

District Department of Transportation

REPORT TO COUNCIL:

Innovative Parking Practices on Residential Streets Study FY 2021-2022

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Overview

Pursuant to the Residential Parking Study Emergency Act of 2021,¹ the District Department of Transportation (DDOT) was tasked with conducting a study of parking practices on residential streets. The scope of the study focuses on residential streets near major commercial centers and includes the following:

- 1. An evaluation of the feasibility and cost of reducing the size of residential permit parking (RPP) zone boundaries from the Ward boundaries to the Advisory Neighborhood Commission (ANC) boundaries; and
- 2. An evaluation of allowing paid parking by non-residents in RPP zones.

For discussion purposes, this report refers to pilot zones combining RPP with mobile payment as Residential Metered Parking (RMP). Mobile payment is defined as an app or phone-based system to pay for on-street parking without using a physical meter (DDOT currently offers this service through a contract with ParkMobile).

DDOT engaged with Advisory Neighborhood Commissioners, business improvement districts (BIDs), residents, visitors, and other affected stakeholders during the course of the study. The study was conducted from January through July 2022. The study results are reported in this document.

This study also responds to requests from ANC and BID stakeholders for a pilot project in ANC 2B (which includes Dupont Circle) to evaluate the two study objectives noted above. The study is therefore focused on the options and considerations for implementing a pilot in ANC 2B, with an eye to the potential to scale the pilot Districtwide.

<u>Scope</u>

In the Dupont Circle (ANC 2B) area, both the ANC and the Dupont Circle BID expressed interest in innovative parking solutions to address limited curbside space and high demands from residents and businesses. Relying on research from current and prior public outreach, examples from other jurisdictions, data collection efforts, and agency communications, this report presents the various policy and implementation options for a pilot to test paid parking in residential parking zones.

Considering feasibility and cost, the report makes curbside policy recommendations and identifies implementation measures for a pilot.

https://code.dccouncil.us/us/dc/council/acts/24-159.

¹ D.C. Act 24-159. Fiscal Year 2022 Budget Support Emergency Act of 2021, Subtitle S.

Background

Residential Permit Parking

The Residential Permit Parking (RPP) program was established by the DC Council in 1974 to help protect resident curbside access during a time of increased commuter pressure. RPP allows eligible residents living on designated blocks to park their personal vehicles that have been registered with RPP permits; vehicles without RPP permits are limited to two hours of parking during the hours of enforcement (typically 7 am to 8:30 pm). Blocks that have been part of the RPP program for at least a year are eligible for Resident Only Parking (ROP), where only residents with RPP permits may park during designated days and hours (there is no free two-hour parking on one side of the street in these zones). ROP requires an ANC resolution, and blocks must meet other occupancy and traffic generation criteria. More details on RPP and ROP regulations, including those governing eligibility and process for designating, removing, or changing the hours of RPP zones, can be found at chapter 24 of title 18 of the District of Columbia Municipal Regulations (DCMR).² Currently, 5,698 blocks are enrolled in the RPP program, which continues to grow each year.

RPP zones are generally tied to the District's eight Wards,³ with each Ward encompassing about an eighth of the District's population. Residents living on a block with an RPP designation can purchase a RPP permit for their vehicle, which allows the vehicle to park for unlimited time anywhere within that zone. These large zones are simpler to communicate and provide flexibility for residents to find parking anywhere in their zone. However, this flexibility can create inequitable parking opportunities and discourage turnover in high-demand areas.

The District's ward-based RPP zones are larger than those of most peer cities' onstreet residential parking programs. For comparison, according to an NPR article on the subject,⁴ Arlington, Virginia, has 23 parking districts and Montgomery County, Maryland, has 53. Other large US cities with RPP programs also have smaller zones: Seattle, Washington, has 38 parking districts; Philadelphia, Pennsylvania, has 39; Boston, Massachusetts, has about 40, and Portland, Oregon, has 13. By area and population, these zones are smaller, on average, than the District's.

The District's RPP Program is managed by DDOT, with support from the Department of Motor Vehicles (DMV) and the Department of Public Works (DPW). Additional details on agency roles can be found in the Institutional Considerations section of this report.

^{2 18} DMCR Chapter 24. Standing, Parking, and Other Non-Moving Violations. <u>https://www.dcregs.dc.gov/Com-mon/DCMR/RuleList.aspx?ChapterNum=18-24&ChapterId=2088</u>.

³ See 18 DCMR §2433 for a description of the areas of the District where the RPP Zone does not match the Ward.

⁴ Pascale, Jordan. "Two Councilmembers Say D.C. Residential Parking Permit Areas Should Be Smaller." *NPR*, October 11, 2021. <u>https://www.npr.org/local/305/2021/10/11/1045024874/two-councilmembers-say-d-c-residential-parking-permit-areas-should-be-smaller</u>.

Metered and Paid Parking

The District charges for use of curbside space throughout the District, as a means to manage demand, encourage parking turnover, and capture revenue for use of public space. In paid parking areas, signs and meters indicate the days and times of meter operation, and drivers pay to park on the street using either pay stations (multi-space or single-space) or a mobile payment platform. The District currently has either a single-space meter for each paid parking space, or a multi-space pay station physically located on each block face with paid parking. The District currently has a contract with ParkMobile to offer mobile payment; approximately 70% of metered parking transactions currently occur via mobile payment (30% occur via single- or multi-space pay station). On the residential side, RPP blocks currently allow vehicles without RPP permits to park for up to two hours or without time restriction and free of charge during non-regulated days and times. On these RPP blocks, there is no curb usage pricing to incentivize leaving these spaces any sooner than is required by posted signs. Unpriced RPP blocks located near metered parking may also encourage drivers to park on residential streets rather than on metered blocks. More information about metered parking is available on ParkDC.com.

Historic Curbside Policy

DDOT's Curbside Management Division has considered policies governing residential and paid parking in recent years. In 2014, DDOT conducted a Curbside Management Study into parking practices and availability in certain neighborhoods.⁵ A series of DDOT workshops to share findings and solicit input from the public were held from 2015 to 2019.⁶ The District published its most recent long-range transportation plan moveDC in 2021, which calls for the following strategies to be implemented in the first five years of plan implementation: "Adapt Curbside Uses to Fit Neighborhood Type" and "Establish Fairer Parking Prices Responsive to Demand."⁷

On March 2, 2021, eight DC organizations and 28 ANC commissioners signed a letter asking DDOT to implement a pilot program based on the findings of the curbside management study report that would both shrink the size of RPP zones and combine RPP with mobile payment zones.⁸ ANC 2B, which represents Dupont Circle residents, passed resolutions in 2018 and 2021 further supporting and seeking implementation of this pilot.⁹

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⁵ DDOT. *Curbside Management Study*. August 2014. <u>https://dcgov.app.box.com/v/curbside-manage-</u> ment-study-2014.

⁶ DDOT. Curbside Management Study Wiki. Last modified March 15, 2022. <u>https://wiki.ddot.dc.gov/display/public/</u> <u>COMP/Curbside+Management+Study</u>.

⁷ DDOT. moveDC 2021 Update. December 2021. <u>https://movedc.dc.gov/</u>.

⁸ Letter from DC Sustainable Transportation Coalition and Other Organizations and ANCs to Muriel Bowser. March 2, 2021. <u>https://www.dupontcircleanc.net/wordpress/wp-content/uploads/2021/07/ANC-2B-RESOLUTION-Performance-Parking-DDOT.pdf</u> (Appendix B).

