

VPP Regional Parking Pricing Project

New Partners for Smart Growth
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METROPOLITAN
TRANSPORTATION
COMMISSION

MTC VPP Regional Parking Pricing Study

1. Research existing studies & best practices
2. Original analysis using
 - New database & website with new data for 25 areas
3. Regional modeling
 - a. Travel Model One
 - b. Urban SIM



Key Policy Study Areas

1. Supply & Demand in the Bay Area
2. Parking Requirements & Unbundling
3. Parking Structure Analysis
4. Employee Programs
5. Regional Parking Policies
6. Implementation Issues



Project Overview: Two primary components

1) Database

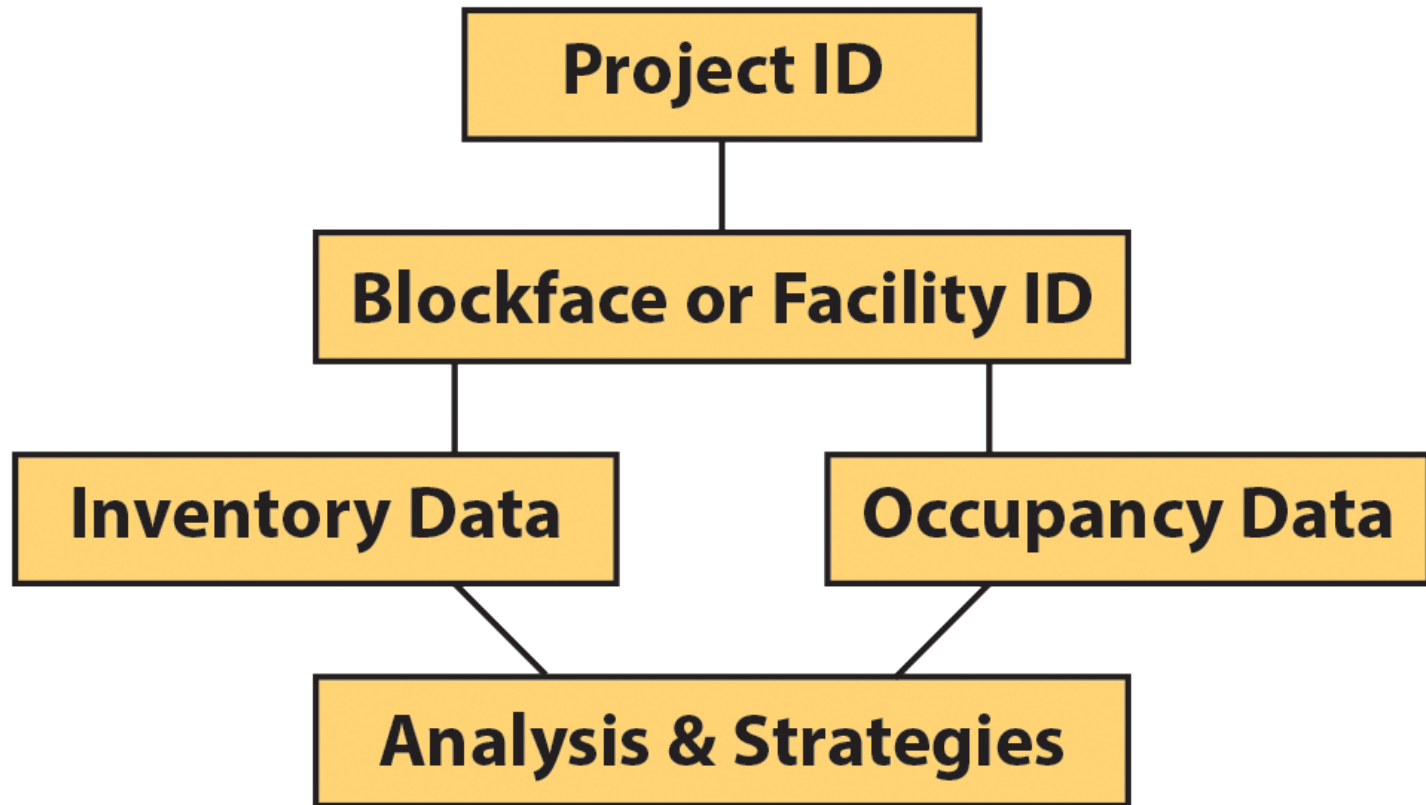
- Developed new regional parking data framework, standardizing collection and centralizing data storage
- Data collection for 25 cities

