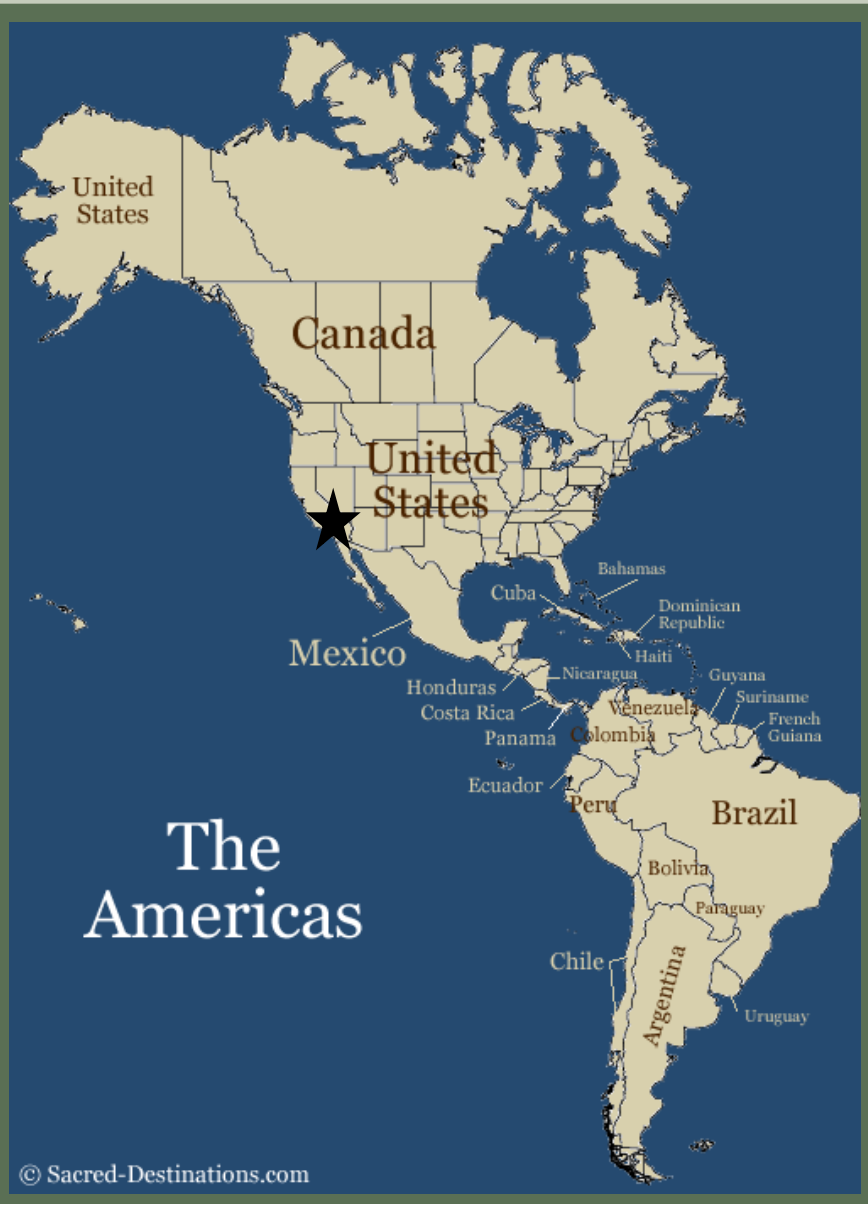
Achieving Lower Carbon and more Sustainable Mobility Alternatives in the Los Angeles Region through Development and Expansion of Public Transportation Systems