⁹ Letter from Dupont Circle Advisory Commission 2B to Muriel Bowser, Everett Lott, and Brooke Pinto. July 20, 2021. <u>https://www.dupontcircleanc.net/wordpress/wp-content/uploads/2021/07/ANC-2B-RESOLUTION-Perfor-mance-Parking-DDOT.pdf;</u> Letter from Dupont Circle Advisory Commission 2B to Jeff Marootian and Mary Cheh. July 26, 2018. <u>https://www.dupontcircleanc.net/wordpress/wp-content/uploads/2021/07/ANC-2B-RESOLUTION-Perfor-mance-Parking-DDOT.pdf</u>

Residential Metered Parking (RMP) in Other Jurisdictions

Several jurisdictions have RMP-type programs that can inform DDOT policy and implementation. The four jurisdictions described in this study include San Francisco, California; Portland, Oregon; Seattle, Washington; and Alexandria, Virginia. The programs vary in nomenclature, such as "Pay or Permit" (San Francisco) and "Residential Pay by Phone program" (Alexandria).

In San Francisco, the Pay or Permit program was approved by the San Francisco Municipal Transportation Agency Board of Directors in 2018 but has only been implemented on a few block faces that were chosen based on community outreach and an extensive occupancy study. More than 30 new block faces should be implementing Pay or Permit soon, at which point a more thorough evaluation will be possible. Visitors to the Pay or Permit block faces may park without time limit, as long as they pay the posted rates based on the hypothesis that the requirement of payment is enough to encourage turnover. Administrators of the program are working to develop a formula to make these rates demand-responsive, as they do on traditional meters. Communicating this new system has been a challenge in San Francisco, especially with enforcement officers who are sometimes unclear on whether residential permitholders are exempted from payment.

In Portland, each parking zone has a committee responsible for permit requirements and limitations, leading to a variety of policies across the 13 zones. Except for two commercial corridors that are pay-to-park only, most of the largest zone, Zone M (586 block faces), is a combination of pay-to-park and permit parking. Residents can purchase digital permits, while short-term visitor parking is available via mobile payment or at meters. Depending on the needs of each area, the time limits for visitors is typically 2 hours and can be raised to 4 hours by petition, while those with a permit can park for an unlimited time. Businesses may also apply for separate permits that are valid during program hours, on behalf of individual employees. Administrators of this program in Portland noted that the high number of residential permits distributed makes the area difficult to manage with the shared pay-to-park visitors. Maintaining the pay stations (1 on short blocks, 2 on long blocks) in these areas costs the same, but they produce less revenue per meter than a pay-to-park-only block face.

In Seattle, resident parking zones are smaller than in the District, and they are generally resident-only (with no short-term visitor parking). If a zone is close to a block with parking meters, then it can automatically qualify for RMP. Only three of Seattle's 38 zones have any RMP blocks. Non-residents can use meters or mobile payment on RMP blocks; all meters are multi-space.

In Alexandria, the "Residential Pay by Phone Parking Program" started in a small, limited area around King Street and is now in the process of expanding beyond the original boundaries. Similar to the District (which requires free 2-hour parking in RPP zones by regulation), Alexandria typically allows free two-hour parking for non-residents in its residential zones. In these Residential Pay by Phone zones, non-residents use mobile payment, rather than physical meters. Alexandria converts the first two blocks near a commercial corridor into RMP parking, and residents on adjoining RPP streets may subsequently petition for inclusion in the program (i.e., 50% of residences agree). The hours and restrictions for paid parking match that of the previous signage.

Alexandria surveyed the public and found that 79% of residents with RMP report parking is more available. Residents within two blocks of RMP reported parking is more available or no change, with only 6% saying parking is less available. Residents on or within two blocks of an RMP block greatly preferred that no pay station be added to the RMP blocks, while business owners and "other" respondents preferred pay stations be added. These findings are summarized in a presentation to the International Parking and Mobility Institute.¹⁰

Most of these RMP programs from other cities that DDOT has reviewed rely on resident initiation for RMP to go into effect. This is similar to the process to designate a new residential parking zone (both in the District and in peer cities like Santa Monica, Los Angeles, and Portland). The petition-based RMP expansion allows zones to grow in response to resident demand, rather than immediately covering an entire area.



¹⁰ North, Katye, and Megan Oleynik. Paying to Park: A Residential Permit Parking District Case Study from Alexandria, VA. Presentation at IPMI Virtual Conference, June 1, 2020. <u>https://dcgov.box.com/v/alexandria-prp-ppt</u>.

Data Collection

To better understand parking demand and quantify needs for the pilot, DDOT sought updated parking occupancy data in ANC 2B. The data helped illustrate the many changes to curbside demand brought on by the COVID-19 pandemic. DDOT staff met with key stakeholders to inform the scope of data collection, as described in the Public Engagement section.

Existing Supply and Demand

DDOT used its recently developed GIS-based inventory of DC's street signs (Sign-Works), combined with data on active vehicle registrations and RPP permits from the DMV, to assess permits and total RPP capacity.

- Within ANC 2B, approximately 2,429 RPP and 102 Resident Only Parking (ROP) curbside spaces exist in 408 block faces.¹¹
 - As of July 2022, approximately 4,153 personal vehicles have a valid RPP permit and active registration to an address with ANC 2B; this represents 1,622 (64%) more permits than spaces within the ANC. For a breakdown of these discrepancies by ward, see <u>Appendix E</u>.¹²
- All Zone 2 RPP permit holders (regardless of ANC) are currently eligible to park in these 2,531 RPP/ROP spaces in ANC 2B.
- Approximately 17% of the RPP/ROP parking spaces in ANC 2B are designated both Zones 1 & 2, meaning that both Ward 1 and Ward 2 registered vehicles with valid RPP permits may park long-term for free.
- There are a total of 12 ANCs in Wards 1 and 2, in which 9.7 times more total RPP permit holders (36,087 more RPP permits) exist than are held by ANC 2B registered vehicles alone.

Parking Occupancy

Occupancy data is essential to identifying residential and visitor curbside availability; it allows DDOT to measure the percent of capacity used by local residents and visitors, as well as average length of stay for visitors.

New technology providing license plate recognition (LPR) is increasingly available to assess occupancy characteristics. DDOT collaborated with DPW using DPW's LPR equipment to survey RPP occupancy in ANC 2B. The following data are based on DPW's data collection on two dates: Thursday, July 7, 2022, from 11:46 AM to 4:23 PM (four hours 37 minutes); and Friday, July 8, 2022, from 1:16 PM to 8:54 PM (seven hours 38 minutes).

¹¹ Terminology note: a "block" is defined as the X00 block of a street, inclusive of both the odd and even sides of that street. For example, the 1700 block of R Street NW would include all residences listed in the District's Master Address Repository from 1700 to 1799 R Street NW. The calculation of estimated parking spaces is based on a standard parking space length of 20 feet.

¹² The mismatch between RPP permits and available on-street parking would provide market incentives for offstreet parking. However, ANC 2B is one of the densest areas of the District, and driveways and garages are less prevalent in these dense areas. Quantitative research on off-street parking would be an area for further study.

