



## CHAPTER 4

### Stakeholder Outreach & Coordination

Reducing the  
time to find  
an available  
parking place





## 4 Stakeholder Outreach and Coordination

Stakeholder buy-in was one of the keys to success for the parkDC pilot. This section summarizes how DDOT generated support through a robust and comprehensive outreach and coordination effort.

### 4.1 NEED FOR EFFECTIVE COMMUNICATION

Introducing and implementing a concept that uses price to manage demand comes with some inherent risks. Unless policymakers and the public are educated about the goals, approach and benefits, there is the risk of such efforts being construed as “price gouging.” To mitigate the risks, DDOT adopted a conservative, incremental approach to its price change strategies. In addition, the project team recognized the importance of taking a thoughtful, comprehensive approach to stakeholder coordination and customer outreach. This approach was instrumental in helping the project avoid negative customer response or press coverage, both of which could have derailed it before the pilot could be completed and undermined any potential for future expansion. This chapter presents the overall communication strategy and describes the stakeholder identification, outreach, and customer experience.

### 4.2 COMMUNICATION STRATEGY

The communication strategy was guided by the Communication Plan (found in the Data Book), which established goals and objectives, defined stakeholders, identified key messages, laid out an outreach strategy, identified appropriate outreach materials and channels of communication, specified a timeline and outlined how the results of the pilot would be presented to stakeholders.

DDOT established the following goals for the communication plan, noting that they would shift throughout the course of the pilot:

- Inform stakeholders of the design, execution, and refinement of the pilot
- Generate public support for the pilot
- Help stakeholders and public better understand how the pilot works
- Keep stakeholders aware of the pilot's status, and inform stakeholders of the results of the pilot and considerations for ongoing deployment

### 4.3 STAKEHOLDER IDENTIFICATION

DDOT identified stakeholders for the project and detailed how the project team would address their respective needs throughout the pilot. The communication plan included a detailed profile of each stakeholder that outlined their primary needs, project impacts, benefits, and risks. The stakeholders identified by the project team and engaged throughout the pilot are summarized in Table 4-1.

**Table 4-1 Pilot Stakeholders**

Stakeholder	Group	Role
District Department of Transportation	Planning & Sustainability Division	▪ Research, freight
	Parking & Ground Transportation Division	▪ Curbside management planning and operations ▪ Coordination with DDOT curbside management initiatives
	Information Technology & Innovation Division	▪ Technology deployment coordination
	Community Engagement Division	▪ Customer outreach
	Policy and Legislative Affairs Division	▪ Parking policy
	Traffic Operations and Safety Division	▪ Signs and markings ▪ Intelligent transportation systems
	Customer Service Clearinghouse Division	▪ Customer outreach
Other District Agencies	Department of Public Works	▪ Parking enforcement
	Department of Motor Vehicles	▪ Adjudication
	Office of Unified Communication	▪ Customer service calls
	Metropolitan Police Department	▪ Enforcement
	Office of the Chief Technology Officer	▪ Intelligent voice recognition system for call intake ▪ Data collection and technology testing ▪ Mobile application deployment
Businesses and Commercial Entities	DowntownDC Business Improvement District	▪ Information sharing ▪ Customer and community outreach
	Penn Quarter Neighborhood Association	
	Motorcoach /Freight trade groups	
	Washington Parking Association	
	Apartment and Office Building Association add Verizon Center/Capital One Arena	
Media	Print	▪ Information sharing ▪ Customer and community outreach
	Radio	
	TV	
	Blogs	
	Social Media	
Policy/	Executive Office of the Mayor	▪ Information sharing ▪ Executive approvals

Stakeholder	Group	Role
Decision-Makers	Council of the District of Columbia	<ul style="list-style-type: none"> <li>Information sharing</li> </ul>
	Advisory Neighborhood Commission 2C Leadership	<ul style="list-style-type: none"> <li>Information sharing</li> <li>Customer and community outreach</li> </ul>
Customers	General Public	<ul style="list-style-type: none"> <li>Information sharing</li> </ul>
	Washington Area Bicycle Association	<ul style="list-style-type: none"> <li>Information sharing</li> <li>Community outreach</li> </ul>
DC Residents	Advisory Neighborhood Commission 2C Neighborhoods	<ul style="list-style-type: none"> <li>Information sharing</li> <li>Customer and community outreach</li> </ul>

## 4.4 OUTREACH AND MESSAGING

DDOT identified and distributed key messages throughout the pilot at significant project milestones to clarify stakeholder issues and answer frequently asked questions. These key milestones included the launch of the pilot, migration to demarcated curbside parking, and prior to each price change, including the launch of the real-time mobile applications in conjunction with the first price change. The pilot team adapted the messaging for the outreach program as their understanding of common stakeholder concerns evolved.

