



Urban Sustainability in the LA Metropolitan Region: Transportation Issues

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April 29, 2015

Transportation Challenges

Economic Growth Creates Traffic

- Two of the Largest Ports in the US – Nearly Half of the Containers from Asia to US – Negative Externalities for the Local Region
- International Air Hub
- Truck and Rail Access Critical to the Economy
- Growth in travel is expected to be substantial but with limited growth potential in capital expansion of transportation networks

Transportation Challenges

- Measures taken must support economic growth
- Infrastructure is Aging
 - In need of replacement, modernization & repair if not expansion
- Revenue to support Transportation System is in Dramatic Decline
 - Traditional reliance on user fees which have not been raised and which are lowered by efforts to promote sustainability
- Absence of Public and Political Commitment to Transportation among a broad set of Sustainability challenges

Los Angeles Is Very Complicated but is Actively Pursuing Sustainability

Air Quality was worst in the nation fifty years ago; dramatic improvement is real and sustained

Many lessons to be learned from the successful improvement of air quality

Transferable to other sustainability issues including the challenges related to Greenhouse Gas Reduction



Most Progress has Come from Technological Changes and Controls

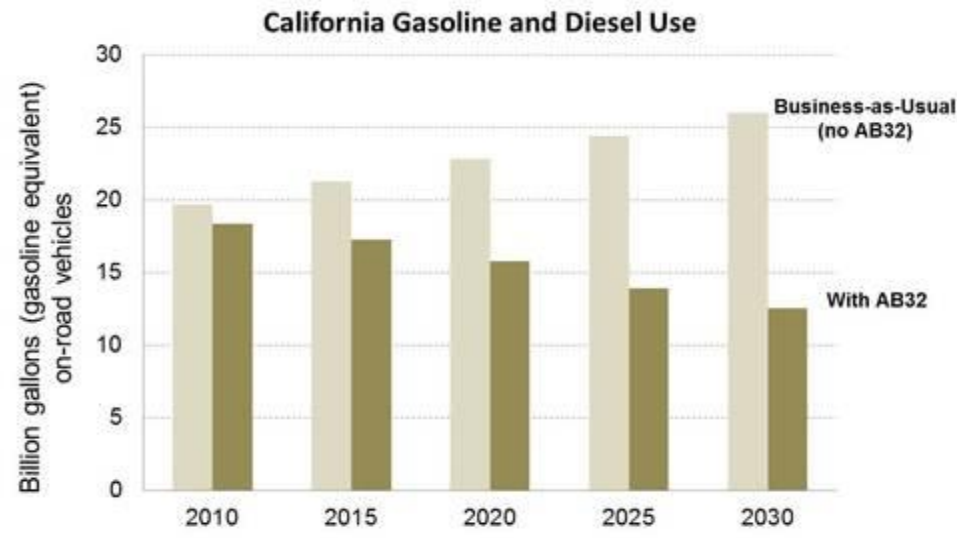
- Earliest Smog Controls on Vehicles
 - First on automobiles and later trucks, locomotives, ships, and planes
- Focus on Engines, Fuels and Substitution rather than reduction of travel
- We have ALWAYS felt that changing travel behavior was likely to be needed too, but it has proven to be FAR more intractable – important but less cost effective and longer term than technology

California is Able to Influence National Policy Directions

- State regulation has strongly affected this region's improvements in sustainability
 - Earlier CEQA, Energy, and Air Quality Regulations
 - Currently AB 32 and SB 375 VERY important