Importantly, the data collected is helpful in understanding the makeup of parked vehicles at these times, but they should be interpreted with the following limitations. First, the data is from the week following July 4 (a holiday week), due to DPW vehicle availability. Second, the route taken was not consistent and repetitive (some areas were visited more than others), and scans included some non-RPP zones. Third, the LPR readers were not able to identify the state registration of 24% of plates scanned.¹³

Therefore, the percentages used below can best be interpreted as comparisons with each other, not in comparison with data gathered during a different time or date. There were 3,964 plate reads of which 2,371 we re unique (identified at least one time). Of these, the state was identified for 1,793 of the vehicles (76%).

Given these limitations, the key findings are summarized below:

1. Most vehicles belonged to visitors outside of Ward 2. The state registration breakdown is shown in Figure 1 below. The LPR readers were not able to determine the registered state of 24% of plates (which are omitted from comparison here). Of plates matched to states, only 832 of 1,793 (46%) were registered in DC (35% of all plates scanned, identified or not).



Identified Registrations by State

Figure 1: Chart of Identified Vehicles Parking in ANC2B by State Registration

 Of the vehicles with identified DC plates, 66% were registered to an address in ANC 2B. Shown in Figure 2, the remaining 33% were a mix of "other Wards" (23%) and other Ward 2 (11%). So, of the total identified plates, 30% were registered to ANC 2B, 5% were registered to other areas in Ward 2, and 10% were registered to other wards in DC.

¹³ The LPR and digital enforcement system is designed to identify uncertainties for further human processing; this limited data collection did not include full data review and verification. Overall, only 6.4% of license plates captured by the LPR system had uncertainty brackets, meaning the data could not be verified. As LPR use becomes more widespread, DPW and DDOT will coordinate to reduce the uncertainty rates.

DC Registrations by Ward/ANC



■ ANC 2B ■ Other Ward 2 ■ Other Wards

Figure 2: Chart of Identified DC Vehicles Parking in ANC 2B by Ward/ANC Registration

- 3. Most visitor vehicles (78%) stayed for less than 2 hours. An initial analysis of this test data, based on the first and last detection of a license plate on each of the given days, indicates that 22% of vehicles that did not have an RPP permit from ANC 2B overstayed the two-hour limit. This includes other Zone 2 RPP permit holders. The maximum length of overstay was 3 hours 18 minutes (5 hours 18 minutes total stay) with average overstay of 1 hours 16 minutes (3 hours 16 minutes of total stay).
- 4. Visitors tend to maximize their free, legal parking. Across all visitor vehicles, the average stay was 1 hour 47 minutes, which is very close to the 2-hour limit (as shown in Figure 3). Of those who stayed beyond two hours, the average overstay and the longest overstay are shown below.¹⁴

1:47:15	Average total stay
1:15:54	Average overstay
3:18:24	Max length of overstay

Figure 3: Table of Vehicle Overstay Times in ANC2B

The data collected for this study support consideration of a Residential Metered Parking (RMP) pilot measure, particularly given that the majority of occupancy is from vehicles registered outside of Zone 2, and less than half (46.4%) of all plates identified were registered in DC. RMP could increase turnover among this population by incentivizing visitors to only pay for the time they need. The time-of-stay data indicate that drivers maximize free visitor parking rather than paying for parking in the time-limited, paid meters on nearby streets. The data collected in July 2022 show that a relatively small percentage (11% of DC-identified plates, or 5% of total identified plates) represent "intra-Ward" vehicles, which, while not necessarily insubstantial, may not present sufficient evidence for reducing zone size.

However, due to limitations in the LPR data collection (limited runs to capture vehicle turnover, holiday week, etc.), the data may not paint a complete picture. DDOT would like to see more data before making policy recommendations.

¹⁴ Overstay is defined as the amount of time that the vehicle is recorded beyond the 2 hour allowable time limit.

Heatmap of Resident Parking

Utilizing the LPR readings, DDOT developed a heat map, shown in Figure 4, illustrating areas with highest and lowest concentration of local ANC 2B residents' vehicles parked on RPP blocks, compared with all other vehicles present on those same blocks.

The bright red indicates areas where non-resident vehicles make up more than 90% of vehicles parked in RPP zones. Orange indicates where non-local vehicles represent 68-78%. Yellow indicates 55-68% non-local vehicles. Green indicates the opposite end of the spectrum, where just 32-70% of vehicles are local. Only 17% of surveyed RPP blocks had at least half local (ANC 2B permitted) vehicles on average, with an absolute maximum of 70% local.

In contrast, intra-ward vehicles (with a Zone 2 RPP permit, but not from ANC 2B) made up an average of only 2.7% of vehicles (but with a maximum of 21% on one block.) Of 53 RPP parking blocks surveyed, only three blocks had more than 10% intra-ward, and only 19% had more than 5% intra-ward. Vehicles without Zone 2 permits, in contrast, made up from 31% to 100% of vehicles, with an average of 70%.

Note that blocks without any color represent both blocks with RPP parking that were not surveyed, and those without RPP parking (although data was collected on some of these). On Connecticut Avenue, for example (metered parking), all vehicles were visitors.



Figure 4: Map of Parking Demand in LPR-Surveyed ANC 2B RPP Zone Blocks (Max %, Local Resident RPP Vehicles)

Public Engagement

As noted above, both residents and businesses demonstrate a history of interest in a RMP pilot of this type. ANC 2B passed resolutions in both 2018 and 2021, referring to DDOT's 2014 Curbside Management Study (CMS) and a series of DDOT workshops between 2015-2019. The Dupont Circle BID, along with the DC Sustainable Transportation Coalition, have also requested a paid parking pilot in response to changing curb uses due to COVID and the loss of metered parking. DDOT staff coordinated with all of these stakeholders, as well as other elected officials, to inform this study.

2022 Community Outreach

During 2022, DDOT reached out to ANC 2B and both the Dupont and Georgetown BIDs to discuss pilot RMP options and better understand their interest in different parking programs. In coordination with these partners and with the staff of the Ward Councilmember, DDOT explored a variety of public engagement strategies to assess community preferences and concerns culminating in a community survey, as summarized below.

ANC and BID Meetings

On February 8, 2022, DDOT met with the Georgetown BID to discuss a potential pilot, and on March 7, 2022, DDOT met with both the Georgetown and Dupont Circle BIDs. Both BIDs expressed a goal to explore how to expand parking capacity for business patrons by increasing turnover. The Georgetown BID was particularly interested in utilizing off-street parking garages and dynamic pricing for on-street parking. The Georgetown BID wanted to use a Dupont Circle pilot to demonstrate success to Georgetown commercial constituents. The Dupont Circle BID requested that a pilot not run during the Connecticut Acenue streetscape and deck-over project. Both BIDs expressed concern that enforcement would need to be improved for a pilot to be successful. Finally, both BIDs are interested in data collection and further study and are generally supportive of a pilot in ANC 2B, given resident support and curbside demand.

On April 19, 2022, DDOT presented to ANC 2B at its regularly scheduled Mobility Committee meeting.¹⁵ The ANC Mobility Committee members and participating residents articulated the following goals:

- 1. The ANC and community participants affirmed the desire for an RMP pilot and expressed frustration at delays in implementation.
- 2. Participants wanted to improve safety for all roadway users, noting unsafe conditions caused by illegal and double-parking that widespread and well-enforced Pick-Up/ Drop-Off (PUDO) zones and truck delivery limitations could alleviate.
- 3. The community believes that intra-Ward 2 commuter parking for Metrorail and offices make up a large share of the RPP demand.
- 4. Participants were interested in how a pilot could meet moveDC goals of shifting people to transit and using demand-based pricing for parking.

