



Intelligent Parking Management

TRB -- Workshop 167
Nexus Between Parking Pricing and Congestion Pricing
Sunday, January 11, 2009, 1:30 PM - 4:30 PM, Hilton





Context >> SFMTA

- Plans, operates, and manages San Francisco's transportation system
 - Transit
 - Streets (not freeways)
 - Parking
 - Taxis
- Manage the transportation system as coherent whole
- Parking: both on-street and part of the off-street supply





Context >> How is parking managed now?

- **How?**
 - Old meters – only accept coins/stored value cards
 - Limited data about demand
 - Emphasis on time limits to achieve turnover goals
 - On-street parking cheaper than off-street
- **Result for customers**
 - Parking can be hard to find and hard to pay for
 - Unpredictable parking search time
 - More congestion >> hurts transit riders





SFpark: What is it?

- **Parking-based congestion management**
- **Intelligent parking management**
- **Managing parking as...**
 - Coherent whole (on and off street)
 - Crucial element of transportation system (rather than in isolation)
 - Powerful means to achieve City's goals for transportation system

Doing more with what we have



Goals and benefits

Primary goal of pilot projects

Manage parking supply and demand to reduce congestion

How parking management can reduce congestion

- Reduce circling
- Reduce double parking
- Manage auto trip demand + shift mode

Expected benefits

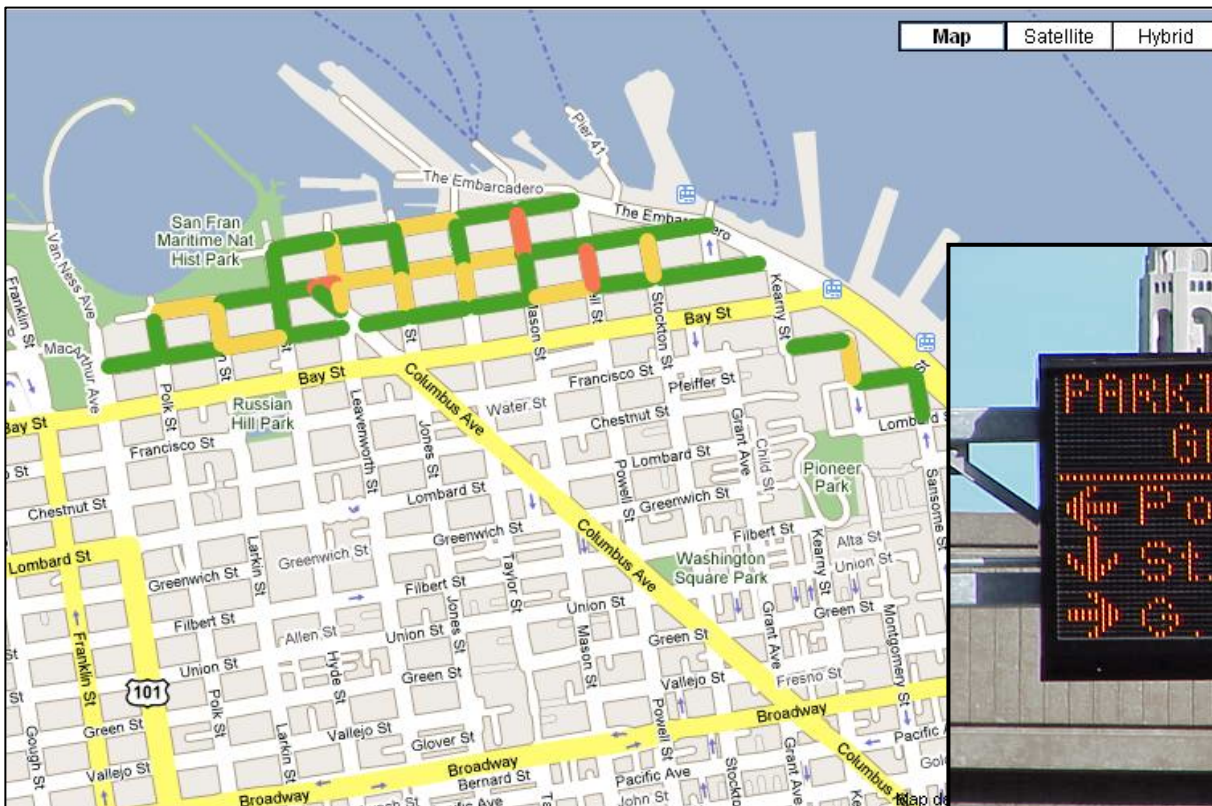
- Make driving more predictable and convenient travel choice
- Improve transit reliability and speed
- Reduce greenhouse gas emissions
- Increase pedestrian, bicyclist, and motorist safety
- Improve economic vitality of pilot areas



How achieve SFpark goals?