2) Policy Research

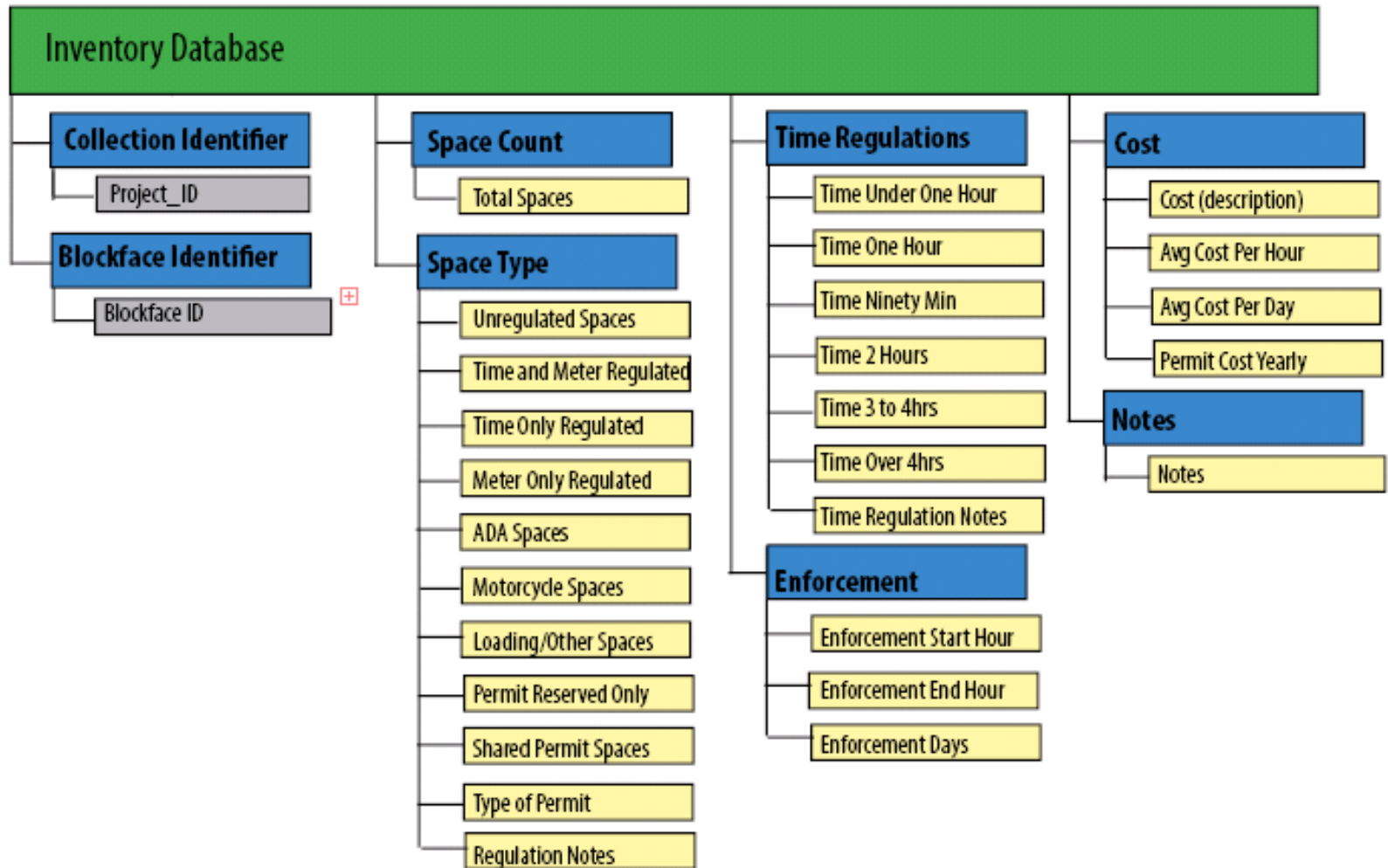
- Compiled existing research
- Analyzed parking pricing policies



