

GEORGETOWN BID SIDEWALK WIDENING

Comprehensive Transportation Review

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INTRODUCTION

The following Comprehensive Transportation Review (CTR) Study evaluates the effects of the Georgetown Business Improvement District's (BID's) Temporary Sidewalk Widening Project. The Georgetown BID installed approximately 3,400 linear feet of sidewalk deck panels on M Street NW and Wisconsin Avenue NW starting at the end of 2020 to provide a more welcoming experience for outdoor dining and create more space for pedestrians to safely and comfortably walk in Georgetown. **Figure 1** illustrates the site vicinity map.

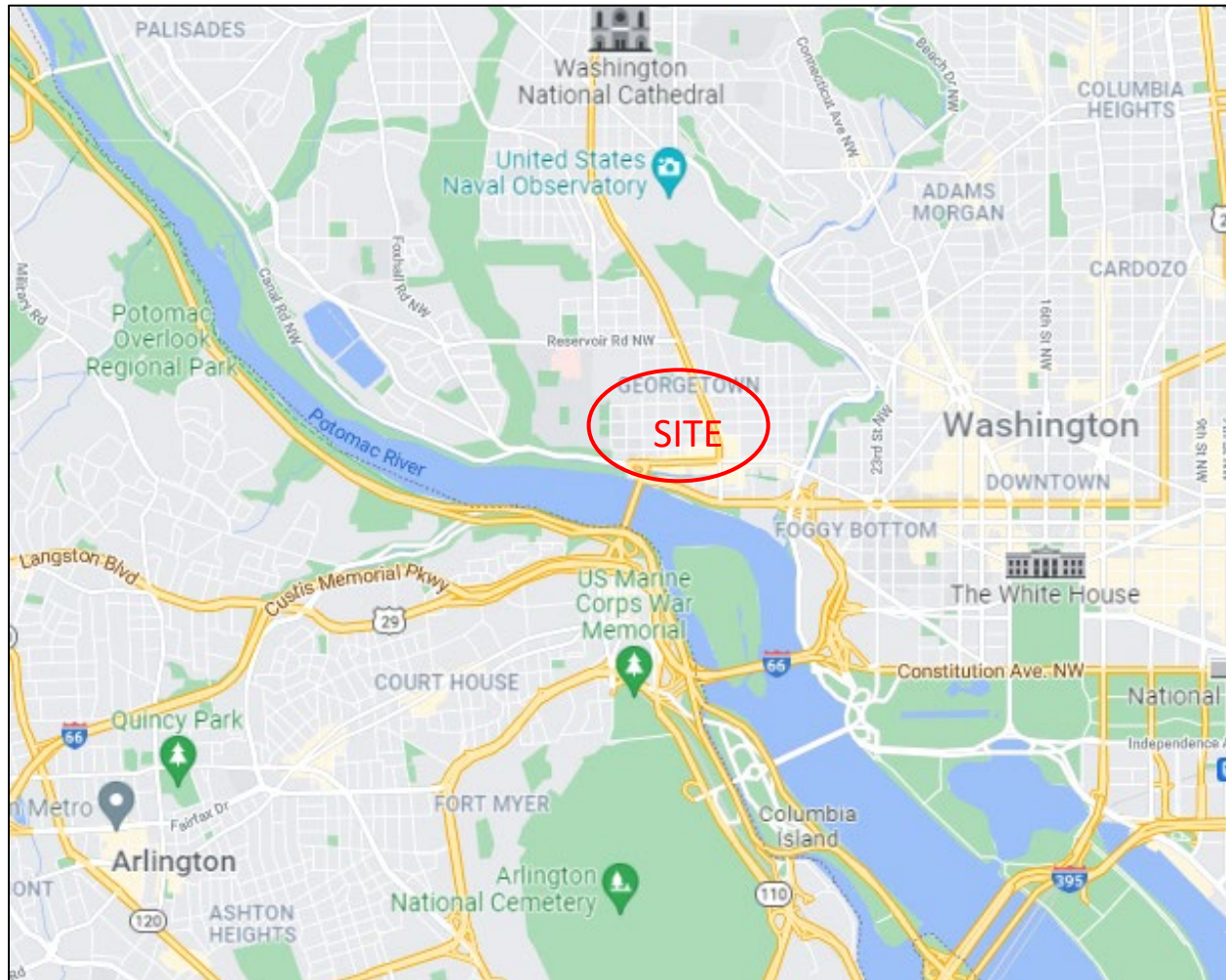


Figure 1: Study Area Vicinity Map

The decking extended Georgetown's narrow sidewalks from an average of 9.5 feet to an average of 15 feet, using removable 4' x 6.5' panels. The deck extensions were designed to be accessible to those using a wheelchair or pushing a stroller, to allow stormwater to flow under the deck to the curb, and to keep storm drains and fire hydrants clear. The panels were built with composite decking on top of a wood frame. Concrete barriers protect the sidewalk extensions to keep diners and pedestrians safe. The deck installation was completed in June 2021.

The sidewalk widening project was initiated under the auspices of the District’s streatery program in response to the COVID-19 pandemic. The public space permit for the sidewalk extensions is valid through the end of 2021; however, the BID and some community members wish to keep the sidewalk extensions longer. This CTR Study was prepared in conjunction with the public space permit application to continue use of the sidewalk widening project through the end of 2022. Continued use of the sidewalk extensions, if desired, would need to be reevaluated on an annual basis.

The project area consists of sidewalk widening along portions of M Street NW between 29th Street and 34th Street and portions of Wisconsin Avenue NW between Q Street and the C&O Canal. The sidewalk widening project reduces the number of rush hour travel lanes in each direction on M Street from three to two and on Wisconsin Avenue NW from two to one. The project accommodates bus stops, on-street loading/deliveries, pick-up/drop-off (PUDO) spaces, and limited on-street parking spaces. A photo of the sidewalk extension is shown in **Figure 2**. **Figure 3** illustrates the extents of the project area and current deck uses.



Figure 2: Sidewalk Widening with Outdoor Seating (Wisconsin Avenue, north of N Street)

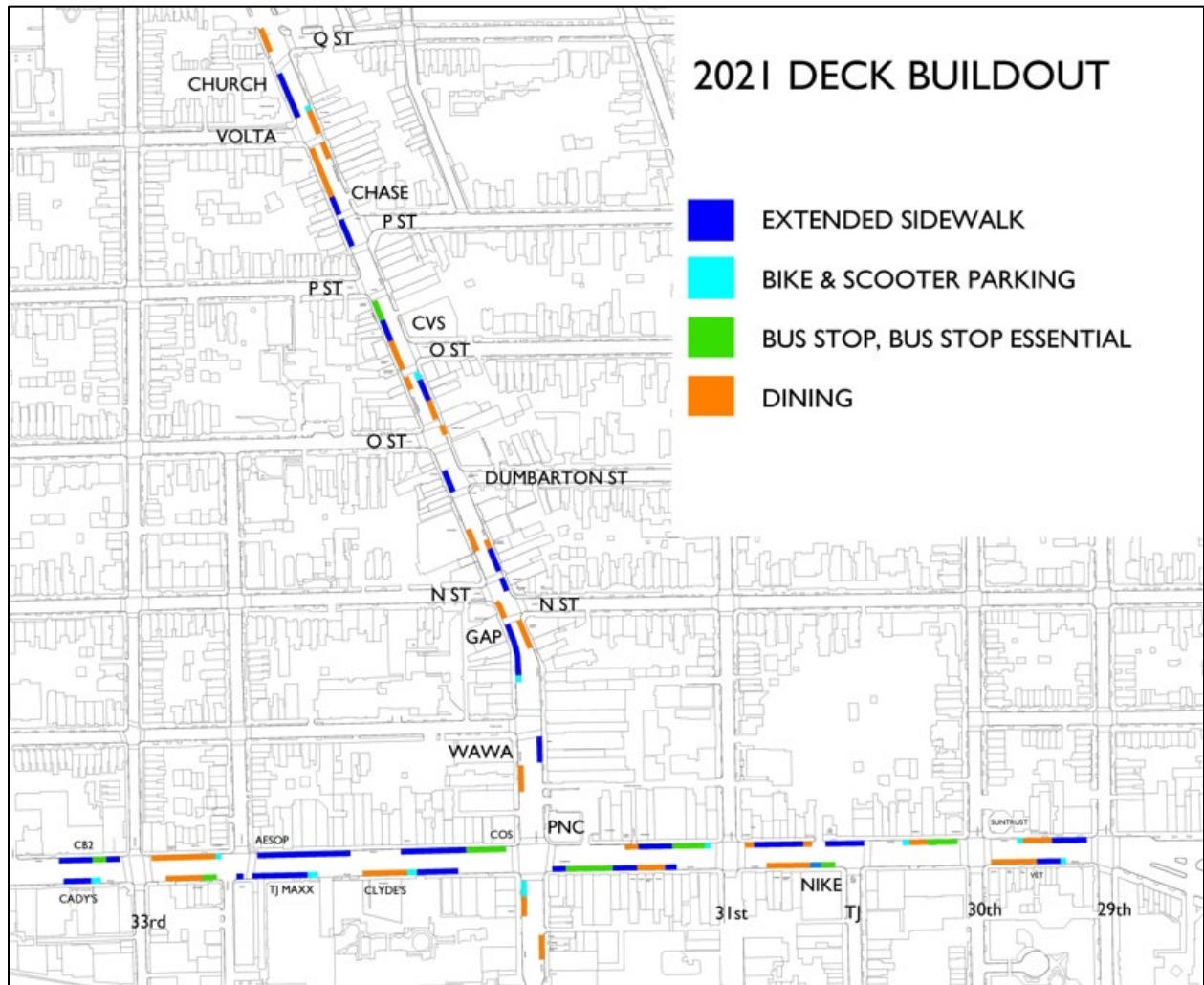


Figure 3: Sidewalk Extension Project Limits & 2021 Deck Uses

Scope of Study

The scope of the sidewalk widening CTR Study was approved by the District Department of Transportation (DDOT) in conjunction with the CTR scoping process. The primary study topics are outlined below:

- Traffic Analysis – capacity and queueing analysis associated with reducing the number of travel lanes during the morning and evening peak periods; analysis of traffic conditions during the Saturday peak hour
- Safety Assessment – review of travel speeds, crash data, and Vision Zero Action Plan Vision Zero reports
- Transit Assessment – observations of bus stop operations at relocated bus stops to confirm adequate access to bus stops with the sidewalk extensions, safety, and maneuverability of buses
- Pedestrian Assessment – observations of pedestrian/vehicle conflicts
- Bicycle Assessment – review of bicycle turning movements, Capital bikeshare trip data, and available bicycle routes
- Curbside Management – evaluation of pick-up/drop-off operations as well as on-street loading operations; recommendations regarding existing curbside restrictions
- Parking Assessment – review of Residential Parking Permit data, on-street parking occupancy and parking garage utilization

BACKGROUND

In conjunction with the initial public space approval for the project, a traffic analysis was conducted by DDOT on September 23, 2020 (based on 2019 traffic data). The DDOT study provided a summary of the traffic analysis impacts to the corridor and presented a list of possible mitigations for adverse impacts at affected intersections. The BID subsequently updated the sidewalk extension plan to incorporate the recommendations outlined in the September 23, 2020 DDOT analysis. The current 2021 plan reflects DDOT's previous recommendations including:

1. Retain a 115-foot exclusive right turn lane in the westbound direction along M Street east of Wisconsin Avenue
2. Retain a 150-foot exclusive right turn lane in the eastbound direction along M Street west of Wisconsin Avenue
3. Retain a 125-foot exclusive right turn lane in the southbound direction along Wisconsin Avenue north of M Street
4. Retain a third through travel lane along westbound M Street between 34th Street and Bank Alley to allow through traffic to bypass left turning vehicles at the Key Bridge intersection.

TRAFFIC

Traffic analysis was conducted for the current year (2021) as an update to the previous traffic analysis (2019) for AM and PM peak periods. Turning Movement Counts (TMCs) were conducted on Tuesday September 28, 2021 for weekday AM peak (7AM-9AM) and PM peak (4PM-7PM) periods, and on Saturday September 25, 2021 for the Saturday peak (12PM-4PM) period. The Highway Capacity Manual (HCM) methodology was used to evaluate intersection Level of Service for all study area intersections (M Street and Wisconsin Avenue). Simtraffic 10 was used to evaluate queuing along the M Street corridor. The study area consists of the following 14 intersections:

- M Street/34th Street
- M Street/ 33rd Street
- M Street/ Potomac Street
- M Street/ Wisconsin Avenue
- M Street/ 31st Street
- M Street/ Thomas Jefferson Street
- M Street / 30th Street
- M Street/ 29th Street
- Wisconsin Avenue/ Prospect Street
- Wisconsin Avenue/ N Street
- Wisconsin Avenue/ Dumbarton Street
- Wisconsin Avenue/ O Street
- Wisconsin Avenue/P Street
- Wisconsin Avenue/Q Street

Figure 4 shows the lane configurations of the study intersections. **Figure 5** displays the peak hour count data for each intersection during the AM, PM, and Saturday periods. A comparison of traffic and pedestrian volumes from 2019 to 2021 indicates the following:

- M Street – traffic volumes decreased by an average of 22 percent during the AM peak hour and 15 percent during the PM peak hour.
- Wisconsin Avenue - traffic volumes decreased by an average of 22 percent during the AM peak hour and 30 percent during the PM peak hour.
- Pedestrian volumes have remained consistent

Traffic counts are included in the Appendix.

