Smart Bay Area
Initial Thinking

Smart Communities, Smart Cities, Smart Regions

ITS California Workshop
January 13, 2017
Support regional goals

Insert relevant PBA goals
Mobility
Equity
Safety
Accessibility
GHG targets

Predicting future transportation disruptors.
How should public policy shape outcomes?
Smart Bay Area – Key Actions

1. Encourage mobility through persons-trip
2. Advance corridor management
3. Manage connected and autonomous vehicle integration
4. Explore mobility as a service (MaaS)
5. Organize land use policies
6. Develop big data strategy
7. Integrate with other public utilities/services

<< Animated on click
Need some pix. Have not thought of yet.
Encourage mobility through persons-trip

Contain VMT through policy and pricing

- Policies to capture mobility benefits of SUM, but influence in right direction (incentivize carpooling, provide carpooling tax benefits, enforce occupancy)
- Expand managed lanes and other pricing
- Make transit more attractive, support other modes
Bay Bridge Forward: Near-Term, Low-Cost, & High-Impact Efficiency Strategies

- **Operational**
  1. West Grand HOV/Bus Only Lane
  2. Sterling St On-Ramp Express Lane
  3. Casual Carpooling
  4. Integrated Bridge Corridor

- **Transit Core**
  5. Higher-Capacity/Increased Express Bus Service
  6. Pilot Express Bus Routes
  7. Transit Signal Priority
  8. Commuter Parking
  9. Higher Frequency Ferry Service

- **Shared Mobility**
  10. Flexible, On-Demand Transit
  11. Shared Mobility

*Total: $40 M

*Preliminary estimates subject to further refinement
Barb to do
Rideshare partnership with private carpool apps
Vanpool incentive program
Expansion of carshare program
Expand corridor management

- Corridors gearing up for new technologies
  - Express Lanes expansion
  - Adaptive ramp metering, hard shoulder running lanes, queue warnings, contra flow lanes
  - Ala 880, 680, Rte 4, ??

- Prepares region for connected vehicles
Deliver Autonomous and Connected Vehicles

**Plan** - Regional vision, resources and project plan

**Platform** - Technical assistance to local implementing agencies through on-line resources and stakeholder group

**Pilot** - Identify key applications and test sites for early pilots

**Promote** - Leverage our regional assets. Partner with automakers and research centers. Advocate at state and federal level.
Organize complementary land use policies

Support shared, connected, autonomous, clean air vehicles through

- Parking policies
- Curb access policies
- Complete streets
Mobility as a Service (MaaS)

Explore universal app
- Integrate regional transportation platforms,
- Leverage pilots

Transform business model – reduction in privately owned single occupancy trips
Mobility as a Service (MaaS)

- **What** – A subscription-based program that provides a seamless combination of door-to-door transportation options (public/private transit, bike/car/rideshare, vanpool, taxi, etc.) to reduce private auto ownership.
- **Who** – People who want to downsize car ownership in their household.
- **Where** – Urban core areas, where alternative transportation options are readily available.
- **How much** – $XX

### Vehicle Ownership by Household

<table>
<thead>
<tr>
<th># of Vehicles</th>
<th>Oakland</th>
<th>San Francisco</th>
<th>San Jose</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>No vehicle</td>
<td>18%</td>
<td>30%</td>
<td>5%</td>
<td>18%</td>
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<tr>
<td>1 vehicle</td>
<td>42%</td>
<td>41%</td>
<td>27%</td>
<td>36%</td>
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<tr>
<td>2 vehicles</td>
<td>29%</td>
<td>21%</td>
<td>41%</td>
<td>30%</td>
</tr>
<tr>
<td>3 vehicles</td>
<td>9%</td>
<td>5%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td>4 or more vehicles</td>
<td>4%</td>
<td>2%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey, 2010-2014.
Pursue partnerships to better understand data quality and to integrate with planning and operations

Develop data warehouse strategy
Integrate with public utilities/local services

**Explore options**
- Transportation data
- Hospitals, utilities, etc.

**Capitalize on local partners efforts**
- Smart City applications from San Francisco, Fremont, Oakland

Picture from SF Smart City proposal?
Smart Bay Area Roadmap

- **Series of workshops with partner agencies and commission**
  - Collaborate with local partners on pilots and local activities
  - Right set of strategies

- **Complete Future of Mobility Study**

- **Consider resources and staff constraints**
  - Prioritize what to do now: planning, pilots, legislative advocacy
Promises Of Autoists

1900 Dawn of the Auto
Dispense with a horse and save the expense, care and anxiety of keeping it.
The Winton Motor Carriage Company

1940s Sprawl + Interstate Era
“Traffic will run pretty smoothly... Within three years, the time needed to carry out our plans.”
Robert Moses, 1941

1920s Modernist Era
“The city of tomorrow will be an automotive city.”
Miller McClintock

2016 Dawn of Autonomous Vehicles
“In less than 20 years, owning a car will be like owning a horse.”
Elon Musk

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