

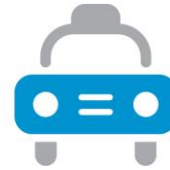
SF *park*

CIRCLE LESS, LIVE MORE

What to expect

- Background & overview
- Implementation
- Lessons learned
- Next steps

The SFMTA



What is parking like in San Francisco?



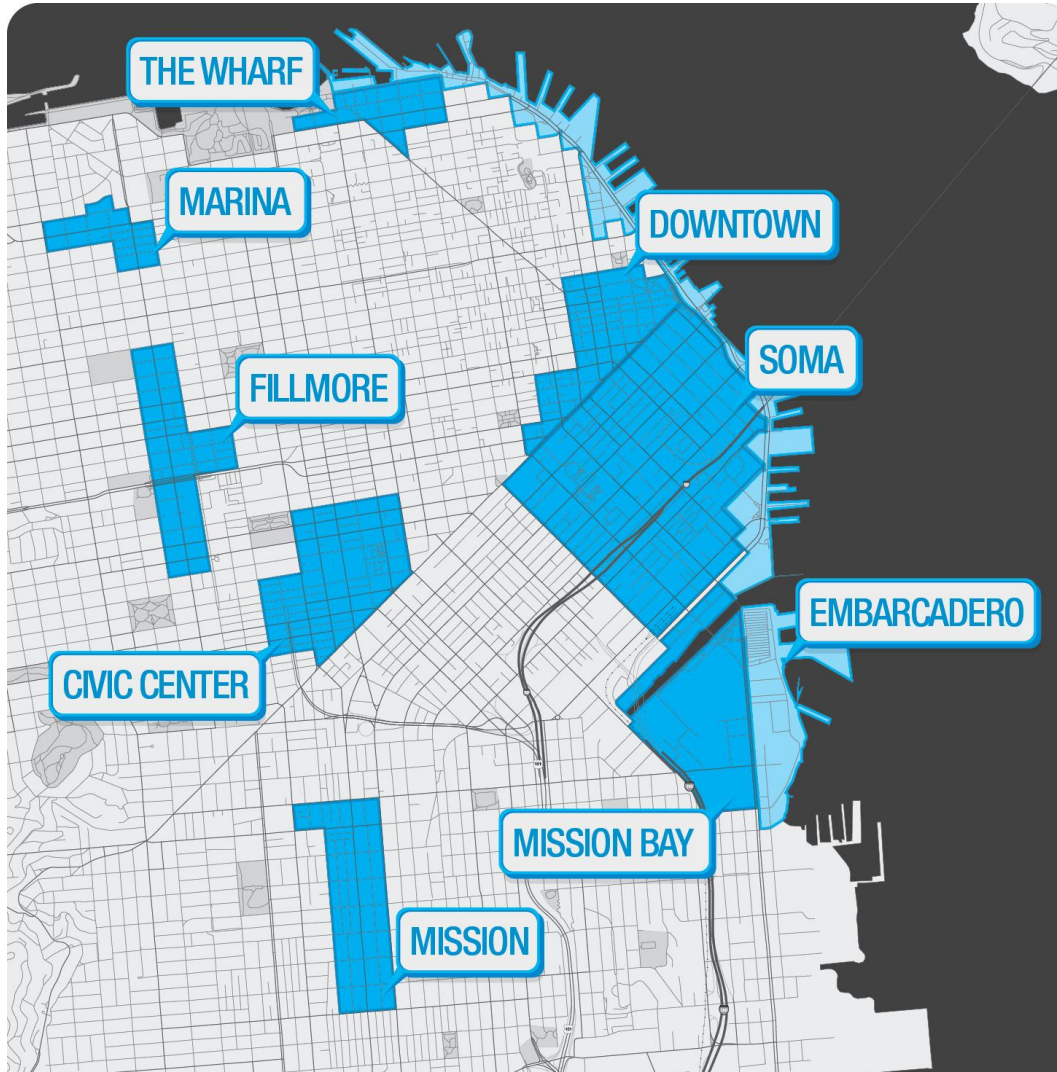
How did we get here?



