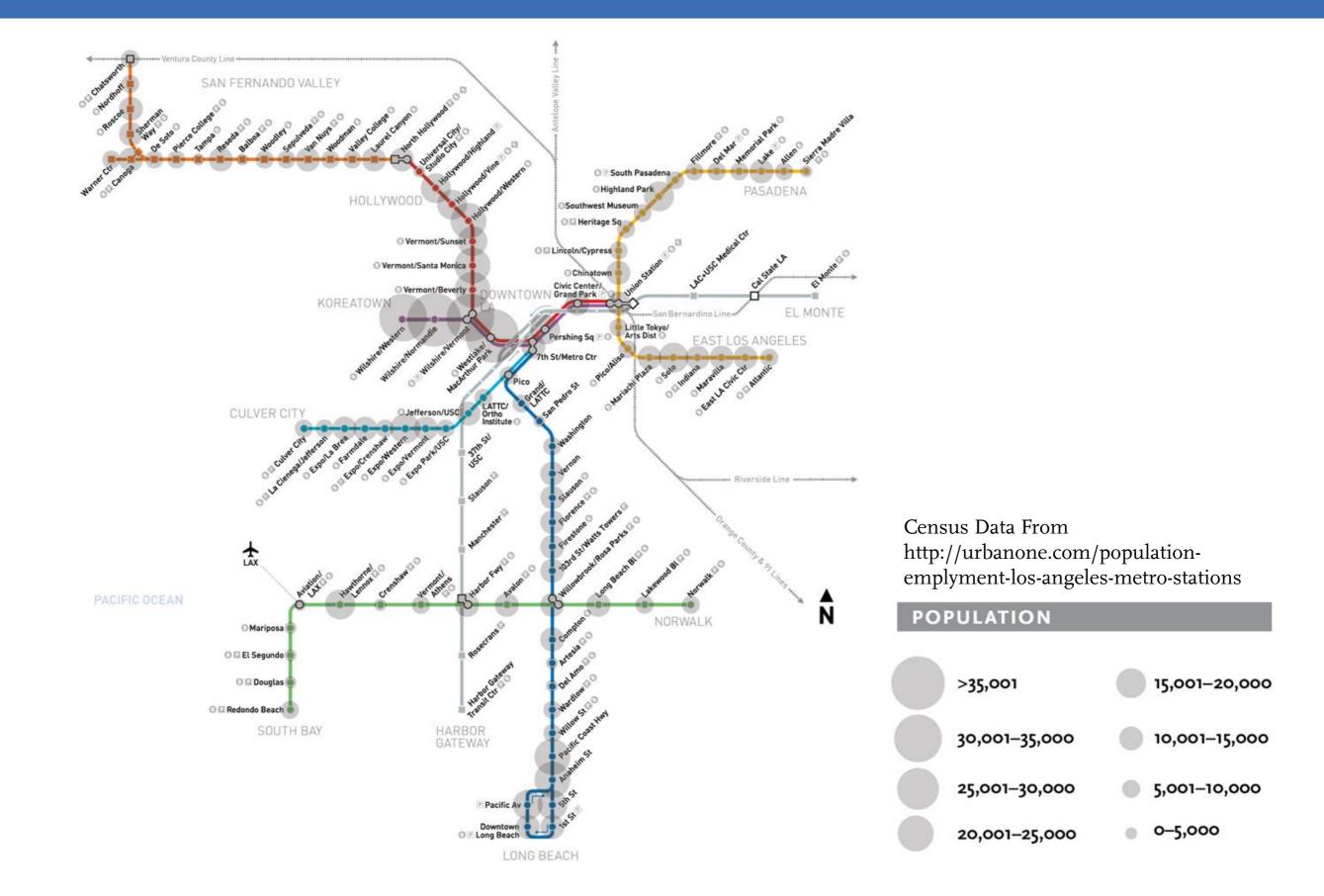
Data and future projections provided by SCAG