After identifying stakeholders and initial key messages, DDOT developed a detailed outreach plan and associated materials to effectively communicate with all pilot stakeholders. The three primary outreach strategies used in the pilot included email updates, in-person meetings, and outreach through social media and other online platforms. The following outreach materials were developed:

- Summary Flyer:** Used to convey key messages to a general audience, the flyer included contact information, so stakeholders could request more information or ask questions (Figure 4-1).
- Press Releases:** Disseminated throughout the duration of the pilot, the press releases provided news announcements, updates on key milestones, and project status updates.
- Frequently Asked Questions (FAQs) Documents:** Distributed in conjunction with press releases, the FAQs reflected changing pilot goals and key messages.
- Formal Letters:** Delivered to local Advisory Neighborhood Commissions (ANC—the District’s smallest unit of representative local government) and other stakeholders in advance of each rate change.
- Public Presentation Material:** A standard public presentation was developed to provide pilot information to a general audience at public meetings and other in-person events. The presentation was updated throughout the pilot to reflect the changing project status and key messages.
- Website:** Developed to provide pilot information to stakeholders. Along with a dedicated web page on DDOT’s official website, the pilot website served as the primary source of information

for stakeholders. It included links to the latest press release, FAQ documents, and the public presentation.

- **Social media:** Used to convey timely messages and responses to customer concerns.
- **Advertising:** Used to draw attention to upcoming project milestones, including advertisements for the mobile applications on bus shelters in the pilot area.
- **On Street Ambassadors.** Supported the transition to pay-by-space by providing answers to customers in the field as they were paying for parking.