¹⁵ Dupont Circle ANC 2B. Mobility Committee Meeting Agenda (Virtual Meeting). April 19, 2022. <u>https://www.du-pontcircleanc.net/wordpress/2022/04/18/april-19th-mobility-committee-meeting-agenda-virtual-meeting/.</u>

Community Survey

In response to stakeholder feedback, DDOT developed and distributed an online survey, "DDOT Parking in Dupont Circle Survey," in June and July 2022. The survey closed at 11:59 PM on July 31, 2022, with 2,035 survey responses.

DDOT distributed the survey via the following methods:

- 1. Social media and email outreach to ANC 2B, BIDs and local organizations
- 2. Emails to all VPP permit holders with accounts in the ParkDC.com system with an address in either ANC 2B or a nearby ANC (11,768 recipients)
- 3. Postcards with QR code and survey link mailed to all ANC 2B postal addresses (15,865 recipients, mostly residential)
- 4. Additional postcards distributed by DDOT staff at Dupont Circle Metrorail entrances and along the Connecticut Avenue commercial corridor.

DDOT's goal was to get the greatest number of responses from residents and visitors to ANC 2B, but the survey distribution method is not a scientific or representative sample of the target groups. Respondents were mostly DC residents (98%), with 45% of these reportly living in Dupont Circle, another 45% living elsewhere in Ward 2, and 9% living yet farther away. At least 28% of respondents reported receiving a survey postcard, indicating a 2B address (however, many ANC 2B residents responded to the earlier email distribution, prior to receiving any postcard). In part because email to RPP permit holders was the most successful method of outreach, vehicle owners with RPP permits were heavily represented (69% of total: 48% Zone 2 and 21% Zone 1). The survey asked key public perception and preference questions regarding the potential RMP pilot. A copy of the survey can be found in <u>Appendix A</u>.

Key Survey Findings

Of the 2,035 respondents, most agreed with the key assumptions behind the pilot project: residential parking should be more available, paid parking for visitors would help increase parking availability, and limiting who can park in the residential zones would increase residential parking. See Figure 5 for more details.



Opinions on Pilot Premise/Desired Outcomes

Figure 5: Results of Surveyed Opinions on the Key Assumptions behind the Pilot Project

These opinions hold true both for ANC 2B residents and for residents in nearby Ward 2 neighborhoods, who would potentially lose free RPP parking near Dupont Circle. District residents from other Wards tended to oppose both types of increased parking availability (for both residents and non-residents), although they represent a much smaller fraction of overall respondents.

However, residents were relatively evenly divided on whether the size of residential parking zones should change. As shown in Figures 6 and 7, 41% of respondents thought that the zones should say the same, and 46% responded that they should shrink to be more local, either at the ANC level (30%) or even smaller (16%). Five percent (5%) of respondents chose the "other" option, with many of these voicing that zones should be eliminated altogether—either removing the RPP program or making it apply city-wide for all residents. One respondent voiced concern about linking parking zones to ANC boundaries, stating, "That is both a bad idea for parking management (since they [sic] boundaries are not drawn with parking management in mind) and a bad idea for redistricting (since it adds unnecessary stress to the process)." The even divide held for Dupont Circle residents, but people from other Wards leaned more heavily toward shrinking the zone sizes (46%) rather than keeping them the same (34%). Vehicle owners slightly favored keeping zones the same, while non-vehicle owners slightly favored shrinking them. A more significant percent of non-vehicle owners chose the "not sure" (14%) or "other" (8%) option (compared to 7% and 3%, respectively, for vehicle owners).



Figure 6: Results of Opinion Survey on Current RPP Zone Size by Neighborhood of Respondent¹⁶

¹⁶ Figures 6 and 7 combine two options (change to the more local ANC level and change to an even more local level) into one option: change to be more local. This combination is meant to illuminate the differences between desires to change RPP or keep it the same. See <u>Appendix A</u> for a more specific breakdown of these responses..



Figure 7: Results of Opinion Survey on Current RPP Zone Size by Vehicle Ownership of Respondent

Most respondents support paid parking for visitors without a permit in residential areas.¹⁷ Respondents had to choose among five attitudes on paying to park in residential zones, as shown in Figure 8. Only 23% of respondents indicated that visitors should continue to park for free on residential streets in Dupont Circle with a two-hour time limit. Seventy percent (70%) of respondents from DC residents outside of Ward 2 felt that visitors should pay to park in Dupont Circle (46% for all residential streets and 24% for the busiest residential streets). Interestingly, fewer (53%) respondents in Dupont Circle felt that parking on residential streets should be paid (43% for all residential streets and 20% for the busiest residential streets). Paying to park was also the most popular option among both non-vehicle owners (68%) and vehicle owners (65%). Overall, paying to park on all residential streets was the most popular option among all neighborhoods, survey distribution methods, and vehicle ownership.

Opinions on Pay to Park in Residential Zones (RMP)



Figure 8: Results of Opinion Survey on Payment for Visitor Parking on RPP Streets

¹⁷ The survey questions and this study are not intended to ask about charging for visitor parking for visitors to residential dwellings (as currently offered through ParkDC Permits for free to eligible residents). This question is focused on visitors to a non-residential destination in ANC 2B.

Respondents support a time limit for paid parking. When asked, "If visitors without a parking permit would need to pay to park on residential streets, they should be able to do so...," most respondents (77%) felt that there should be a time limit for visitors either all of the time (46%) or only during the busiest times of day (31%). See Figure 9 for the complete breakdown of responses. Only 9% thought that paid parking should not have a time limitation. Among Dupont Circle respondents, the overall percentages stayed the same, but 50% felt that the time limit should be at all times, and 27% felt that the limit should only apply during the busiest times of day. Non-Ward 2 DC respondents were evenly split between a time limit only at the busiest time of day (39%) versus at all times (38%). Vehicle owners and non-vehicle owners both selected a time limit at all times most frequently. Overall, a time limit at all times of day was the most popular among all groups, though many also supported a time limit only at the busiest times of day.



Opinions on RMP Time Limits

Figure 9: Results of Opinion Survey on Time Limit for Pay to Park in RPP Zones

Survey Implications for Potential Pilot

Overall, while respondents largely agreed with the idea of paid parking in residential zones, they were divided about RPP zone sizes. Concerns about RPP included the ratio of residential permits to available parking spaces, tying RPP to political boundaries, unequal opportunities for those in different zones, street cleaning, and parking for service workers.

While analyzing the survey results, DDOT staff looked into a hypothesis expressed by ANC 2B Mobility Committee members in 2022 that drivers with valid Zone 2 RPP permits from other Ward 2 ANCs contribute to a large portion of curbside demand near Dupont Circle. They believed occupancy is high from commuters who work near Dupont Circle or who drive to access the Dupont Circle Metrorail Station. A curbside occupancy survey from February 2016 reported that some "30% of vehicles parked in RPP spaces in North Dupont/Sheridan-Kalorama are vehicles registered to addresses in Ward 2 outside of North Dupont/Sheridan/Kalorama."¹⁸ The 2022 survey findings and the LPR data suggest that the percentage is lower today. LPR data indicates that only 11% of the DC plates with RPP permits identified in 2B belonged to Ward 2 residents outside of 2B, whereas 65% were associated with residents of ANC 2B. Of survey respondents identifying as residents from other areas near Dupont Circle with a Zone 2 RPP permit, only 4% reported using their RPP permit to park near public transport (anywhere in Zone 2), and 13% to park near their job. The 2022 data suggest that between 10 and 20 percent of daytime curbside occupancy is driven by Ward 2 residents outside of ANC 2B. Visitors from outside of Ward 2 appear to be a much larger contributor to curbside occupancy in RPP zones and charging for parking would address these vehicles.

