parkdc

Penn Quarter/Chinatown

Multimodal Value Pricing Pilot and Curbside Management

Program Overview

April 24, 2016

Image courtesy of Mr. T in DC

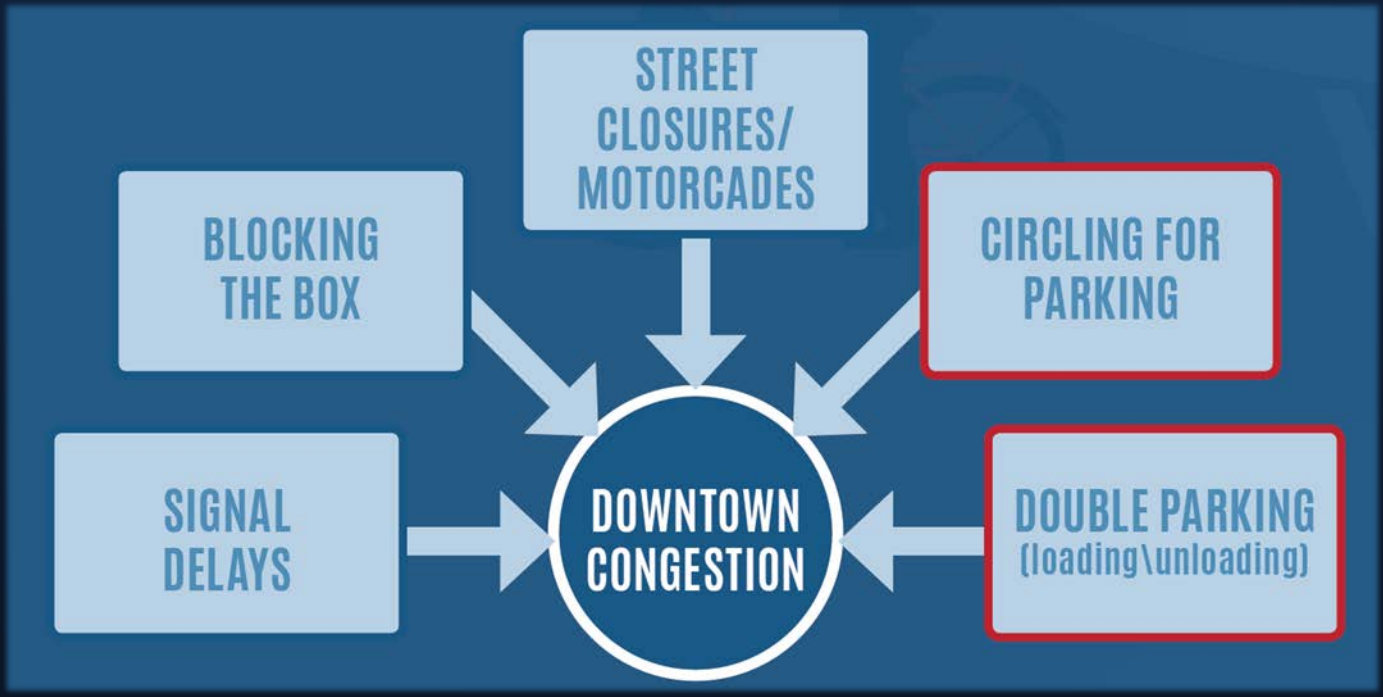
Outline

- parkDC: Penn Quarter/Chinatown program overview
- What to expect
- Schedule and Next Steps

PARKDC: PENN QUARTER/ CHINATOWN PROGRAM OVERVIEW

Why parkDC: Penn Quarter/Chinatown?

- The “agony” associated with finding a place to park has negative effects
- Circling to find parking and double parking both contribute to roadway congestion



Parking Issues Video

http://vimeo.com/97065285

What will parkDC: Penn Quarter/Chinatown do to improve the customer parking experience?

Provide a smarter approach to rebalance the supply and demand of parking!

- Provide better parking information
- Increase number of available parking spaces
- Reduce time to find an available parking space
- Encourage use of other modes

How will parkDC: Penn Quarter/Chinatown rebalance supply and demand of parking?