Figure 4-1 parkDC Summary Flyer

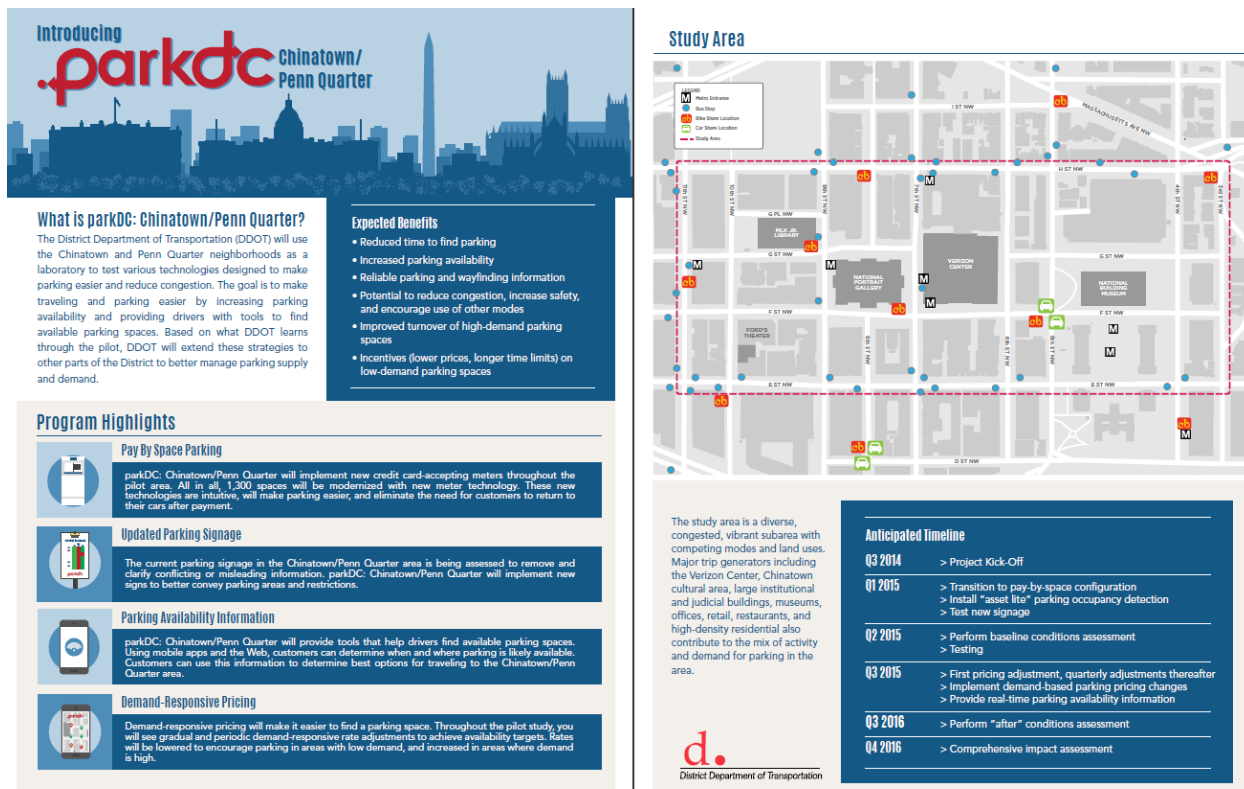
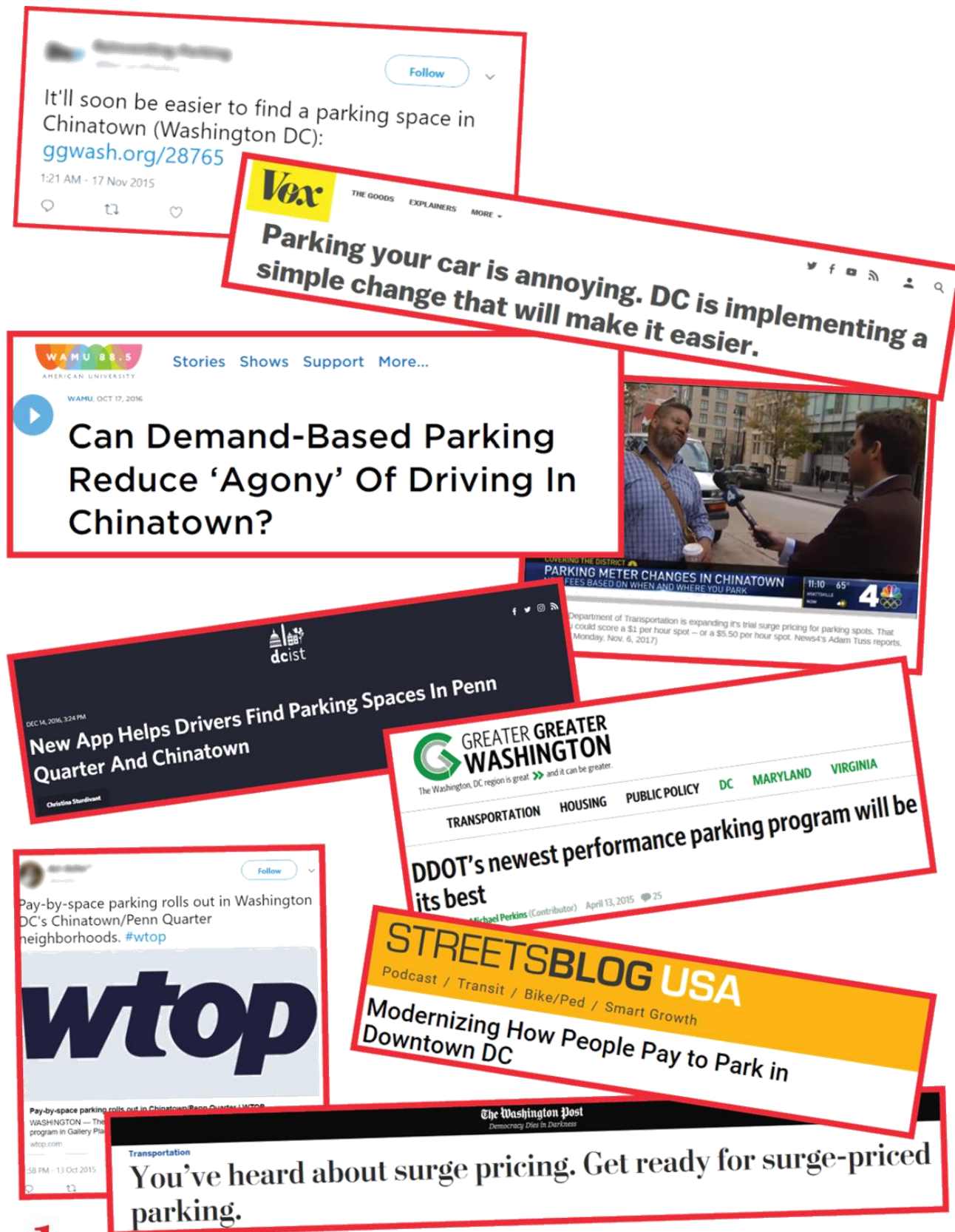