Additional Curbside Findings

The survey included questions about curbside management policies, tools, and tradeoffs. It also included an option for open-ended comments, and over 40% of respondents filled in these comments. See <u>Appendix B</u> and <u>Appendix C</u> for a more specific breakdown of these findings.

Public's Curbside Priorities

To equitably represent all residents and visitors, including those that do not use onstreet parking, the survey asked respondents to select (not rank) their top curbside priorities. As demonstrated in Figure 10, respondents named many other priorities in addition to residential parking. The most frequent responses in aggregate included residential parking, bike lanes, and green space. Responses varied significantly among different groups, as described in <u>Appendix B</u>. Note that the majority of households in ANC 2B (over 58%) do not own a vehicle, highlighting a neighborhood divide in public space priorities.



Curbside Priorities by Vehicle Ownership

Figure 10: Results of Opinion Survey on Priorities for Curbside Programming beyond Residential Parking

Institutional Considerations

DDOT currently manages the RPP program as well as parking revenue collection, with support from the DMV and the DPW. DDOT aims to outline the current roles and responsibilities of these agencies and identify potential collaborations or efficiencies to improve RPP program operations.

DMV issues RPP permits, collects fees, and manages communications and customer service for permit issuance. DPW enforces all parking in the District, including enforcement of parking in residential zones using visual dashboard inspection and license plate reader (LPR) technology.¹⁹ DMV, DDOT, and DPW have integrated data systems of current and eligible RPP residences and permits, which allows for digital enforcement. Digital permitting solutions depend on DPW's ability to enforce a fully digital system without needing paper permits.

District Department of Transportation (DDOT)

DDOT is the overall program manager for RPP. DDOT receives, investigates, and approves all new or modified RPP and ROP applications. DDOT maintains the GIS database of RPP blocks and addresses, determines RPP eligibility, and manages all development of RPP policies and implementation. Finally, DDOT manages and installs RPP signs.

Department of Motor Vehicles (DMV)

DMV adjudicates non-moving violations, including RPP. DMV's current role in the RPP program is to issue permits, collect fees, and manage customer service. DMV typically issues RPP permits as part of a resident's vehicle registration process. The DMV receives payment, then prints and provides RPP permits (in the form of wind-shield permits with the RPP zone number) to vehicle owners, based on their vehicle type and street eligibility. DMV also manages communication with residents as their vehicle registrations and RPP permits are up for renewal; they process RPP permit requests via their brick-and-mortar locations as well as via online portals. Their customer service center also field calls about RPP vehicle permits.

The DMV uses a mainframe system that is approximately 20 years old and managed by the DC Office of the Chief Technology Officer (OCTO) to process and print the windshield permits. DMV reports that the system lacks any flexibility to adopt new Zone numeration or other sub-zone identification and any modification to the system is very costly and time consuming. The software technology does not allow issuance of RPP permits at the sub-Ward or ANC level, thus forming a barrier to pilot implementation. DMV does not have any other option for printing or issuing RPP permits outside of the current zone system. DMV does not have plans for a software upgrade in its budget over the next few years. However, should the software be updated, it would enable pilots such as the potential one in ANC 2B and allow much greater flexibility and streamlining in RPP permit issuance and boundary size.

As of 2022, DPW primarily enforces parking in RPP zones using visual inspection, but DPW anticipates shifting to fully LPR-based inspection in FY23 based on new funding for a fleet of LPR devices.

Presently, DMV shares a daily electronic list of all DC vehicles with both active registrations and valid RPP permits to both DPW and DDOT for daily coordination and enforcement. DMV maintains a parallel tabular database of all streets where RPP permits are allowed, as designated by DDOT (note that DDOT's RPP database is spatial/map-based). This data is critical for DDOT's program management and DPW parking enforcement.

Department of Public Works (DPW)

DPW manages parking enforcement in the District, including in residential zones using visual dashboard inspection and license plate reader (LPR) technology. As of 2022, DPW uses LPR technology to enforce parking in RPP zones with visual inspection for visitor permits. With new enhancements of additional LPR equipped vehicles, DPW anticipates shifting to fully LPR-based inspection for all RPP zones by FY23. DMV, DDOT, and DPW have integrated data systems of current and eligible RPP residences and permits, which allows for digital enforcement.

Digital parking enforcement, using LPR technology, has the ability to match a license plate with its location, which in turn can be associated with an ANC. The plate can then be compared to a list of plates that have permits for the associated boundary. As DPW further increases its use of digital enforcement in RPP zones in FY23 and beyond, it will become feasible for DPW to enforce via sub-zone boundaries, provided that the appropriate data are integrated into enforcement devices.

In this future potential scenario (of all-digital RPP enforcement), DMV would not need to issue physical or windshield permits. Instead, permits could be much more flexible. For example, zones could change easily over time or could be set to match policy goals. In this scenario, an individual RPP permit might be valid within a specific distance from the home address, and digital permits for essential workers or special events could be limited to a defined radius.²⁰

A key institutional consideration in parking enforcement is the large fleet of parking enforcement officers and equipment, as well as the scale of all RPP blocks in the District. While the funding for LPR technology is identified and the devices are already in use at a much smaller scale, DPW has yet to procure the devices or implement them in a widespread fashion. The District will need to prioritize training, data integration, and institutional adoption in this critical first year to ensure that the advantages of digital enforcement can be realized.

²⁰ DPW's current digital enforcement technology would allow ANC-based boundaries. DPW could not enforce other sub-Ward boundaries (such as Single Member Districts or 5 minute walkshed) at this time, but these may be feasible in the future.

Pilot Options

For purposes of this study, DDOT is considering approaches, implementation, and regulatory considerations for a pilot in ANC 2B that would introduce Residential Metered Parking and shrink the RPP zone to the ANC level.

DDOT considers three primary approaches for this pilot, with opportunities and challenges described below:

- 1. Modify the RPP program within ANC 2B to require payment for nonresidents
- 2. Modify the metering program within ANC 2B by creating new residential metered parking zones in place of RPP zones, while offering exemptions for residents with valid RPP permits
- 3. Modify the metering program within ANC 2B by creating new residential metered parking zones, while offering digital permits for residents to park in these zones.

Option 1: Modify Existing Residential Permit Parking (RPP) Program in ANC 2B

In the first option, DDOT would add signage and develop other communication materials that instruct visitors to ANC 2B that they are required to pay to park in RPP areas.