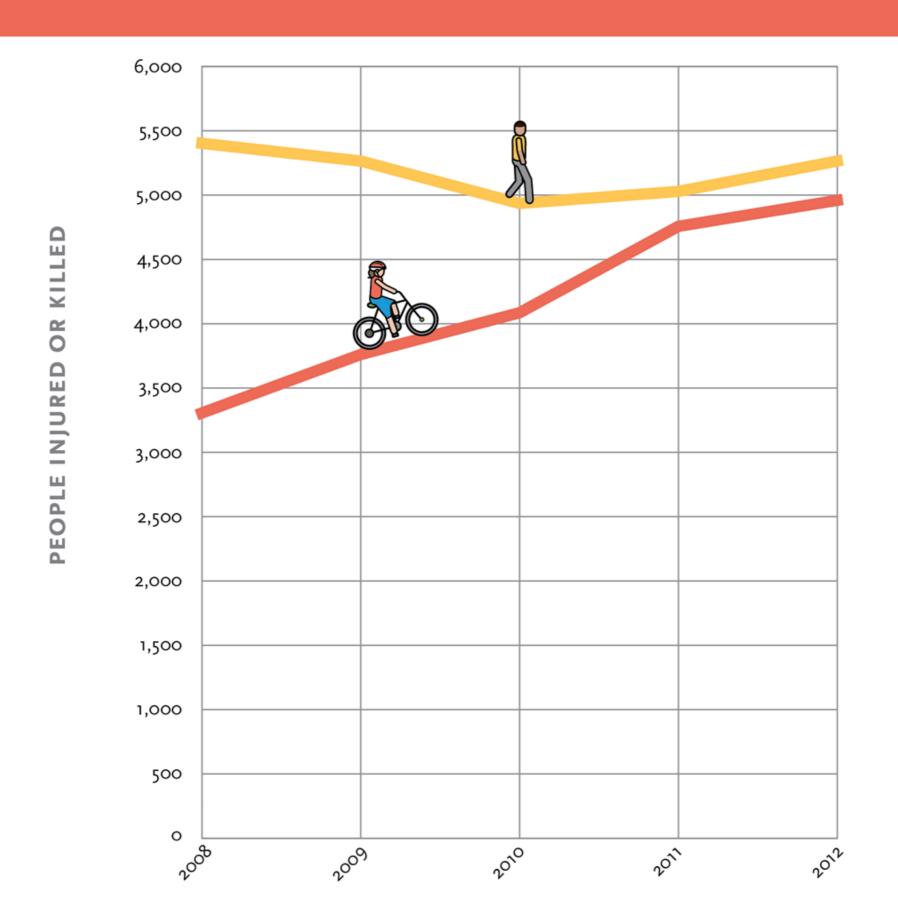
## Number of Jobs Within a Half Mile Radius of Station