Figure 4-2. Selection of headlines from media outlets about the pilot



Based on the Parking Pricing Business Rules developed at the start of the pilot, DDOT aimed to inform stakeholders about each upcoming price change at least 10 business days prior to the implementation date.

As part of the stakeholder coordination and customer outreach effort, DDOT held media events, spoke at numerous public meetings, held meetings with the Downtown DC Business Improvement District (BID) and the Penn Quarter Neighborhood Association, conducted a press event for local media, and submitted papers and abstracts to multiple annual transportation and parking conferences (Table 4-2).

**Table 4-2. Sampling of Outreach Events**

Event	Type	Date
Media Events	Project Overview Media Briefing	December 2014
	Pay-By-Space Conversion Media Outreach	October 2015
	First Price Change Media Briefing	October 2016
	Fox 5 DC Interview	December 2016
	Washington Post interview	November 2015, February 2017
Public Meetings	Ward 2 ANCs	February 2015, September 2015, October 2016, February 2017, July 2017, September 2017
	Pay-By-Space Community Outreach	April 2015
Stakeholder Meetings	DowntownDC BID	December 2014, January 2017, February 2017, May 2017
	Penn Quarter Neighborhood Association	September 2015, October 2016
	Council Member Meetings	March 2015
	Federal Highway Administration	March 2015, January 2017, October 2017
	Parking Garage Operators	March 2015, May 2016, September 2016
Conference Presentations	<b>Institute of Transportation Engineers</b>	
	▪ Mid-Colonial District Meetings	April 2015, April 2016, April 2017
	▪ Washington D.C. Section Meeting	April 2016
	<b>International Parking Institute</b>	
	▪ IPI Conference & Expo	June 2015
	▪ Webinar	September 2015
	<b>Intelligent Transportation Systems</b>	
	▪ ITS America	June 2016
	▪ World Congress	October 2017
	<b>Transportation Research Board</b>	
	▪ parkDC: Penn Quarter and Chinatown--Sustainable Approach to Performance Pricing for Parking in Washington, D.C.	January 2016
	▪ Asset-Lite Parking: Using Big Data Analytics to Develop Sustainable Smart Parking Solutions in Washington, D.C.	January 2016
	▪ "To Demarcate or Not to Demarcate" On-Street Parking Spaces: Analytical Approach	January 2016
	▪ Hunt for Perfect Parking Occupancy Detection: Evaluation of Technologies and Their Ability to Address Urban Challenges	January 2017