Modification of the RPP program entails:

- Updating DMV software system to allow ANC to be printed on permits
- Notifying all affected RPP permit holders
- Issuing new permits to all existing and future ANC 2B registered vehicles
- Modifying all RPP signs to indicate ANC 2B permits only (or other communication so that residents had clarity on areas where parking is permitted)
- Adding mobile payment signage
- Possibly adding multi-space pay stations on each block (although for a pilot, the streamlined option would be to use signage to direct visitors to pay-by-plate at an existing pay station on a commercial corridor)

The key considerations and risks of this approach include:

- Coordination with DMV on permit issuance and with DPW on enforcement
- Comprehensive communication with all residents on permit needs and program details
- Comprehensive communication with businesses and the general public on paid parking
- Cost and labor associated with sign replacement

Option 2: Create New Metered Parking with Residential Exemptions in ANC 2B

Modification of the mobile payment program could also achieve the objectives of the pilot program without requiring DMV to issue new permits. It would also not affect the structure of the RPP program itself. Instead, existing RPP zones in ANC 2B would be converted to a new "RMP zone," which would effectively introduce a new system to exempt residents (with paid, valid RPP permits) from meter payment in these RMP zones. The current list of eligible vehicles would be updated daily with no action required by residents.

In summary, this option would entail the following:

- Issuing exemption to all existing and future ANC 2B registered vehicles
- Removing all converted RPP signs
- Adding Pay-to-Park signage, with ANC 2B Permit exemption indicated
- Possibly adding pay stations on some or all new RMP blocks (although again, a pilot would likely use existing meters on nearby commercial blocks)

The key considerations and risks for Option 2 are as follows:

- Coordination with DPW on enforcement, which may require new processes or resources
- Coordination with DMV to ensure DDOT only issues special ANC 2B exemptions to residents with paid RPP permits
- Coordination with DMV to contact all current RPP permit holders in ANC 2B
- Comprehensive communication with all residents on permit needs and program details
- Challenges with digitally registering residents that are not comfortable with technology
- Comprehensive communication with businesses and the general public on paid parking
- Cost and labor associated with sign replacement

Option 3: Issue Digital RPP Permits in ANC 2B

As a modification of Option 2, DDOT would issue pilot permits digitally through ParkDC Permits (rather than issuing an exemption to existing ANC 2B RPP permit holders). These pilot permits would allow residents to park in the new RMP zones.

ParkDC Permits is the District's new digital visitor permit system, and it has the ability to issue permits at the ANC level. Currently DPW requires a physical printout of the digital, license-plate-based permit, but as LPR is adopted, ParkDC Permits could issue license plate-based permits to RPP permit holders in ANC 2B. The permits could be issued at the ANC level or using a more flexible boundary, such as 5-minute walk from home. Enforcement staff would need only scan or enter the license plate to determine automatically whether the vehicle under observation was parked legally based on pre-loaded boundaries. The key considerations and risks include the following:

- Relies on DPW to do all-digital enforcement
- Coordination with DMV to ensure DDOT only issues special ANC 2B permits to residents with paid RPP permit and active registration (already implemented in ParkDC permits)
- Comprehensive communication with all residents on permit registration in ParkDC Permits and program details
- Challenges with digitally registering residents that are not comfortable with technology
- Comprehensive communication with businesses and the general public on paid parking

In the future, digital permits could serve as the primary RPP permit when all technological requirements are in place. Digital permits would provide DDOT with the implementation mechanism to flexibly change RPP zone boundaries and permit permissions based on policy needs. The conversion of RPP to digital permits would align with the trend among US cities for all-digital parking permits and enforcement.

Additional Pilot Features

The following additional features could enhance either of the approaches above; these features could be applied alone or in combination to meet DDOT, resident, and business policy goals. Pricing, time limits, and designation of participating zones are the key features to meet these policy goals. The features are described below, with DDOT making further recommendations based on the findings of this report.

- <u>Pricing Structure</u>: DDOT can use pricing structure to drive behavior. "Performance pricing" allows pricing to change by day, hour, and time of stay to influence behavior. One example of Performance Pricing is in DDOT's Stadium Zone, where rates increase after the first hour during special events to encourage event attendees to use off-street lots and allow higher turnover on-street.
- <u>Time periods of metering restriction</u>: Payment in residential zones could be enacted only during specified hours (such as when visitor demand is high).
- <u>Maximum length of stay</u>: Maximum length of stay can be set to shorter time periods to encourage higher turnover.
- <u>Number of payment zones</u>: Payment zones refer to the area within which visitors park and pay, and DPW enforces. Smaller zones allow DDOT to modify policies more granularly based on localized needs; larger zones may allow for a simpler system for visitors.
- <u>Designation and size of pilot</u>: DDOT assumes a smaller RPP zone would result in greater parking availability for residents of high-demand residential curbsides near commercial areas. The pilot can apply to the entire ANC or a subset of the ANC (such as a Single Member District or within two blocks of a designated commercial corridor). DDOT can also vary the timeline and method for expanding a pilot.

 Simplified RMP using current Zone 2 boundaries: The LPR data suggests that curbside demand may be driven more by residents outside of Ward 2 than by Ward 2 residents outside of ANC 2B. Given the cost and complexity of offering a new type of residential permit at the sub-Zone level, and the implications of the data collected for this report, a pilot that charges nonresident vehicles to park for up to two hours in RPP spaces could be a better option. To be successful, DDOT would want to measure curbside occupancy regularly and adjust pricing to manage parking availability. This option falls outside the scope of this narrowly focused study, but this study may help inform an RMP-only approach.

Regulatory Considerations

Each of the approaches outlined above would require changes to District regulations in the case of post-pilot Districtwide adoption. The District would require these changes to modify RPP regulations and RPP boundaries, as well as to modify meter regulations and performance pricing. This section considers only regulatory changes and does not include any legislative changes that may be necessary. See Figure 11 for details.

Type of Change	Action Required
Implement pilot in ANC 2B to carve out smaller, pay-to-park with RPP zone from Zone 2 (Option 1)	No Regulatory Changes
DDOT to issue Mobile Payment Exemption/Permits instead of DMV (Options 2 or 3)	No Regulatory Changes
Allow DDOT to charge for non-resident parking in RPP zones (post- pilot, Districtwide adoption)	Regulatory Changes (various sections under <u>18 DCMR §24</u>)
Adoption of Performance Pricing in joint RPP/Mobile Payment zones (post-pilot, Districtwide adoption)	Regulatory Changes (under authority from the Performance Parking Pilot Zone Amendment Act of 2008)

Figure 11: Table Showing Breakdown of Regulatory Considerations for a Pilot

Cost Estimate for the Term Pilot

The cost estimate table (Figure 12) assumes the minimum amount of time that each agency would need to be ready to implement a pilot. The costs provided reflect sources gathered in 2021–2022, based on data provided by District agencies and vendors. These are rough estimates, and actual figures may change based on exact scope, size, and timing of pilot.

				Options	2&3	
	Option 1 Modify RPP Zo allow paid pa	Option 1 y RPP Zones to paid parking		Create new RMP zones with residential exemptions		
Agency/ Entity	Cost	Time in months		Cost	Time in months	Notes
DDOT	\$80K (signage) \$20,000 (outreach)	8		\$80K (signage) \$20,000 (outreach)	8	Minimum time to procure evaluation consultant and update signage
DPW	Unknown	6		Unknown	6	Presumed LPR purchase and training; gTechna has confirme no additional cost to integrate; possible staff and vehicle additions
DMV	\$1.5M	24+		\$0	0	Major IT modification for Option 1; no significant time/\$ commitment for Options 2 & 3
Consultant / vendor expenses	\$400,000	12		\$400,000	8	Assumes hiring consultant to monitor and evaluate pilot Modifications to existing payment and enforcement contracts
осто	\$0	0		\$40,000	1	Additional OCTO cost due to program management and integrations
TOTAL	\$2,000,000	24+		\$540,000	8	

Figure 12: Table with Estimates for Time Required to Begin a Pilot and Cost to Run a Pilot

Recommendations

Given the additional information developed through this study, DDOT recommends a refined review of the pilot options. If a pilot is selected for implementation, authority will need to be developed to conduct the pilot outside the scope of existing regulations. In addition, agencies should work to refine funding estimates for all steps of a pilot program.