## Population Within a Half Mile Radius of Station



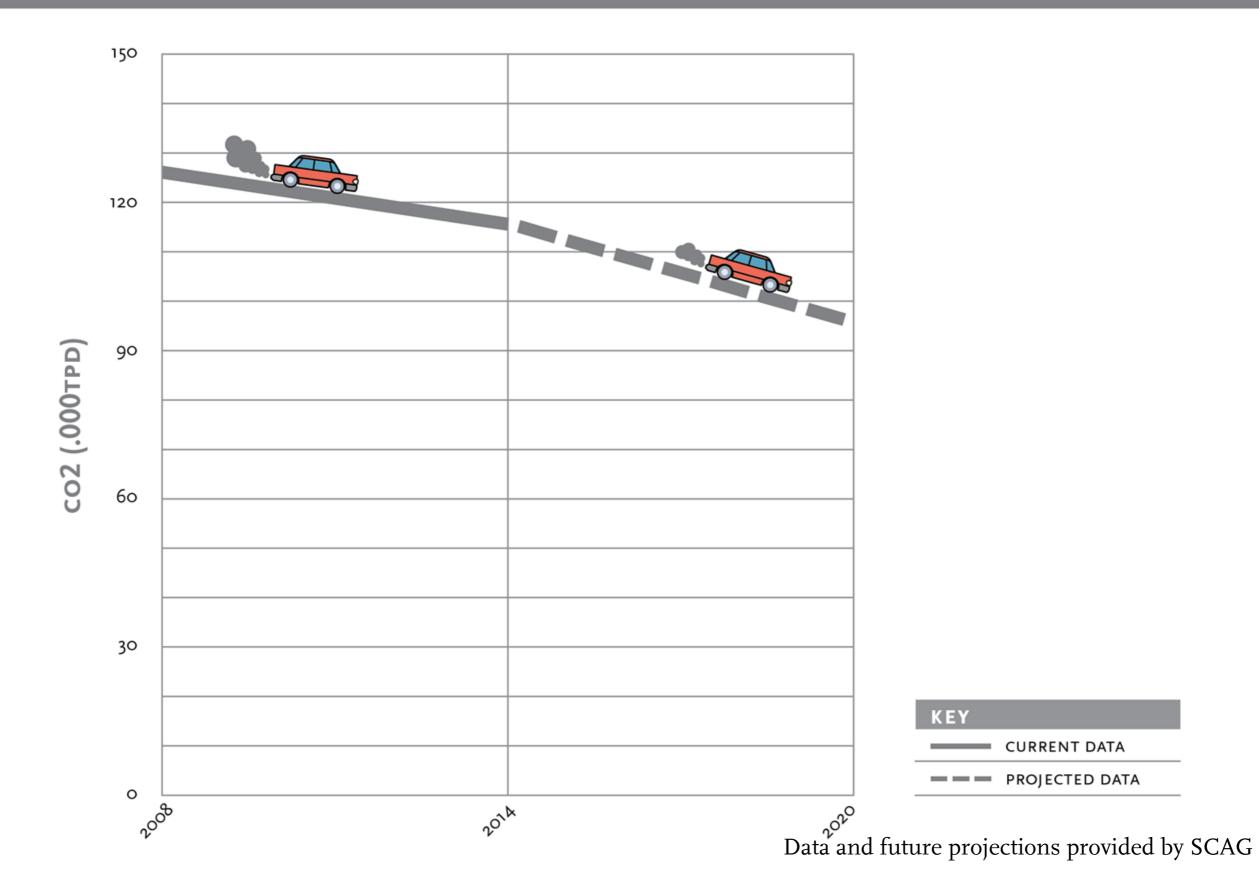
## Pedestrians and Cyclists Killed or Injured in Car Crashes



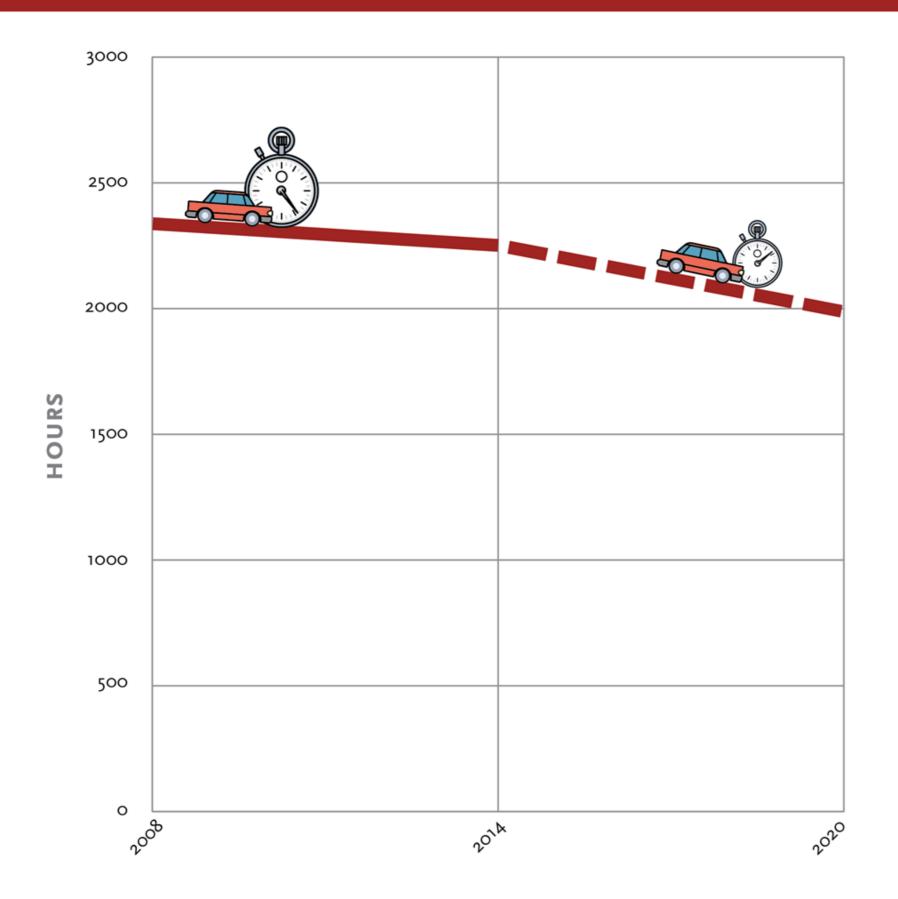
From
http://www.ots.ca.gov/media\_and
\_research/rankings/default.asp