RIO+20 Global Human Settlements Forum

Los Angeles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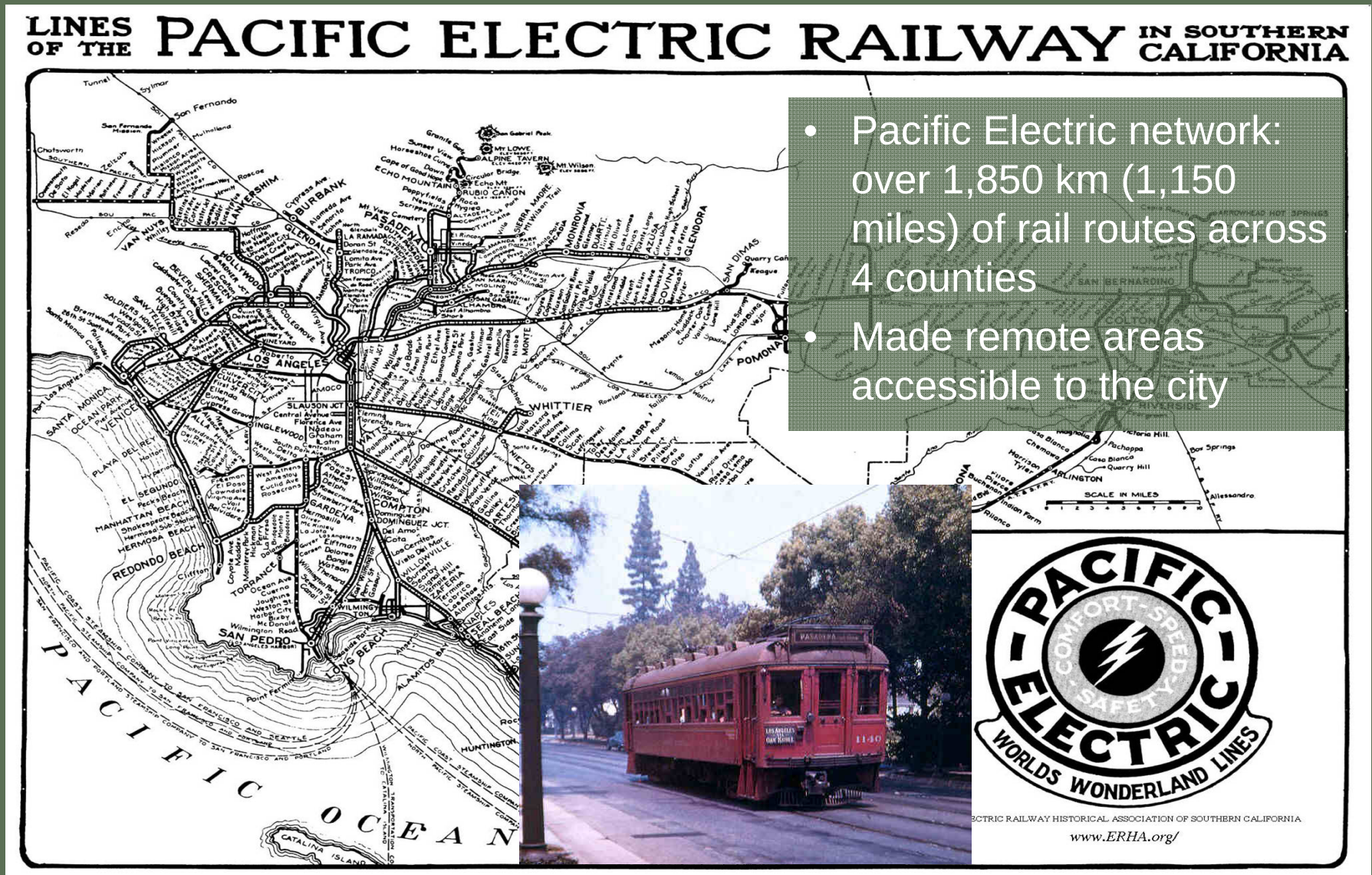
Los Angeles County
County with the largest economy in the United States