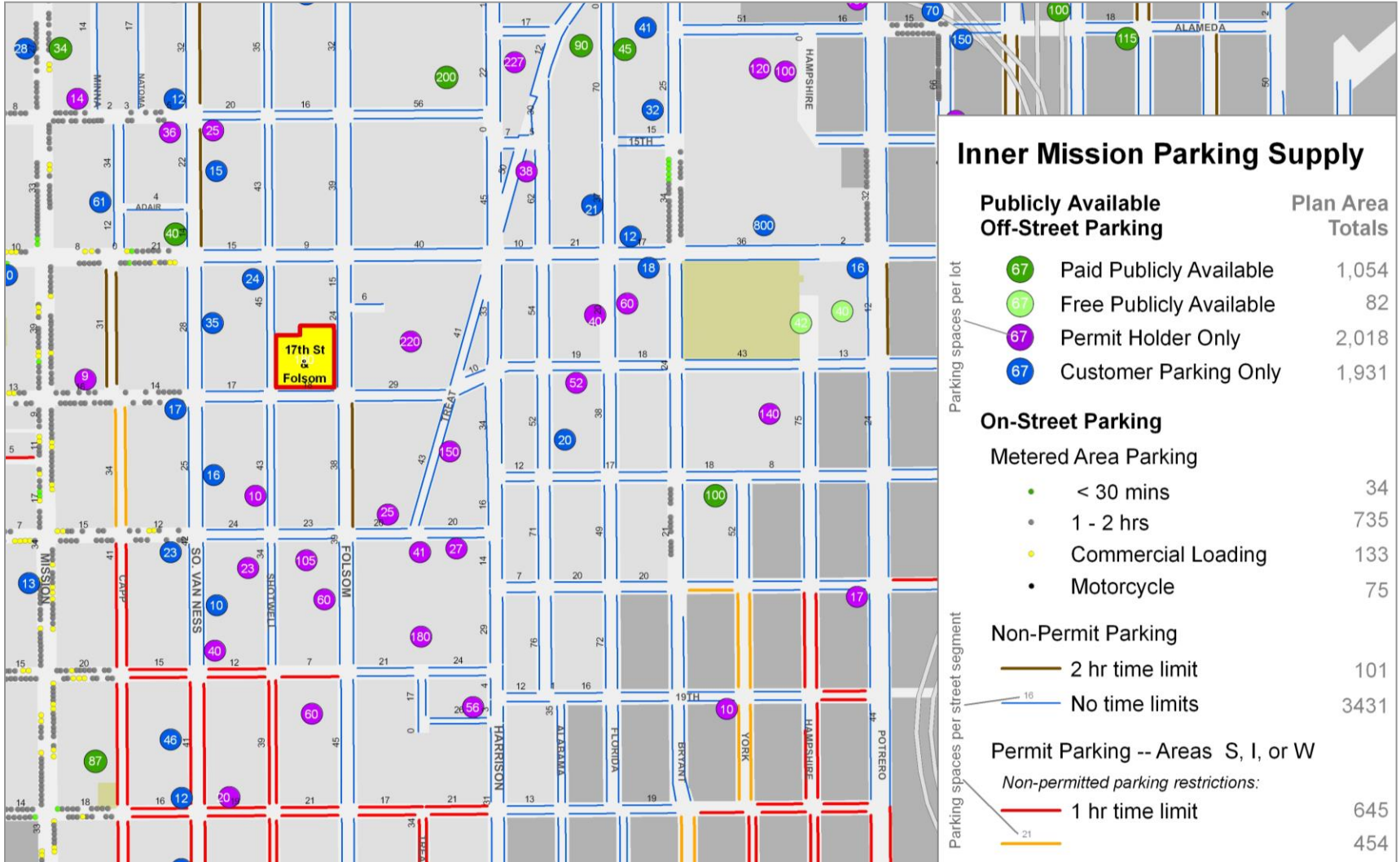
What is the SFMTA doing about it?