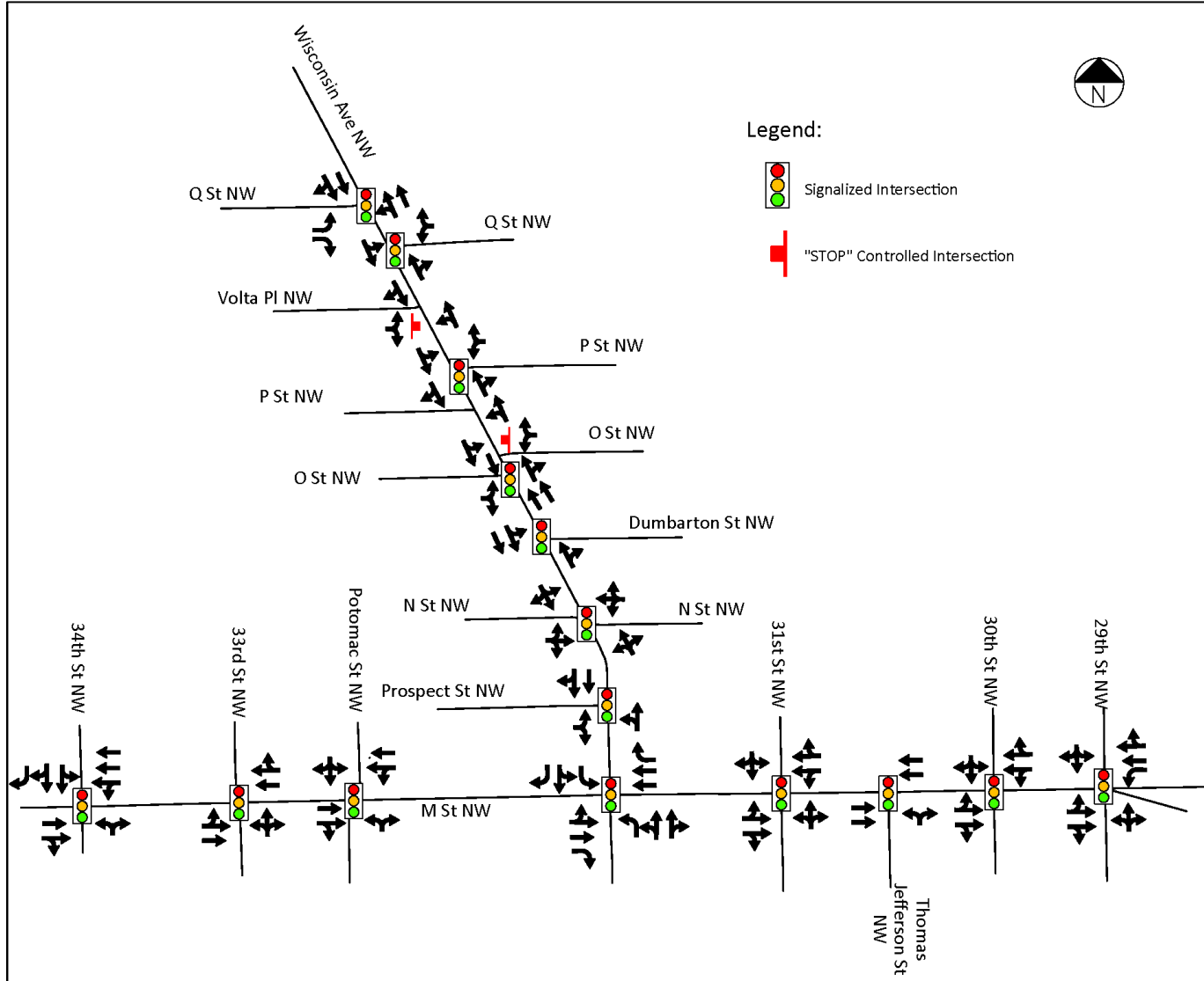


Figure 4: Lane Configurations

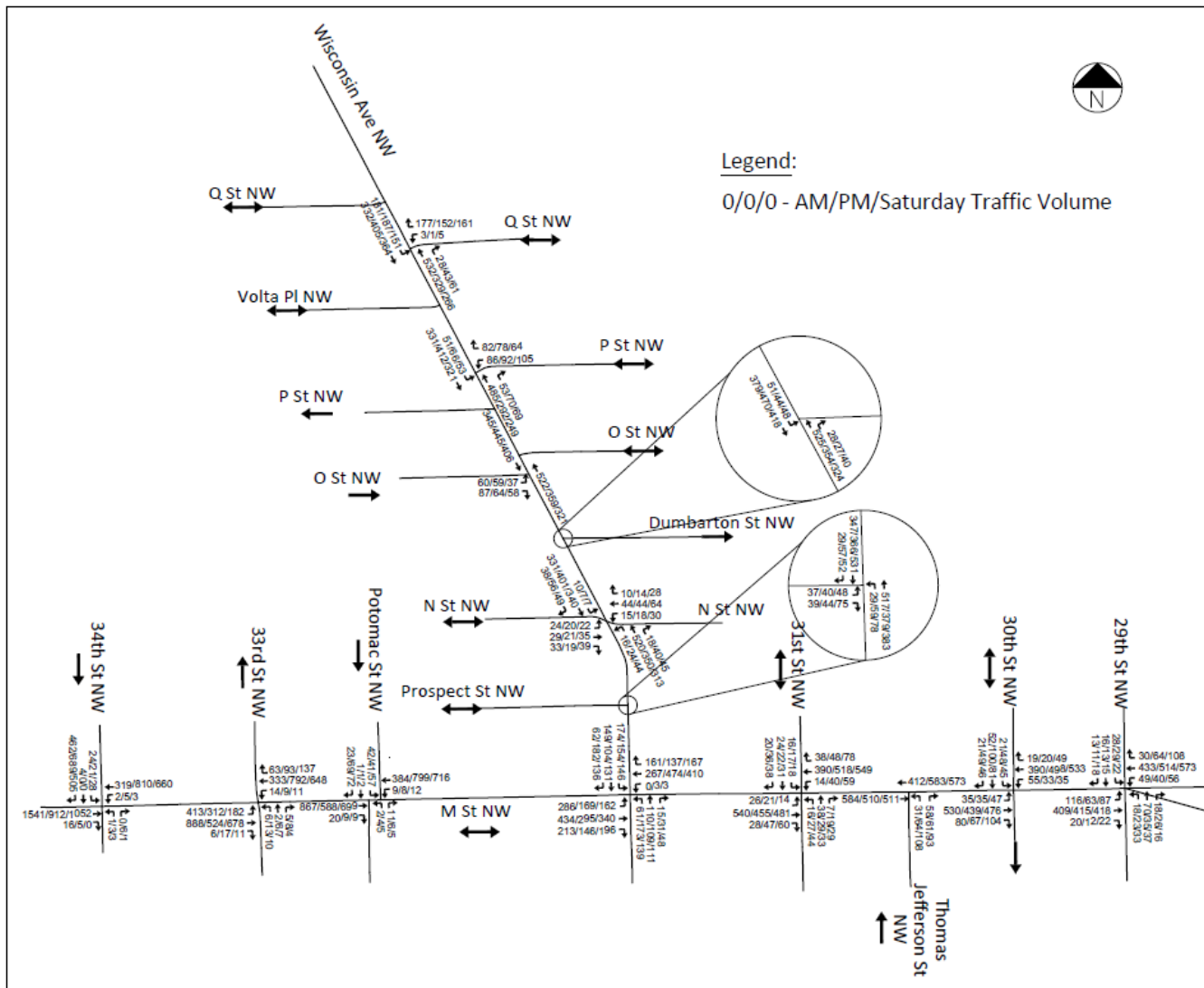
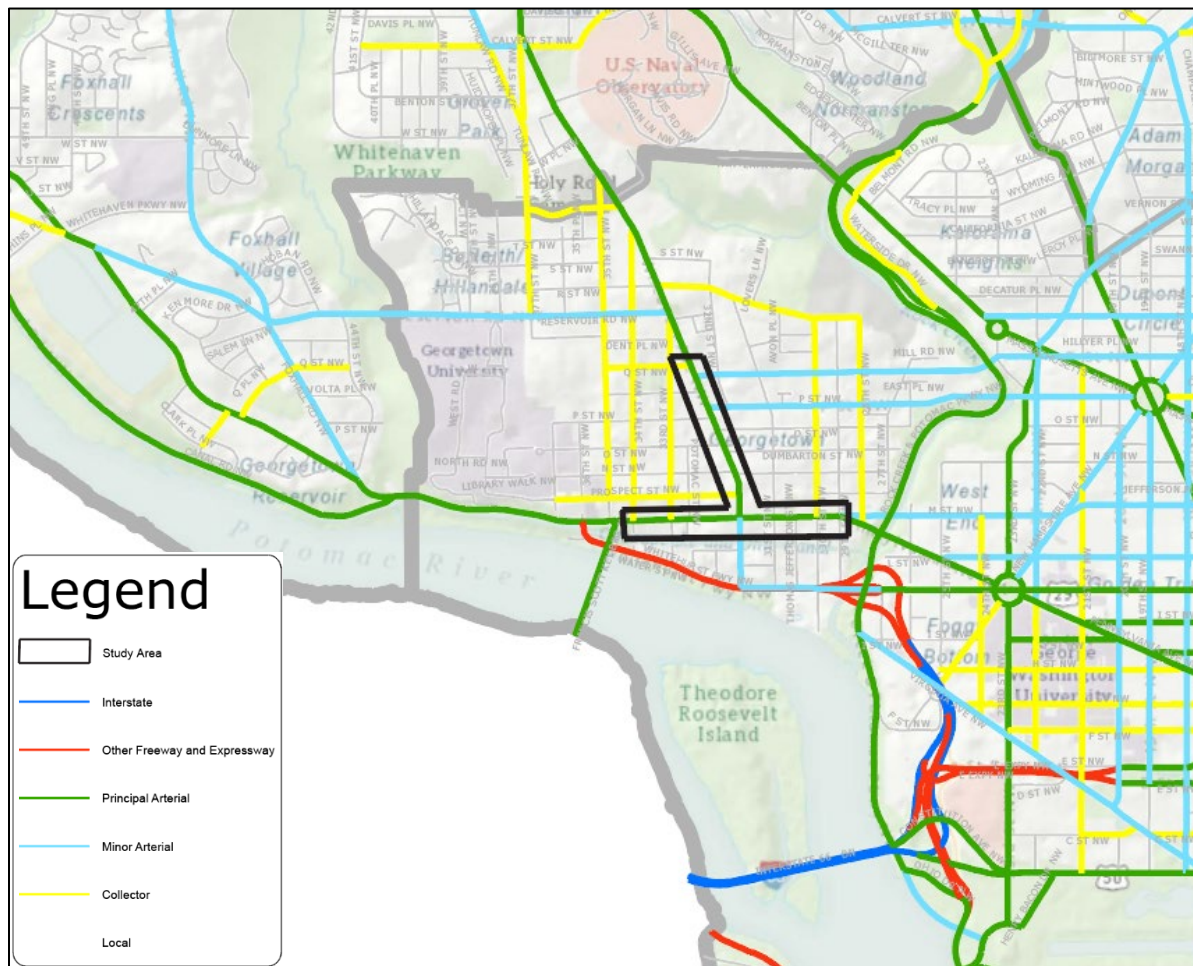


Figure 5: Intersection Peak Hour Traffic Counts

Roadway Network

- **M Street** - M Street NW is a principal arterial in the Georgetown neighborhood, with an annual average daily traffic (AADT) of 21,445 in 2019. Between the Key Bridge and 29th Street, M Street was a six-lane roadway with rush hour restrictions¹ prior to the sidewalk widening. The curb lane was used for on-street parking, loading and bus stops during off-peak periods and on weekends. As a result of the sidewalk widening project, M Street has four travel lanes at all times. The segment of M Street in Georgetown carries heavy commuter traffic because it connects Pennsylvania Avenue with the Key Bridge and Canal Road. The posted speed limit is 25 miles per hour on M Street east of Wisconsin Avenue and 20 miles per hour west of Wisconsin Avenue.
- **Wisconsin Avenue** – Wisconsin Avenue NW is a principal arterial in the Georgetown neighborhood north of M Street, with an AADT of 28,395 in 2019. South of M Street Wisconsin Avenue is classified as a minor arterial. From the Georgetown riverfront, Wisconsin Avenue climbs steeply north through Northwest D.C. along two travel lanes, with parked vehicles continuously filling both curb lanes. The posted speed limit is 25 miles per hour.