Event	Type	Date
	<ul style="list-style-type: none"> <li>Sensors and the City: Urban Challenges for Parking Occupancy Detection and Pricing</li> </ul>	January 2018
	<ul style="list-style-type: none"> <li>If You Price It, Will They Change? Assessing the Effects of Demand-Based Parking Pricing on Customer Behavior in Washington, D.C.</li> </ul>	January 2018
	<ul style="list-style-type: none"> <li>Measuring Cruising for Parking in Washington, D.C., Using Dense, Ubiquitous AVI Sensor Networks</li> </ul>	January 2018
	<b>National Parking Association</b>	October 2018
	<b>Federal Highway Administration</b>	
	<ul style="list-style-type: none"> <li>FHWA Workshop on State of the Practice: Contemporary Tools and Approaches to Parking Pricing and Management</li> </ul>	March 2016
	<ul style="list-style-type: none"> <li>Congestion Pricing Workshop</li> </ul>	May 2018
	<b>Global Cities Team Challenge</b>	May 2015, August 2017
	<b>Mid-Atlantic Parking Association</b>	November 2017
	<b>Georgetown Smart Cities Assembly</b>	April 2016, April 2017

This report and associated documents (Executive Summary and Data Book) comprise the final element of the pilot’s communication plan, which seeks to inform all stakeholders about the pilot findings and recommendations for expanding demand-based parking pricing in the District.

## 4.5 CUSTOMER EXPERIENCE

When describing the “agony” associated with finding parking, customers most often referenced finding and paying for parking. The pilot team viewed informing the search for parking as an opportunity to improve the customer experience while also mitigating issues leading to downtown congestion, such as circling for parking and double parking. Along with providing stakeholders with advance notice of impending pricing changes, DDOT employed a range of strategies to make it easier for people to find and pay for parking in the pilot area, including customized meter decals, a new parking sign design pilot, and mobile applications with real-time traveler information.

### 4.5.1 Real-Time Traveler Information

The parkDC team deployed an Application Programming Interface (API) which is a software go-between that allows two applications to speak to each other, available upon request to software developers or researchers. The API provides real-time information on parking pricing and occupancy data for the pilot area. DDOT worked with application (app) developers to release two high-quality mobile apps: parkDC and VoicePark.





Recognizing that real-time information was a central component of the pilot's communication strategy, DDOT wanted to make multiple real-time portals available to customers where they could access this information. Since the real-time parking availability app development industry was in a state of flux, DDOT chose to develop its own mobile app while continuing to make the API available to independent developers. The parkDC app developed by DDOT provides parking availability and rate information for on-street parking in the zone, and importantly ensures that real-time information will remain available to customers. On-street availability is shown using green, orange and red lines, which indicate low, medium or high numbers of spaces available (Figure 4-2). Current hourly prices are provided for each block. The parkDC app also provides location, daily rates and hours of operation for parking garages. parkDC has been downloaded at a rate of approximately 300 users per month since it was released in December 2016, with approximately 2,600 total downloads.



VoicePark, developed by an independent app developer, delivers turn-by-turn guidance to available on- or off-street parking in the zone area. The app shows the estimated number of available on-street spaces along with hourly rates (Figure 4-3). VoicePark also provides location, daily rates and hours of operation for area parking garages. VoicePark has been downloaded at a rate of approximately 310 users per month, and users have initiated an average of 8.3 sessions since the app was released in December 2016. It takes less than a minute for VoicePark's server to notify the VoicePark team when their system is down in the DC pilot area, and less than one hour after that to restore service.