- Demand-based pricing

- Provide real-time parking availability information

Before Demand-Based Pricing

High Demand for Parking – Moderate Prices

Low Demand for Parking – Moderate Prices

After Demand-Based Pricing

High Demand for Parking – Higher Prices

Low Demand for Parking – Lower Prices

Local Examples of Demand-Based Pricing

I-495 HOT Lanes (Opened November 2012)

http://www.aaroads.com/guide.php?page=i0495oava

95 Express Lanes (Opened December 2014)

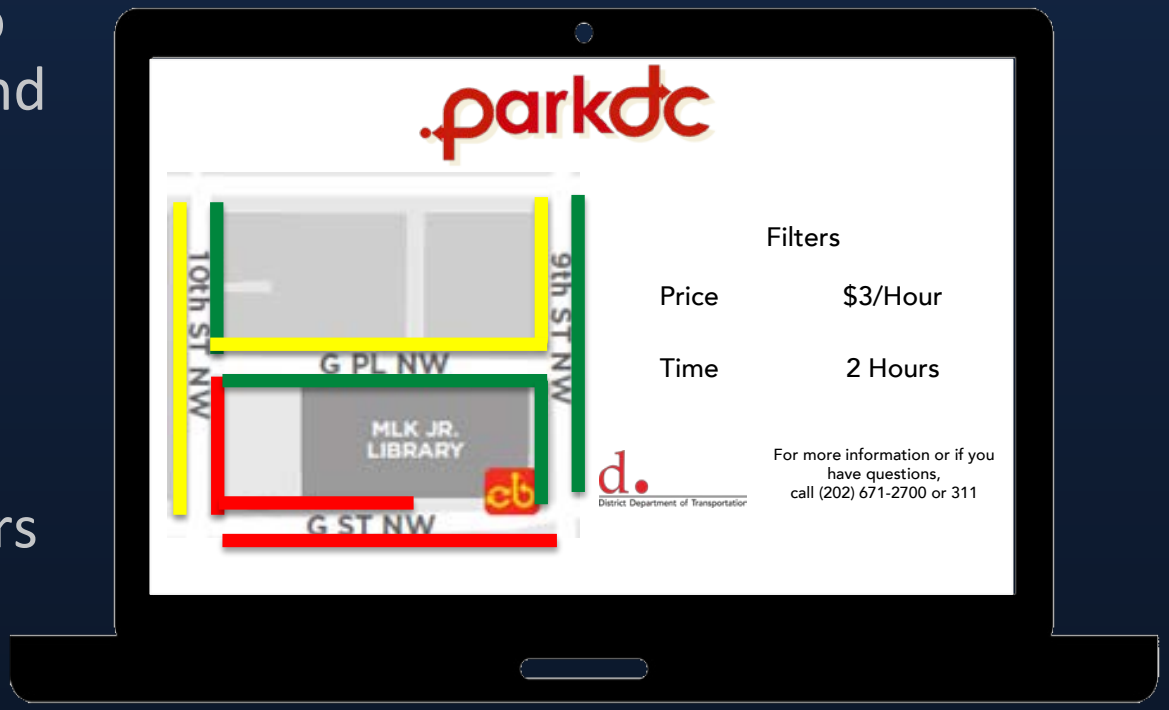
http://www.95expresslanes.com/album/50

WMATA Metrorail Time of Day Pricing

Monday-Thursday		Friday		Saturday	
5:00 a.m. – 9:30 a.m.	Peak	5:00 a.m. – 9:30 a.m.	Peak	7:00 a.m. – Midnight	Off-Peak
9:30 a.m. – 3:00 p.m.	Off-Peak	9:30 a.m. – 3:00 p.m.	Off-Peak	Midnight – 3:00 a.m.	Peak
3:00 p.m. – 7:00 p.m.	Peak	3:00 p.m. – 7:00 p.m.	Peak		
7:00 p.m. – Midnight	Off-Peak	7:00 p.m. – Midnight	Off-Peak	**Sunday**	
		Midnight – 3:00 a.m.	Peak	7:00 a.m. – Midnight	Off-Peak

Provide parking information

- Information on real-time parking availability to customers via web and apps
(Coming in Autumn 2016!)
- Open data feed so multiple app providers can use
- Work with parking garages to share their data, too



Uniqueness of parkDC: Penn Quarter/Chinatown – Cost-effective approach

- Other cities (Los Angeles, San Francisco, and Seattle) use demand-based pricing and provide parking information in select areas.