- 88 incorporated cities
- Large area – 10,570 km^2
  - Larger than the states of Rhode Island and Delaware combined
- Large Population
  - Over 10 million people in LA County (4 million in City of LA); 17.6 million in surrounding counties
  - More than 42 states
- Diverse – More than 40% foreign-born, over 220 languages spoken
- 17th largest economy in the world

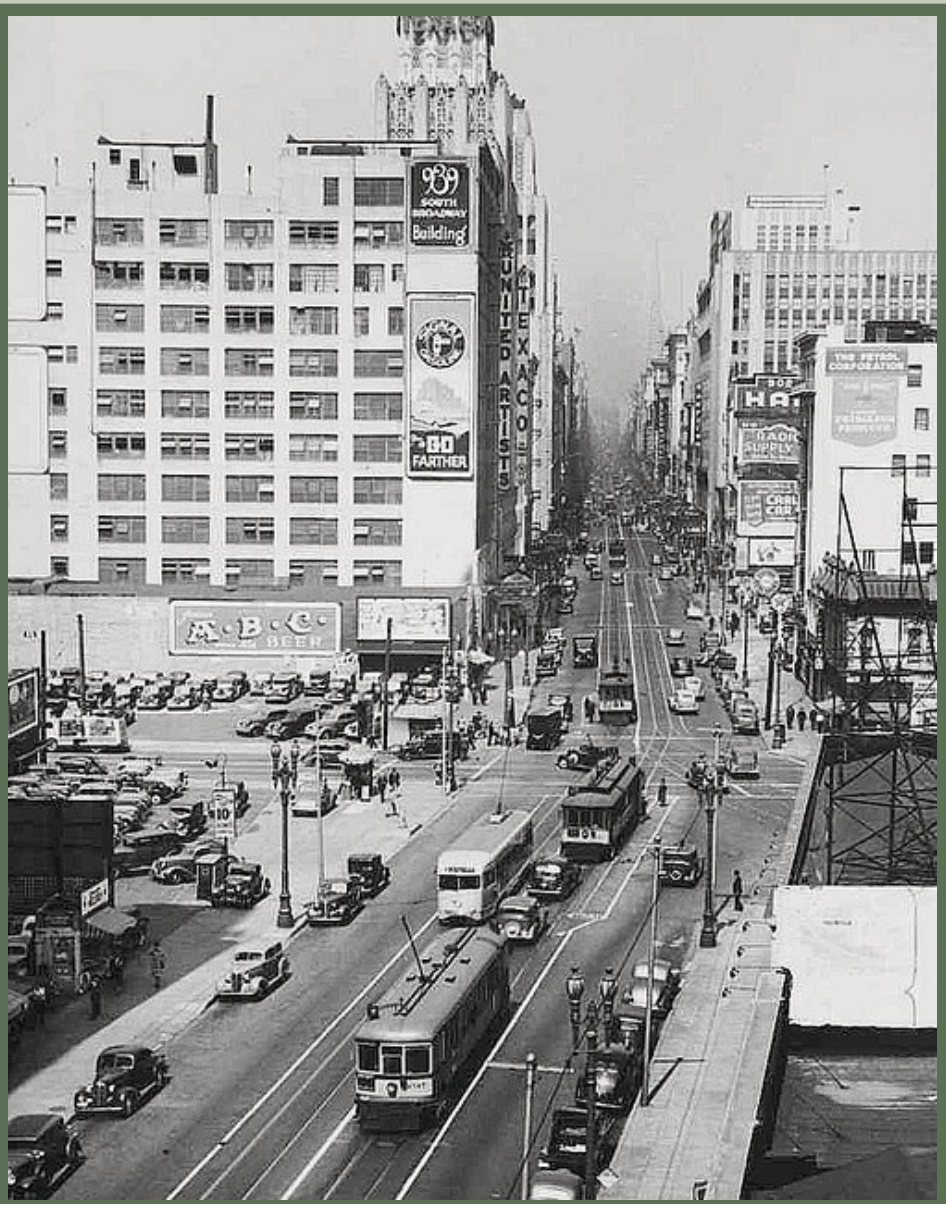
Growth in Los Angeles and Challenges to Sustainability