Figure 4-3 Screen captures of the parkDC mobile application

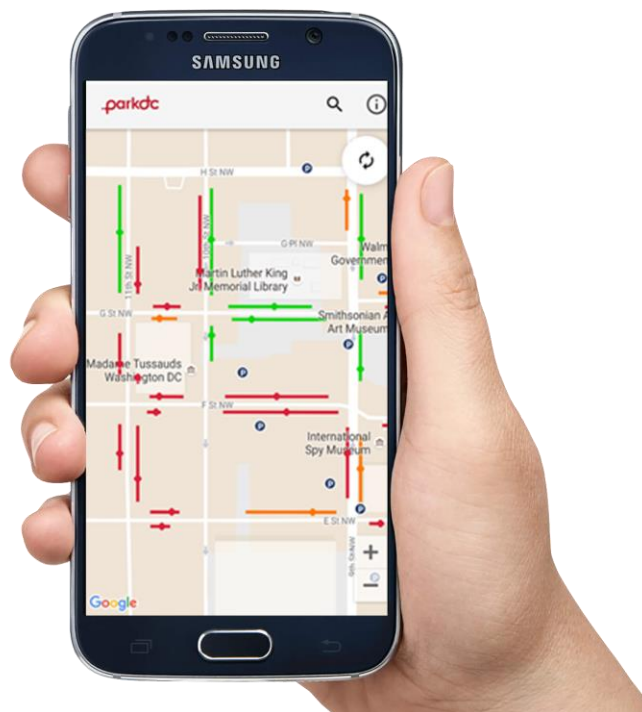
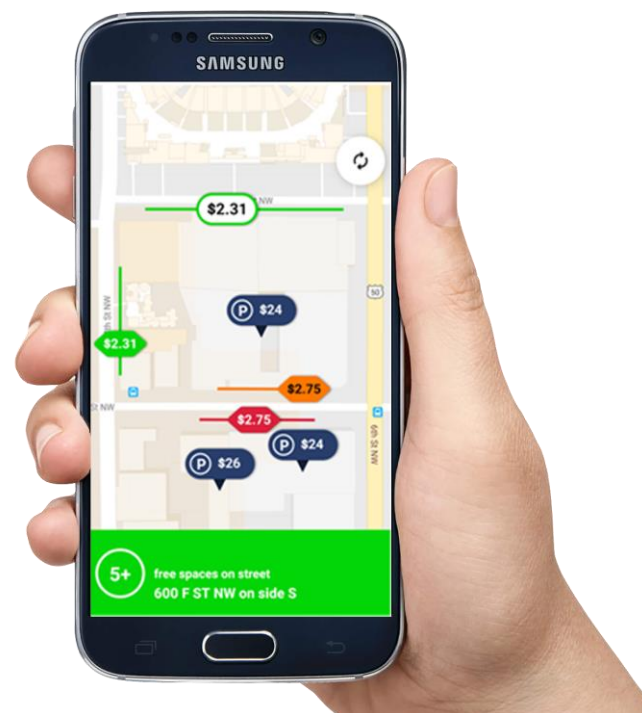


Figure 4-4 Screen capture of the VoicePark mobile application



The VoicePark team provided DDOT with quality assurance/quality control assistance throughout the app deployment process, sharing real-time data about outputs from DDOT's API for the team to compare with outputs from the pilot's internal system. VoicePark's input helped the pilot team fine tune the API.

Both apps allow stakeholders to see how likely they are to find parking on a given block face and how much it would cost to park there. Stakeholders can use this information to decide whether they will drive to their destination or choose to walk, bike, or use transit instead. If they decide to drive, they will know where to look for parking. The apps aimed to take the guesswork, trial and error, and unnecessary circling out of users' travel. Advertisements for the parkDC app were placed in transit shelters in the pilot area, and all parking meter decals included information about it and a mention of the VoicePark app. Both apps were also referenced in all press releases and in most of the stories published by media outlets.

The parkDC team conducted a series of independent quality assurance/quality control tests on both apps and generally found that the accuracy of both apps improved over the year they were in operation. The results of this QA/QC process are described in greater detail in Chapter 5.

*Full results of the mobile application quality assurance/quality control assessments can be found in the parkDC Data Book.*

#### 4.5.2 Paying for Parking

The parkDC pilot sought to make it easier for customers to pay for parking by transitioning from a pay-and-display environment to a demarcated, pay-by-space configuration (Figure 4-5). In addition to occupancy detection benefits offered by the pay-by-space configuration, demarcated environments are generally more convenient. The pay-by-space configuration removes the need for users to return to their vehicle to display a receipt after paying. It is also easier for drivers of convertibles and motorcycles to comply in a pay-by-space area. It is difficult to display a receipt on a motorcycle, and in a convertible, a receipt can easily be stolen or lost. The pay-by-space environment also provides increased operational efficiencies, since there is no risk of paper jams at pay-by-space kiosks.