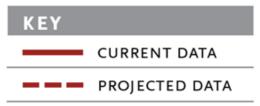
## Daily Total CO<sub>2</sub> Emissions for LA County



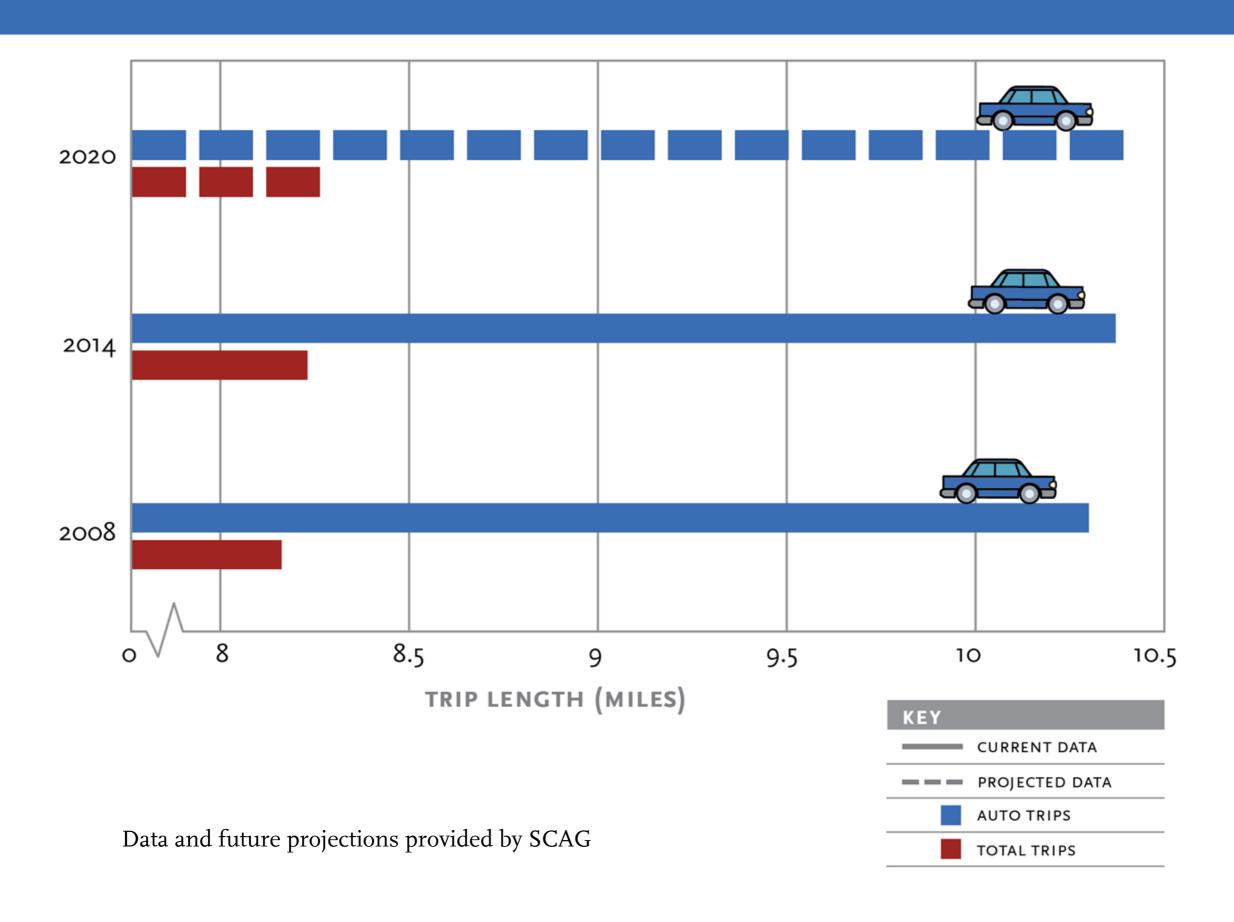
## **Daily Total Vehicle Delay for LA County**