AB32 Global Warming Solutions Act of 2006

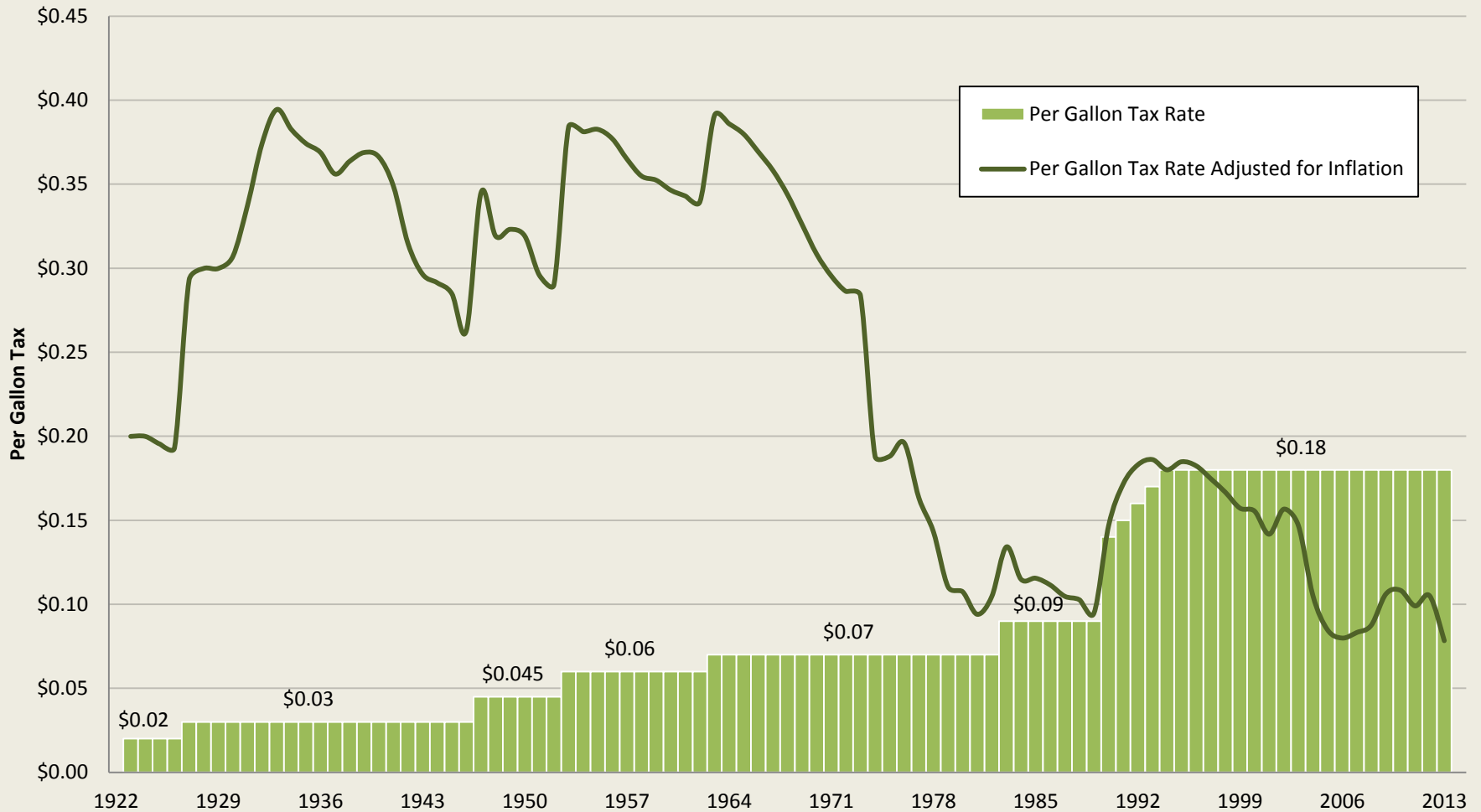
California to reduce its GHG emissions to 1990 levels by 2020 — a reduction of approximately 15 percent below emissions under “business as usual”