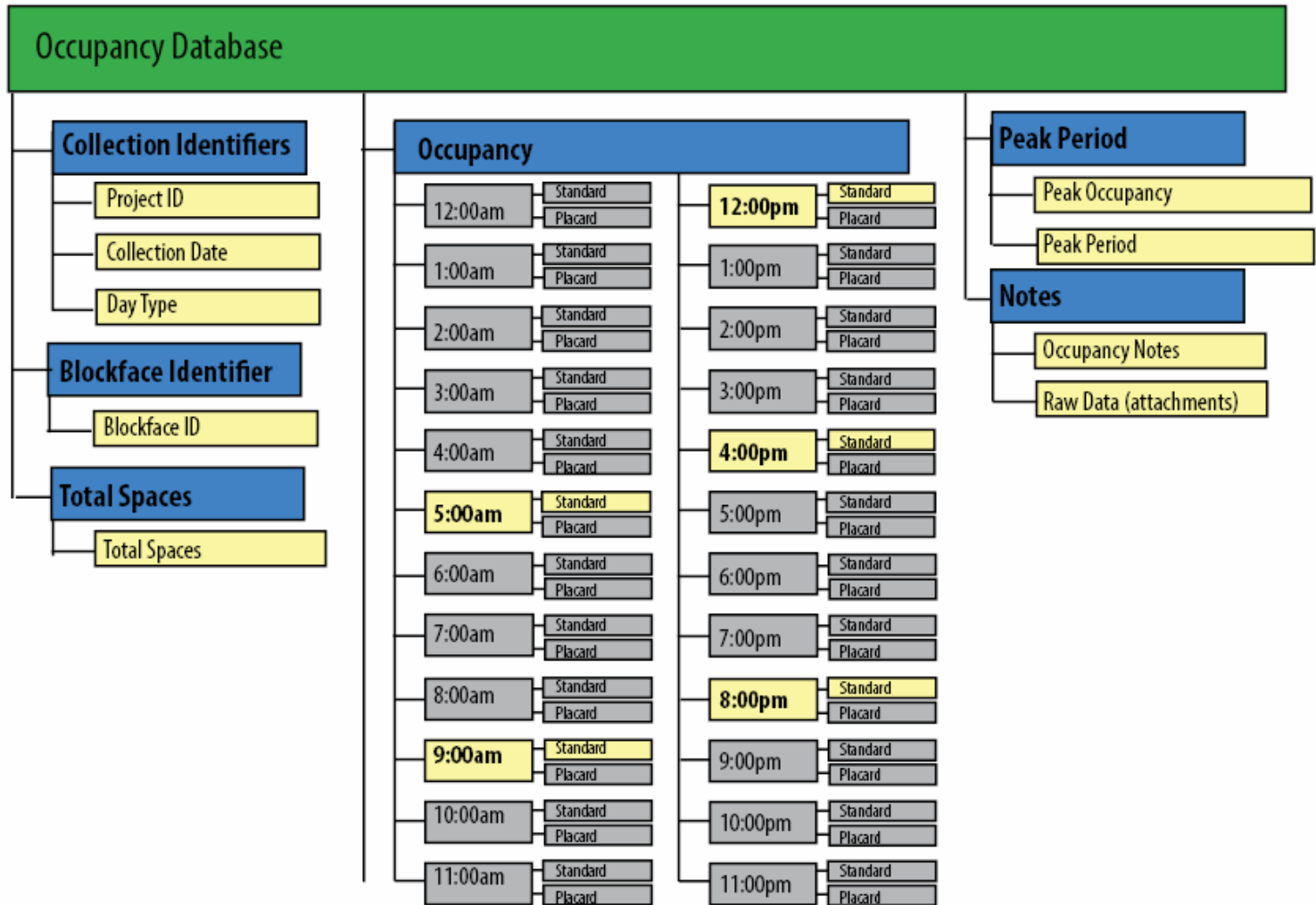
Database Format



Database Format - Inventory



Database Format - Occupancy

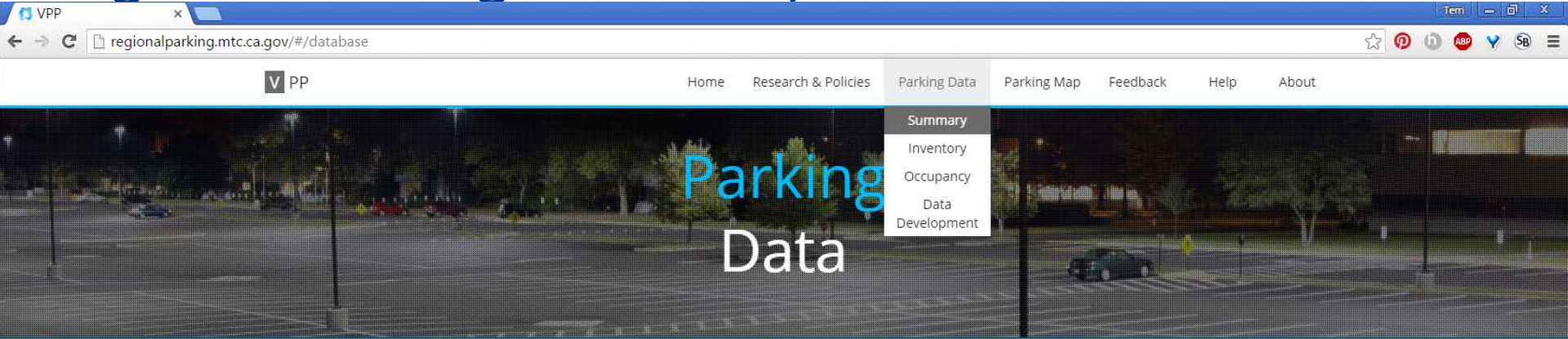


Web Application

- Automate data-to-mapping process
- Reduce cost and time of data collection
- Reduce error in data input
- Currently testing in field