¹ No Stopping 7-9:30AM, 4-6:30PM, Monday-Friday

Figure 6: Roadway Classification (DDOT Functional Classification 2019)

Level of Service

Level of Service (LOS) is a measure of the average control (i.e., stop sign or traffic signal) delay experienced by all motorists arriving to an intersection. There are six representative levels of service defined for intersections and they are designated using letters “A” through “F”, with LOS “A” representing the best operating conditions and LOS “F” representing the worst. Safety of the intersection is not included in the measures used to calculate LOS. For signalized intersections, delay is evaluated for the overall intersection). The thresholds for the intersection levels of service are shown in **Table 1**.

Table 1: Intersection Level of Service Threshold for Delay

LOS	Signalized
A	0-10 sec
B	> 10-20 sec
C	> 20-35 sec
D	> 35-55 sec
E	> 55-80 sec
F	> 80 sec

Capacity Analysis

Capacity analyses were performed for the study intersections for AM, PM, and weekend peak hours. The capacity analysis results were performed using Synchro 10 and Highway Capacity Manual (HCM) methodology to determine delay, volume-to-capacity ratio, and Level of Service (LOS) for each intersection in the study area. The capacity analyses were compared to the DDOT 2019 baseline study, the 2020 projected conditions with sidewalk widening (using 2019 data), and the updated 2021 conditions with the current sidewalk widening conditions. The results from 2021 and the results from previous 2020 study are included in **Table 2** as a comparison. Analysis results are included in the appendix.

The analysis results presented in **Table 2** indicate that the lane reduction associated with the sidewalk widening with the 2021 volumes has a low to moderate impact for all the signalized intersections in the study area when compared to 2019 conditions. All the study area intersections operate at an acceptable level of service. When compared to the intersections that were included in the previous studies, the effect on the delay per vehicle is minimal. The maximum increase in delay is at the Wisconsin Avenue/M Street intersection which experiences a 4.1 second increase in delay during the Saturday peak hour when compared to 2019 conditions (30.9 vs. 26.8 sec delay/vehicle). There were also instances where the delay per vehicle decreased (improved) when compared to 2019 conditions. For instance, the overall vehicle delay at the 34th Street/M Street intersection which experiences a 5.9 second decrease in delay during the AM peak hour when compared to 2019 conditions (13.8 vs. 19.7 sec delay/vehicle). The decreases in delay are associated with the decrease in volume from 2019 to 2021. The capacity analyses for this study are expected to degrade slightly once more employers return to the office workplace and traffic volumes

increase. However, the increased volumes in the immediate future are not expected to reach the levels from 2019.

Table 2: Summary of Capacity Analysis for Georgetown Sidewalk Widening

Scenario	Intersection	Synchro 10 (HCM2000) Results								
		Delay (sec/veh)			v/c ratio			Level of Service		
		AM	PM	Sat	AM	PM	Sat	AM	PM	Sat
2019 DDOT Baseline: No Sidewalk Widening Project	34th St and M St, NW	19.7	22.8	17.0	0.67	0.63	0.57	B	C	B
	33rd St and M St, NW	9.4	12.3	18.4	0.52	0.54	0.72	A	B	B
	Potomac St and M St, NW	7.9	15.0	14.8	0.45	0.46	0.51	A	B	B
	Wisconsin Ave and M St, NW	30.0	22.8	26.8	0.72	0.55	0.67	C	C	C
	31st St and M St, NW	6.2	10.1	11.1	0.36	0.37	0.51	A	B	B
	Thomas Jefferson St and M St, NW	6.8	9.4	9.4	0.41	0.43	0.41	A	A	A
	30th St and M St, NW	6.4	10.9	12.9	0.51	0.54	0.63	A	B	B
	29th St and M St, NW	7.2	10.8	9.2	0.49	0.44	0.60	A	B	A
	Wisconsin Ave and Prospect St, NW	8.0	9.2	14.8	0.29	0.35	0.58	A	A	B
	Wisconsin Ave and N St, NW	9.4	15.2	16.8	0.46	0.64	0.61	A	B	B
	Wisconsin Ave and Dumbarton St, NW	4.5	2.0	2.7	0.35	0.42	0.44	A	A	A
	Wisconsin Ave and O St, NW	8.2	7.4	10.9	0.36	0.38	0.50	A	A	B
	Wisconsin Ave and P St, NW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Wisconsin Ave and Q St, NW South	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Wisconsin Ave and Q St, NW North	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2020 Sidewalk Project: 2019 Counts w/ Sidewalk Widening	34th St and M St, NW	19.6	25.8	17.4	0.67	0.69	0.57	B	C	B
	33rd St and M St, NW	20.1	16.0	17.8	0.79	0.68	0.72	C	B	B
	Potomac St and M St, NW	8.6	18.5	14.3	0.61	0.60	0.51	A	B	B
	Wisconsin Ave and M St, NW	46.0	28.4	29.2	0.98	0.76	0.75	D	C	C
	31st St and M St, NW	7.1	10.2	9.7	0.54	0.52	0.41	A	B	A
	Thomas Jefferson St and M St, NW	6.8	9.4	9.4	0.41	0.43	0.41	A	A	A
	30th St and M St, NW	8.9	14.7	13.0	0.67	0.70	0.63	A	C	B
	29th St and M St, NW	7.5	11.3	9.2	0.50	0.47	0.60	A	B	A
	Wisconsin Ave and Prospect St, NW	11.6	15.5	19.0	0.50	0.47	0.60	B	B	B
	Wisconsin Ave and N St, NW	15.1	36.5	15.0	0.73	1.01	0.61	B	D	B
	Wisconsin Ave and Dumbarton St, NW	6.3	6.9	3.0	0.64	0.75	0.48	A	A	A
	Wisconsin Ave and O St, NW	11.8	13.9	10.9	0.63	0.69	0.50	B	B	B
	Wisconsin Ave and P St, NW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Wisconsin Ave and Q St, NW South	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Wisconsin Ave and Q St, NW North	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2021 Sidewalk Project: 2021 Counts w/ Sidewalk Widening	34th St and M St, NW	13.8	22.0	16.2	0.60	0.51	0.57	B	C	B
	33rd St and M St, NW	6.9	13.3	21.2	0.61	0.55	0.69	A	B	C
	Potomac St and M St, NW	9.3	18.3	18.6	0.43	0.44	0.54	A	B	B
	Wisconsin Ave and M St, NW	26.8	23.8	30.9	0.74	0.59	0.61	C	C	C
	31st St and M St, NW	7.9	10.0	13.7	0.33	0.37	0.54	A	B	B
	Thomas Jefferson St and M St, NW	5.3	7.3	9.0	0.30	0.31	0.43	A	A	A
	30th St and M St, NW	6.6	9.6	10.8	0.41	0.41	0.47	A	A	B
	29th St and M St, NW	7.7	6.9	7.9	0.36	0.30	0.31	A	A	A
	Wisconsin Ave and Prospect St, NW	10.2	9.7	12.6	0.49	0.42	0.58	B	A	B
	Wisconsin Ave and N St, NW	11.9	9.6	17.1	0.60	0.45	0.56	B	A	B
	Wisconsin Ave and Dumbarton St, NW	5.3	2.5	3.9	0.51	0.38	0.36	A	A	A
	Wisconsin Ave and O St, NW	8.0	9.6	7.0	0.47	0.34	0.32	A	A	A
	Wisconsin Ave and P St, NW	22.1	16.6	22.5	0.53	0.51	0.61	C	B	C
Wisconsin Ave and Q St, NW South	42.3	22.6	21.1	0.74	0.64	0.66	D	C	C	
Wisconsin Ave and Q St, NW North	7.6	13.6	12.3	0.39	0.31	0.35	A	B	B	

n/a – The intersection labeled n/a were not included in the 2019 or 2020 traffic studies

Queuing

Previous DDOT 2019 analysis evaluated the traffic conditions along M Street from a level of service (LOS) and delay perspective. The previous supplemental analysis included a review of 95th percentile queuing along the M Street corridor during the PM peak hour. This study expands the queuing analysis to include AM and weekend peak hour scenarios for both the M Street and Wisconsin Avenue corridors using the data collected in 2021.

Queuing analyses were performed using Simtraffic 10 methodology for the study intersections along both M Street and Wisconsin Avenue under the existing conditions with the sidewalk widening project in place. The PM peak hour timeframe was originally chosen since it represented the time that would experience the greatest amount of queuing in the westbound direction creating a spillover effect on the Georgetown roadway network.

Table 3 provides a summary of the results of the queuing analysis performed using Simtraffic 10 methodology for both directions on M Street and Wisconsin Avenue during the AM, PM, and weekend peak hours. The 95th percentile queue length and the link distance are shown for each intersection along M Street and Wisconsin Avenue. The queuing results worksheets are in the Appendix.

Table 3: Summary of Queuing Analysis for Georgetown Sidewalk Widening (AM and PM)

Intersection	Simtraffic 10 Results AM Peak Hour					
	95 th Percentile Queue Length				Link Distance	
	2019		2021			
	EB	WB	EB	WB	EB	WB
M Street						
34th St and M St, NW	-	-	166	218	120	448
33rd St and M St, NW	-	-	218	102	448	176
Potomac St and M St, NW	-	-	95	96	176	598
Wisconsin Ave and M St, NW	-	-	250	258	598	392
31st St and M St, NW	-	-	135	156	392	237
Thomas Jefferson St and M St, NW	-	-	59	86	237	249
30th St and M St, NW	-	-	93	86	249	252
29th St and M St, NW	-	-	85	100	252	86
Wisconsin Avenue	NB	SB	NB	SB	NB	SB
Wisconsin Ave and M St, NW	-	-	106	155	153	248
Wisconsin Ave and Prospect St, NW	-	-	225	114	248	212
Wisconsin Ave and N St, NW	-	-	163	89	212	235
Wisconsin Ave and Dumbarton St, NW	-	-	188	118	235	68
Wisconsin Ave and O St, NW	-	-	14	88	68	462
Wisconsin Ave and P St, NW	-	-	180	173	462	420
Wisconsin Ave and Q St, NW South	-	-	283	141	420	118
Wisconsin Ave and Q St, NW North	-	-	87	343	118	635

Intersection	Simtraffic 10 Results PM Peak Hour					
	95 th Percentile Queue Length				Link Distance	
	2019		2021			
	EB	WB	EB	WB	EB	WB
M Street						
34th St and M St, NW	177	546	172	490	120	448
33rd St and M St, NW	392	245	301	205	448	176
Potomac St and M St, NW	117	271	105	261	176	598
Wisconsin Ave and M St, NW	197	215	137	262	598	392
31st St and M St, NW	146	128	140	143	392	237
Thomas Jefferson St and M St, NW	82	89	72	101	237	249
30th St and M St, NW	165	166	90	83	249	252
29th St and M St, NW	98	126	76	124	252	86
Wisconsin Avenue	NB	SB	NB	SB	NB	SB
Wisconsin Ave and M St, NW	-	-	95	192	153	248
Wisconsin Ave and Prospect St, NW	-	-	186	134	248	212
Wisconsin Ave and N St, NW	-	-	139	84	212	235
Wisconsin Ave and Dumbarton St, NW	-	-	139	108	235	68
Wisconsin Ave and O St, NW	-	-	15	107	68	462
Wisconsin Ave and P St, NW	-	-	169	195	462	420
Wisconsin Ave and Q St, NW South	-	-	249	147	420	118
Wisconsin Ave and Q St, NW North	-	-	92	235	118	635

Table 4: Summary of Queuing Analysis for Georgetown Sidewalk Widening (Weekend)

Intersection	Simtraffic 10 Results Saturday Peak Hour					
	95 th Percentile Queue Length				Link Distance	
	2019		2021			
	EB	WB	EB	WB	EB	WB
M Street						
34th St and M St, NW	-	-	140	133	120	448
33rd St and M St, NW	-	-	310	185	448	176
Potomac St and M St, NW	-	-	122	227	176	598
Wisconsin Ave and M St, NW	-	-	169	320	598	392
31st St and M St, NW	-	-	165	160	392	237
Thomas Jefferson St and M St, NW	-	-	88	96	237	249
30th St and M St, NW	-	-	166	116	249	252
29th St and M St, NW	-	-	104	111	252	86
Wisconsin Avenue	NB	SB	NB	SB	NB	SB
Wisconsin Ave and M St, NW	-	-	153	193	153	248
Wisconsin Ave and Prospect St, NW	-	-	260	163	248	212
Wisconsin Ave and N St, NW	-	-	191	87	212	235
Wisconsin Ave and Dumbarton St, NW	-	-	178	103	235	68
Wisconsin Ave and O St, NW	-	-	39	133	68	462
Wisconsin Ave and P St, NW	-	-	214	289	462	420
Wisconsin Ave and Q St, NW South	-	-	194	173	420	118
Wisconsin Ave and Q St, NW North	-	-	104	214	118	635

As shown in **Table 3**, when compared to 2019 PM peak hour conditions, queuing along M Street is generally less except for the westbound direction west of Wisconsin Avenue. This is generally due to the

decrease in traffic volumes between 2019 and 2021. The 95th percentile queue increased from 215 feet to 262 feet with the sidewalk widening project. This queue length does not spillback to the upstream intersection at Potomac Street. The queue lengths at the 29th Street, 33rd and 34th Street intersections continue to spillback to the upstream intersection. However, the queue lengths decrease at all these intersections when compared to the 2019 scenario. The queues at the other intersections along this segment do not spillback to the upstream intersections. During the AM peak hour, all queue lengths are maintained within the link capacity except at the 34th Street intersection eastbound and at the 29th Street intersection in the westbound direction. Similarly, during the weekend peak hour, all queue lengths are maintained within the link capacity except at the 34th Street intersection eastbound and at the 29th Street and 33rd Street intersections in the westbound direction.