Historic land development and settlement spread across Southern California around a vast inter-urban rail system



- Pacific Electric network: over 1,850 km (1,150 miles) of rail routes across 4 counties
- Made remote areas accessible to the city

Growth in Los Angeles skyrocketed in the early 20th Century



- Population grew between 1900 and 1950 from 170,000 to 4,152,000
- Growth originally followed linear transit corridors
- After World War II, Los Angeles led the US and the world in developing a spread out model of development centered around the automobile

Focus on automobiles led to disinvestment in public transit

- By 1963, Los Angeles had completely dismantled its rail transit system
- Replaced by buses
- No longer profitable, the public took ownership of the transit lines

Federal, State and Local Investments in Freeways created the most vast freeway network in the nation

- In Los Angeles County:
  - Over 800 km (500 mi.) of freeways
  - Over 7,300 km (4,546 mi.) of freeway lanes
- Over 9 Interstate highways by 1993

Congestion –
Los Angeles has the worst congestion in the U.S.

- Los Angeles County residents lose over 70 hours of their lives to traffic delay
- Region ranked as the most congested in the nation for almost every year for the last 15 years

Air Pollution
Los Angeles region had the worst air quality in U.S. for over 30 years

- At the peak of air pollution in 1977, over 184 days were declared unhealthful (down to 0 in 2010)
- The California economy continues to lose $28 Billion per year due to premature deaths and illnesses related to air pollution

Unsustainable Development
Sprawl development resulted in no more room to grow

Our Challenge

Over the next 30 years…imagine adding another city the size of Los Angeles

- **3 million additional people**
- **1.5 million more jobs**
- **More than 30 percent increase in trips**
- **Increased sprawl & complex travel patterns**

Addressing LA's Challenges

- **Enhancing the Regional Transportation System**
- **Innovative Financing**
- **Policies/Programs Supporting Sustainability**

Addressing LA's Challenges-
Enhancing the Regional Transportation System

For Los Angeles County, Metro is…

- The Regional Planner

- The Regional Builder

- The Regional Operator

Urban Rail and Busways

18 km (11 route miles) of busway

36km (22 route miles) of busway

6 urban rail lines, 140 km (87 mi.), 81 stations

5 commuter rail lines to 5 surrounding counties

Existing Rail Lines and Busways

103 stations

195 km (121.2 miles)

Metro

Expanding Transit Network

Our Commuter Rail System

- Started in 1992:
  - 3 Lines
  - 12 stations
  - 5,000 daily riders
- Today:
  - 7 Lines
  - 56 stations
  - 45,000 daily riders
  - 512 route miles
    (824 route km)

Metro Bus Network

- 3711 km^2 (1,433 miles^2) service area, 183 bus routes,
- Daily Boardings: 1.1 million on buses; 300,000 on rail
- Clean-air fleet of over 2,635 CNG buses (the largest in the US)

Bicycle Network

- Paths – 403 km
- Lanes – 774 km
- Routes – 837 km

Developing a Master Plan for Union Station

- Opened May 1939
- Our Hub for:
  - Light and Heavy Rail (Subway)
  - Commuter Rail (Metrolink)
  - Intercity Rail (Amtrak)
  - High Speed Rail
  - Intercity/Regional/Local Bus Lines

High Speed Rail

- Union Station to San Francisco in 2.5 hours

Transportation Demand Management and Carpooling

35 km (22 miles) of carpool lanes

863 km (536 miles) of carpool lanes

- First lanes: El Monte Busway in 1974
- Carpool trips are 19-20 % of all person trips and more than 1/3 of all peak-hour vehicle trips (2003)