The Sustainable Communities and Climate Protection Act of 2008

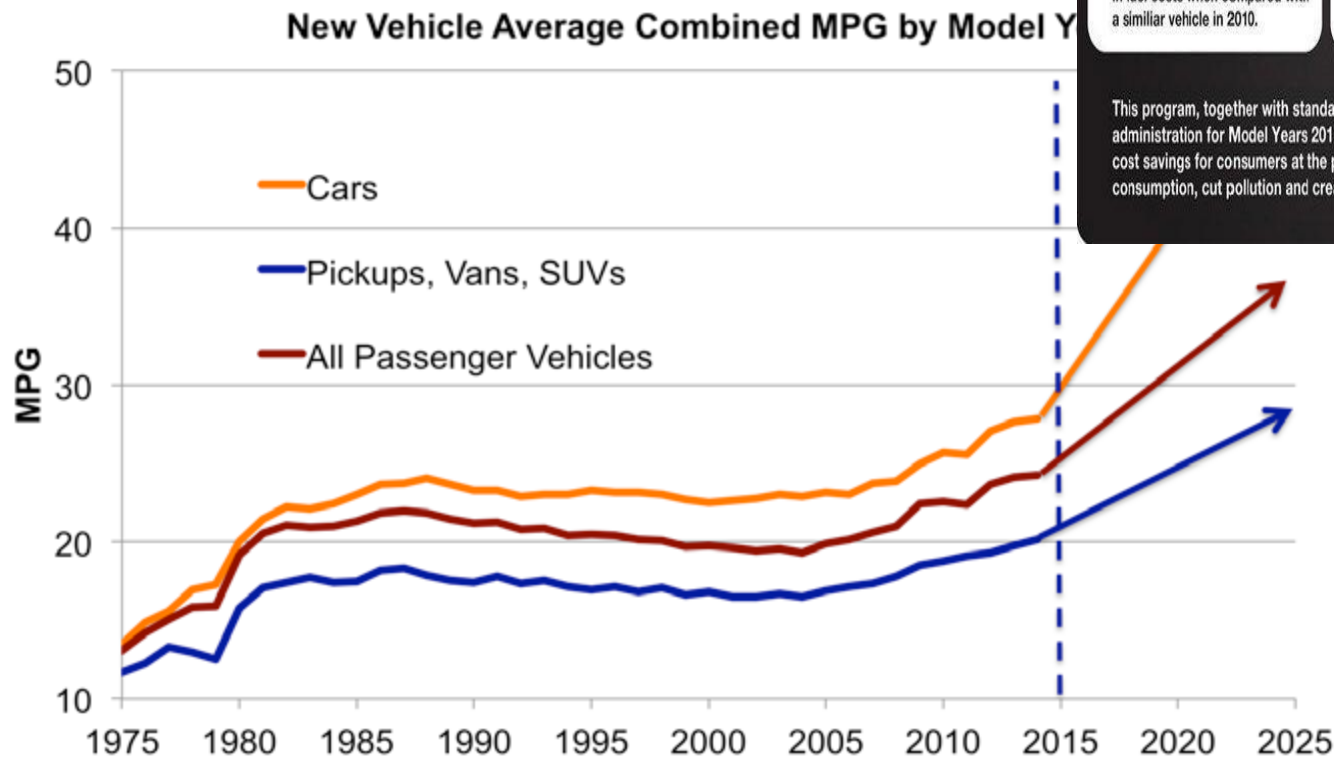
- **Land Use** growth pattern that accommodates the region's future employment and housing needs, and that protects sensitive habitat and resource areas.
- A **Transportation Network** that consists of public transit, highways, local streets, bikeways, and walkways.
- **Transportation Demand Management (TDM)** measures that reduce or eliminate peak-period demand on the transportation network, such as carpooling, telecommuting, vanpooling, and other innovative programs such as "parking pay-out."
- **Transportation System Management (TSM)** measures that maximize the efficiency of the transportation network, such as signal timing, freeway ramp metering, and bottleneck relief/auxiliary lane projects.

Value of Motor Fuel Tax Lowest in History



Source: Board of Equalization. Escalation based on California State Highway Construction Cost Index and Consumer Price Index

Fuel Economy Improvement
will steadily reduce revenue
in relation to road use



Source: Environmental Protection Agency, Light-Duty Automotive Technology, Carbon Dioxide, and Fuel Economy Trends: 1975-2014

The fleet-wide average will be

54.5 MPG

Consumers will have saved
\$1.7 TRILLION
at the pump over the
life of the program.

A family that purchases a new
vehicle in 2025 will save

\$8,200
in fuel costs when compared with
a similar vehicle in 2010.

Over the life of the program, the standards will:

Save **12** billion
barrels
of oil.

Eliminate **6** billion
metric
tons
of carbon dioxide pollution.

This program, together with standards already put into place by this
administration for Model Years 2011-2016, will result in significant
cost savings for consumers at the pump, dramatically reduce oil
consumption, cut pollution and create jobs.



Efforts to Enhance Transportation Revenue VERY important

- Conversion of Sales Tax on Gasoline to Additional Per Gallon Excise Tax
- Direct Road User Charge Pilot Test Being Planned
- Cap & Trade Extended to Transportation Fuels and some Revenue from Cap & Trade for Transportation
- Transportation Measures that influence travel patterns AND produce revenue

HOT (High Occupancy/Toll) lanes are a Promising Innovation

- Add new lanes to existing freeways & charge to use new capacity: allow single occupancy drivers to pay tolls while carpools are free
 - Tolls vary with demand to keep lanes free-flowing
 - Transit can also use express lanes
- Experience to date – Three projects in Place in LA
- Regional System being Planned
 - Reduce delay, increase reliability
 - Viewed as providing additional travel choices
 - Not As Capital Intensive as other options



Urban Form and Function

(Transportation Reflects Land Use)

- The region is on board and committed – smart growth, transit oriented development, rail and express bus improvements walkability; densification.
 - Takes longer to produce results than technological changes but both paths being pursued
 - Has in the past been less cost effective than regulation of technology
 - Produces longer-range quality of life benefits too
 - Higher levels of uncertainty regarding our ability to deliver; hostility from some business interests

Many Communities ARE changing (but not all in the same direction)

- Los Angeles, Pasadena, Long Beach, Santa Monica
- Low density edge development is slowing but substantial – because of housing affordability and to serve employment that suburbanized over many decades
- Logistics sprawl – in support of our role in the international economy – warehousing, distribution centers



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