The queues along Wisconsin Avenue spillback to the upstream intersection at the Dumbarton Street and Q Street intersections in the southbound direction during the AM, PM, and weekend peak hours. The queue at Prospect Street spills back to the upstream intersection during the weekend peak hour in the northbound direction. The queue lengths at all the other intersections along Wisconsin Avenue are maintained within the link capacity during all the scenarios. Queuing at the Q Street intersection has been identified by the community as being problematic. The queues in the southbound direction during the AM peak hour at the southern leg of the Q Street intersection extend back approximately 140 feet. Field observations determined that these queues were partially a result of the short distance between the two legs of Q Street and left turning traffic onto the southern leg of Q Street. The queues at the northern leg of the Q Street intersection in the southbound direction during the AM peak hour extend approximately 340 feet. The analysis shows that the queue at the northern Q Street intersection is accommodated within the link capacity (635 feet) to the next intersection.

Traffic Analysis Conclusions

The following are a summary of the capacity and queuing analysis results:

1. Traffic volumes are substantially less in 2021 vs. 2019
2. Levels of Service have generally improved compared to pre-sidewalk widening conditions with higher traffic volumes
3. Queuing exceeds the link capacity in one location on M Street but the sidewalk widening project does not impact queuing capacity. Queue lengths are less than the queues that were analyzed in the previous 2019 study
4. Queuing exceeds the link capacity in several locations on Wisconsin Avenue, particularly where the link distance is short (less than 125 feet).
5. The queues on Wisconsin Avenue in the southbound direction between the two legs of Q Street exceed the link capacity. However, analysis showed the resulting queue north of Q Street is accommodated within the link capacity to the upstream intersection at Reservoir Road.

CURBSIDE MANAGEMENT

The sidewalk widening project includes deck panels on M Street NW and Wisconsin Avenue NW to provide a more welcoming experience for outdoor dining and create more space for pedestrians to safely and comfortably walk in Georgetown. Throughout the study area, there are locations where the existing curb line has been maintained (i.e., no deck panels) to accommodate bus stops, on-street loading/deliveries, pick-up/drop-off (PUDO) spaces, and on-street parking spaces. This is shown on **Figure 7**.

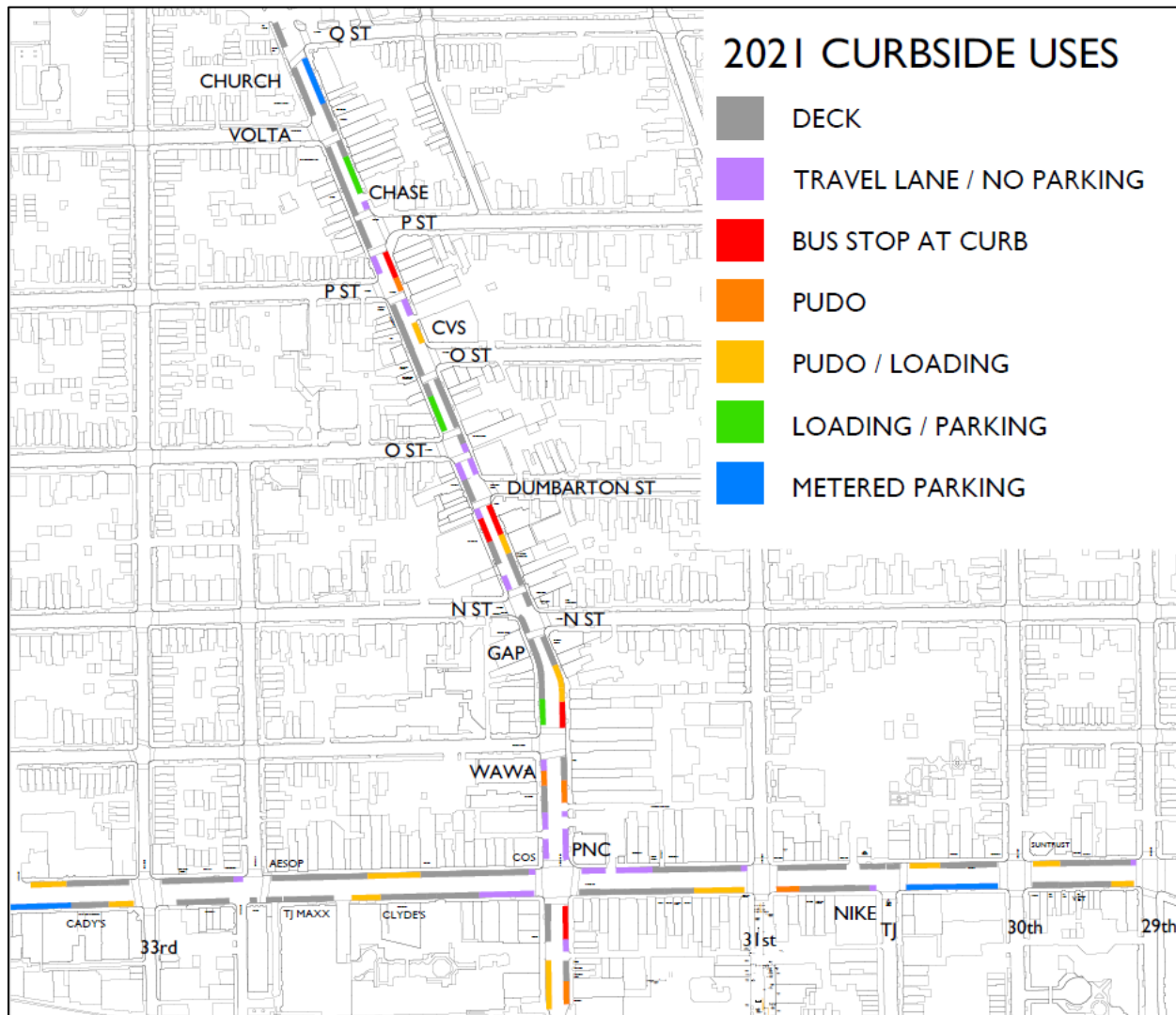


Figure 7: Sidewalk Extension Project Limits & 2021 Curbside Uses

As part of the 2020 public space permit process, a signage plan was prepared to illustrate proposed changes to curbside management. As necessary, signage indicating metered parking were updated to denote no parking, shared loading/delivery², or PUDO spaces. Updated signage was installed in April 2021.

² 30-minute permit or pay to load 7AM-4PM Monday-Friday

The number of PUDO and loading spaces in 2019 and 2021 are shown in **Table 5** for comparison. The total number of spaces on Wisconsin Avenue stayed relatively the same. The total number of spaces on M Street increased, but there are no loading-only spaces and only shared spaces with two PUDO spaces.

Table 5: 2019 and 2021 PUDO AND Loading Space

Block	Wisconsin Avenue						M Street					
	1000	1200	1300	1400	1500	Total	2900	3000	3100	3200	3300	Total
2019 PUDO and Loading Spaces												
PUDO	3	3	-	-	-	6	-	-	-	-	-	0
30-Minute Loading	-	-	-	-	-	0	-	-	-	-	-	0
1-Hour Loading	3	-	-	-	-	3	-	-	-	-	-	0
2-Hour Loading	-	-	-	-	5	5	-	1	7	7	-	15
PUDO/Loading	-	9	-	-	-	9	-	-	-	-	-	0
2019 Total	6	12	0	0	5	23	0	1	7	7	0	15
2021 PUDO and Loading Spaces												
PUDO	2	3	-	2	-	7	-	2	-	-	-	2
30-Minute Loading	-	2	-	3	4	9	-	-	-	-	-	0
1-Hour Loading	-	-	-	-	-	0	-	-	-	-	-	0
2-Hour Loading	-	-	-	-	-	0	-	-	-	-	-	0
PUDO/Loading	4	3	2	-	-	9	4	2	4	7	3	20
2021 Total	6	8	2	5	4	25	4	4	4	7	3	22
Total Difference	0	-4	+2	+5	-1	+2	+4	+3	-3	0	+3	+7

The CTR Study evaluated curbside operations to determine the need for potential adjustments. The following data sources were reviewed:

- Survey feedback from business about loading operations provided by the BID
- Double parking observations provided by the BID Clean Team
- Department of Public Works (DPW) parking enforcement data

Georgetown Business Surveys

The Georgetown BID conducted online questionnaire surveys of businesses to determine loading activity and issues. Surveys were conducted November 2020, June 21-27, 2021, and October 13-19, 2021. The November 2020 survey was more detailed; however, the November 2020 survey was conducted prior to the full implementation of the deck widening project, before signage was installed to denote revised curbside management, and when District parking enforcement was not active. Thus, qualitative questions regarding difficulty parking and loading and parking ticket frequency were excluded from the analysis. November 2020 data regarding daily average of delivery vehicles, typical delivery times and busiest days of the week was thought to be sufficient for the purposes of assessing curbside management demand and potential deficiencies. Data from the June 2021 survey was less detailed. The October 2021 survey asked businesses about whether their experience with the sidewalk extensions has changed over time. **Table 6** outlines a summary of key questions asked during each survey.

Table 6: Key Survey Questions for Georgetown Business Survey

	November 2020	June 2021	October 2021
Daily Average of Delivery Vehicles	✓		
Typical Delivery Times	✓		
Busiest Days of the Week	✓		
Difficulty Loading	✓	✓	✓

The qualitative survey responses from the June 2021 survey are summarized in **Table 7**. As indicated in **Table 7**, 60% of businesses thought it was “harder to park and load” after completion of the sidewalk widening project. The number of businesses that responded is depicted in **Figure 8** by side of the block.

Table 7: Business Survey Results from June 2021

Delivery Feedback	%	#
Easier to park and load	2%	2
Harder to park and load	60%	59
Mix of easier and harder to load	2%	2
No change in ability to load	10%	10
No feedback	26%	26
Total	100%	99

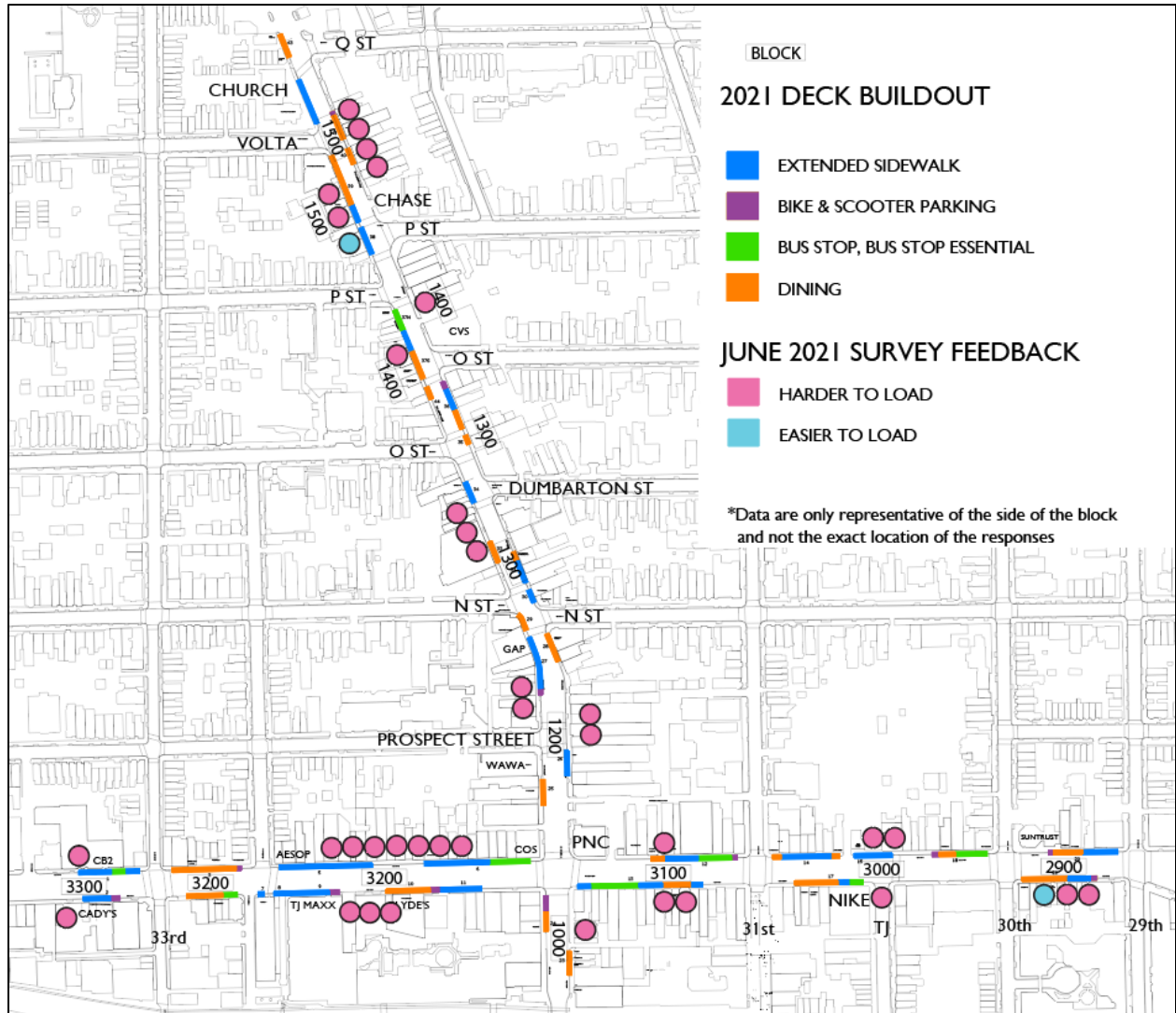


Figure 8: 2021 Deck Buildout with Business Loading Survey Feedback (June 2021)

Many businesses felt it was harder to park and load, with seven on the north side of the 3200 block on M Street and four on the east side of the 1500 block on Wisconsin Avenue.