Addressing LA's Challenges – Innovative Financing

County Sales Taxes – The Foundation for Transportation Funding

- Three Half-Cent Sales Taxes – passed in 1980, 1990, and 2008
- In 2008, Measure R passed with 67.9% of County voters approved half-cent sales tax in 2008
  - Tax revenues dedicated to transportation improvements throughout the County

Grants and Loans – America Fast Forward and "30/10" Initiative –

To Achieve 30 Years of Projects in 10 Years:

- Large Federal Grants
- Low interest rate loans – Including foreign
- Transportation Infrastructure Finance and Innovation Act (TIFIA)
  - Direct Federal loans at Treasury rates
  - Flexible payment terms
- Qualified Transportation Improvement Bonds (proposed)
  - New class of "qualified" bonds for surface transportation
  - Federal tax credits in lieu of cash interest payments

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Public-Private Partnership Program

- Explore opportunities to partner with the private sector through:
  - private financing for new capital
  - risk-sharing strategies for
    - finance, design, construction, operation and/or maintainence
- Accelerate project delivery for earlier benefits
- For both Transit and Highway Projects

Tolling

- ExpressLanes Program – 1 year demonstration on I-10 and I-110
  - Tolling added to existing carpool lanes
  - Choices for drivers to use unused capacity on lanes
- Tolling is being explored for most major highway projects moving forward

Addressing LA's Challenges – Policies & Programs Supporting Sustainability

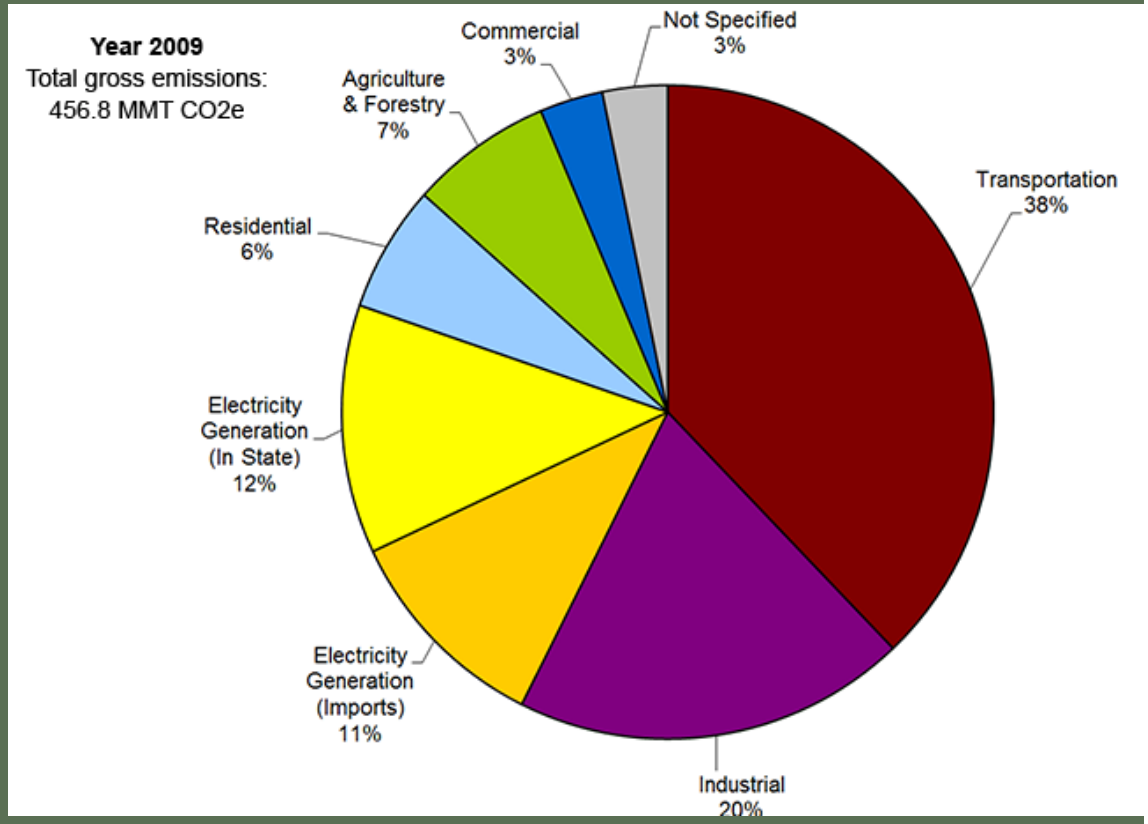
(Statewide/Regional/Local)

