Welcome

Bay Area Local Jurisdictions Parking Technology Roundtable

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Metropolitan Transportation Commission

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Purpose of today’s session

- Acquire better understanding of the process for upgrading your parking technology
- Learn about parking technology hardware and software being used locally
- Share your experience and knowledge with others
- Develop contact with others who are experienced and/or interested in this field – collaborations for parking technology endeavors?
Logistics for today

• 8 local speakers - short talks based on their experience; contact info for follow-up

• Scheduled time after every few talks for Q&A and sharing your experience

• Closing with feedback about what was valuable, next steps / what to pursue

• Lunch, bathrooms
Why does MTC care about parking policies?

- Impacts cost & feasibility of development - housing, retail, employment. Feasibility of TOD
- Impact on mode choice, which effects VMT & GHG
- Impact on the economy, equity and environment of the region
What has MTC done so far?

**Tools, model, ordinances, case studies**

- Working with local jurisdictions - MTC Smart Parking Toolbox and case studies
- Model to re-estimate parking demand with sharing, pricing, transit, etc.
- Planning process, case studies
- Technical analyses, labs
- Pricing, unbundling, sharing, on/off street price coordination, cash-out, transit passes, carshare
- On-line short engaging videos
Why a session on parking technology now?

• Technology can be an important tool in implementing parking management policies

• Technology is changing very quickly, many hardware and software options. Compatibility is important

• Vendors and parking integrators have “all the answers” for a price . . . BUT your colleagues have important real world experience.

• Request by city planning and public works staff, local transportation planners
VPP Parking Pricing Project

mtc.ca.gov/planning/smart_growth/parking/2014.htm

Funded by FHWA
VPP Parking Project: Purpose

• **Regional** aspect- Analyze regional impacts of parking pricing on land use, transportation, economy & environment to support policy development.

• **Local** aspect - Provide analytical tools for local jurisdictions to use in support of local policies.
VPP Parking Project: Approach

1. **Regional parking database** for locals & regional agencies
2. **Analyze and model the effects of parking pricing policies** UrbanSim & Travel Model One
3. **Workshops for local jurisdictions** using the new parking database and tools
Key Steps

• Analyze data requirements
• Collect and analyze data – 25 new locations, ~ 20 recent other locations, primarily PDAs
• Integrate data into UrbanSim and travel models
• Analyze regional policies
• Training for locals
• Expert evaluation, outreach, final report
Policy Questions

• What are the **most effective actions** the regional agencies can **take** to support pricing parking policies?

• Under what conditions do **individuals perceive parking pricing policies** to be appropriate?

• How common are **the conditions that would lead to successful local parking pricing policies** in the San Francisco Bay Area?

• What are the **specific approaches** to parking pricing programs and the components that are most important for a successful program?
Budget and Schedule

- Project cost $700,000
- Largest component is data collection
- Establishes framework for additional local data to be collected over time
- Began 2013, completion late 2015
- Follow up – ongoing database and framework, policy implementation
Modeling

- **UrbanSim**
  - Developed by the Urban Analytics Lab at UC Berkeley
  - Discrete Choice Model
  - Transportation and Land use integration
  - Populate fields with local data to get context-specific modeling

- **Travel Model One**
  - Activity-based Regional Travel Model
  - Evaluates changes in travel behavior for policies
Bay Area Parking Database

Zoomed out, database entries for all cities are shown.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Collection Year</th>
<th>Data Available</th>
<th>Number of on-street spaces</th>
<th>Number of off-street spaces</th>
<th>Weekday peak occupancy</th>
<th>Weekday peak period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain View's Downtown, Santa Cara County</td>
<td>2014</td>
<td>inventory and occupancy of public facilities</td>
<td>3,467</td>
<td>2,398</td>
<td>76%</td>
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Double click on a city and it zooms into an detailed layer. User selects attributes to view. User can pull down map to view bigger.
What does the VPP project mean for local jurisdictions?

* Shared database “location” to maintain your parking data and access data from other locations

* Standardized parking data format/schema to use for MTC funded station area plans, technical assistance

* Tools for locals to use for parking analyses

mtc.ca.gov/planning/smart_growth/parking/
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