Welcome

Bay Area Local Jurisdictions
Parking Technology Roundtable

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Metropolitan
Transportation
Commission

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METROPOLITAN
TRANSPORTATION
COMMISSION

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?
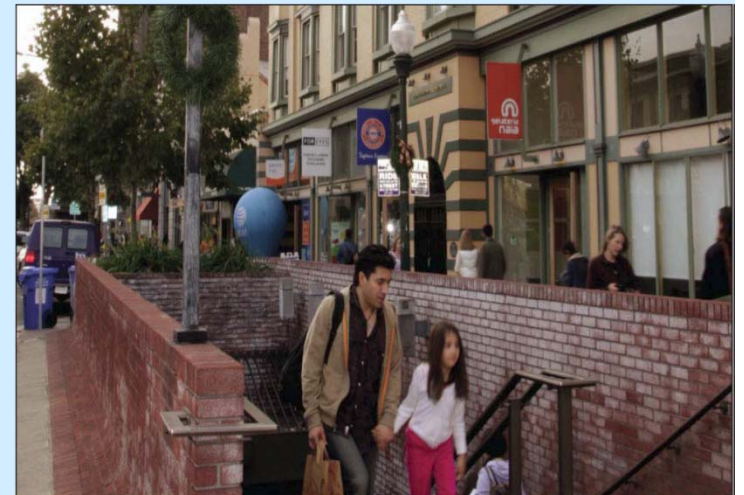
Logistics for today

- 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
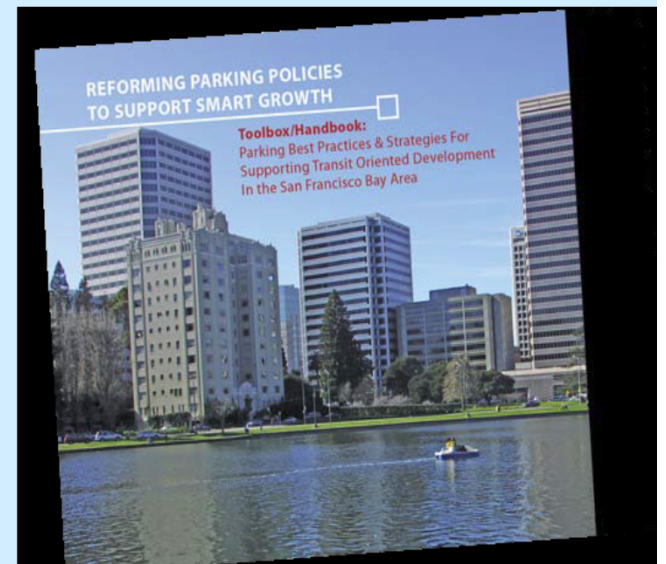
Why a session on parking technology now?

- 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
PRICING
PROJECT

VPP Parking Project: Purpose

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

- **<u>Local</u>** 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

4. **Expert review**, final report, and policy recommendations.

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 pri**cing 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
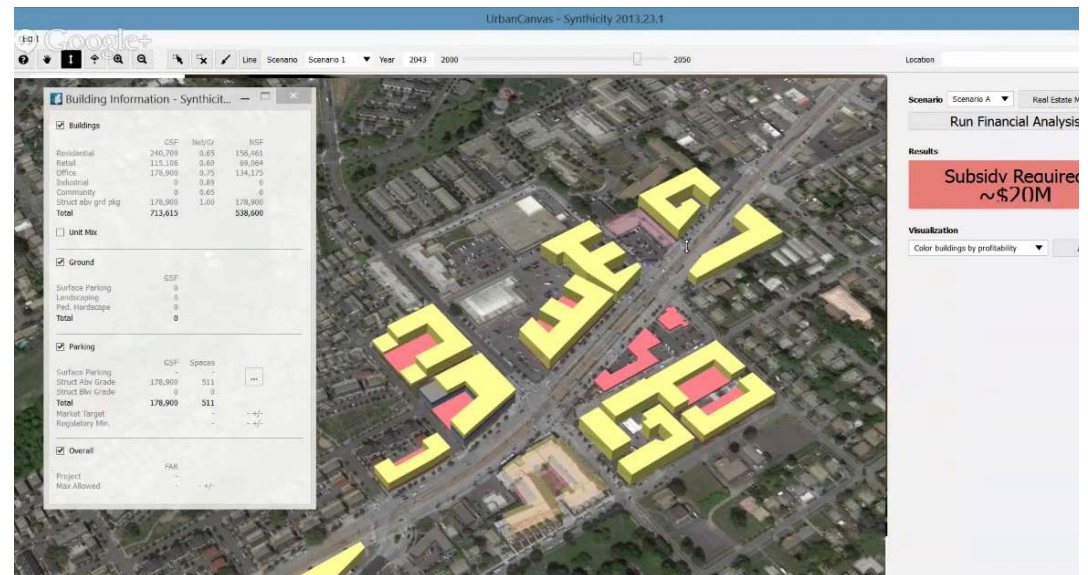
Zoomed out, database entries for all cities are shown.