Climate Change Policies

Goal: Reduce greenhouse gas emissions (GHGs) to 1990 levels by 2020, and achieve 80% reduction from 1990 levels by 2050.

Transportation Sector

- 38% of GHG emissions
- Sustainable Communities Strategies (SCS) must be included in transportation plans
- SCS must achieve reduction of 8% per capita by 2020, 13% per capita by 2035



State of California GHG Inventory

Source: California Air Resources Board

Sustainable Communities Strategy

In April 2012, Southern California adopted an integrated land-use and transportation plan that meets state GHG reduction targets. Key strategies include:

Sustainable Communities Strategy

LAND USE

- Local governments: 2/3rds of all new housing to be in multifamily units, focused in transit corridors
- By 2035, 2x as many households will live near transit

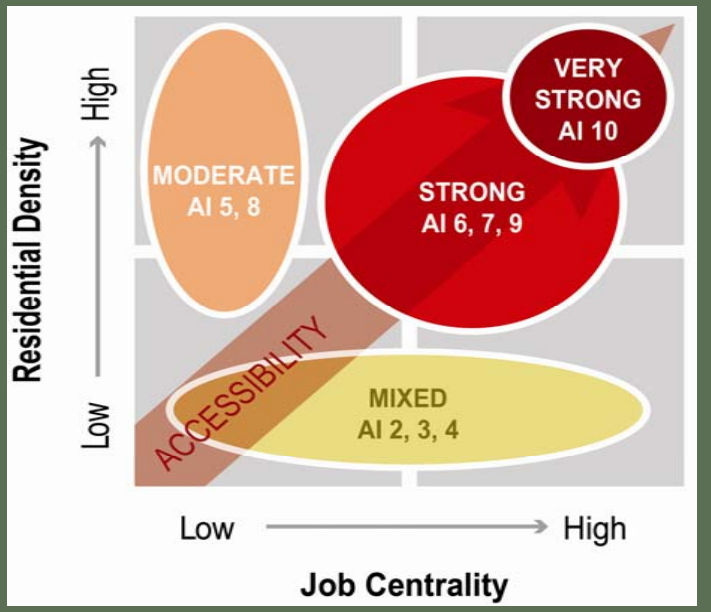
TRANSPORTATION

- Transit expansion
- Triples pedestrian and bicycle investments
- Endorses VMT fee to replace state and federal gas tax

Metro Countywide Sustainability Planning Policy (Under Development)

Goals:

- Establish performance metrics for evaluating sustainability of plans and projects
- Encourage people to drive less and in more efficient vehicles
- Match transportation strategies with land-use patterns



Local

Active Transportation & Design Policy

(Under Development)