- The cost of assets and data collection from these other cities' programs were deemed unsustainable for D.C.

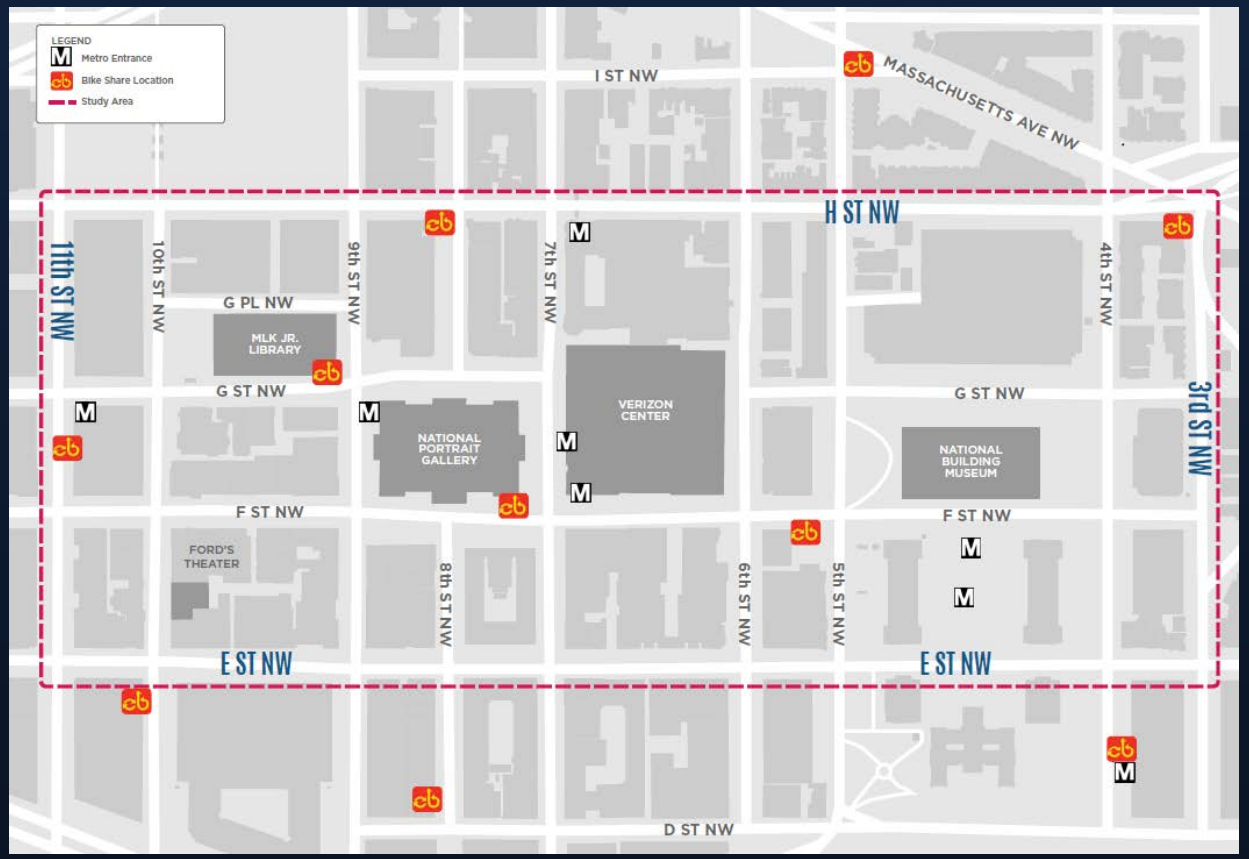
- D.C. is using the Penn Quarter/Chinatown area as a pilot to identify a cost-effective system that can be expanded to the rest of the District.