1) Parking information

- Information about location, availability, and price
- Variable message signs, web, PDAs, text message





2) Parking management + 3) Enforcement

- **Parking management**
 - Demand-responsive pricing to manage towards availability targets
 - Relaxing time limits
 - Right relationship between price of on- and off-street parking
 - New meters make it easy to pay
- **Enforcement**
 - New low-tech deployment strategies
 - Utilize new technologies



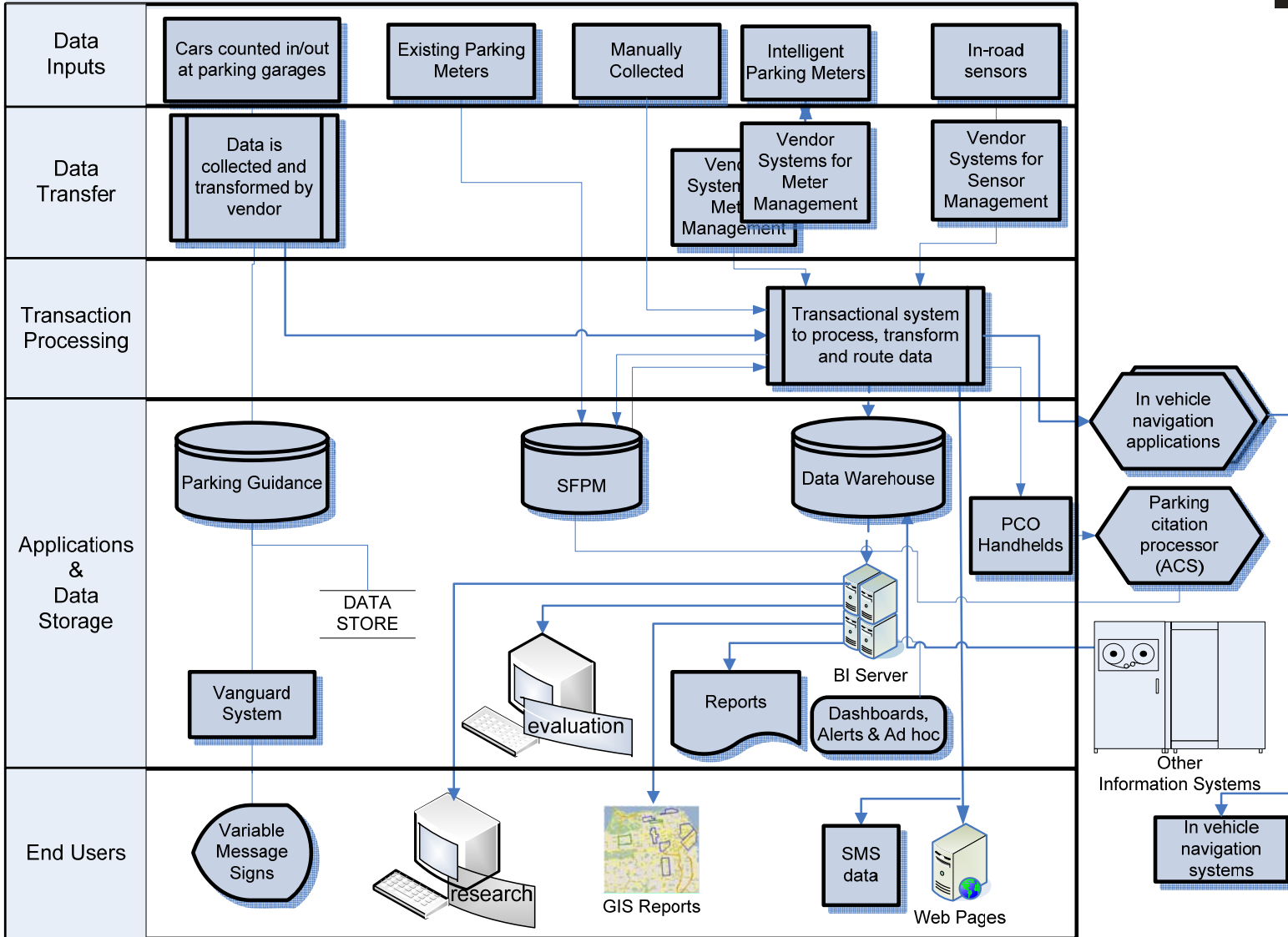


How will prices change?