With the move to digital enforcement in FY23 and the cost of upgrading the software system at DMV, Option 3 with digital permitting for ANC 2B residents is preferred due to its feasibility for near-term implementation and its compatibility with long-term planning. Digital permitting would allow for smaller area permits and paid parking in selected RPP zones and would be useful outside of this pilot.

In addition, if a pilot is selected for implementation, DDOT recommends the following Residential Metered Parking (RMP) pilot program:

- Implement RMP zones in ANC 2B with residential exemptions via digitally issued permits.
- Introduce RMP in ANC 2B using an adhesive decal to modify the existing RPP signage to indicate mobile payment using existing ParkMobile service. Longer-term, these signs would need to be replaced with new signs ("Pay to Park" signage with exemption for RMP 2B permits).
- Consider a simplified pilot designating new RMP zones near Dupont Circle that are open to all Zone 2 RPP holders. This would allow for expedited pilot delivery but would need to be monitored closely with pricing adjustments to manage parking availability.
- Utilize a new database integration with enforcement devices to allow local RPP permit holders whose vehicles are registered in ANC 2B to be exempt from payment.

Widespread collection of LPR data can provide valuable insight into occupancy levels and help quantify tradeoffs to design zones that are adaptable to changing parking needs, such as new development. Digital enforcement and permitting, along with other curbside management tools, will pave the way for a more flexible, demand-responsive RPP program.



APPENDIX A: Survey

Dupont Parking Survey Questions

Background

DDOT is conducting a study of innovative parking practices on residential streets, focusing on the dense commercial and residential area of Dupont Circle (ANC 2B).

Parking permits allow residents to park within their zone for free without time limit on signed residential blocks (sign shown in the image above). These zones include large areas of the city, allowing many people to park without restriction in high-demand neighborhoods where they do not live.

DDOT wants your insight for the following ideas:

1) Change the size of residential parking zones to be closer to residents' homes.

By dedicating free use of residential parking in high-demand areas for people who live there, this change should increase parking availability for all who need access to the curb.

2) Add paid parking on residential streets for vehicles without a valid parking permit.

By encouraging visitors to park only as long as they need, this change should further increase parking availability for local residents, visitors, and business customers.

Please complete the following survey to give DDOT your feedback and ideas. It should take about 5 minutes of your time, and we won't ask for any identifying information.

Thank you!

1.

1. Please indicate how much you agree with the following statements about the Dupont Circle area.

	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree
Resident parking should be more available					
Non-resident parking should be more available					
Paying for parking encourages visitors to park only as long as they need					
Because residents from other neighborhoods can park without reaction in Dupont, there is less parking available for local residents					

- 2. During busy times, visitors without a parking permit should...
 - Continue to park for free on residential streets, with a two- hour limit
 - Pay to park on all residential streets in Dupont Circle
 - Pay to park on the busiest residential streets in Dupont Circle and continue to park for free on other residential streets
 - Not sure
 - Other
- 3. If visitors without a parking permit would need to pay to park on residential streets, they should be able to do so....
 - With a time limit
 - With a time limit only at the busiest times of day
 - Without a time limit
 - Visitors should not need to pay park
 - Not sure

- 4. The size of residential parking zones in Dupont Circle should...
 - Stay the same, allowing residents from other areas of the same zone (e.g., Georgetown and Downtown) to continue to park on residential streets without restrictions
 - Change to the more local Advisory Neighborhood Commission (ANC) level, so that only residents who live in that ANC can park on residential streets without restrictions
 - Change to an even more local level so that only people who live on the block or nearby streets can park on residential streets without restrictions
 - Not sure
- 5. How do you prioritize uses for the curbside? Please select your top prioritize..
 - Electric vehicle charging stations
 - On-street bicycle or scooter parking corrals
 - Residential parking
 - Sidewalk widening
 - Midblock crosswalk for safety and visibility of pedestrians
 - Visitor/non-resident parking
 - Pick-Up/Drop-Off or Loading Zones
 - Bike lanes
 - Green spaces, landscaping, seating, playspace
 - Other
- 6. If you would like to elaborate on any of your responses, please do so here:

The following questions will help DDOT contextualize our responses and understand current parking practices in Dupont. We won't ask for any identifying information.

- 7. Are you a DC resident?
 - Yes
 - No
- 8. What neighborhood in DC do you live in?
 - Dupont Circle
 - Areas near Dupont Circle (Kalorama, Georgetown, Downtown, West End, Logan, Shaw, Penn Quarter, or Mount Vernon)
 - Other neighborhood in DC
 - Not sure
- 9. How many personal motor vehicles does your household have a residential parking permit for?
 - None. My household doesn't have an eligible vehicle.
 - None. My household has one or more eligible vehicles, but doesn't have any residential parking permits.
 - 1
 - 2
 - More than 2
 - Not sure
- 10. What parking zone is/ are your permit(s) for?
 - Zone 1
 - Zone 2
 - Zone 3
 - Zone 4
 - Zone 5
 - Zone 6
 - Zone 7
 - Zone 8

- 11. How far away from home do you typically park on the street?
 - Within one block
 - One to two blocks
 - Three or more blocks
 - I don't typically park on the street near my home
 - Not sure
- 12. Do you have an off- street parking option at home?
 - No
 - Yes, for all of my vehicles
 - Yes, but not for all of my vehicles
 - Yes, but I don't use it for parking
 - Other
- 13. How often do you use your residential parking permit to park without restriction away from your home?
 - Daily
 - Weekly
 - Monthly
 - Never or very rarely
 - Not sure

14. Where do you use your residential parking permit to park without restriction? Select all that apply.

- My home
- Public transit (rail or bus)
- My job
- Shopping/retail
- Place of worship
- Healthcare/medical office
- Other: _____

- 15. Did you receive a postcard mailer about this survey to your home or business?
 - Yes
 - No
 - Not sure
 - How did you receive the link to this survey?
 - Flyer on the street
 - Email from DDOT
 - Notice from resident representative group (ANC, tenant association, etc.)
 - Notice from local business or representative (BID, etc.)
 - Social media (from a source other than previously listed)
 - Other: _____

Please share any additional concerns or ideas you have about parking or curbside usage (such as pick-up/drop-off, streateries, scooter corrals, etc.) in DC: _____

DDOT Parking in Dupont Circle Survey

2035	26:41	Closed
Responses	Average time to complete	Status

1. Please indicate how much you agree with the following statements about the Dupont Circle area.



2. During busy times, visitors without a parking permit should...



3. If visitors without a parking permit would need to pay to park on residential streets, they should be able to do so...