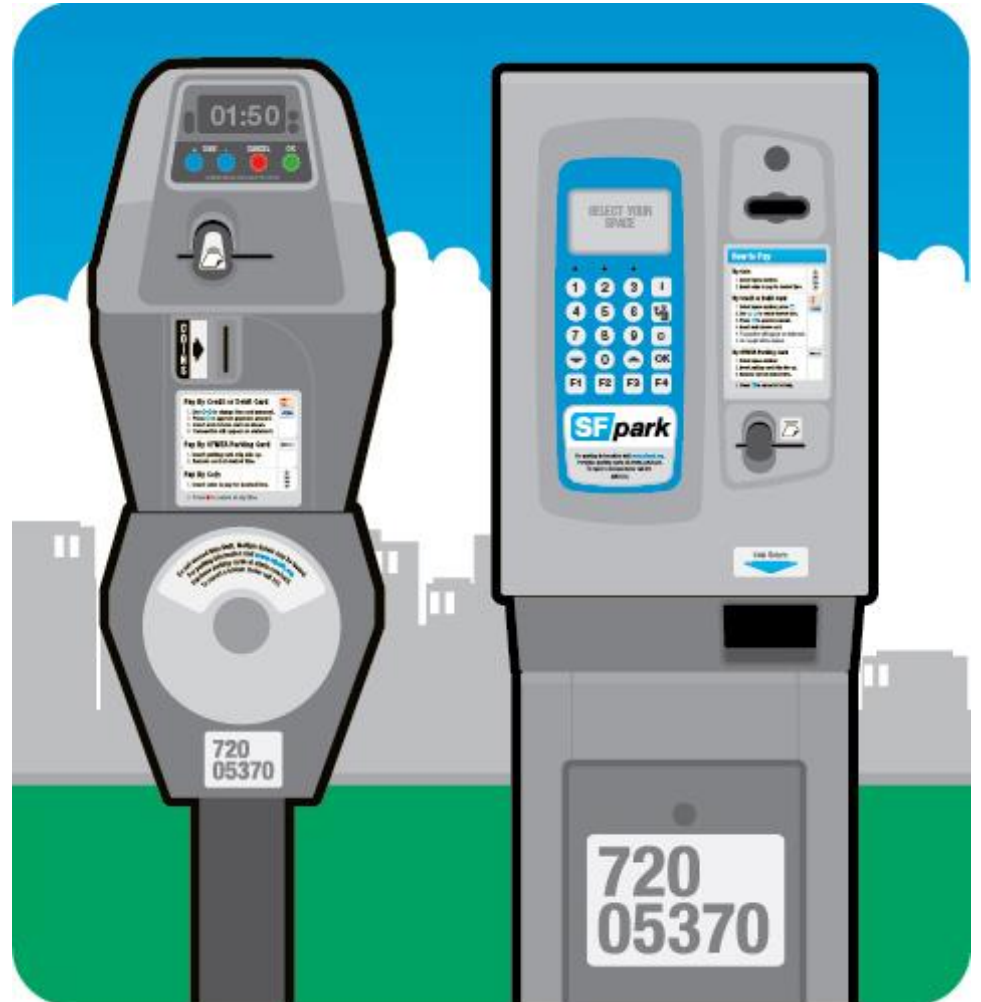
Demonstrating a new approach to parking



Parking census



Coin and card meters



On-street parking sensors

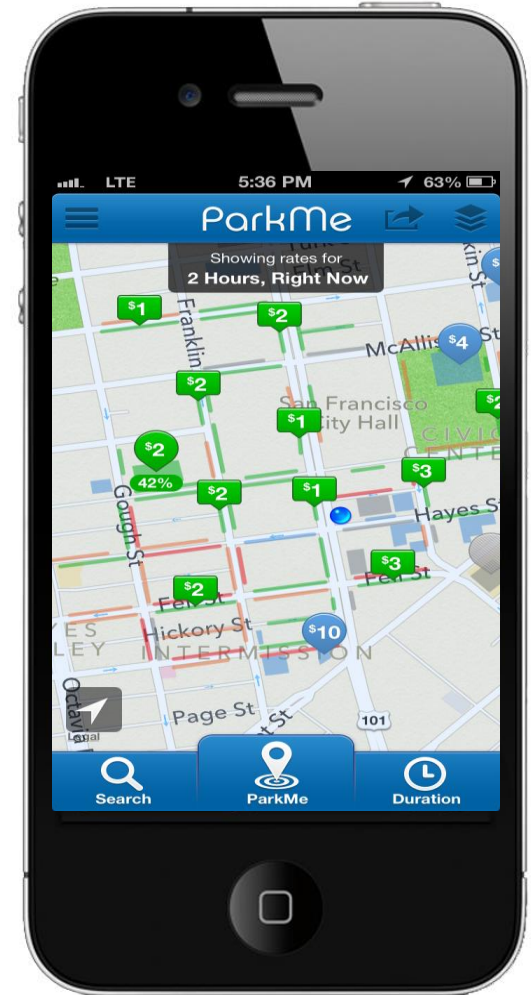


Garage occupancy sensors



SPACES	GARAGE
500	5TH & MISSION
150	PORTSMOUTH
0	PERFORMING ART

Real-time information and app development



Pricing at parking meters and lots

- Demand responsive to find lowest possible prices
- Gradual and periodic changes: \$0.25 up or down every 6-8 weeks
- Time of day pricing (vary by block + weekday/end)



Pricing at parking meters and lots

Occupancy Range	Rate Adjustment
80% - 100%	+\$0.25
60% - 80%	No change
30% - 60%	-\$0.25
0 - 30%	-\$0.50

Pricing at SFpark parking garages



Performing Arts Garage

Hourly

Midnight – 9am	\$1.00/hr
9am – Noon	\$1.00/hr
Noon – 3pm	\$1.50/hr
3pm – 6pm	\$1.00/hr
6pm – Midnight	\$1.00/hr