Regional Parking Database/Website



Data Summary Options

Study Area

Collection Year

Summary Categories

Show All

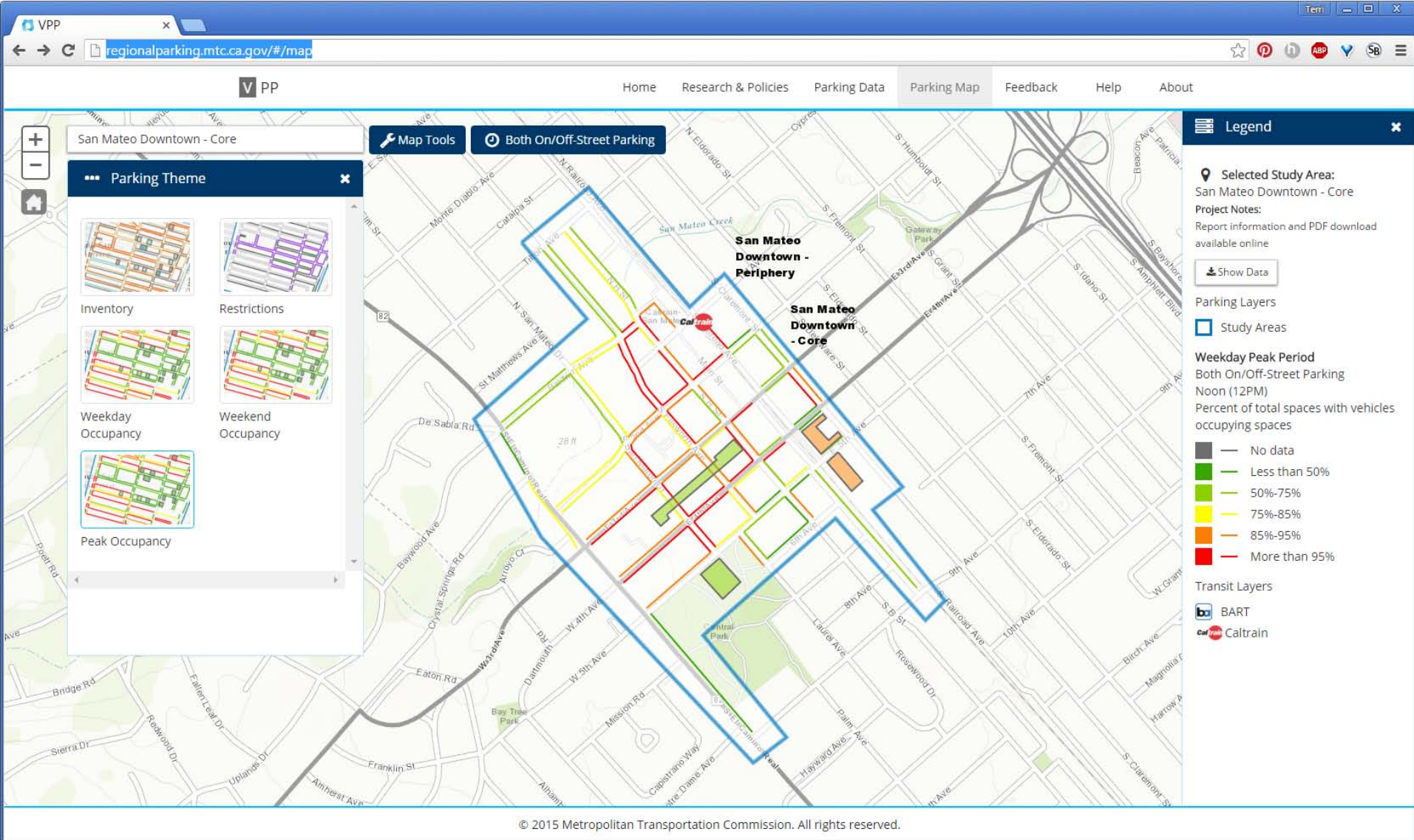
Pricing Parking Supply

Time Restrictions Type of Parking Spaces

Weekday Occupancy Weekend Occupancy

Additional Resources

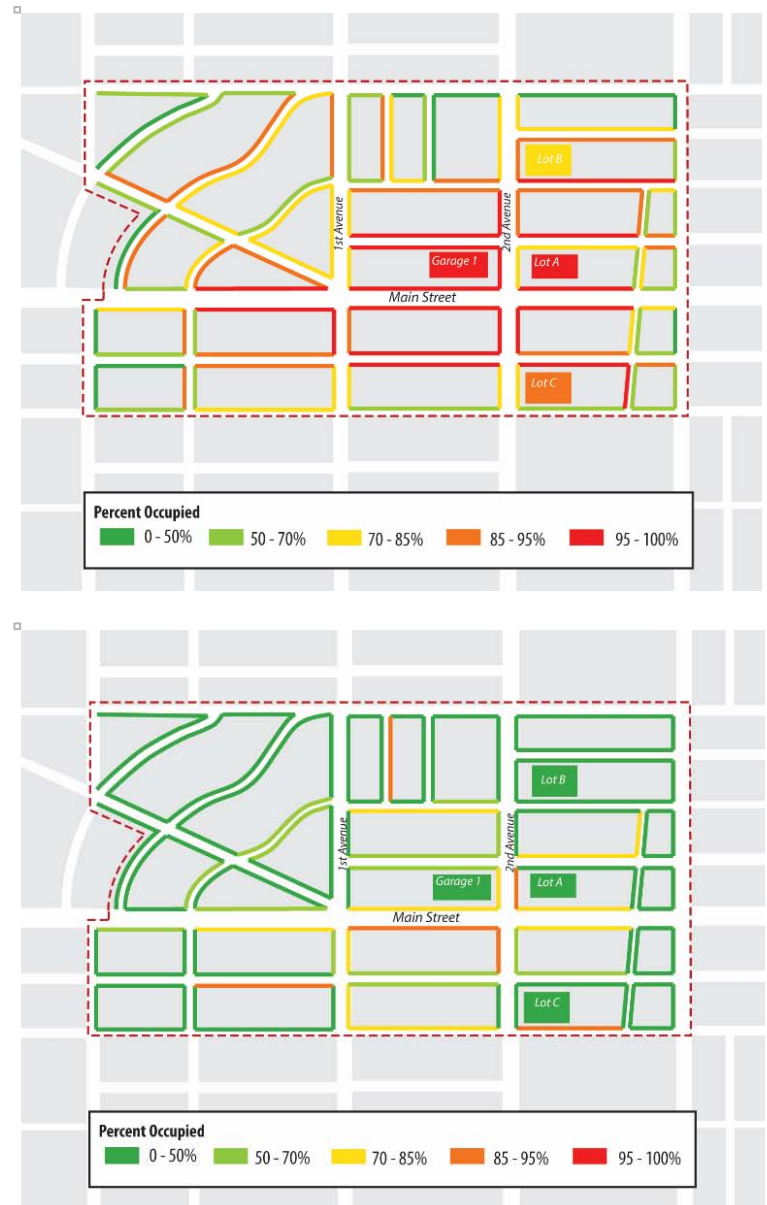
Regional Parking Database/Website



#1 SUPPLY & DEMAND IN THE BAY AREA

Policy Questions

1. Where does local supply not match demand? What is the relationship to prices and other policies?
2. How common are the conditions that would lead to successful local parking pricing policies?



#1 Key Findings – Supply and Usage

- *Most study locations have significant amounts of unused parking, even during the peak use time.*
- There is excess parking demand on particular streets/lots/structures during the peak in some locations at current prices (often free)
- However, there are significant amounts of unused parking spaces in lots and structures within a few blocks in almost all the locations, at almost all times.
- Opportunity for pricing to better balance usage in many locations.



Parking Changes for Downtown and Telegraph/Southside
June 2nd 2014



#2 REDUCED PARKING REQUIREMENTS & RESIDENTIAL DEMAND

Policy Questions

1. What would be the impact of reduced parking requirements?
2. How much demand exists for housing with lower amounts of parking?
3. What would be the impact of unbundling parking from rents on residential demand in urban areas?



#2 REDUCED PARKING REQUIREMENTS & RESIDENTIAL DEMAND

Method