- Prices will vary by:
 - Location
 - Day of week
 - Time of day
 - Special events
- Adjusted gradually and periodically – e.g., every 4 to 6 weeks, up or down by no more than \$0.50/hour
- Give people time to learn prices and adjust behavior

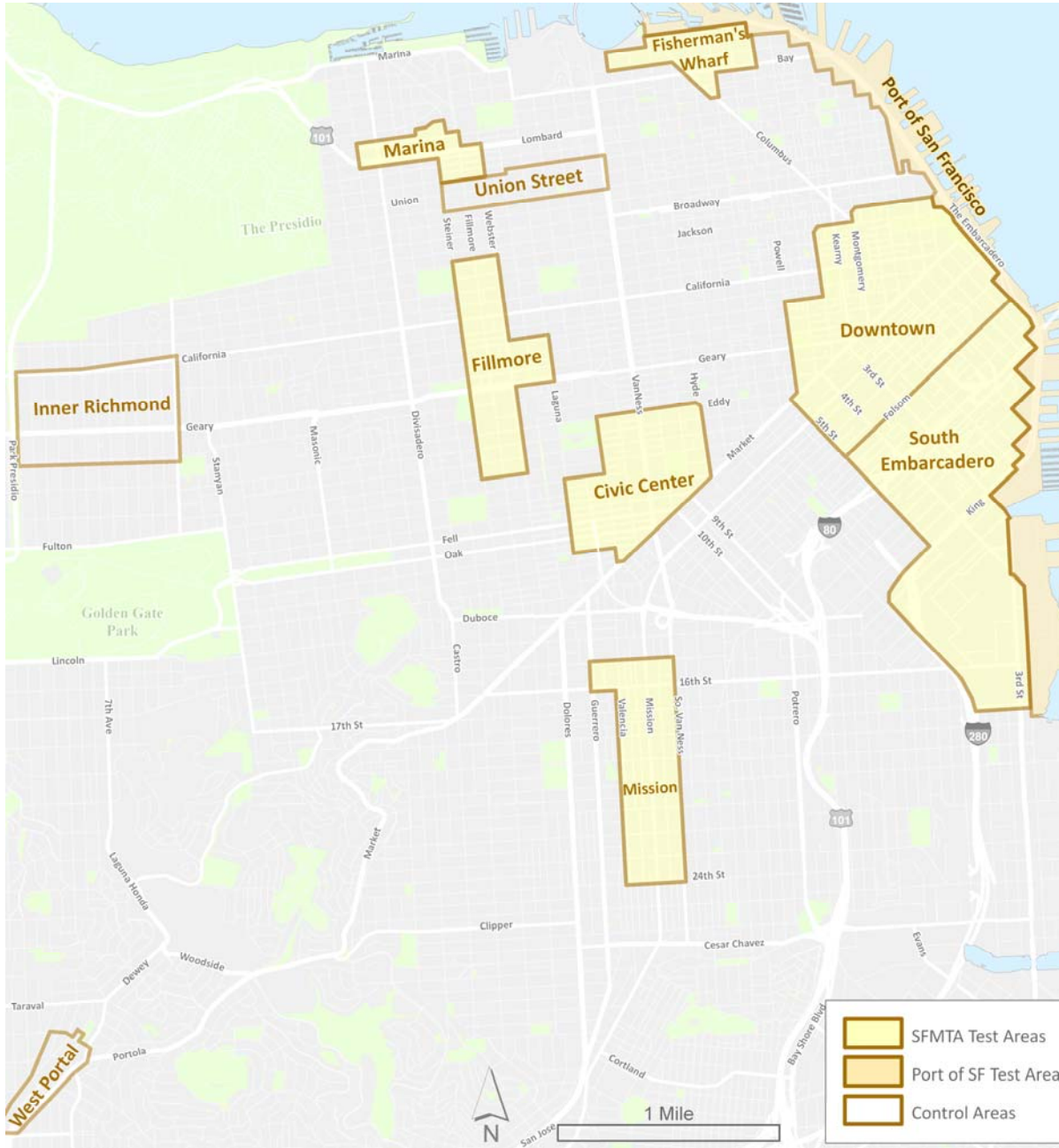


SFpark data flow diagram V 4.2
January 6, 2009



Scope

- \$24.75 million
- ~25% of metered on-street parking spaces (6,000)
 - New sensors
 - New meters
- ~11,500 off-street parking spaces
- Parking information
- 18 months