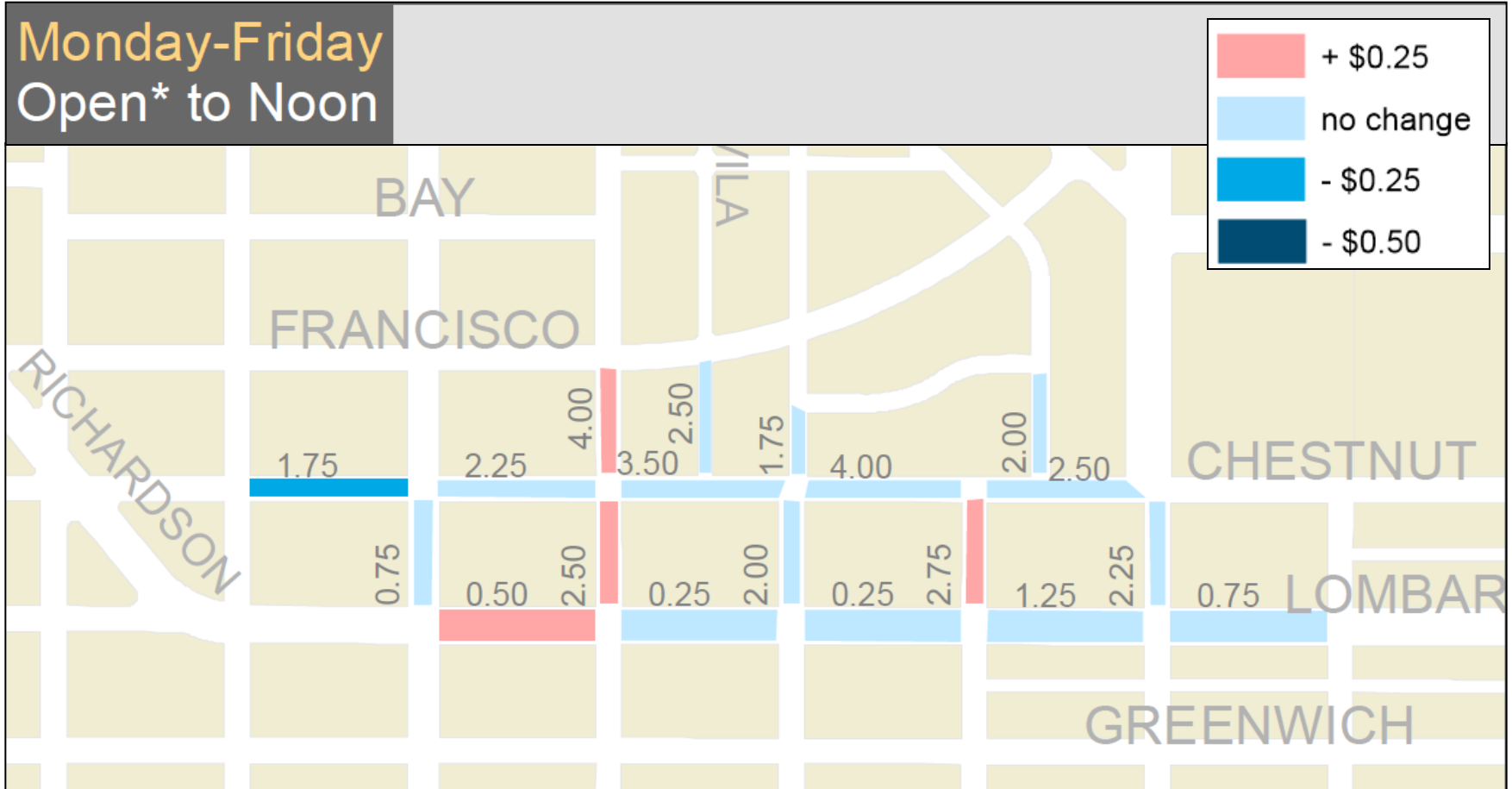
Charged in 60-minute increments

Off-Peak Discounts *Mon–Fri*

Enter before 8:30am	\$2 off
Exit after 6:30pm	\$2 off

*Must enter and exit on same calendar day
Must park for at least 3 hours*

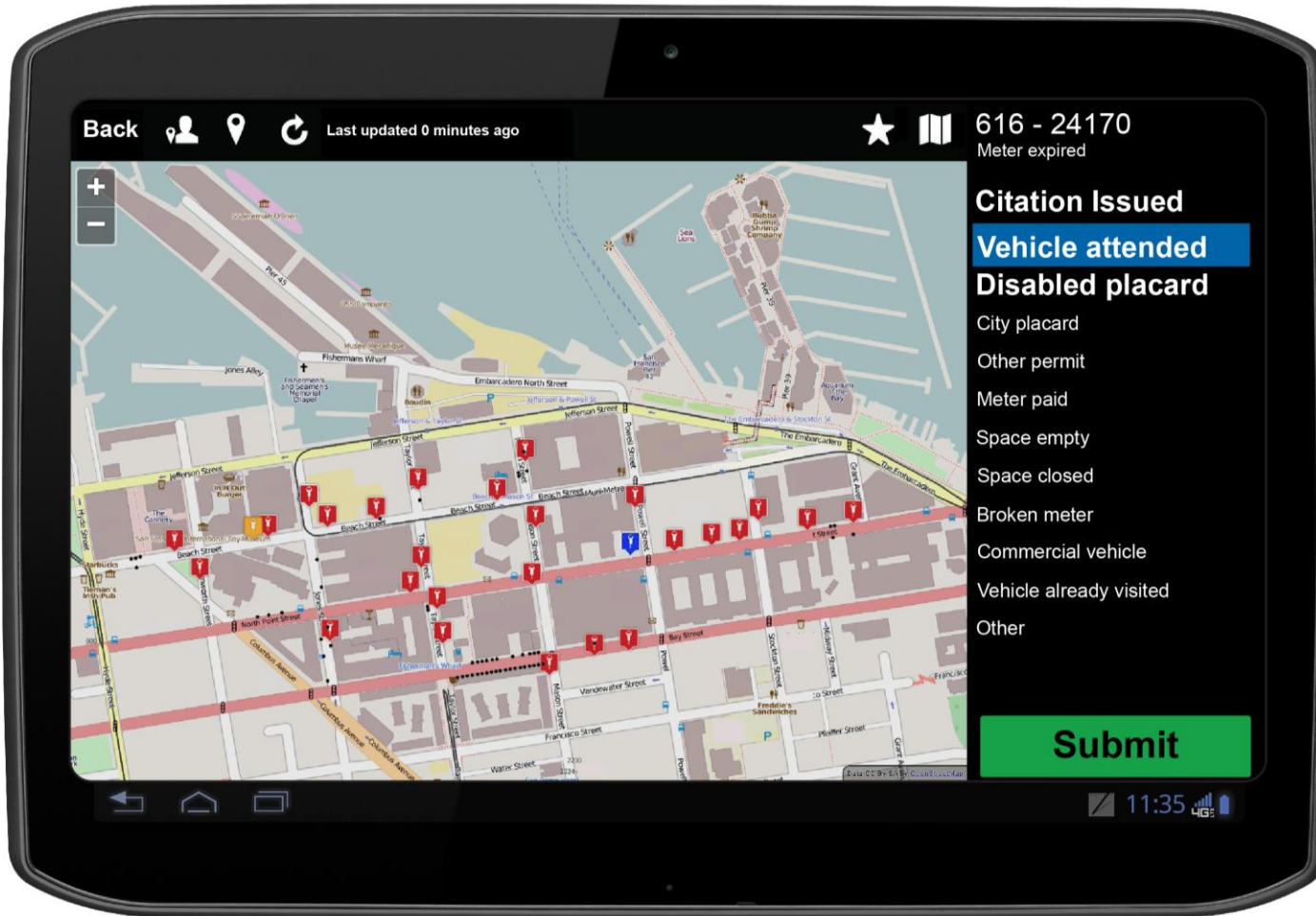
Demand responsive rate adjustments



Enforcement



Enforcement real-time data pilot



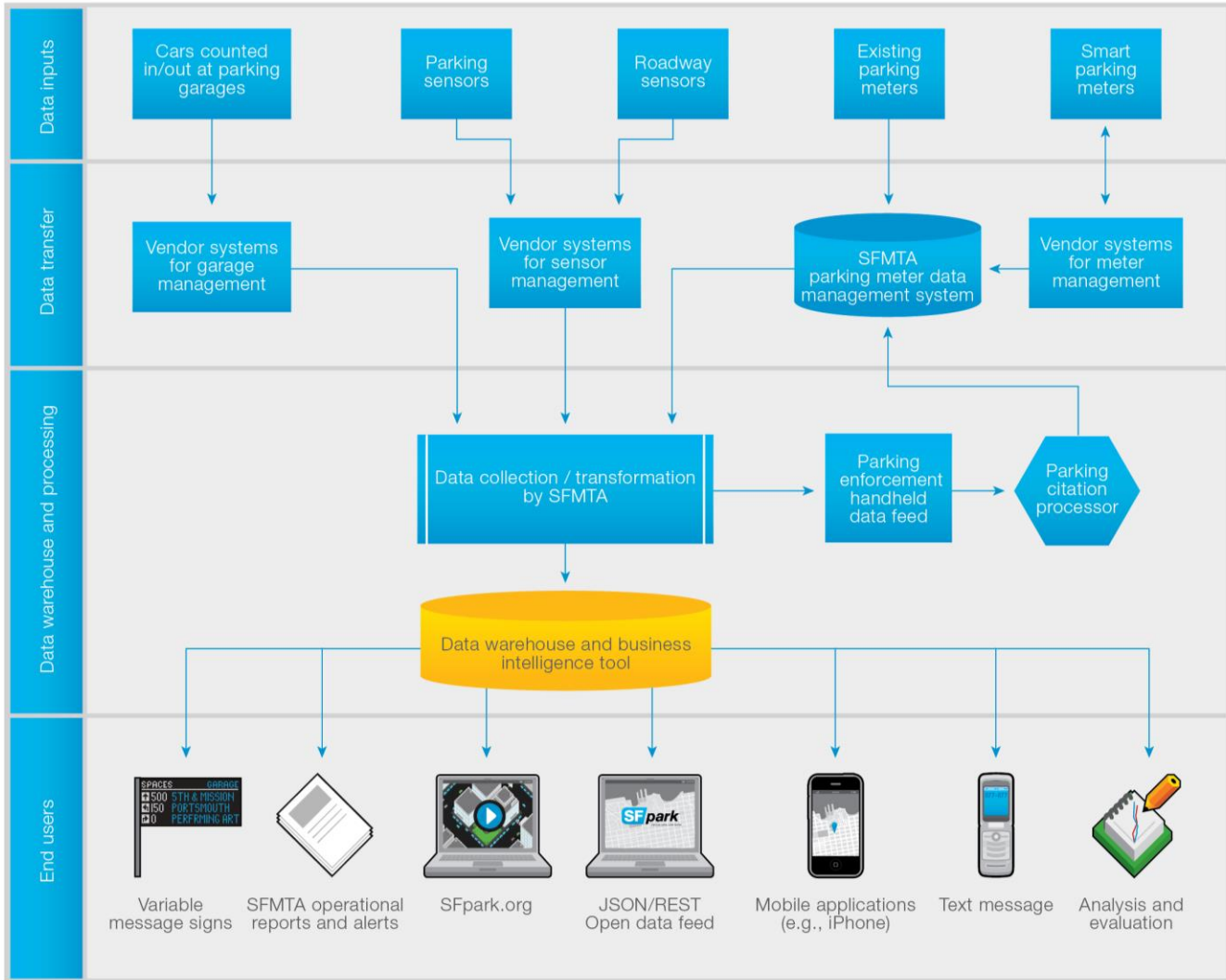
Automatic data

- Supply data (census, asset management)
- Parking data (from sensors, meters, and citations)
- Garage data (usage by hour)
- Travel demand data (roadway sensors, highways PEMS, BART, Muni)
- Muni data (travel time data from APCs)
- Parking tax
- Sales tax
- Safety (SWITIRS collision data)
- Exogenous (fuel price, CPI, unemployment, precipitation)

Manual data

- Parking search time
- Double parking and disabled placard
- Intercept surveys (professional survey firm)

Investment in data management/analytical tools



Acquire + understand + clean + structure data



Inventory/asset management

Manage Parking Spaces - Map

Spaces | Blockfaces | Blocks | PM Districts | Neighborhoods

Open Map in a new window

SFPark

Layers

- Overlays
 - spaces
 - city_curbs
- Base Layers
 - None
 - Terrain Map
 - Satellite Map
 - Hybrid Map
 - Road Map

spaces.124384

Space Attributes | Street View

Post ID:	217-32060
Cap Color:	Grey
Created Date:	2010-10-02T01:23:33Z
Modified Date:	2013-03-18
Sensor Flag:	C
Space Number:	0