Figure 4-5. Pay-By-Space Parking Configuration





Figure 4-6. Meter decal and sign survey deployed in the field



### 4.5.3 Parking Meter Decals

The pilot team needed an eye-catching approach to inform motorists about new curbside rates in the study area. Parking meters in the study area were programmed to reflect the latest prices for each block, but unless a stakeholder was already preparing to pay for parking at a meter they were unlikely to know the prevailing parking rate. The pilot team employed calendar-style decals originally developed in New York City<sup>1</sup> and implemented in other cities across the country, to provide stakeholders with a snapshot of the prevailing parking rates on each block in the study area. The calendar style signs increase the clarity of the parking regulations and the project team hypothesized that they may reduce accidental improper parking during peak hour restrictions and other times when parking is prohibited. The 8.5 x 11 decals were placed on all pay-by-space meters and used bright colors and the parkDC logo to inform stakeholders that they were in a demand-based pricing zone. Further, the pilot team opted for a consistent color gradient across all decals (rather than using a scale specific to each decal's price range) to make it easier for customers to identify blocks that are cheaper or more expensive.

Figure 4-7. Initial Meter Decal (left) and Current Meter Decal (right)



<sup>1</sup> Elizabeth Stinson. *A redesigned parking sign so simple that you'll never get towed.* Wired. July 2014.  
<https://www.wired.com/2014/07/a-redesigned-parking-sign-so-simple-youll-never-get-towed-again/>



The pilot team deployed the parking meter decals at the start of each price change and received positive anecdotal feedback from stakeholders who used the decals to help identify cheaper blocks (Figure 4-6).

#### 4.5.4 Sign Inventory and Plan

Although much of the curb use and parking pricing information associated with the pilot was communicated to stakeholders via the website, mobile applications, and meters and associated decals, regulatory signage was and continues to be a key component of the parking system. The pilot team conducted a sign inventory and developed a plan to reduce clutter and increase the clarity of parking signs in the pilot area.

The sign inventory included geo-coding all parking signs in the study area, preparing geographic information system (GIS) mapping to indicate the allowable use of curbs in the study area, creating a curb data inventory that was consistent and compatible with other sign inventory activities at DDOT, and coordinating with DDOT's chief technology officer to ensure compatibility. The pilot team used Esri's ArcGIS Collector tool to document the location and type of each sign in the pilot area. After conducting the conditions assessment, the team provided recommendations as to whether or not signs should be removed, maintained or replaced in a detailed sign plan. Figure 4-7 shows an excerpt from the sign inventory and sign plan.

**Figure 4-8. parkDC Sign Inventory and Sign Plan Recommendations**

Pole ID	Location Map	Current Sign			Proposed Sign			Category	Comments
		Photo	Sign ID	Sign Type	Photo	Sign ID	Sign Type		
203,753			{384C9098-FE47-4F78-982F-BABF909E7D9D}	R-NS-046: HC				Remove Sign	Remove existing R-NS-046 sign; Remove pole
			{42B08703-4D8F-4E99-A5CF-D1FF0103CBA2}	R7-108: Limited Time Parking				Remove Sign	Remove existing R7-108 sign; Remove pole
203,754			{C9F42941-8350-4C26-B391-5C14ECF808B8}	R-NS-046: HC			R-DC-PTPCOIN; R-DC-PBC_PLAQUE	Replace Existing	Remove existing sign and install new R-DC-PTPCOIN and R-DC-PBC-PLAQUE signs;

The pilot's sign plan also included preparing a set of sign shop orders to replace parking signs within a subarea bounded by and inclusive of 9<sup>th</sup> Street NW to the west, H Street NW to the north, 7<sup>th</sup> Street NW to the east, and E Street NW to the south. The new signs, designed to improve legibility and reduce



clutter, were installed in September 2016 (Figure 4-8). A view of the original signs, other proposed sign options, and the recommended design which became the new signs, are seen in Figure 4-10. As shown, the signs were made to be more concise and provide higher-level information at the top.

The pilot team released an online survey in conjunction with the sign installation to collect stakeholder feedback on parking signage in the study area and the District at large. While the results of the survey were not statistically significant, they indicated that stakeholders preferred calendar style signs (such as the parkDC meter decal) and the new pilot signs to the parking signs traditionally used in the District. The survey also indicated that it took survey respondents less time to interpret calendar style signs than all other sign types, and that survey respondents were more confident about their interpretation of the calendar style signs.

**Figure 4-9. Pilot sign and placard advertising sign survey**



Figure 4-10. Prior sign (left) proposed new signs (middle) and recommended sign (right) in the pilot area