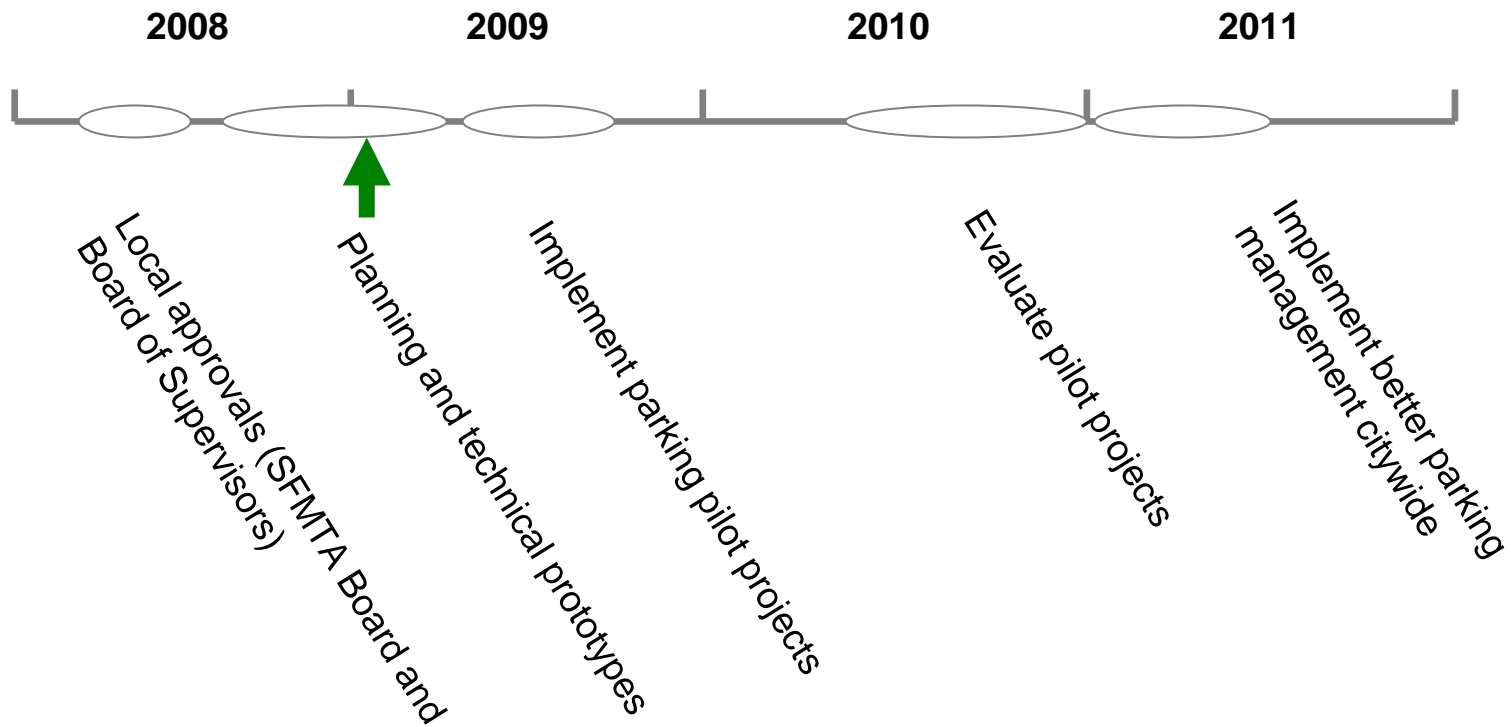


SFpark: Project status

- **Political approvals/ environmental clearance**
- **Implementation planning**
 - Technical prototypes
 - Survey of supply
 - Communications / marketing
 - Technical plans (SEMP)
- **Funding obligation**
- **RFPs**
- **Implementation**



SFpark pilot projects timeline





How promising is a parking-based approach to congestion management?

Advantages

- People are accustomed to paying for parking (few interface issues)
- Parking prices are large factor in travel decisions
- Price adjustments can be subtle and respond to changing demand
- Technically straightforward; leverage existing infrastructure
- Low cost to implement
- Easy to replicate in other cities
- Only local political approvals are necessary (not state)
- No privacy issues
- Strong value proposition: many direct benefits for drivers
- Works well with other TDM / congestion pricing strategies

Issues

- Community support ?
- Revenue generation ?
- Effective ?

Thank you ----

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