Reviewed case studies of impact of reduced parking requirements and demographic trends re auto ownership

Used UrbanSim to simulate how reduced or eliminated parking requirements in the regions Transit Priority Areas (TPAs) would affect how the region grows.

Additional Analysis:

1. *GIS-based analysis of US Census data on car ownership in TPAs and/or surrounding BART and Caltrain Stations*
2. *GreenTRIP analysis*

Best Practices/Case Studies

- Reduced Parking Requirements in Santa Clara County
- Reduced Parking Requirements and Housing Affordability
- Reduced Parking Requirements in Los Angeles
- Zoning Code Reform in Sacramento
- Reducing Parking Requirements in Berkeley, CA
- Elimination of Parking Minimums and Creation of Maximums in San Francisco
- Use of King County's Right Size Parking Calculator

Literature Review

- Varying parking demand based on market segment: "Choosing Where We Live" (MTC, 2010)
- Millennials and parking demand
- Parking requirements for suburban multifamily Housing

#2 REDUCED PARKING REQUIREMENTS & RESIDENTIAL DEMAND

Findings

Modeled Residential Growth & Non-residential Growth in next 15 years

- Tested parking requirements reduced by 1/2 (scenario 2)
- Tested parking requirements eliminated (scenario 3)

	Residential Growth			Non-residential Growth		
	In TPA	Out TPA	Change from Baseline	In TPA	Out TPA	Change from Baseline
Scenario 1 (Baseline)	73.2%	26.8%	0.0%	60.0%	40.0%	0.0%
Scenario 2	75.4%	24.6%	2.2%	63.1%	36.9%	3.1%
Scenario 3	76.7%	23.3%	3.5%	65.8%	34.2%	5.8%

Movement of 3.5% of the residential growth and 5.8% of non-residential growth into Transit Priority Areas (TPAs).