Edit Delete

Map data ©2013 Google, Sanborn

Rate change process

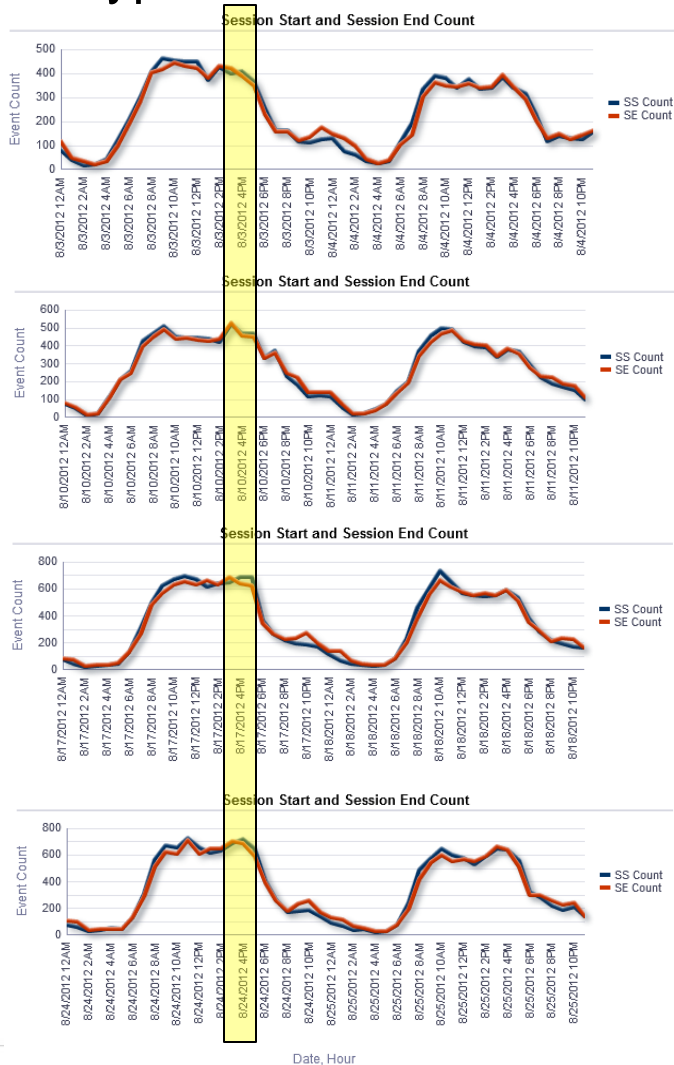
Rate Adjustment Implementation Status

Rate Change Reference ID: 1304

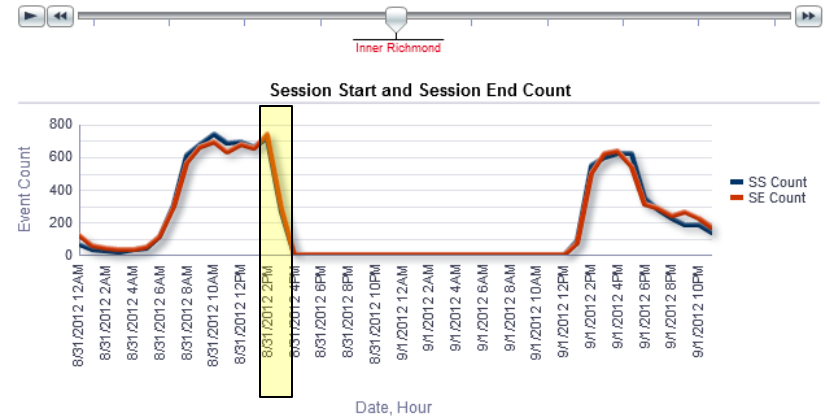
Actions	Implementation Reference	Comments	Process Step	Meter Vendor	Meter Model	Effective From Date	Step Start Date	Step End Date	Step Execution Status	Parking Management Districts	Block Selection	Time Limit Option	Step Start Flag	Xml Input File Name	Xml Output File Name
	201301%	Rate Change #9 PBP	99 - Process completed	PBP	-	01/16/2013	1/15/2013 4:41:53 PM	1/15/2013 4:41:53 PM	3 - Success			Y	-	ratesReconciliation_14-Jan-13.xml	PBP_PS_20130110_201301_1.xml
	201301013	Downtown Duncan	99 - Process completed	Duncan	VM	01/16/2013	1/15/2013 4:21:24 PM	1/15/2013 4:21:26 PM	3 - Success	Downtown		Y	-	REC_Duncan_PS_20121226_201301013_1.xml	Duncan_PS_20130104_20130101:
	201301014	Downtown IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:22:29 PM	1/15/2013 4:22:32 PM	3 - Success	Downtown		Y	-	Rec_IPS_PS_20130104_201301014_1.xml	IPS_PS_20130104_201301014_1.
	201301023	South Embarcadero Duncan	99 - Process completed	Duncan	VM	01/16/2013	1/15/2013 4:24:56 PM	1/15/2013 4:24:57 PM	3 - Success	South Embarcadero		Y	-	REC_Duncan_PS_20121226_201301023_1.xml	Duncan_PS_20130104_20130102:
	201301024	South Embarcadero IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:29:55 PM	1/15/2013 4:29:58 PM	3 - Success	South Embarcadero		Y	-	Rec_IPS_PS_20130104_201301024_1.xml	IPS_PS_20130104_201301024_1.
	201301033	Civic Center Duncan	99 - Process completed	Duncan	VM	01/16/2013	1/15/2013 4:35:29 PM	1/15/2013 4:35:31 PM	3 - Success	Civic Center		Y	-	REC_Duncan_PS_20121227_201301033_1.xml	Duncan_PS_20130104_20130103:
	201301034	Civic Center IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:37:44 PM	1/15/2013 4:37:45 PM	3 - Success	Civic Center		Y	-	Rec_IPS_PS_20130104_201301034_1.xml	IPS_PS_20130104_201301034_1.
	201301043	Mission Duncan	99 - Process completed	Duncan	VM	01/16/2013	1/15/2013 4:38:16 PM	1/15/2013 4:38:16 PM	3 - Success	Mission		Y	-	REC_Duncan_PS_20121226_201301043_1.xml	Duncan_PS_20130104_20130104:
	201301044	Mission IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:38:33 PM	1/15/2013 4:38:35 PM	3 - Success	Mission		Y	-	Rec_IPS_PS_20130104_201301044_1.xml	IPS_PS_20130104_201301044_1.
	201301054	Fillmore IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:38:59 PM	1/15/2013 4:39:00 PM	3 - Success	Fillmore		Y	-	Rec_IPS_PS_20130104_201301054_1.xml	IPS_PS_20130104_201301054_1.
	201301064	Fisherman's Wharf IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:39:22 PM	1/15/2013 4:39:23 PM	3 - Success	Fisherman's Wharf		Y	-	Rec_IPS_PS_20130104_201301064_1.xml	IPS_PS_20130104_201301064_1.
	201301074	Marina IPS	99 - Process completed	IPS	147	01/16/2013	1/15/2013 4:39:41 PM	1/15/2013 4:39:42 PM	3 - Success	Marina		Y	-	Rec_IPS_PS_20130104_201301074_1.xml	IPS_PS_20130104_201301074_1.