After four months with the full sidewalk deck extensions, businesses were asked if their experience has changed over time. The qualitative survey responses from the October 2021 survey are summarized in **Table 8**. As indicated in **Table 8**, 49% of businesses thought it was “harder to park and load” after completion of the sidewalk widening project. Compared to the June 2021 survey, more businesses responded with “mix of easier and harder to load”. Most businesses and customers felt generally positive about sidewalk widening.

Table 8: Business Survey Results from June 2021

Delivery Feedback	%	#
Easier to park and load	5%	4
Harder to park and load	49%	38
Mix of easier and harder to load	12%	9
No change in ability to load	10%	8
No feedback	24%	18
Total	100%	77

Table 9-Table 10 and **Figure 9** summarize the data from November 2020.

Table 9: Business Survey Results from November 2020

Feedback		%	#
Difficulty for Delivery Vehicles to Park	Always	31%	28
	Sometimes	54%	48
	Never	15%	13
	Total	100%	89

Table 10: Business Loading and Delivery Survey Results by Vehicle by Block (November 2020)

	Block	Wisconsin Avenue NW						M Street NW						
		1000	1200	1300	1400	1500	Total	2900	3000	3100	3200	3300	3400	Total
Typical Delivery Times	6:00am-9:30am	0	1	0	0	0	1	0	1	2	0	1	0	4
	9:30am-12:00pm	4	6	5	4	10	29	3	2	7	17	6	3	38
	12:00pm-3:00pm	6	8	5	12	8	39	7	2	6	16	7	1	39
	3:00pm-7:00pm	3	4	3	0	0	10	0	0	1	7	4	0	12
	7:00pm-12:00am	0	0	0	0	0	0	0	0	0	1	1	0	2
	12:00am-6:00am	0	0	0	0	0	0	0	2	0	0	1	0	3
	Total	13	19	13	16	18	79	10	7	16	41	20	4	98
Busiest Days	Monday	8	8	6	2	2	26	4	2	6	24	16	2	54
	Tuesday	12	4	8	4	4	32	10	0	4	20	10	4	48
	Wednesday	10	6	8	10	16	50	10	0	6	20	10	2	48
	Thursday	10	6	8	12	8	44	6	2	16	18	12	2	56
	Friday	10	10	8	12	14	54	6	2	8	22	12	2	52
	Saturday	0	0	4	2	0	6	2	0	0	10	10	0	22
	Sunday	0	0	0	2	0	2	0	0	0	0	4	0	4
	Total	50	34	42	44	44	214	38	6	40	114	74	12	284

As outlined in **Table 10**, most often delivery times were from 9:30am-12:00pm and 12:00pm-3:00pm. The weekend was the least busy for truck loading and deliveries. **Table 10** also shows that the 3200 block of

M Street NW had the greatest number of delivery vehicles loading throughout the day³. This is most likely because there are 6 restaurants and 4 retail establishments located in the 3200 block of M Street that responded in the survey, more restaurants than any other block and second in the number of retail establishments.

Difficulty parking data were used to identify blocks where potential curbside loading issues may exist. More than half of all businesses found it sometimes hard and almost one-third of businesses always found it hard to park. These responses are depicted in **Figure 9** below.

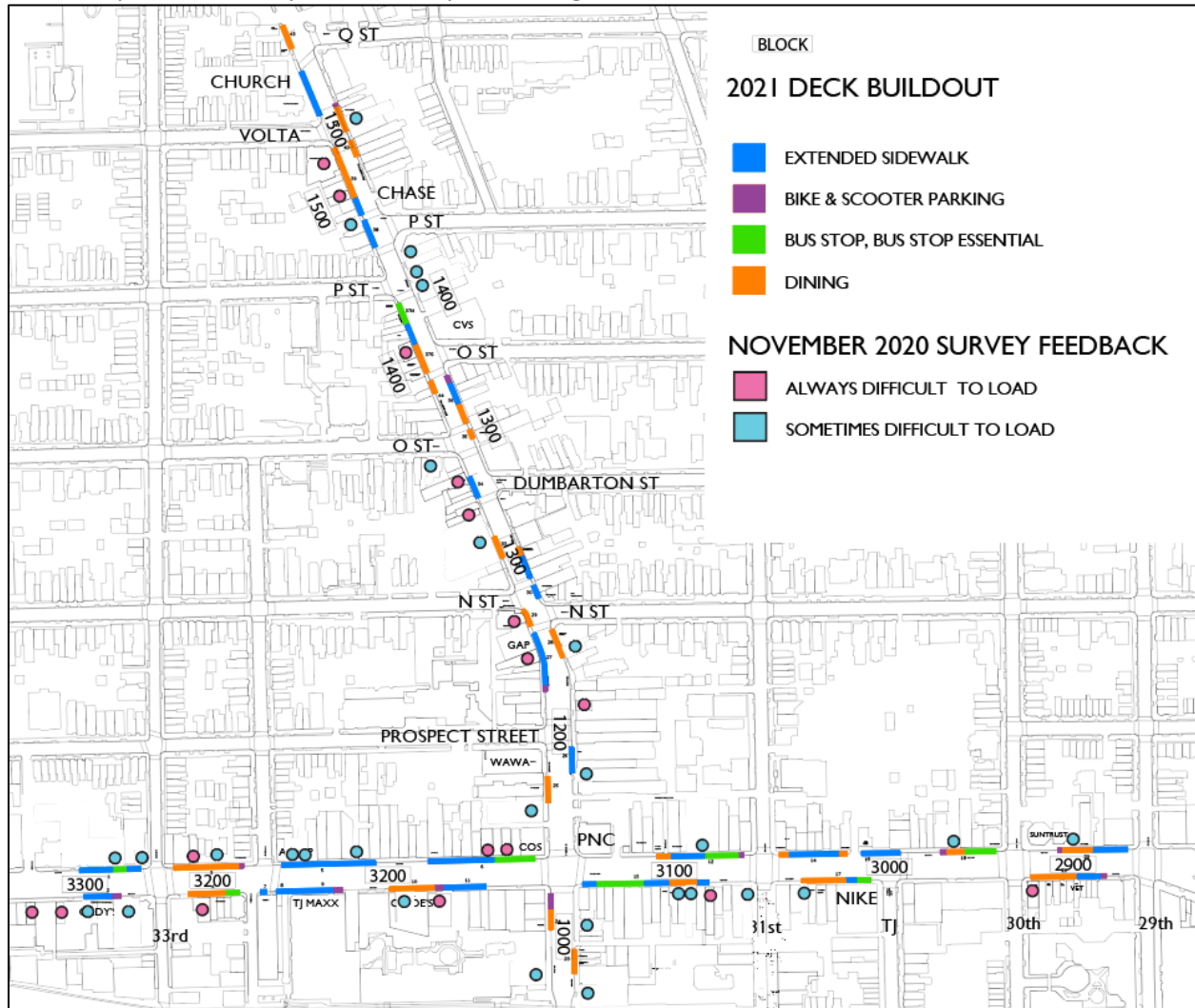


Figure 9: 2021 Deck Buildout with Business Loading Survey Feedback (November 2020)

³ The number of daily vehicles used is the average of the daily average maximum and minimum provided on the survey, rounding up when necessary.

Approximately two-thirds of businesses on M Street and Wisconsin Avenue do not have alley access. Businesses utilize on-street space for loading, parcel deliveries and pick-up/drop-off operations. Delivery vehicle demand data from the November 2020 survey was used to compare loading demand to the number of on-street loading spaces. The number of loading spaces on each block were determined from the signage plans. Loading capacity was calculated assuming each loading activity took 30 minutes⁴. Spaces were assumed to be 30 feet for loading and 20 feet for PUDO activities. The capacity of shared PUDO/Loading spaces were reduced by half to account for expected PUDO demand.

Table 11 shows detailed peak demand to capacity analysis of blocks where vehicles load at the peak time. Although **Table 10** shows that the 3200 block of M Street NW had the greatest number of delivery vehicles loading throughout the day, it was not over the capacity at any time because there were three seven PUDO/loading spaces available on the block. The 1300 block on Wisconsin Avenue and the 3300 block on M St, however, are at or near capacity during the early-afternoon period from 12pm-3pm. The 1300 block on Wisconsin Avenue is also at capacity during the mid-morning period from 9:30am to 12pm. The ratio is a conservative estimate by assuming the size of loading vehicles to be 30 feet.

Table 11: Maximum Demand to Capacity for Loading Vehicles (November 2020)

	1000	1200	1300	1400	1500	2900	3000	3100	3200	3300
Peak Period	12pm-3pm	9:30am-12pm	9:30am-12pm	12pm-3pm	9:30am-12pm	12pm-3pm	9:30am-12pm	9:30am-12pm	9:30am-12pm	9:30am-12pm
Loading Spaces	0	2	0	3	4	0	0	0	0	0
PUDO/Loading Spaces	4	3	2	0	0	4	2	4	7	3
Loading Capacity	12	17	5	18	20	12	5	10	17	7
Loading Demand	5	6	5	8	8	7	1	7	12	6
Demand/Capacity	42%	35%	100%	44%	40%	58%	20%	70%	71%	86%

Parking Enforcement Violations

Parking enforcement data for the second quarter of 2019 and 2021 were retrieved from Open Data DC. **Table 12** shows the parking violations in years 2019 and 2021 for comparison. All increases in violations occurred on Wisconsin Avenue. Table 6 also indicates several decreases in violations. However, it cannot be assumed that any reductions in violations are associated with the sidewalk widening project.

Table 13 and **Table 14** elaborate on **Table 12** for deeper analysis of violations that may be related to the sidewalk widening project. **Table 13** shows that majority of the parking in a bus zone violation increased on the 1300 block on Wisconsin Avenue NW. **Table 14** shows the violation of unauthorized vehicles in loading zone by block. Most of the violation increases occurred on Wisconsin Avenue NW. All the parking in designated entrance violations increases occurred on the 1000 block of Wisconsin Avenue.

⁴ Restriction for loading space is 30 minutes. In a three-hour period, there are six potential loading activities.