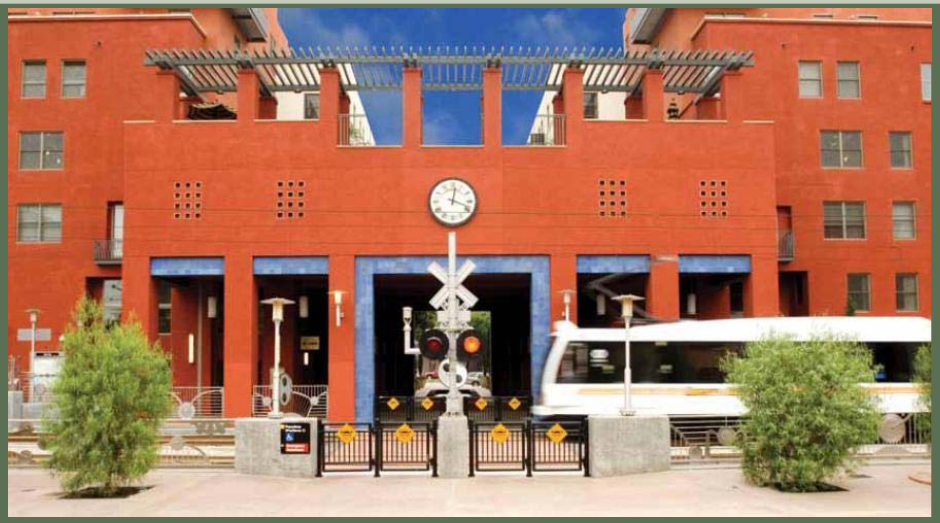
- Establishes “Standards of Excellence” for Active Design—including Street Design Guidelines for projects Metro implements and/or funds
- Sets mode-share targets to increase walking/biking to transit and measure performance over time
- Encourages continued support for local projects: CicLAvia, Safe Routes to School, Bikeshare, Education/ Outreach Programs

Congestion Management Program (CMP)

- Links land use, transportation and air quality decisions
- Cities must address impact of new development on regional highway and roadway network
- Cities can receive gas tax and competitive grants for new transportation projects

- Potential Congestion Mitigation Fee
  - one-time fee for future development
  - Fees would support local transportation projects

Transit-Oriented Development

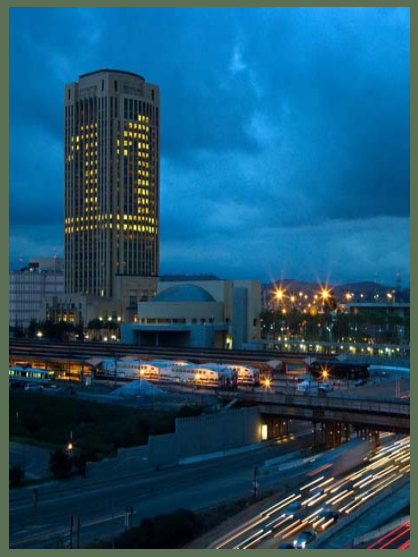


- Eleven projects completed as of 2011
  - Nearly 3,000 residential units, 20% affordable
  - Over 460,000 square meters of retail/commercial space
  - Total value: $1.5 billion
- 2 projects are under construction with 30 more under consideration or negotiation
- Cities are pursuing changes to local plans and zoning codes

Green Business Practices

TRANSIT INFRASTRUCTURE & FACILITIES

- Alternative Fuels
- Sustainability Design Criteria
- Green Buildings
- Energy Efficiency & Renewable Energy Policy
- Clean/Green Construction Policy



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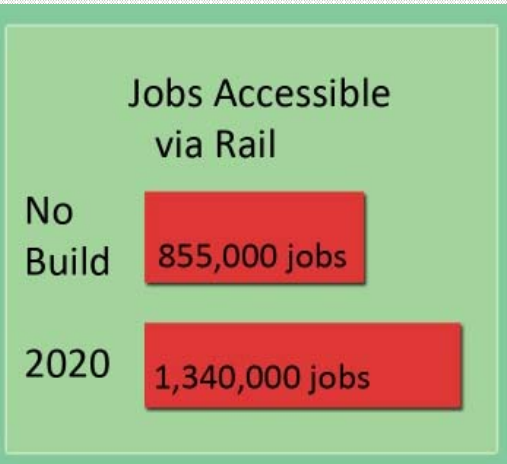
A More Sustainable Los Angeles Region