WHAT TO EXPECT

parkDC: Penn Quarter/Chinatown Study Area

The pilot test is only being applied to this initial study area. If DDOT finds a system that works, they will consider extending to other areas of the District.

- 114 block faces
- ~1000 metered spaces
- 30 loading zones
- 6 bikeshare stations
- 2 car sharing spaces
- 3 major Metro stations
- WMATA bus stops
- Freeway-arterial Interaction
- Different land uses



parkDC: Penn Quarter/Chinatown Project Goals

- Reduce time to find parking:
  - Increased parking availability
  - More reliable parking information for drivers
- Potential to reduce congestion, increase safety, and encourage use of other modes
- Improve turnover of high-demand parking spaces
- Provide incentives (lower prices, longer time limits) on low-demand parking spaces

Key Project Milestones

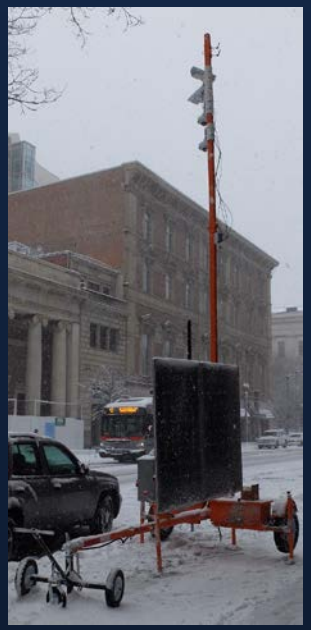
1. Transition to pay-by-space parking
2. Install parking occupancy detection
3. Improve parking signage
4. Implement demand-based parking pricing changes
5. Provide parking information
6. Conduct surveys and impact assessments

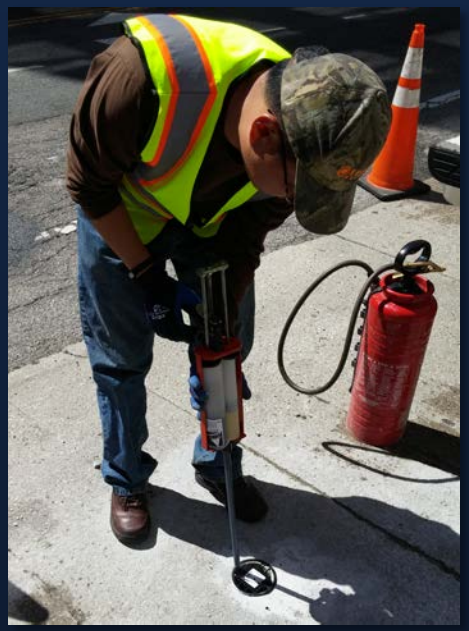
1. Transition to pay-by-space parking

- Completed end of October 2015
- Improves the customer experience
  No more returning to your car to display a receipt!
- DDOT collected data to determine if pay-by-space affects the number of available parking spaces
  It does not!

2. Install parking occupancy detection

- 500 sensors installed in March of 2016
- Additional occupancy data collected using portable cameras throughout 2015
- Pilot test determines the minimum number of sensors required if the program is expanded

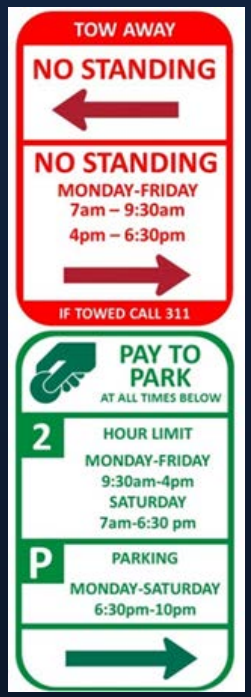


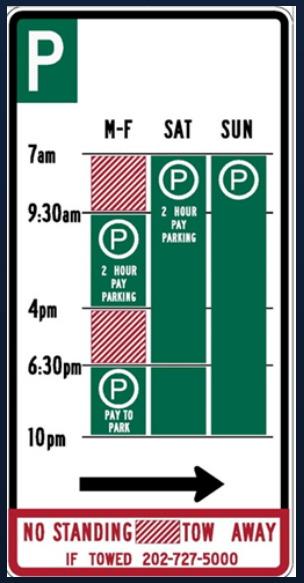


3. Improve parking signage

New Signage

- Improve legibility of current parking restriction signs
- Test new designs





4. Implement demand-based parking pricing changes

- Price adjustments quarterly
- Different pricing by time of day (like Metro pricing)