Table 12: Second Quarter Parking Enforcement Violations (2019 and 2021)

Violation Description	2019 Total	2021 Total	% Change	2019 M Street	2021 M Street	% Change	2019 Wisconsin Avenue	2021 Wisconsin Avenue	% Change
No Parking Anytime	86	101	17%	14	23	64%	72	78	8%
No Standing Anytime	128	18	-86%	2	3	50%	126	15	-88%
No Stopping Anytime	1895	32	-98%	1493	19	-99%	402	13	-97%
No Stopping Or Standing Anytime	328	180	-45%	8	0	-100%	320	180	-44%
No Stopping Or Standing In Am Rush Hour Zone	34	24	-29%	14	3	-79%	20	21	5%
Obstruct An Intersection	1	2	100%	1	2	100%	0	0	0%
Obstructing Crosswalk	6	8	33%	3	3	0%	3	5	67%
Park Abreast Of Another Vehicle	25	9	-64%	11	7	-36%	14	2	-86%
Park In A Bus Zone	163	80	-51%	127	20	-84%	36	60	67%
Park In A Designated Entrance	16	51	219%	0	0	0%	16	51	219%
Park More Than 12 Inches From Curb	2	1	-50%	2	0	-100%	0	1	N/A
Park Within 10 Feet Of A Fire Hydrant	41	13	-68%	35	8	-77%	6	5	-17%
Park Within 5 Feet Of Driveway Or Alley	2	3	50%	1	2	100%	1	1	0%
Passenger Loading Zone	48	22	-54%	0	0	0%	48	22	-54%
Unauthorized Vehicle In Loading Zone	58	101	74%	49	50	2%	9	51	467%
Vehicle On Private/Public Property Without Consent	19	7	-63%	2	5	150%	17	2	-88%

Table 13: Park in a Bus Zone Violation by Block

Block	2019 Total	2021 Total	Change
1000	7	0	-7
1200	2	5	3
1300	17	48	31
1400	8	6	-2
1600	0	1	1
3000	32	5	-27
3100	74	15	-59
3200	12	0	-12
3300	11	0	-11
Total	163	80	-83

Table 14: Unauthorized Vehicle in Loading Zone Violation by Block

Block	2019 Total	2021 Total	Change
1000	8	5	-3
1200	1	9	8
1300	0	1	1
1400	0	4	4
1500	0	9	9
1600	0	23	23
2800	4	0	-4
3000	0	6	6
3100	2	4	2
3200	43	40	-3
Total	58	101	43

BID Clean Team Observations

Field observations were conducted from May 2, 2021 to August 19, 2021 periodically between 11:00am and 6:00 pm by the BID Clean Team. Double-parking and deck use data were collected during these observations. Observations indicated least double parking on Wisconsin Avenue and on the 1400 and 1500 blocks of Wisconsin Avenue, moderate double parking on the 1200 block of Wisconsin Avenue, and most double parking on M Street NW – and on the 3200 block of M Street with as many as ten instances in a day.

Pickup/Drop-off

The number and location of for-hire vehicle pickups and drop-offs were compared for January-June 2019 and 2021. On average there were 894 pickups and drop-offs per day on Wisconsin Ave in 2019 compared to just 321 per day in 2021. There was a significant decrease in pickups and drop-off south of M Street compared to 2019. Only 8% of pick-ups and drop-offs on Wisconsin Avenue are within 100 feet of a designated zone in 2021.

On average there were 3,303 pickups and drop-offs per day on M Street in 2019 compared to just 911 per day in 2021. All pickups and drop-off hotspots in 2021 mirror some of those in 2019. Only 9% of points on M Street are within 100 feet of a designated zone in 2021.

Figure 10 and **Figure 11** show the pickup and drop-off hotspots on M Street and Wisconsin Avenue. All data points in 2021 and most in 2019 are limited to up to three decimal places resulting in fewer point groupings and hot spots.



Figure 10: Pickup/Drop-off Hotspots on Wisconsin Avenue January-June 2019 (left) and 2021 (right)

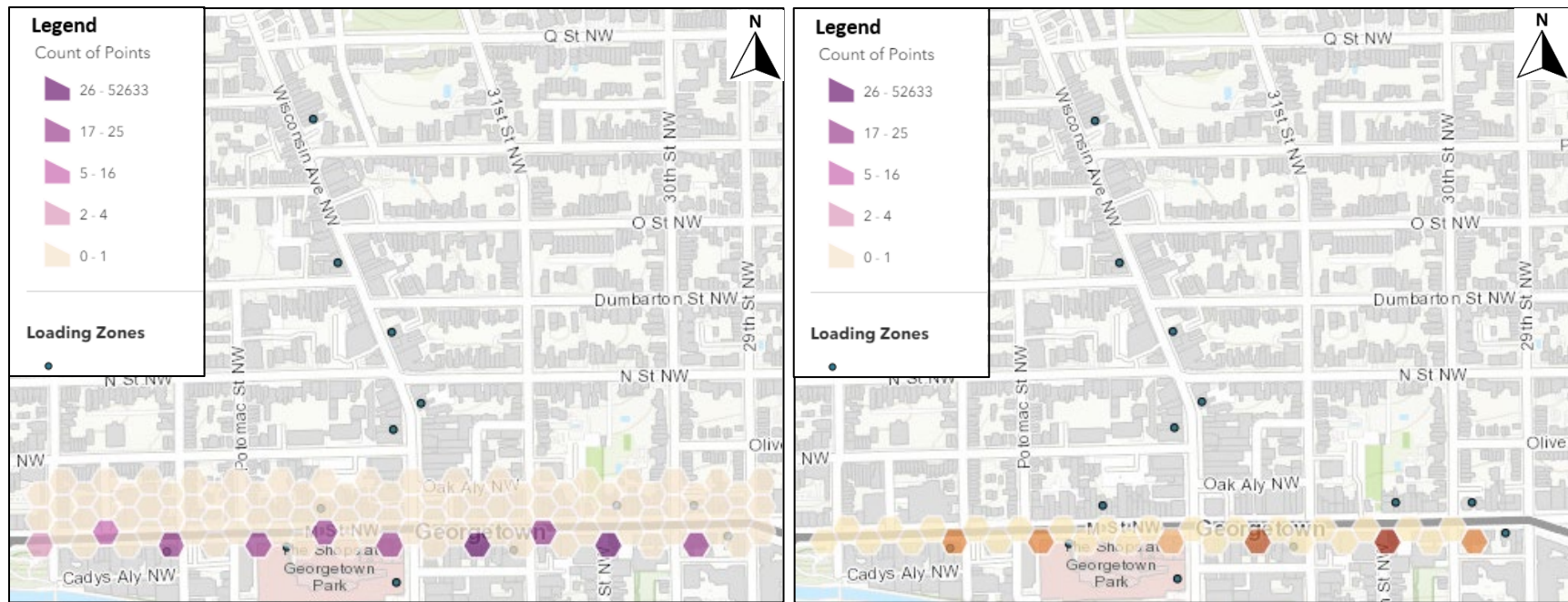


Figure 11: Pickup/Drop-off Hotspots on M Street January-June 2019 (left) and 2021 (right)

Summary of Findings

Key findings from curbside management data are displayed in **Figure 12**.

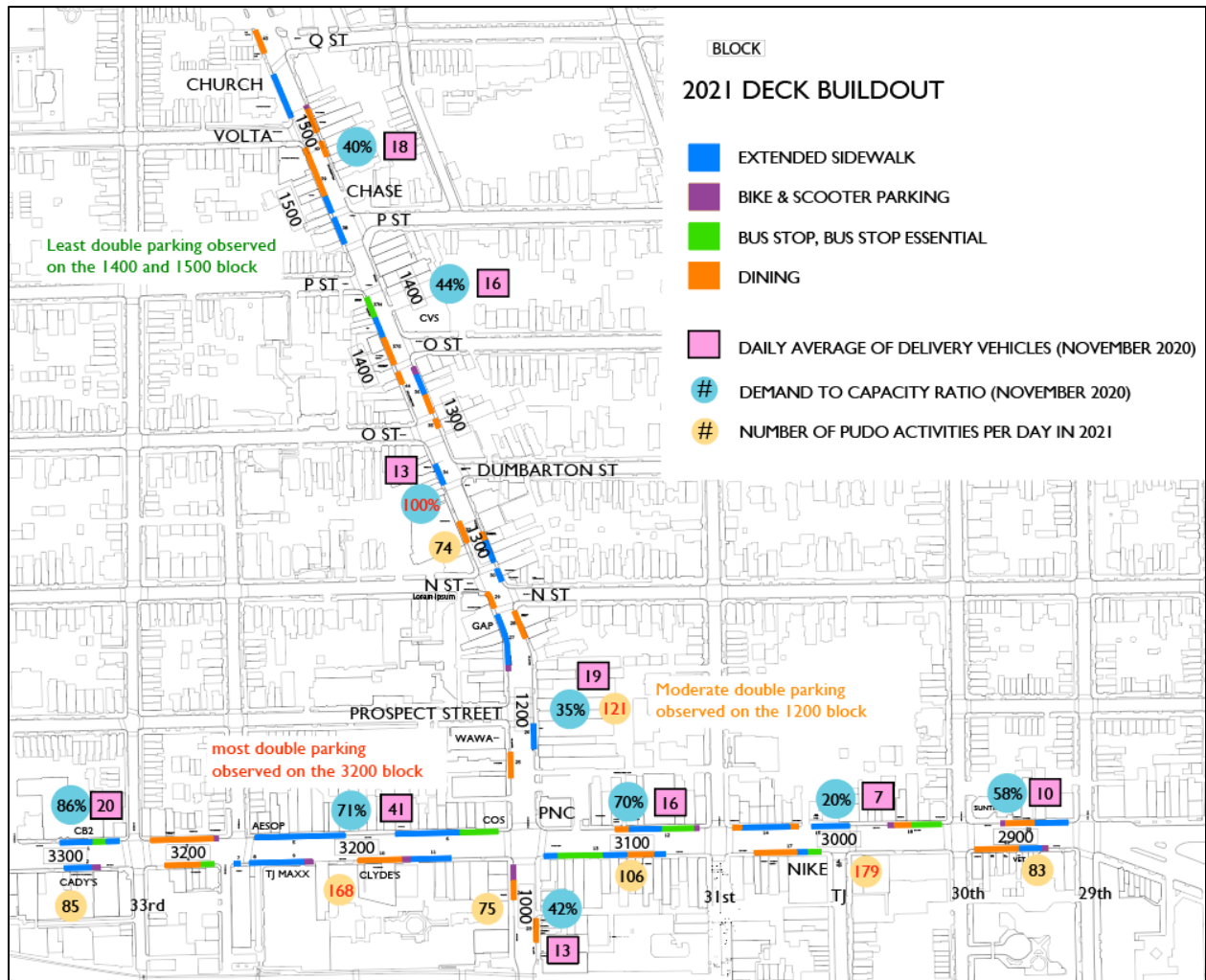


Figure 12: Summary of Curbside Management Data

Curbside Management Recommendations

Based on the data assessment above, recommendations were made to adjust existing curbside restrictions and presented in **Table 15**.

Table 15: Curbside Management Recommendations

Topic	Issue/Opportunity	Assessment	Recommendation
Loading Zones	<p>Businesses in the 1300 block of Wisconsin Avenue indicate delivery vehicles always have issues parking. Review of loading demand data (from business surveys) versus expected capacity of the loading zones on the 1300 block confirm there may be inadequate loading zones to support loading activity.</p>	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional loading zone.</p> <p>All loading zones on the 1300 block are also PUDO zones.</p> <p>Review of PUDO data does not indicate a need to add additional PUDO zones.</p>	<p>The deck on the west side of Wisconsin Avenue on the 1300 block across from Dumbarton Street is for extending the sidewalk and not used for dining or bus stops. Remove the deck and designate the two spaces as loading.</p> <p>Upon review: DDOT does not support loading or parking in the middle of the intersection and the loading should be moved, perhaps north of O Street which is proposed as Parking.</p>
Loading Zones	<p>Businesses in the 3200 block of M Street indicate more daily delivery vehicles than any other block in the study area. Some indicate delivery vehicles always having issues parking.</p> <p>Review of PUDO data indicates 168 daily pick-up/drop-off activity occur on the 3200 block, which is 27% of all PUDO activities on M Street.</p> <p>Clean Team observations indicate as many as ten double parking instances daily on the 3200 block.</p>	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional loading zone.</p> <p>All loading zones on the 3200 block are also PUDO zones.</p>	<p>The deck adjacent to the PUDO/loading area on the north side of the 3200 block is for extending the sidewalk and not used for dining or bus stops. Expand the PUDO/loading area to accommodate two more spaces.</p>

Topic	Issue/Opportunity	Assessment	Recommendation
PUDO Zones	Review of PUDO data indicates 38% of pick-up/drop-off activity on Wisconsin Avenue occur on the 1200 block.	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional PUDO zone.</p> <p>There were 9 PUDO/loading zones in 2019 versus 3 PUDO/loading zones in 2021 on the 1200 block due to the sidewalk widening.</p>	<p>The deck on Wisconsin Avenue across from Prospect Street is for extending the sidewalk and not used for dining or bus stops. Remove the deck and designate the two spaces as PUDO only.</p> <p>Upon Review: DDOT does not support loading or parking in the middle of the intersection and the signage on Wisconsin Ave, across from Prospect Street should reflect that change.</p>
Bus Zone	Parking enforcement data indicates a noteworthy increase in violations of vehicles parking in the bus zone at Wisconsin Avenue and Dumbarton Street (17 in 2019 versus 48 in 2021).	There were no changes to the bus stop from 2019 to 2021. During observations, individuals were observed parking in the bus stop even though there were two available PUDO spaces adjacent to the bus stop.	Request increased enforcement of parking in bus stops. Ask DDOT to consider photo enforcement of illegal parking in the bus stop at Wisconsin Avenue and Dumbarton Street.