Stronger Economy

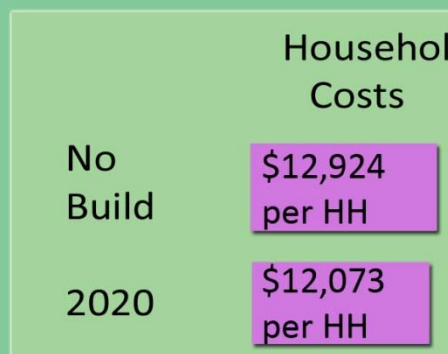
Better Access

- Increasing share of jobs and housing will be within high quality transit areas



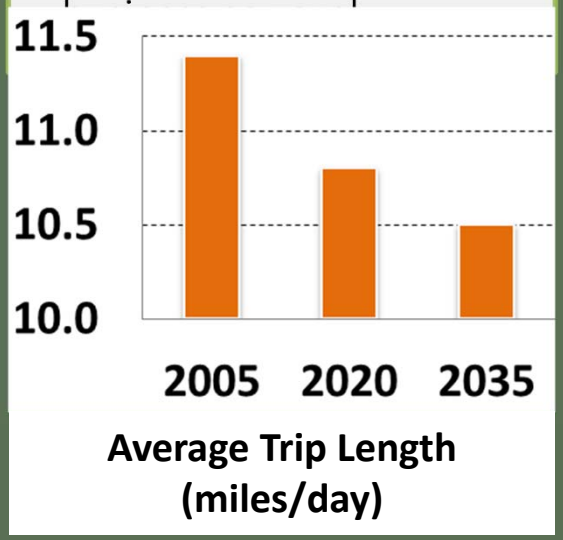
Reduced Transportation Costs

- Household costs including fuel use and automotive expenditures will decline



More Efficient Travel

- Average trip length will be reduced
- Fuel Consumption will decline compared to



Healthier Communities

Cleaner Air

- Air quality and public health will improve by reducing all criteria pollutants (ROG, NOx, Sox, PM10, PM2.5)

More Walking, Biking

- Each additional kilometer walked each day = 4.8% **decrease** in the likelihood of obesity
- People who use transit are more likely to walk 30 minutes or more a day
- 16% of all recorded walking trips are part of transit trips

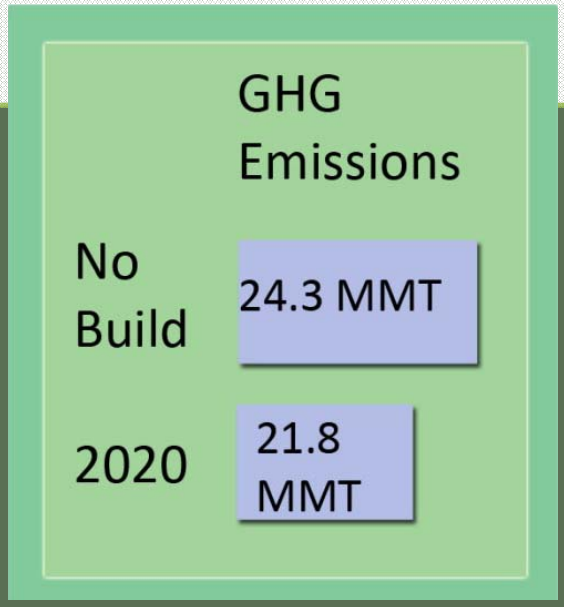
Reduced Environmental Footprint

Land Consumption

- Transit investments that support infill development will reduce greenfield development, preserve open space and reduce infrastructure costs.

GHG Reduction

- Reduction of per capita GHG emissions of 9% by 2020 and 16% by 2035
- Performance exceeds targets established by the state climate change legislation.



Los Angeles of the Future – More Livable, More Vibrant, More Sustainable

"These rail and bus projects will transform Los Angeles from the car capital of the world to the cleanest, greenest big city in America."

~Mayor Antonio Villaraigosa