4. The size of residential parking zones in Dupont Circle should...





5. How do you prioritize uses for the curbside? Please select your top priorities.



6. If you would like to elaborate on any of your responses, please do so here:



8. What neighborhood in DC do you live in?



9. How many personal motor vehicles does your household have a residential parking permit for?



10. What parking zone is/are your permit(s) for?



11. How far away from your home do you typically park on the street?





12. Do you have an off-street parking option at home?





13. How often do you use your residential parking permit to park without restriction away from your home?



14. Where do you use your residential parking permit to park without restriction? Select all that apply.



15. Did you receive a postcard mailer about this survey to your home or business?



16. How did you receive the link to this survey?



17. Please share any additional concerns or ideas you have about parking or curbside usage (such as pick-up/drop-off, streateries, scooter corrals, etc.) in DC:



APPENDIX B: Curbside Priorities

To equitably address residents and visitors, including those that do not use on-street parking, the survey asked respondents to select (not rank) their top curbside priorities. This is particularly meaningful, given that a majority of households living in ANC 2B (over 58%) do not have a vehicle available, according to the latest census data (estimated by the DC Office of Planning for this DDOT analysis).

Car-free Households Prioritize Diversified Public Space

Of those who identified as Dupont Circle residents and reported not owning a vehicle in their household, priorities were markedly different from households reporting one or more vehicles (see Figure 10).

Respondents from car-free households were roughly two times more likely to prioritize bike lanes, green space/play space, sidewalk widening, midblock crosswalks for pedestrian visibility/safety, and bike/scooter corrals than respondents from households with vehicles. They had slightly lower rates of prioritization for visitor parking and electric vehicle charging stations and were 33% more likely to prioritize curbside pick-up/drop-off and loading spaces, suggesting car-free households may rely more on delivery and ride-hailing/taxi services.

Vehicle Owners Prioritize Parking

Those with one or more vehicles, regardless of method of survey receipt, prioritized residential parking 68% of the time. Of those with vehicles who reported receiving a postcard to their homes or businesses in ANC 2B, residential parking priority rose to 74% of responses. Conversely, those without a vehicle prioritized residential parking 26% of the time. Those with vehicles were nearly a third less likely to prioritize bike/scooter corrals, and well under half as likely to prioritize sidewalk widening or midblock crosswalks for pedestrian safety and visibility, than those from households without vehicles. They prioritized bike lanes just over 40% of the time, whereas 73% of households without vehicles prioritized bike lanes.

Preference for Bike Lanes & Sidewalks Diverges from Preference for Parking

Similarly to households without vehicles, but distinct, the respondents who prioritized bike lanes often did not overlap with the respondents who prioritized residential and/ or visitor parking. Of those who prioritized bike lanes, only 40% also prioritized residential parking, and only 12% prioritized visitor parking. Of those who prioritized residential parking, only 33% also prioritized bike lanes, and were almost three times as likely to prioritized residential parking. Conversely, of those who prioritized visitor parking, 85% also prioritized residential parking have strong support, the respondents show a divide between using curbsides for private vehicular storage versus multimodal transportation.

Similarly, those who prioritize wider sidewalks (33%) were about half as likely to prioritize esidential parking than across all respondents (28% versus 59%), and those who prioritize green space/play space were about one-third less likely to prioritize residential parking and half as likely to prioritize visitor parking than average. Note again that the survey was heavily weighted toward private car owners with both RPP permits and visitor parking permits, most likely due to the method of delivery (direct email) and the nature of the topic (those without cars might be less likely to respond to a parking survey than those with).

APPENDIX C: Survey Free-Response

Of the 2,035 survey responses received, 1,029 respondents (50.6%) included at least one free response comment to elaborate upon their curbside priorities. The comments illustrate a range of preferences, from expanding parking to abolishing parking in favor of multimodal curbside uses. Several residents offered their own creative ideas for parking policies and solutions. A Word Cloud in Figure 13 shows some common themes from the free-response comments, and a few illustrative quotes are included below.



Figure 13: Word Cloud Generated from Survey's Long-Form Responses

Increase Parking Availability for Residents

I think the streets (residential ones) should be used for the residents. I'm tired of coming home from work and seeing half of the streets covered in Maryland and Virginia plates. Enforce the time limit or just get rid of it all together. Allowing visitor parking on residential streets encourages people to drive in, and the fact that the hours end so early means that parking for residents basically disappears in the evening. I do understand that street parking is a privilege not a right, but I think we could do more to ensure that disabled, elderly, and families with small kids are not burdened disproportionately.

Comments on Changing RPP Zone Sizes & Charging for Parking

I don't mind parking farther away, I like having the flexibility of parking throughout Zone 2 for free.

My bias: I hate paying for parking. I especially hate paying for parking when I'm going somewhere to spend money (shop, eat, etc.). I'll drive out of my way to go somewhere w/o parking hassles.

Reduce Public Space Dedicated to Parking

Dupont is an extremely well transit-connected neighborhood in the core of large city. In a disastrously urgent climate crisis, streets should be dedicated to forms of travel that minimize or altogether don't use fossil fuels, while paved space gets converted to trees and greenery.

I honestly only keep my car around since I have free parking on the streets. We barely use the car, but since I have a RPP I just keep it parked around for the occasional road-trip. ... It also means I can rent out my off-street parking space to an out-of-neighborhood commuter for \$200/mo. This area is just not setup for universal car ownership. Ways to encourage mass transit/biking and improve safety for pedestrians should be the top priorities.

Policy Ideas

I believe that if residents reside somewhere with a private driveway, that should default as their "first permit", so if they apply for an RPP, it should already be at a higher price to accommodate their second vehicle parked on the road.

Residential parking permits and metered parking should be far more expensive in Du-Pont circle than someplace a lot less expensive, like Michigan Park or Langdon.

Would it be possible for DC to organize discounted off street parking for residents in area parking garages? That might help relieve some parking issues, but it could also create space for things that better serve the community like bike lanes, bus lanes, EV charging, etc.

APPENDIX D: Signage

The fastest and least expensive option communicate the change to a Residential Metered Parking (RMP) zone is to modify the current RPP signs with an adhesive decal (Figure 14). This option would allow DDOT to deploy this solution without manufacturing and installing new signs. These new signs would be supplemented by green informational ParkMobile signs (see Figure 15). This solution would require DDOT to implement user education strategies and plan for extensive outreach and public notification.





Figure 14: Current RPP Sign and Mock-Up of Modified RPP Sign for Residential Metered Parking (RMP)



Figure 15: ParkMobile Sign

APPENDIX E: RPP Permits to Estimated Spaces by Ward

The data in Figure 16 below illustrates the estimated number of RPP and ROP zone parking spaces available compared with the number of permitted vehicles, broken down by RPP zone. The parking spaces are a rough estimate calculated using GIS data and an average space length of 20 feet. These numbers can be used to better understand where parking demand outstrips supply among RPP permit holders. These figures do not account for the non-residents that park for under 2 hours or outside of enforcement hours in RPP zones, and do not account for off-street parking availability, nor are Visitor Parking Permits represented here. Note that the total number of registered vehicles can be substantially larger than the total number of permits, which suggests off-street parking is available for those vehicles.



RPP Permits to RPP/ROP Spaces by Ward

Figure 16: Comparison of Active RPP Permits and Estimated RPP/ROP Parking Spaces per Ward





GOVERNMENT OF THE DISTRICT OF COLUMBIA MURIEL BOWSER, MAYOR

DISTRICT DEPARTMENT OF TRANSPORTATION | 250 M ST SE. | WASHINGTON, DC 20003