#2 REDUCED PARKING REQUIREMENTS & RESIDENTIAL DEMAND

Findings – Residential Demand & Unbundled Parking

- There is unmet demand for TOD housing with lower amounts of parking.
- Households of renters and younger people (**18-34**) are much more likely to be **car-free**.
- Households living in **dense urban areas** and close to high quality **transit** are much more likely to be car-free.
- Percent of **one car households** have increased significantly in last decade

City	Description of Unbundling and related policies
San Francisco, CA	<ul style="list-style-type: none"> • Unbundled parking with carsharing • Apartments with the presence of carsharing and unbundled parking - 0.76 vehicles/unit
Clarendon, VA	<ul style="list-style-type: none"> • Tiered payment system for unbundled parking: unbundled parking is \$25/month for the first vehicle per unit, \$75/month for the second, and \$100/month for the third.
Bellevue, WA	<ul style="list-style-type: none"> • Drive-alone commute rate decrease of 30 percent since unbundling policies enacted
Berkeley, CA	<ul style="list-style-type: none"> • The Gaia Building - monthly parking price of \$150/space • Demand exists for only 20 spaces despite 42 available spaces (237 residents)
St. Louis, WA	<ul style="list-style-type: none"> • TOD condo project - option to purchase a parking space for \$18,000 • Lowered costs for those who opt out of car-ownership. Given this choice • 25% of condo buyers decided against the purchase of a parking space

#2 REDUCED PARKING REQUIREMENTS

Potential Policy Actions

- Provide regional funding for subsidized carshare in locations that provide housing without parking or with very low parking requirements, and allow carshare pods to replace several required parking spaces as a VMT/GHG reduction measure
- Include criteria of car free or low parking levels for housing in evaluation for regional funding programs
- Require low parking minimums and unbundling of parking in PDAs within OBAG requirements as a condition of particular funds
- Include requirements for unbundling and other smart growth parking policies in the regional principles for reviewing projects in the Cap and Trade AHSC Program

#3 PARKING STRUCTURE ANALYSIS

Policy Question

1. Could some planned or proposed parking structures be downsized?

- Pricing policies
- Alternative modes
- Impacts on transit ridership
- Impact on revenues and downtown retail



#3 PARKING STRUCTURE ANALYSIS

Methods

1. **MTC's Travel Model One** was used to look at the impact on BART ridership if the space used for parking was altered.



Best Practices

- MTC's Parking Structure Analysis
- MTC, economic assessment of parking vs. housing at transit stations
- Shared parking to reduce supply needs
- Using taxes to affect private parking usage
- Valet and off-site parking to reduce supply needs

Applications and Case Studies

- Replacing parking with TOD at VTA light rail stations
- Union City Park & Ride Pricing and Downsizing
- Evaluating need for parking around Petaluma's SMART stations
- Valet Parking in Redwood City

#3 PARKING STRUCTURE ANALYSIS

Findings

- **Travel Model One Analysis**
 - BART ridership generated from 5 story housing is about half of that generated by parking lot – not including retail/office component.
 - Note: limited abilities of the model
- **BART Parking Structure Analysis:**
 - 6 stories of housing would replace ridership generated from a surface lot.
- TOD produces more off-peak ridership, which is financially advantageous to BART, and works better within capacity constraints for peak direction/time.
- TODs produce additional benefits in local retail/sales/property taxes and reduced vehicular traffic.



#3 PARKING STRUCTURE ANALYSIS

Potential Policy Actions

Regional policy actions - require multi-modal planning and financial analysis prior to regional funding of structures

Local jurisdictions - create a vision for the area when considering parking supply, including management alternatives w/multi-modal access.

- Evaluate the relative costs and benefits of parking with other approaches.



#4 EMPLOYEE PROGRAMS

Policy Question

1. What would be the impact on employment location and types, and on employees' income of a regional parking cash-out program



#4 EMPLOYEE PROGRAMS

Methods

Review of *cash-out programs* and *commuter benefit programs* that affect the price of parking. Application and review of potential within the Bay Area

Additional analysis:

Bay Area's Commuter Benefits Ordinance (CBO)

Best Practice Applications

- California's Parking Cash-out Law
- Washington's Commute Trip Reduction Law
- Boulder Colorado Transit Passes
- Genentech's gRide Rewards program
- Santa Monica's Parking Cash-Out Law enforcement



#4 EMPLOYEE PROGRAMS

Findings

1. Studies have found significant decrease in drive-alone mode share to work when employees ***must pay to park***.
 - A Bay Area survey found 77% of commuters drive alone when parking is free, whereas only 39% drive alone when they must pay for parking
 - Free parking overwhelms other factors in impacting mode choice; regardless of what other benefits are offered, free parking results in high drive alone rates
2. California enacted a parking cash-out law requiring employers with more than 50 employees (and certain additional qualifying characteristics) to offer a parking cash-out program.
 - 17% decrease in drive-alone mode share for those who participated (Shoup, 1997).
 - A lack of enforcement and high employer exemption from the law has prevented many employers in participating.

