Emerging Technology

Regional Implications of the New Tomorrow

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INNOVATING FOR A BETTER TOMORROW
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Agenda

1. **Technical Approach**
2. Policy Approach
3. Implementation

New Mobility -- 2016

GHG REDUCTIONS FROM MOBILITY INNOVATIONS 2040 ZERO-EMISSION VEHICLE (ZEV)

1.0%

NEIGHBORHOOD ELECTRIC VEHICLE (NEV)
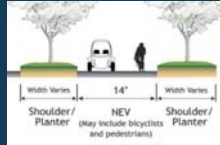
0.1%

CARSHARING/ RIDESOURCING

0.9%

16% of Uber trips in LA started or ended near a Metro Station

22% of those trips took place during peak commute times (7-10am & 4-7pm, M-F)

New Mobility -- 2020

Research Questions

- What is happening in the private & public sectors?

- How can SCAG collect data and model these innovations?

- If these innovations produce outcomes that work against our regional goals, how do we develop and encourage policies?
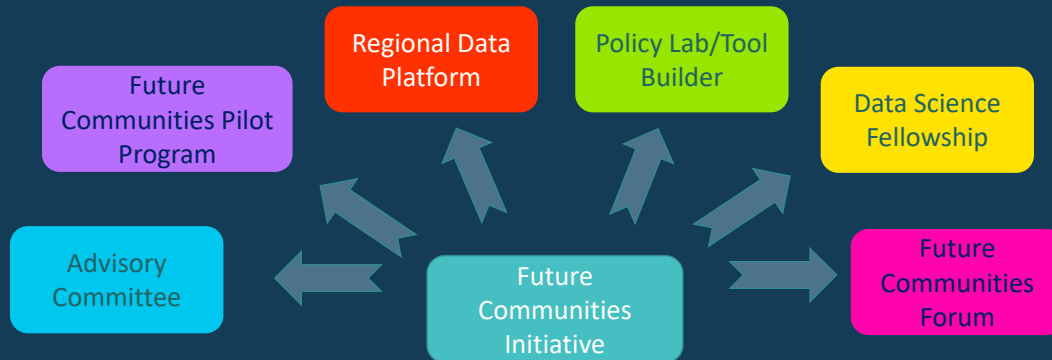

Emerging Technologies Discussed

Existing & Near-term Emerging Technologies

Alternative Fuel Vehicles*

Carshare*

Bike Share / Micromobility*

Neighborhood Electric Vehicles

Smart Parking

Transportation Network Companies (TNC)

Transit / TNC partnerships

Microtransit

Mobility as a Service (MaaS)

Advanced ITS – Connected Vehicles

Goods Movement Technologies

Medium to Long term technologies

Automated / Connected Vehicles

Hyperloop

Vertical Take Off and Landing

Future Communities Initiative: Program Details

SCAG

Partnership Framework
- SCAG launched a 3-year, $8M initiative to advance priority projects
- The initiative will leverage public/private funds, including $4.5M in SCAG resources
- Projects will be administered by SCAG leveraging existing relationships and programs with cities/counties

Agenda

SCAG

1. **Technical Approach**
2. **Policy Approach**
3. **Implementation**

What Stakeholders Have Asked For

SCAG

Main Themes:
- Mobility
- Accessibility
- Public Health/Safety
- Climate Change

San Francisco's Guiding Principles

SCAG

TEN GUIDING PRINCIPLES

Collaboration
Emerging Mobility Services and Techno
with each other and the community to

Congestion
Emerging Mobility Services and Technologies must consider the effects on traffic congestion, including the resulting impacts on road safety, modal choices, emergency vehicle response time, transit performance and reliability.

Safety
Emerging Mobility Services and Techno
Francisco's goal for achieving Vision Ze
security.

Sustainability
Emerging Mobility Services and Technologies must support sustainability, including helping to meet the city's greenhouse gas (GHG) emissions reduction goals, promote use of all non-auto modes, and support efforts to increase the

Transit
Emerging Mobility Services and Techno
services, must account for the operati
occupancy modes.

Equitable Access
Emerging Mobility Services and
regardless of age, race, color, g
any other protected category, sl
and groups who have historically
benefit most.