Operational control and real-time alerts

Typical behavior



Atypical

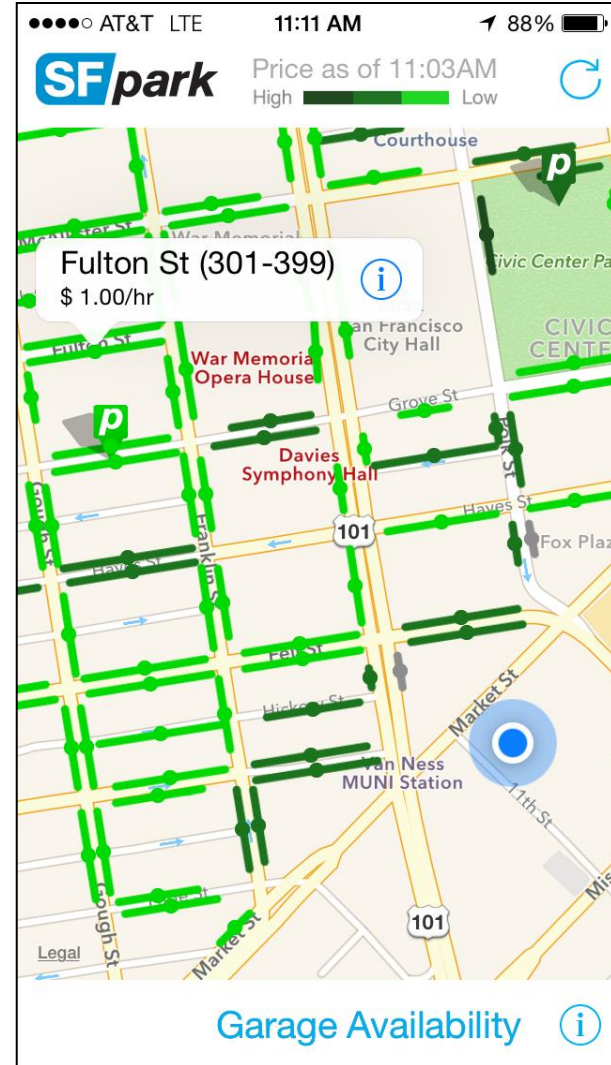
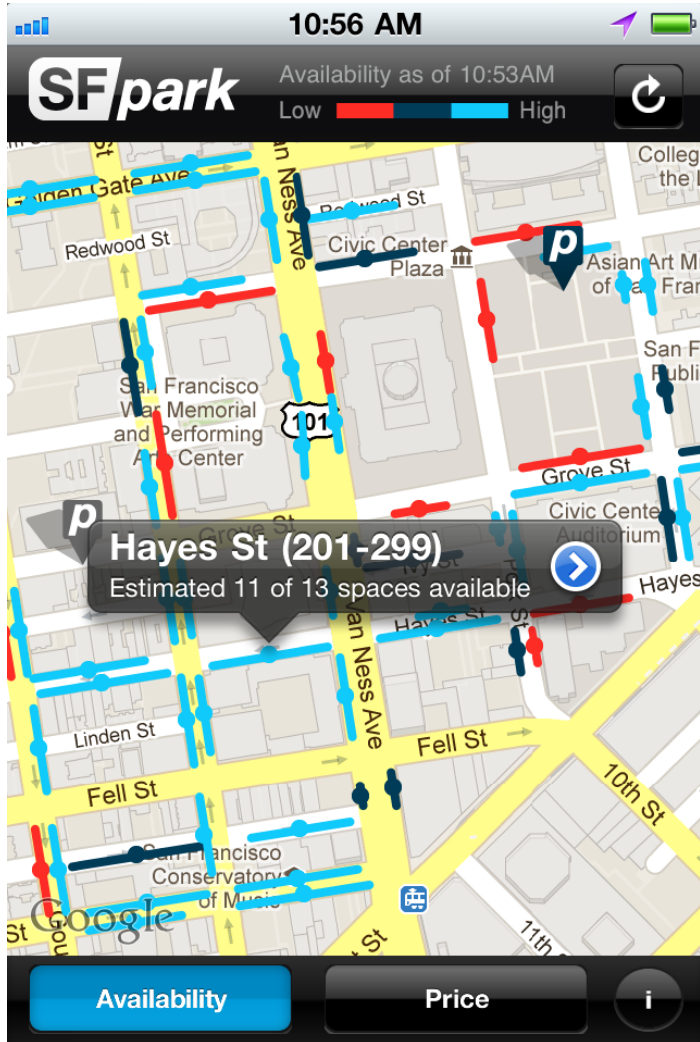


Lessons learned

- What worked well
 - Pilot project approach
 - Transparent, rules-based, and data-driven process
 - Clear goals and policies
 - Large investment in communication and customer experience

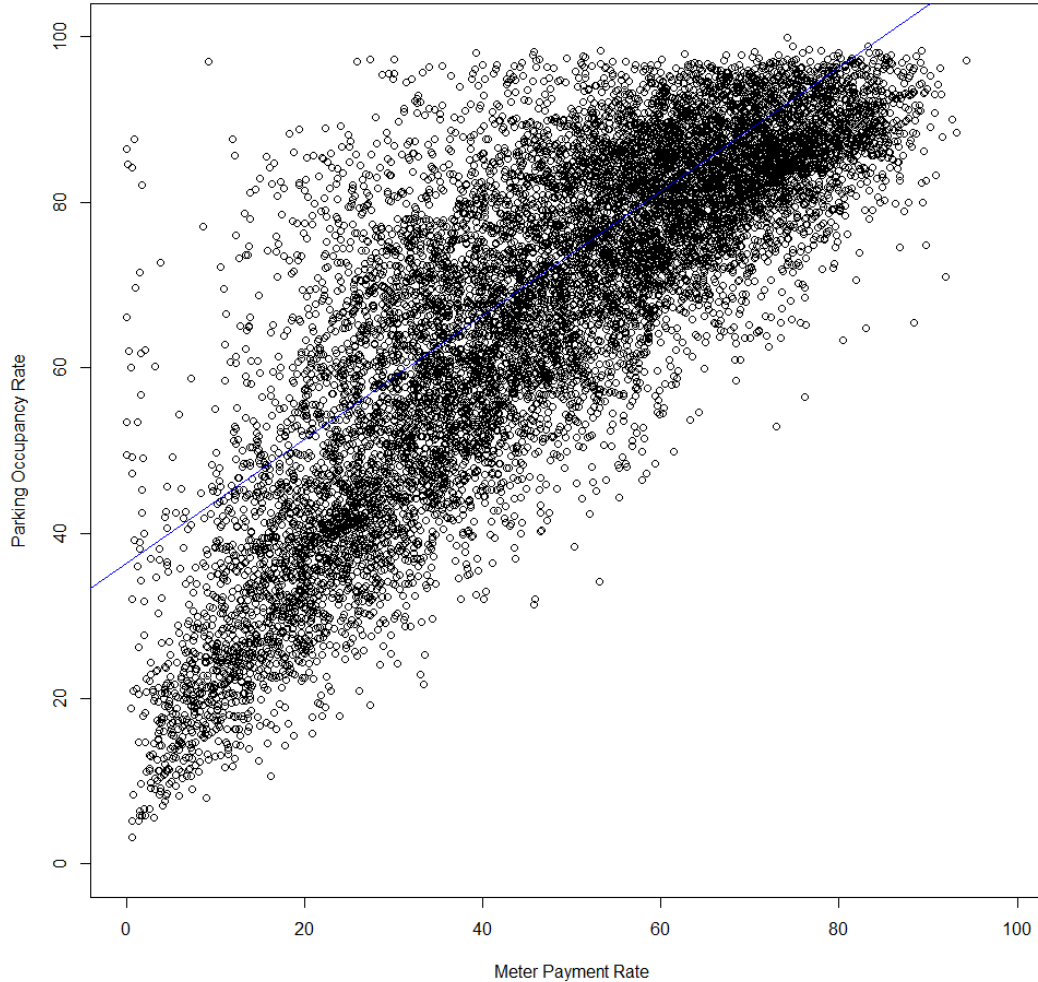
- What was challenging
 - This approach is very IT intensive
 - Implementing new technologies and procedures
 - Parking sensors are a nascent product/industry
 - Culture change takes time