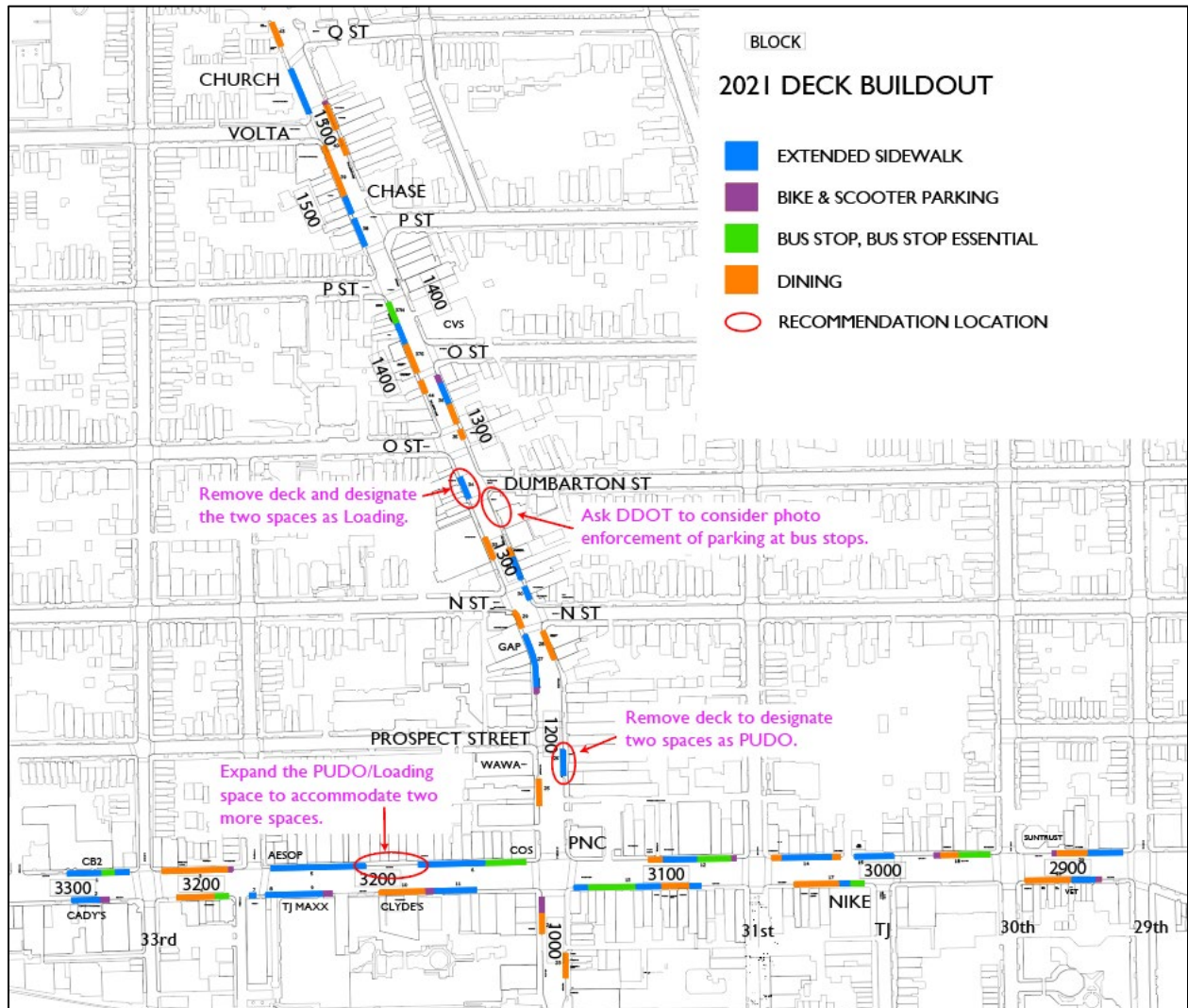


Figure 13: Curbside Management Recommendations

TRANSIT

The transit assessment includes a review of access to bus stops that may be impacted by the sidewalk widening project. During the 2020 public space application process, the BID and DDOT coordinated to identify bus stops that should be modified as a result of the project. Two bus stops on Wisconsin Avenue at P Street and at N Street/Dumbarton Street and one stop on M Street at 33rd Street were determined to be relocated as part of the project.

Figure 14 shows the transit study area as well as the priority transit corridors. M Street and Wisconsin Avenue are both priority transit corridors. Priority transit corridors have been identified as the busiest bus routes in the District that are in need of improvements to make transit faster and more reliable.

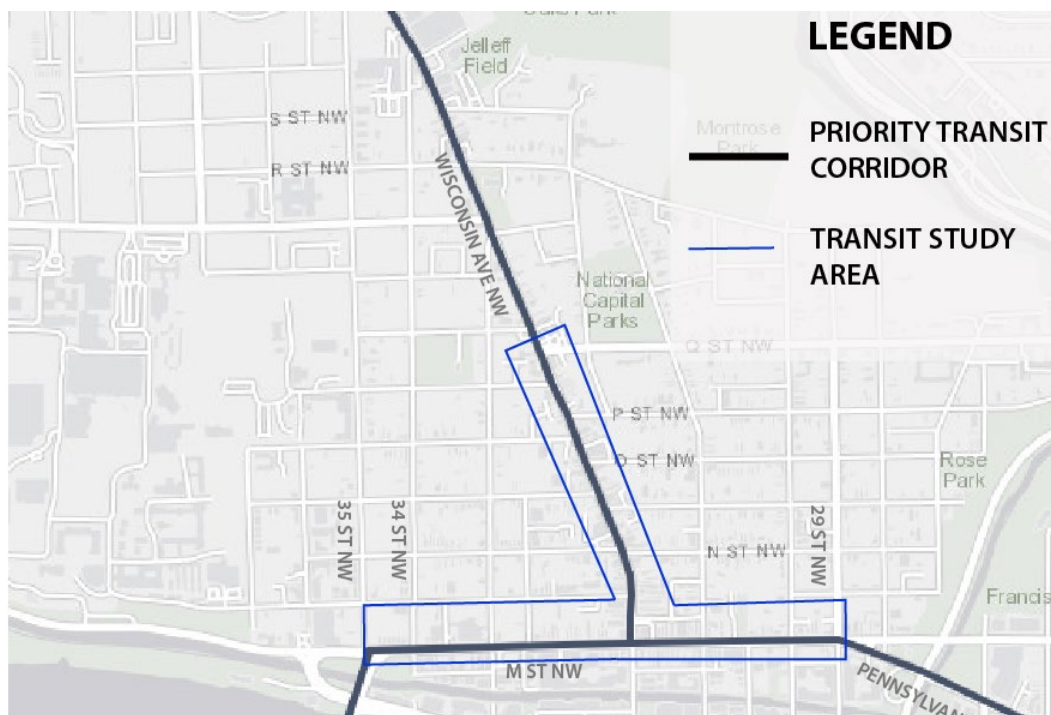


Figure 14: Transit Study Area

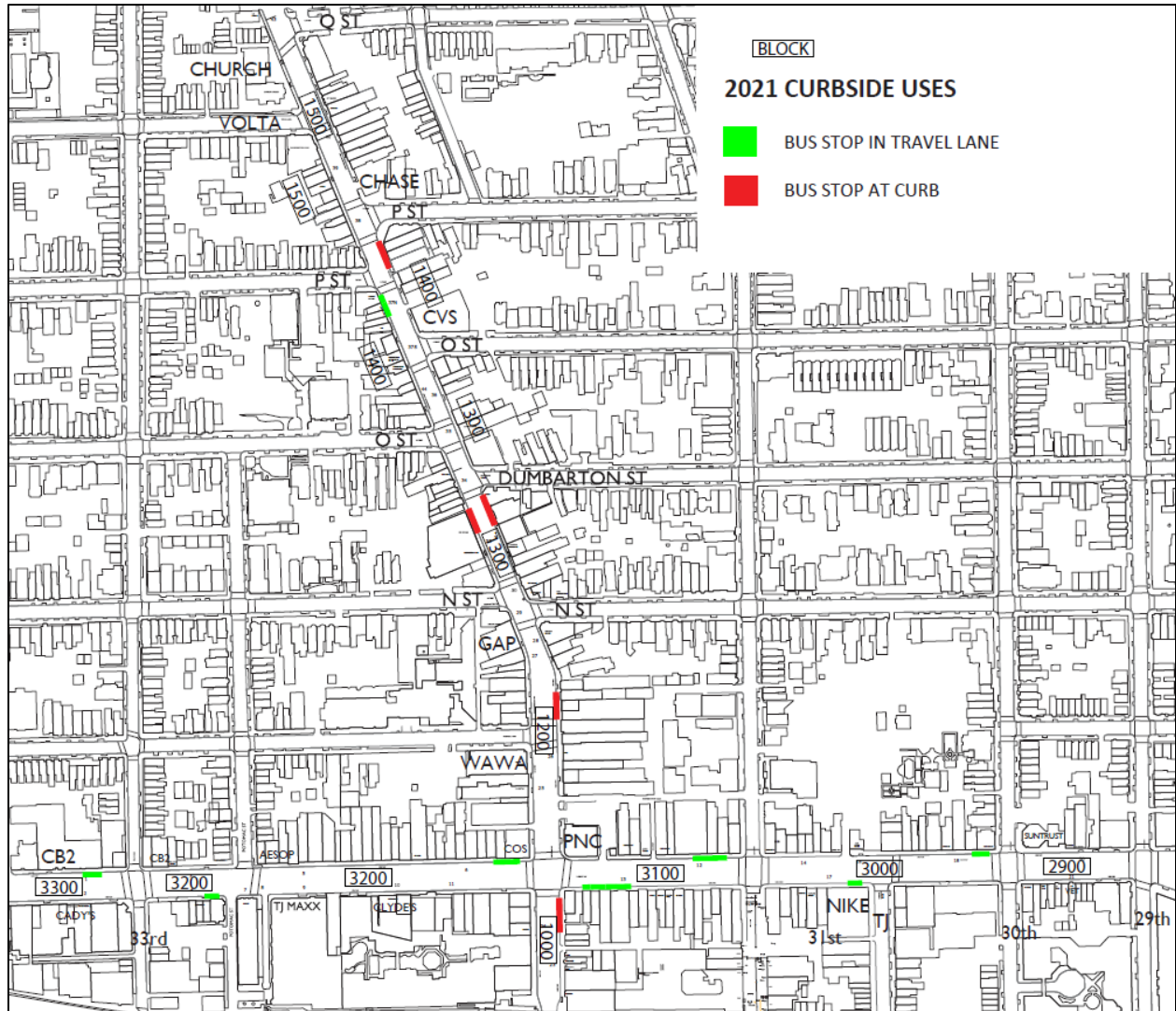


Figure 15: Bus Stop Location

Table 16: Bus Route Frequency

Route	Frequency
31	30 min
33	10-20 min
38B	15 min
GT-US	10 min
RS-DP	10 min

Observations were conducted at bus stops within the transit study area on Thursday October 7th from 7am-9am and 4:30pm-6:30pm, and Saturdays October 2nd and 9th from 1-2pm. Pedestrian comfort level at bus stops have been enhanced with widening. People have space to wait and pedestrians can continue to walk to their destinations.

Table 16 lists the bus route and frequency. **Figure 15** well as whether the buses stop in the travel lane or pull over to the curb. The following checklist was made based on the scoping form and used during the observations:

- Are buses stopping in their designated area?
- Are riders able to board and alight?
- Effectiveness of in-lane boarding?
- Are trucks loading in the bus zone?
- Are vehicles stopped/parked in the bus zone?
- Any DPW (Department of Public Works) enforcement? Note.
- Is this a relocated bus stop? If so, are there any issues with this stop?
- Possible improvements to bus stop amenities (shade, seating, etc.)

Passengers were able to board and alight easily. Bus stops that were relocated did not have any issues. The double-bus stop at M Street & Wisconsin Avenue EB stop, where multiple buses can stop in the bus zone at the same time, was observed during the AM and PM peak hour for an hour each. Other bus stops were observed for two hours during the AM, PM, and Saturday peak. The following observations were made and depicted on **Figure 16**:

- Stacking of buses was observed once during the AM hour at the double bus stop at M Street & Wisconsin Avenue EB, shown in **Figure 17**. The bus stop accommodated this by extending the deck area where passengers wait for buses.
- One truck was loading in the bus zone at M Street & 31st Street WB during the AM observation.
- One vehicle was seen stopped in the bus zone at M Street & 30th Street EB during the AM observation.
- During the PM hours, vehicles were constantly observed in the bus zone at Wisconsin Avenue & Dumbarton Street NB in front of a Pizza store, even though there was a PUDO/loading zone right behind the bus zone, as shown in **Figure 18**.
- During the second Saturday observation, vehicles were stopped in the bus zone at Wisconsin Avenue & Dumbarton Street NB like in **Figure 18**.
- A bus had to protrude in the travel lane when stopped due to vehicles standing in the designated bus zone at Wisconsin Avenue & Dumbarton Street NB, shown in **Figure 19**.
- Two other occasions of buses protruding into the travel lane while picking up passengers were observed, both on Wisconsin Avenue NW.