Labor
Emerging Mobility Services and Technologies must ensure fairness in pay and labor policies and practices. Emerging Mobility Services and Technologies should support San Francisco's local hire principles, promote equitable job training opportunities, and maximize procurement of goods and services from disadvantaged business enterprises.

Accountability
Emerging Mobility Services and
and the public can effectively e
system and determine whether

Disabled Access
Emerging Mobility Services and Technologies must be inclusive of persons with disabilities. Those who require accessible vehicles, physical access points, services, and technologies are entitled to receive the same or comparable level of access as persons without disabilities.

Financial Impact
Emerging Mobility Services and Technologies must promote a positive financial impact on the City's infrastructure investments and delivery of publicly-provided transportation services.

7/22/2019

Common Proposed Policies

- Road Pricing
  - Layered pricing to include congestion pricing, and high zero-occupancy pricing
- Integrated Payment Systems
- Reform Parking Requirements
  - Design future parking for flexible use
- Smart Growth policies to mitigate AV induced sprawl
- Job Centers Concept to reduce commute mileage
- Require more private sector data sharing
- Smart curb space management

Agenda

1. Technical Approach
2. Policy Approach
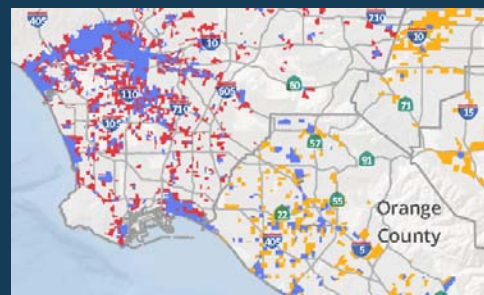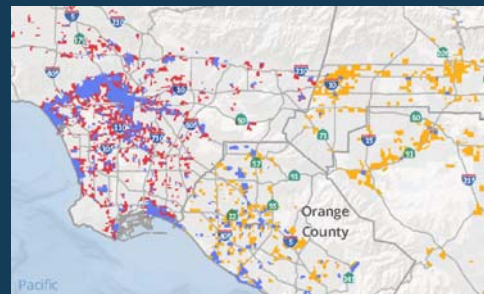3. **Implementation**

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Policy Integration

- Land-Use
- Street Design
- Pricing and System Management

Land-Use & Sustainability

- Neighborhood Mobility Areas

- Identified TAZ's with
  1. High number of intersections
  2. Low observed travel speeds
  3. High mix of uses
  4. High accessibility to "everyday" destinations

Land-Use and New Mobility

Neighborhood Mobility Areas

Employ Complete Streets strategies:
- Bike lanes, roundabouts, wider sidewalks and better lighting,
- Connected network of low-speed lanes
- Neighborhood design

Shift short trips to Non-SOV modes.

Street Design & New Mobility

Street Design & New Mobility

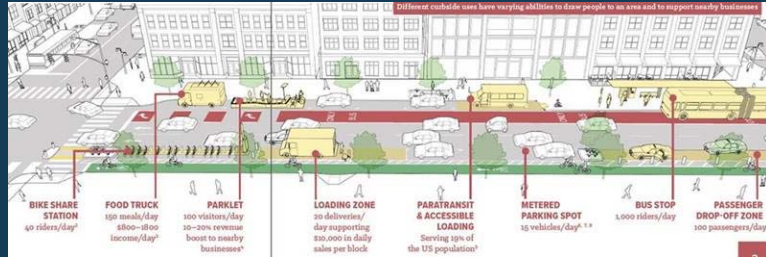## System Management & Sustainability

Regional Express Lane Network

Pricing Strategies

System Management & New Mobility

Curbside Management

4 MPO Future Mobility Research Program

- Research Products:
  - Off-Model Calculators for Carshare, BikeShare, Microtransit etc.
  - Modeling approach for automated vehicles
  - Currently conducting travel surveys of ridehailing users

Final Thoughts

- How do we frame all of these decisions through an equity lens?
  - Both in terms of who pays?
  - And who benefits?
- How do we assist our jurisdictions in adapting to the pace of change?
- How do we leverage gains we've made in livability to craft this new future of mobility?

Thank You

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Sustainability

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For more information visit **www.scag.ca.gov**

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