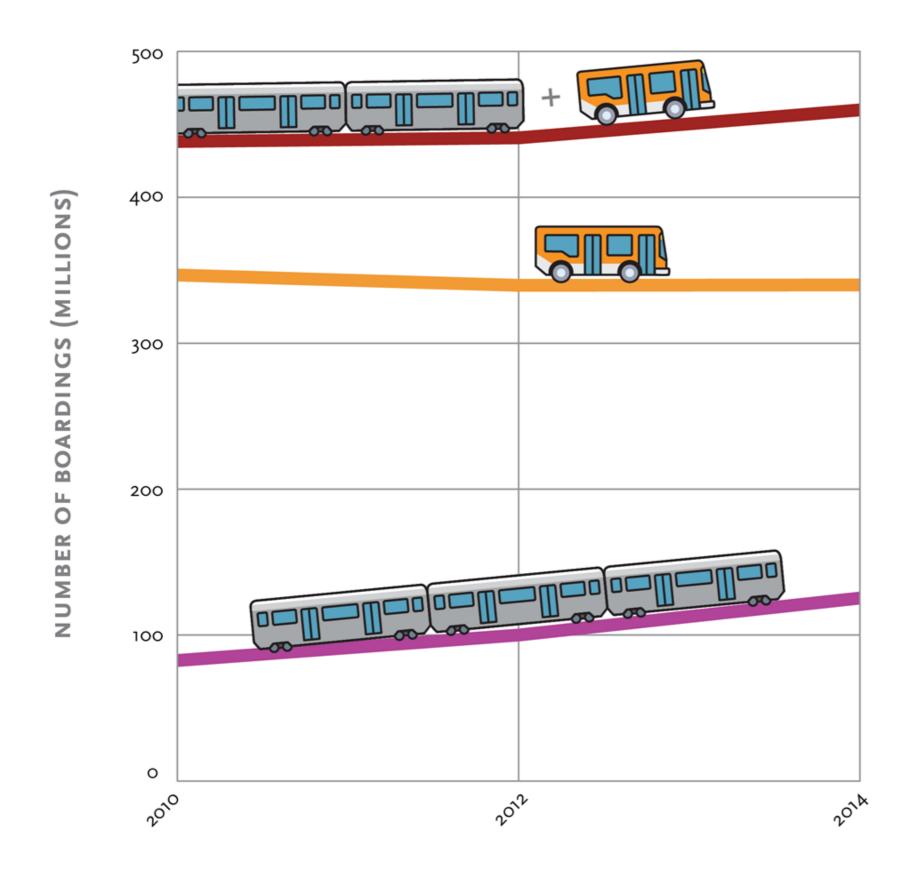
Data and future projections provided by SCAG

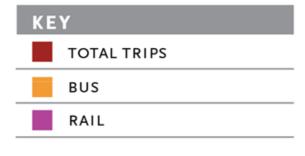


## Average Trip Lengths for Auto Trips and Total Trips



## Metro Transit Ridership Total Annual Boardings





Metro ridership data

## **Next Steps**

- Release Publication Version of Sustainability Annual Report
- Incorporate feedback for next year's report development