Bay Area Parking
Database

About / **Map & Database** / Research

View Layers ▾

Downtown Mountain View

Collection Year: 2014
Data Available: inventory and occupancy of public facilities
Number of on-street spaces: 3,467
Number of off-street spaces: 2,398

| Data Summary | Inventory | Weekend Occupancy | Weekday Occupancy | Policies |

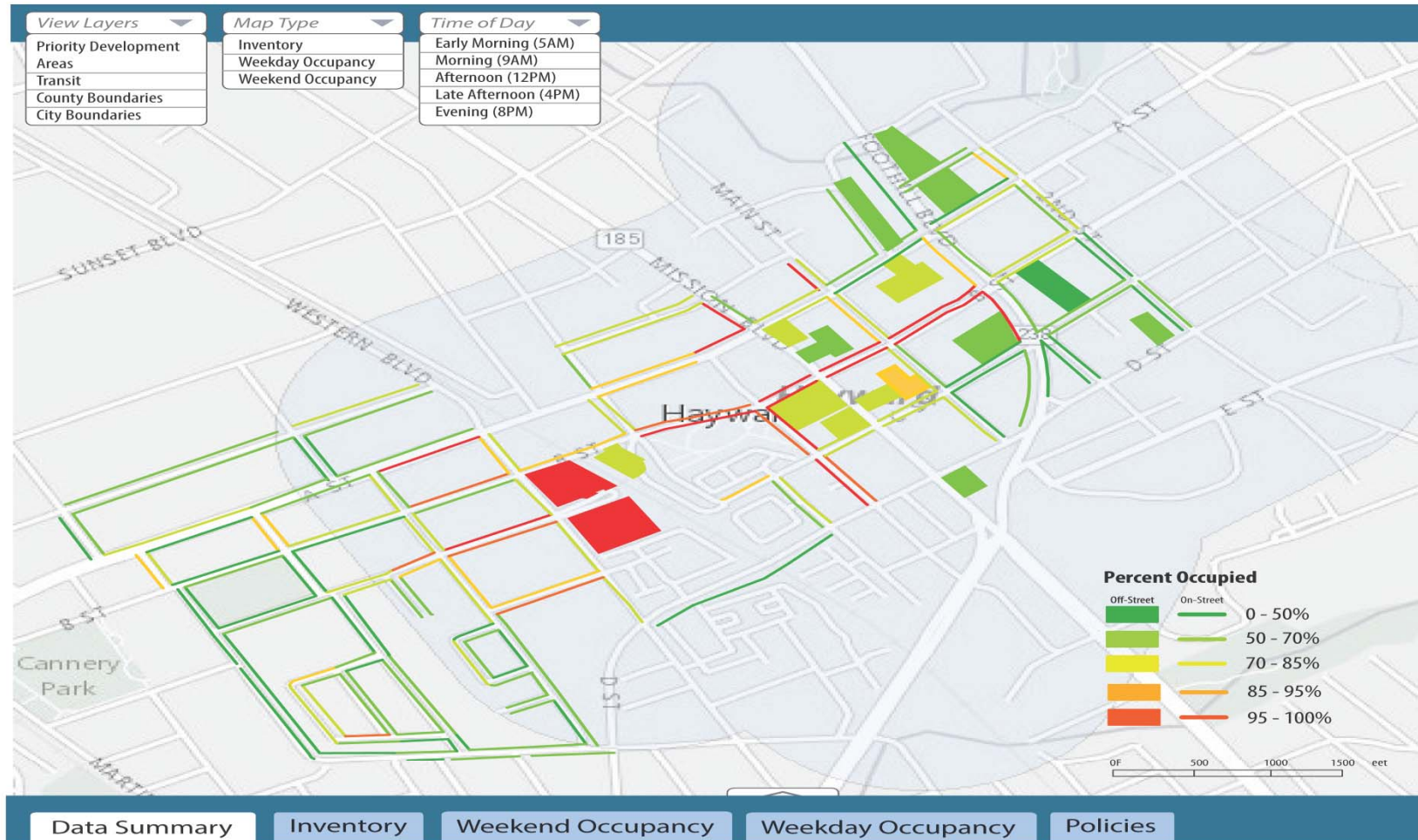Search by location 🔍

Download .CSV   View for Print

Study Area	Collection Year	Data Available	Number of on-street spaces	Number of off-street spaces	Weekday peak occupancy	Weekday peak period
⊗ Mountain View's Downtown Santa Cara County	2014	inventory and occupancy of public facilities	3,467	2,398	76%	12PM
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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.

Bay Area Parking 🚗 🚗 Database

About / Map & Database / Research

View Layers ▾	Map Type ▾	Time of Day ▾
Priority Development Areas	Inventory	Early Morning (5AM)
Transit	Weekday Occupancy	Morning (9AM)
County Boundaries	Weekend Occupancy	Afternoon (12PM)
City Boundaries		Late Afternoon (4PM)
		Evening (8PM)

Percent Occupied

Off-Street	On-Street	
		0 – 50%
		50 – 70%
		70 – 85%
		85 – 95%
		95 – 100%

0F   500   1000   1500   eet

Data Summary | Inventory | Weekend Occupancy | Weekday Occupancy | Policies

Search by location 🔍

Download .CSV   **View for Print**

Study Area	Collection Year	Data Available	Number of on-street spaces	Number of off-street spaces	Weekday peak occupancy	Weekday peak period
⊗ **Hayward Downtown & Station Area** Alameda County	2014	inventory and occupancy of public facilities	3,467	2,398	76%	12PM

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

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