#4 EMPLOYEE PROGRAMS

Potential Policy Actions

- Require all employers that qualify to charge for parking, potentially coupled with transit subsidies.
- Enforce / require enforcement of California's parking cash out law in the Bay Area.
- Work with cities to eliminate/reduce minimum parking requirements for new office development.
- Require employers to charge for parking in renewed Bay Area Commuter Benefits Ordinance (CBO)



#5 Implementation Issues

Policy Questions

What are the conditions, public perception, and specific approaches to enact or enforce various priced parking policies?



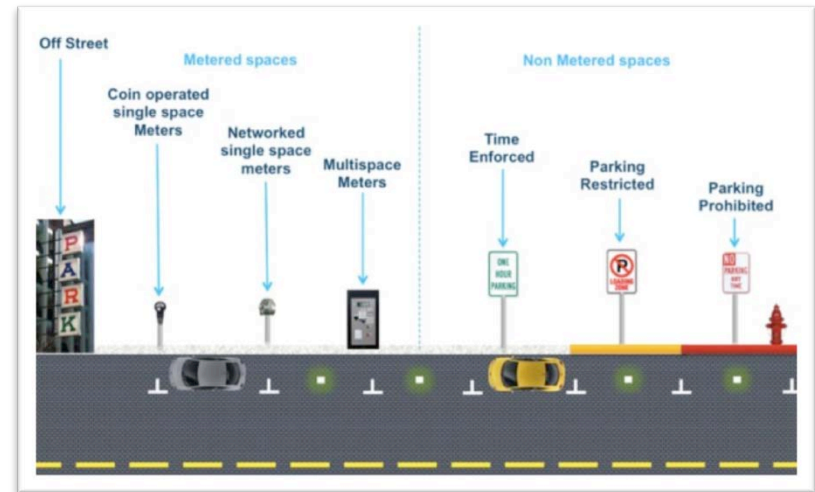
#5 Implementation Issues

Findings

Specific Approaches and local cases reviewed

Components

- Outreach & stakeholder support
- Clear communication of benefits
- Re-investing revenues back into the community
- Tax or charge impact fees to private facilities
- Increase enforcement



#5 Implementation Issues

Findings

Public Perception goBerkeley example

- Face-to-face interviews with local businesses
- Community meetings in each pilot study area
- Before and after intercept surveys

- Ultimately, **the public supported** on-street price increases and changes in parking time limits where the was data to support it.
- **The business community** supported this approach after understanding how it supports customers' access to their businesses



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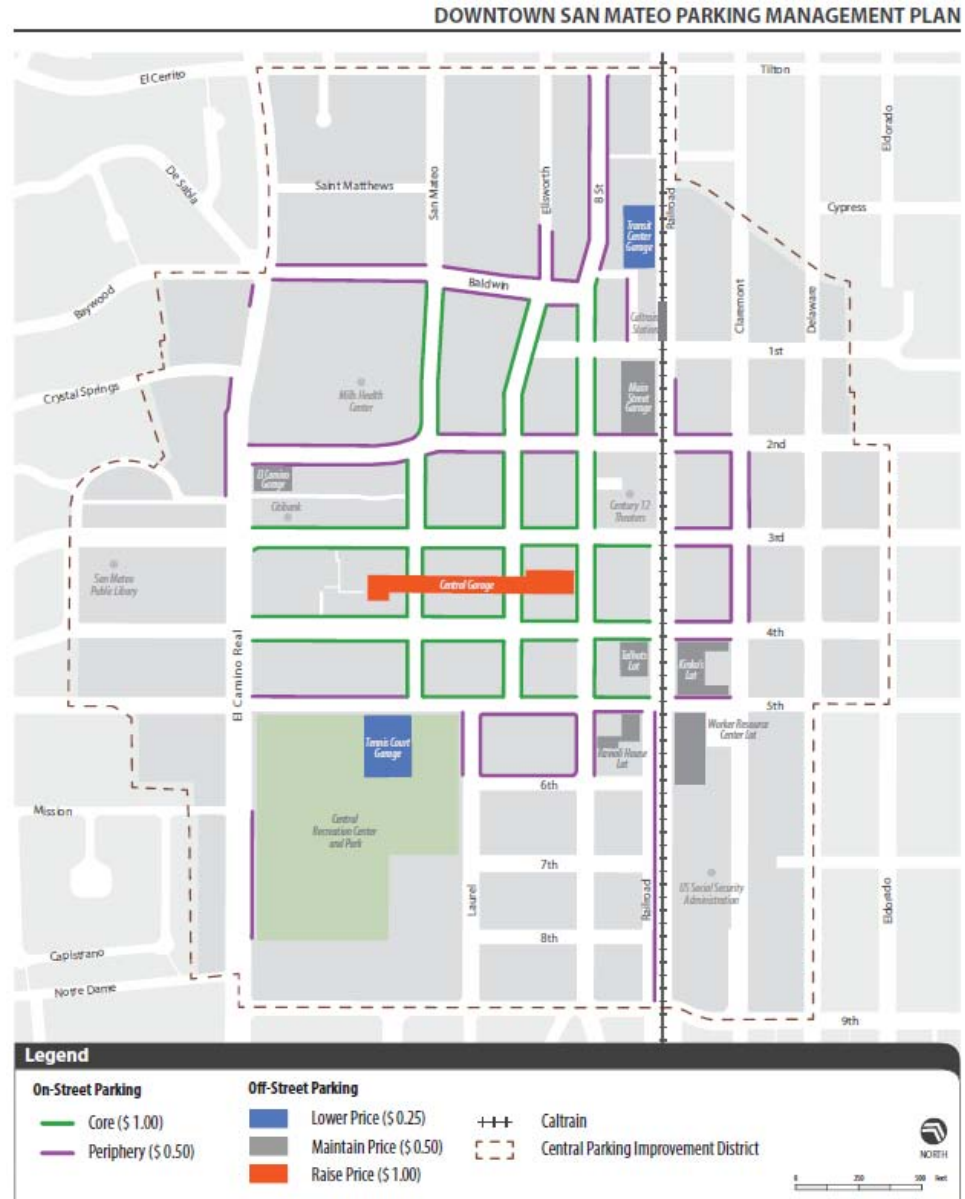
#5 Implementation Issues