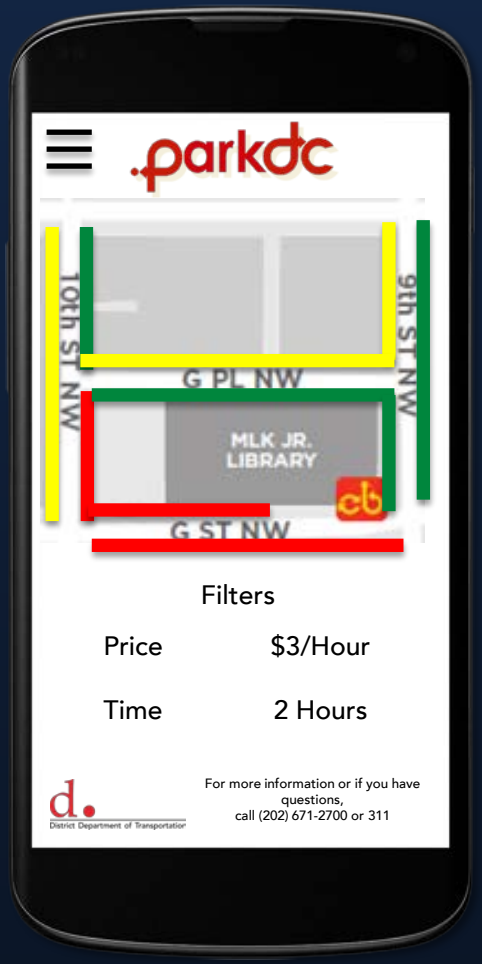
CURRENT Parking Prices Per Hour (same price throughout)			
	M-F	Sat	Sun
7am – 9:30am	No parking	$$$	Free
9:30am – 4pm	$$$	$$$	
4pm - 6:30pm	No parking	$$$	
6:30pm – 10pm	$$$	$$$	
Overnight	Free	Free	

FUTURE Parking Prices Per Hour (different rates based on congestion; adjusted periodically)			
	M-F	Sat	Sun
7am – 9:30am	No parking	$	Free
9:30am – 4pm	$$	$$$$	
4pm – 6:30pm	No parking	$$$	
6:30pm – 10pm	$$	$$$	
Overnight	Free	Free	

5. Provide parking information

- Information on real-time parking availability and pricing to customers via web and apps
  (Coming in Autumn 2016!)

- Future updates to possibly include regulatory and restriction information, and a portal for feedback on unclear signage



6. Conduct surveys and impact assessments

- Survey of business owners/operators, customers, and delivery drivers
- Time to find parking analysis
- Placard usage review
- Cruising for parking evaluation
- Study of traffic volumes, Capital bikeshare data, and Metro Rail and Metrobus ridership to determine effects (if any)
- Assessment of technology impacts

SCHEDULE AND NEXT STEPS

Key Project Activities and Timeline…

Q3 2014	› Kick off project
Q1 2015	› Prepare project documentation › Develop new signage
Q2&3 2015	› Install “asset lite” parking occupancy detection › Test new systems › Transition to pay by space
Q4 2015	› Perform baseline conditions assessment
Q1 2016	› Install parking occupancy sensor equipment
Q2 2016	› Develop pricing algorithm and traveler information
Q3 2016	› Install new signage › Implement demand-based parking pricing changes › Provide real-time parking availability information
Quarterly	› Adjust pricing
Q3 2017	› Perform “after” conditions assessment
Q4 2017	› Complete comprehensive impact assessment

More information

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