App changes



Modeling occupancy from meter payment

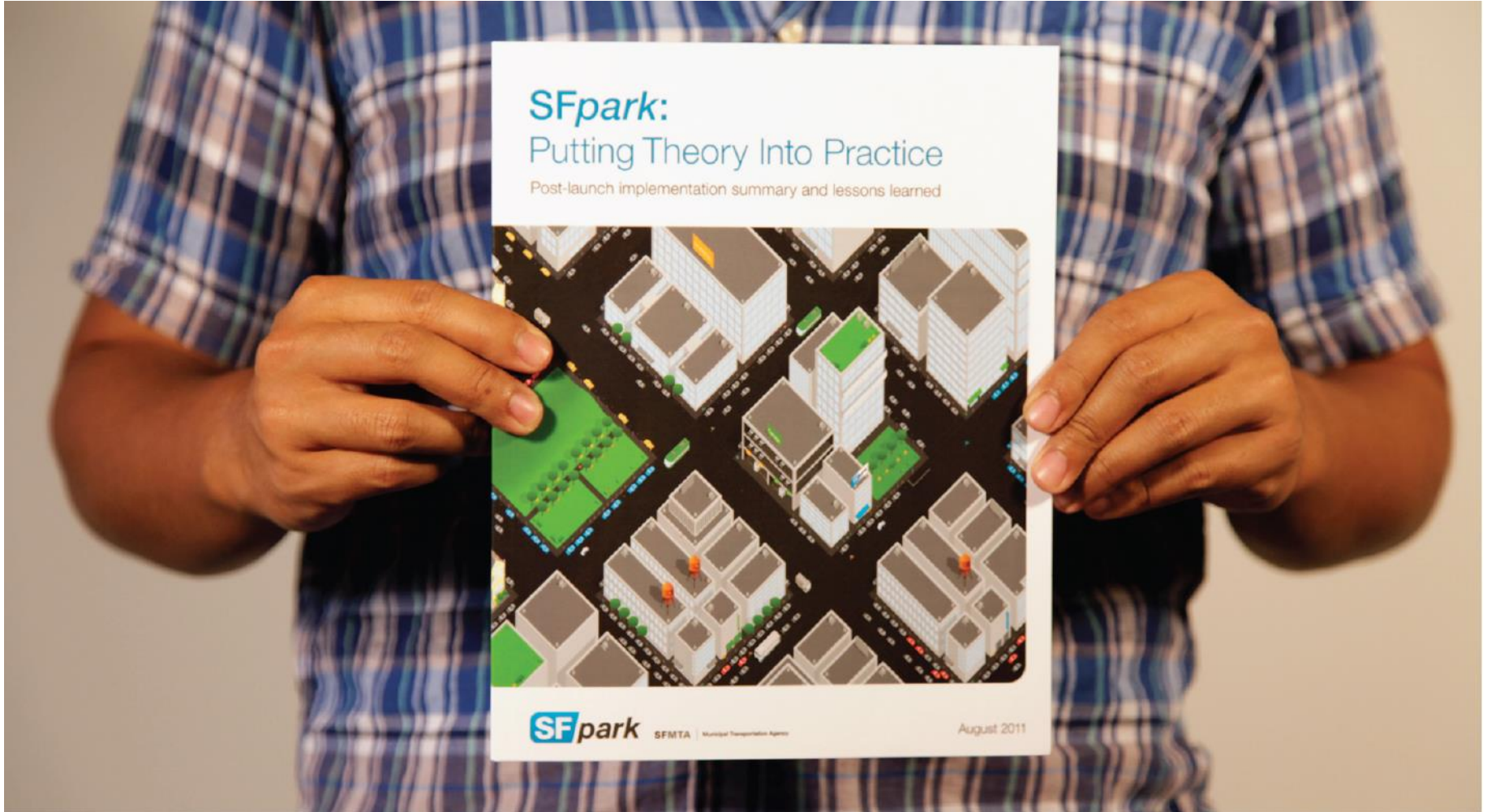
Meter Payment Rate and Parking Occupancy Rate



What's next

- Upgrade meters citywide
- Evaluate pilot projects
- Perform first rate adjustment without sensors
- Develop proposal to expand *SFpark* citywide

Sharing our resources



Thank you

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SFMTA

www.SFpark.org