Findings

Public Perception San Mateo example

- Local business and residential associations meetings
- Community meetings
- Public opinion survey

After explaining the concepts behind parking management, the public was generally supportive of market-based pricing.



#5 Implementation Issues

Parking Policy Implementation Issues

1. New pricing of parking is controversial with the public. Policies that are needed to effectively manage parking, such as reductions or elimination of parking minimums, are also controversial.
2. Significant, sensitive and ongoing education is necessary to communicate the benefits, and can be effective. Parking Benefit Districts and other approaches that provide local benefits create more local support for pricing and policy changes.
3. Programs / projects that provide funding to local jurisdictions are popular with local jurisdictions (e.g., funding meters).
4. Regional policies to impact parking are controversial, and may be more feasible as part of a larger package of reform.



#6 REGIONAL POLICIES

Policy Questions

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



#6 REGIONAL POLICIES

Methods

- Analyses of potential regional actions, including brainstorming meetings with MTC staff.
- MTC Commissioners are being consulted.
- Public perceptions and responses are important – review recent local experiences with changes in parking pricing policies



Applications & Best Practices

- Parking Requirement Reform to Create a basis for Pricing
- Repurposing Parking Supply to Create a Basis for Pricing
- Parking Taxes in the City of Los Angeles
- Partnerships with Entities Facing Parking Shortages
- Climate Initiatives Program
- PDA Planning and Plan Bay Area
- MTC's Resolution 3434 TOD Policy
- The Bay Area Regional Prosperity Plan
- CEQA reform with SB 743
- The Commuter Benefits Program
- TransitLink for TOD (T4T) Pilot Program
- Policy Tools to address employee and resident dynamics

#6 REGIONAL POLICIES

Findings

1. Regional parking policies are a logical policy approach as part of the Sustainable Community Strategy (SCS, as per SB 375).
2. Continue / expand funding for regional parking database, policy development. Develop a regional parking management system plan for local jurisdictions. Regionally monitor local strategies, provide recognition and financial support.
3. Continue / expand Climate Initiative /other funding of local parking implementation strategies, consider extending to corridors
4. Consider creating an Indirect Source Rule (ISR) to place a fee on new parking, adjusted for location, alternative modes offered, with funding to locals?



Findings from the VPP Project

1. A number of local jurisdictions seek regional assistance in parking data analysis, policy analysis and funding for planning and implementation.
2. Performance pricing parking is being accepted by more local jurisdictions over time, but continues to be controversial in many local jurisdictions.
3. Reduced / eliminated local parking requirements is being adopted in more jurisdictions, especially around high quality transit /downtowns, but is controversial in many cities.
4. Regional policy changes around parking are politically challenging. Approaches that focus on supportive and direct regional activities may be the most feasible.
5. Enforcing parking cash-out may not be the most effective due to complications of ownership and rights of use, and parking requirements.
6. Additional regional parking reform, such as an ISR / trip caps and conditioning regional funds, may require further efforts in the context of broader regional transportation and land use planning efforts.

Next Steps for the VPP

Key Recommendations for MTC

1. Continue to build Regional Parking Database/website.
2. Continue/expand regional funding for developing parking plans based on performance pricing and for implementing local parking pricing projects.
3. Continue to work with local jurisdictions to support reductions in local parking requirements and parking management approaches.
4. Require multi-modal & financial analysis of parking structures prior to the commitment of regional funds.
5. Continue additional regional parking reform efforts, including ISR / trip caps, enforcing parking cash-out, and conditioning funds, in context of regional transportation and land use planning efforts.



MTC VPP Regional Parking Study

Our thanks to FHWA for funding for this project.

MTC VPP project website

<http://regionalparking.mtc.ca.gov>

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