California's Transportation System in a New Political Era

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Yosemite Policymakers Conference
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The SCAG Region

- Nation’s Largest Metropolitan Planning Organization (MPO)
- 38,000 Square Miles
- Nation’s Global Gateway for Trade
- Develops the Region’s Long-Range Transportation Plan (RTP/SCS)
RTP/SCS Highlights

- Fix it First—Focus on O & M
- Strategic Investments to Relieve Congestion
- Rail Expansion
- Goods Movement/Logistics Industry Investment
- Increased Active Transportation Options
- Strengthens the Health of Our Communities
- Economic Development (Jobs)
2016 RTP/SCS Financial Plan
$556.5 Billion (in nominal dollars)

Key Strategy: Revenue Neutral Mileage (VMT) Based User Fee

TOTAL REVENUE
$320.8 BILLION

- $254.7 Core Local
- $37.7 Core Federal
- $63.8 Core State
- $64.2 Additional Local (e.g. Highway, Tolls, Ventura County Sales Tax Measure)
- $70.8 Additional Federal (e.g. Federal Portion of Mileage-Based User Fee, National Freight Program)

TOTAL EXPENDITURES
$556.5 BILLION

- $250.9 Capital Projects
- $156.7 O&M State Highways
- $65.3 O&M State Highways
- $37.1 O&M Regionally Significant Local Streets & Roads
- $30.7 Debt Service
- $15.7 O&M Passenger Rail

Note: Numbers may not sum to total due to rounding
SCAG Regional Issues

TRANSPORTATION
GOODS MOVEMENT
HOUSING
AIR QUALITY

SCS/LAND USE
FUNDING
LONG TERM GROWTH FORECAST
WATER
Regional Housing Challenges

**Causes**

**Lack of fiscal incentives to increase housing:**
- Lack of redevelopment funds
- Shy away from general obligation bonds

**Regulatory and other barriers to development:**
- Adds costs
- Uncertainty

**Community opposition to development:**
- Fear of change
- False concerns about traffic and safety

**Impacts First Time Home Buyers...**

**aaand its gone!**

**...and renters!**
Funding in the New Millennium
Low Fertility, Slower Population Growth, Rapid Ageing of the Workforce

Population growth rates continue to decline due to fewer births, less migration, and less immigration.

Baby Boomers continue to near retirement, and the average age of our workforce also rises.
10,000

Roughly 10,000 Baby Boomers will turn 65 today, and about 10,000 more will cross that threshold every day for the next 19 years.

*Pew Research Center. 2010
Funding in the New Millennium

Rapid Ageing of the Workforce — 65+ population will account for $\frac{3}{4}$ of all population growth in California and the SCAG Region (DOF 3/8/17 Projections)

Growth in Population Ages 65 and Over from 1970 to 2040
Funding in the New Millennium
Rapid Ageing of the Workforce

Older people earn less and spend less, leading to declining revenues for all government agencies and public projects.
Funding in the New Millennium

Slow Growth of Taxable Sales & the Economy

California still has NOT bounced back to 2006 levels of commerce, and has not shown much growth when compared to the year 2000.
Funding in the New Millennium

Funding Uncertainties—Pension/Health Care vs. Infrastructure vs. Deficit

Average Per Capita Public Costs by Age Cohort

Older people require more relative public assistance for health care and social security.
Solutions to Funding Challenges
Potential Solutions – Cap & Trade in Southern California

WITH GGRF

$119M Housing

$276M Rail

$37M Transit

$108M EVs

WITHOUT
The New Customers: Millennials

Who are they?
- 20 – 38 year-olds
- Expected to be largest buying cohort by 2017

What do they want?
- Smaller footprint ➔ Sharing Economy
- Convenience ➔ Internet of Things
- Health and Sustainability ➔ Big Data

Source: The Westly Group
Millennials and Education

What type of transportation, housing and job options are the Millennials looking for?

For answers, please visit the RTP/SCS website:

http://scagrtpscs.net
Solutions to Funding Challenges
Can Millennials Produce More?

Our success as a region will depend on the availability of economic opportunities for the millennials
Solutions to Funding Challenges

Potential Solutions – AI, Robots, Automation and New Technology

The technical potential for automation in the US

Many types of activities in industry sectors have the technical potential to be automated, but that potential varies significantly across activities.

Sectors:
- Managing others: 5%
- Applying expertise: 10%
- Stakeholder interactions: 20%
- Unpredictable physical work: 25%
- Data collection: 4%
- Data processing: 6%
- Predictable physical work: 75%

Technical feasibility: % of time spent on activities that can be automated by adapting currently demonstrated technology.

Source: IFR World Robotics 2016
Solutions to Funding Challenges

Potential Solutions – Automation and New Technology

New technologies will need guidance (and sometimes intervention) from public agencies
Solutions to Funding Challenges

Potential Solutions – Automation and New Technology

Public sector guidance can accelerate adoption as well as manage expectations
Solutions to Funding Challenges

Potential Solutions – Public/Private Partnerships (PPPs)
“If you don’t cannibalize yourself, someone else will.” – Steve Jobs

Think different.
Bus ridership dropped -11% from 2007 to 2011
Since 2013, ridership resumed decline, on both busses and Metro Rail
Metro light rail ridership increased in 2016 due to new lines
2016 suggests continued decline of ~7% (combined bus and rail)
Transit & Future Mobility

Transit & transportation will exist on a continuum

- Personal Vehicles
- Shared Vehicles
- Transit Vehicles
- Freight Vehicles

- Full Speed / Size
- Low Speed < 35mph

- High Turnover
- Low Turnover

- Many Decision Makers
- Fewer Decision Makers
Governing For The 21st Century

Sharing Economy

21st century employment laws

Internet of Things

Prepare for driverless vehicles

Big Data

Longitudinal student test data

Source: The Westly Group
"Information is the oil of the 21st century, and analytics is the combustion engine."

-- Peter Sondergaard of the Gartner Group

Source: The Westly Group
Big Data Is Revolutionizing The Auto Industry

Why do we need these things?

• Reduce auto fatalities 90%
• Reduce congestion → pollution
• Provides access for seniors and disabled

Coming faster than you think...

• Google
  – 30 Lexus’ on the road today (top)
  – Now producing 100 of their own (bottom)
• Apple
  – Auto division expanded from 600 to 1,800
  – Planning electric car with self-driving features in 2019
• Tesla
  – Self-driving features launched Oct. 2015
  – 2016 cars park themselves with your iPhone

Source: The Westly Group
Sharing Economy – Impacting Every Industry

Hotels
- Hilton
- airbnb

Transportation
- Uber

Finance
- Bank of America
- Lending Club

More to come...

100k companies and counting

Source: The Westly Group
The Connected Home

The largest companies in the world are taking over your home

*Why did Google pay so much for this company?

Source: The Westly Group
In the SCAG Region, down payments for a median priced home cost $125k. To afford median rent, households must make $60k a year.

Weddings average $35k, NOT Including the Honeymoon.

Millennials may have fewer lifetime earnings than their parents.

Generation Gap...

Haven't you young people found jobs, yet?

Hurry it up! Someone needs to keep funding our Social Security and Medicare.

Millennials graduate with more student loan debt.

Ages 0-18, No College $245,340

The cost of raising a child

Source: Mark Kantrowitz/WSJ.com
Thank you!

Learn more by visiting http://www.scag.ca.gov