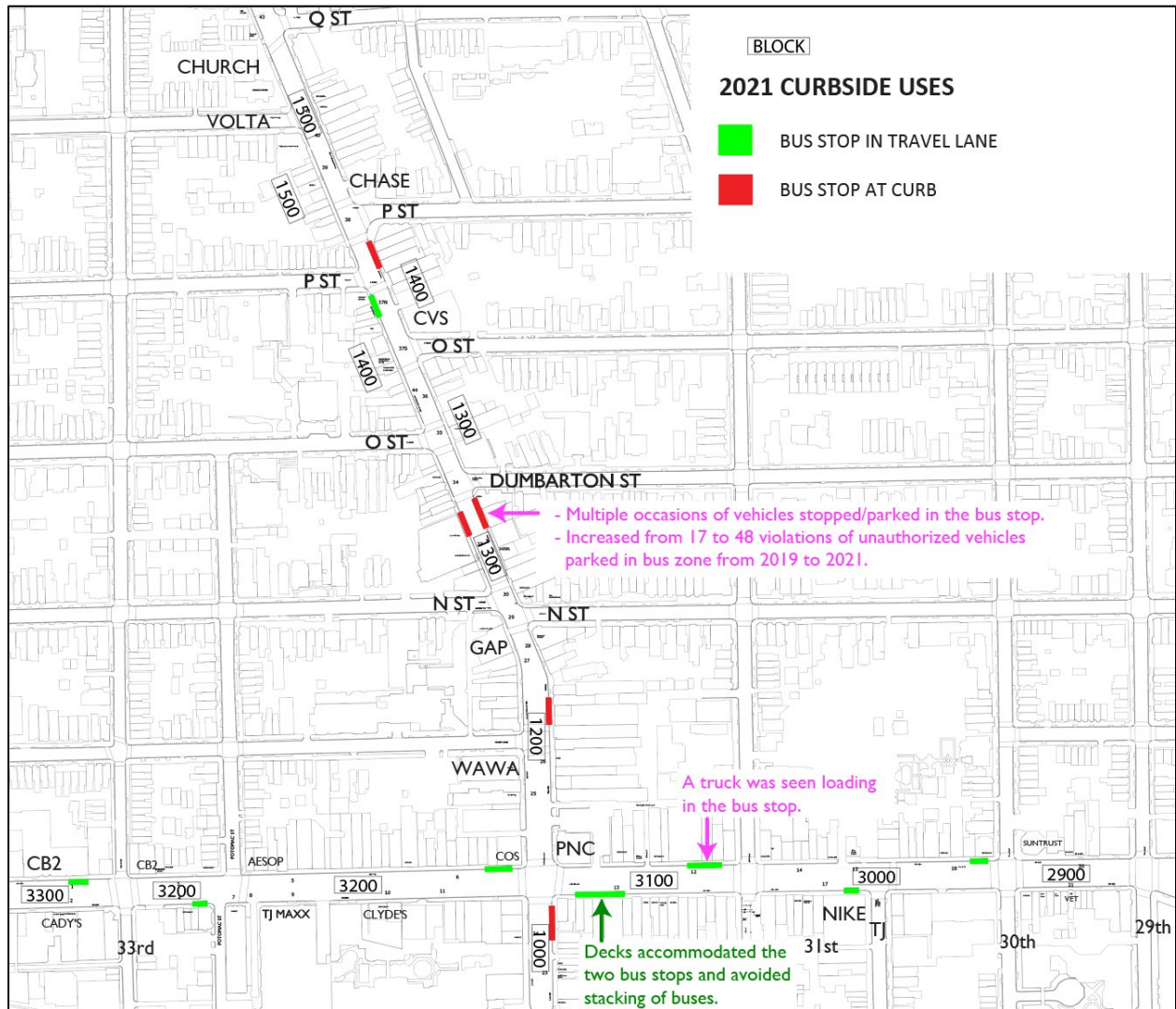


Figure 16: Transit Observations



Figure 17: Stacking of Buses Accommodated by Decking at the M Street & Wisconsin Avenue EB Stop



Figure 18: Vehicles in Bus Stop at Wisconsin Avenue & Dumbarton Street NB



Figure 19: Bus Protruding the Travel Lane due to Unauthorized Vehicles Stopped in the Bus Zone

Transit Recommendations

All observed issues with buses not stopping in the bus zone was due to another unauthorized vehicle parking/standing in the bus zone. This agrees with the findings in the Curbside Management section of this report. As proposed in the Curbside Management section, there need to be increased enforcement of parking in bus stops. Ask DDOT to consider photo enforcement of illegal parking in the bus stop at Wisconsin Avenue and Dumbarton Street.

BICYCLE

The bicycle network assessment synthesizes data from traffic counts and Capital bikeshare trip data. Observations of potential conflicts along the M Street and Wisconsin Avenue corridors were made during the AM, PM, and Saturday peak periods. Alternatives for bicycles and scooters instead of using M Street and Wisconsin Avenue are to be considered. The study also identifies locations of additional bike parking and total quantity of bike parking spaces added within the project area.

Figure 20 shows the bicycle study area as well as bicycle routes and access in the area. There is a Capital Bikeshare station on M Street & Potomac Street and on Wisconsin Avenue & O Street. The stations are located on the minor streets (Potomac Street and O Street) and therefore access is not affected by the sidewalk widening. There was a designated bicycle/scooter parking area added to west side of Wisconsin Avenue south of M Street as part of the project.

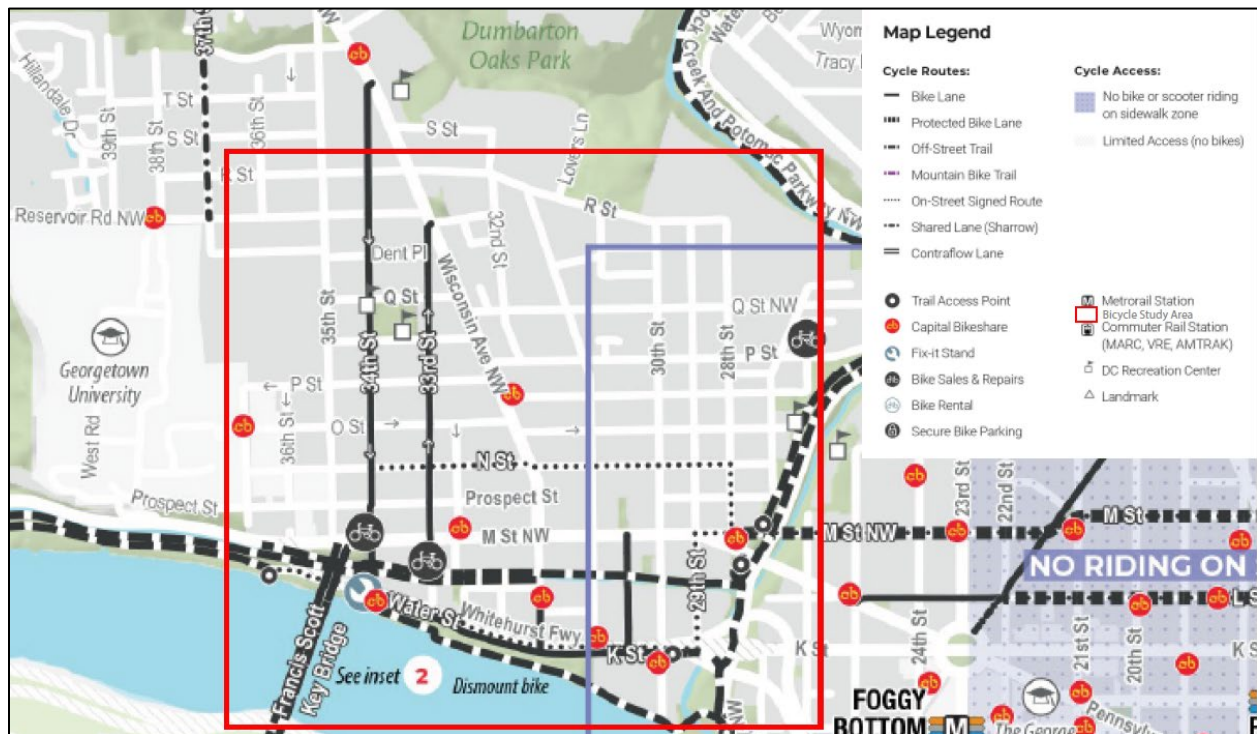


Figure 20: Bicycle Facilities Map

Bicycle data was obtained from the traffic counts collected on September 25th and 28th, 2021. The peak hour volume counts are shown on **Figure 21**. There are many bicyclists who ride through the study area, but there aren't any significant number of left-turn movements at any of the study intersections. There are four Capital Bikeshare stations south of M Street. Bicyclists travelling east-west can ride along Water Street where there is a bike lane or along the signed route on N Street. North-south bicyclist can use the bike lanes on 33rd and 34th Street. Major stops such as DC recreation centers are along these routes. These are all alternatives to taking M Street and Wisconsin Avenue.

Bicycle network conditions were observed on Thursday October 7th from 7am-9am and 4:30pm-6:30pm, and Saturdays October 2nd and 9th from 1-2pm. M Street and Wisconsin Avenue do not include dedicated bike facilities; therefore, bicycle routes and facilities were not impacted by the sidewalk widening. Almost all bicyclists travelled within the traffic stream in the direction of traffic, but on one occasion was observed in the weekday AM peak where a bicyclist rode on the sidewalk on M Street.

Capital Bikeshare trip data was obtained for April-September 2019 and 2021. The data is summarized in **Figure 22** and **Figure 23** by station. Note that in April 2021, the 31st and Water Street NW station was moved to Thomas Jefferson Street NW and Water/K Street NW. Therefore, there were zero trips in 2021 after April at 31st and Water Street NW, and no trips for Thomas Jefferson Street NW and Water/K Street NW in 2019, but they are essentially the same station.

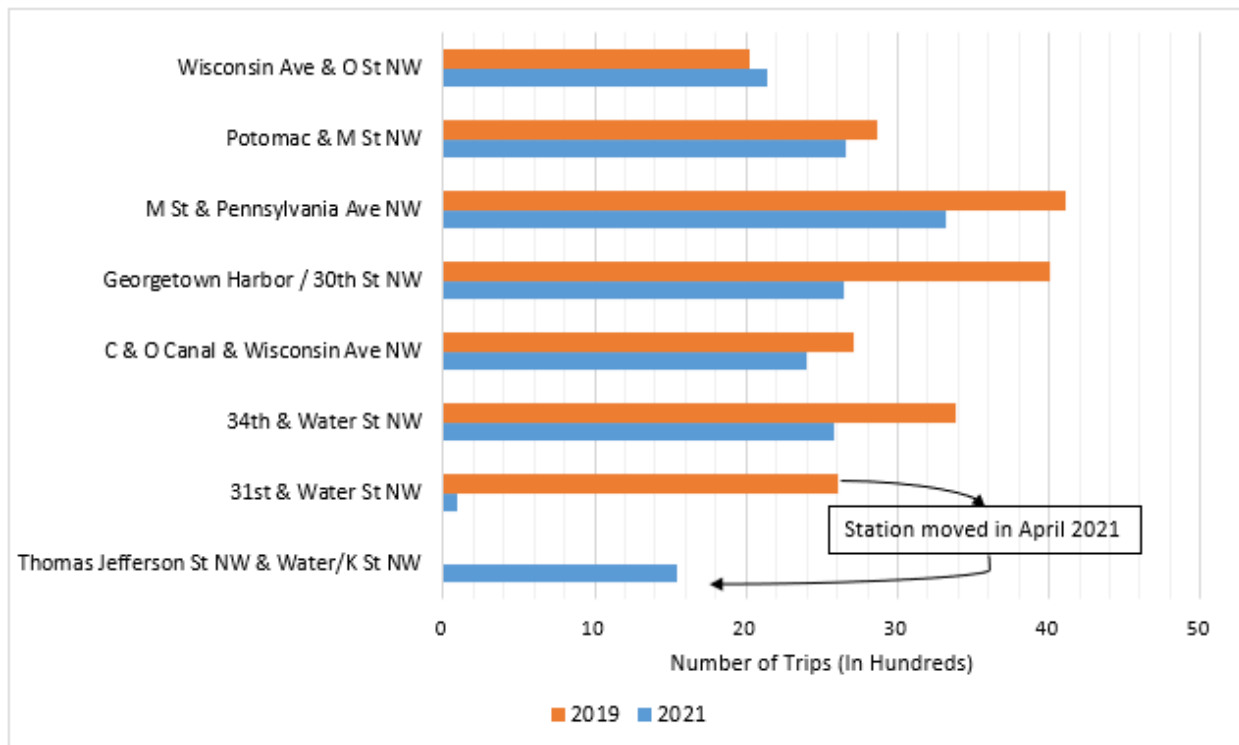


Figure 22: 2019 Versus 2021 Monthly Average Capital Bikeshare Origin and Destination Trips

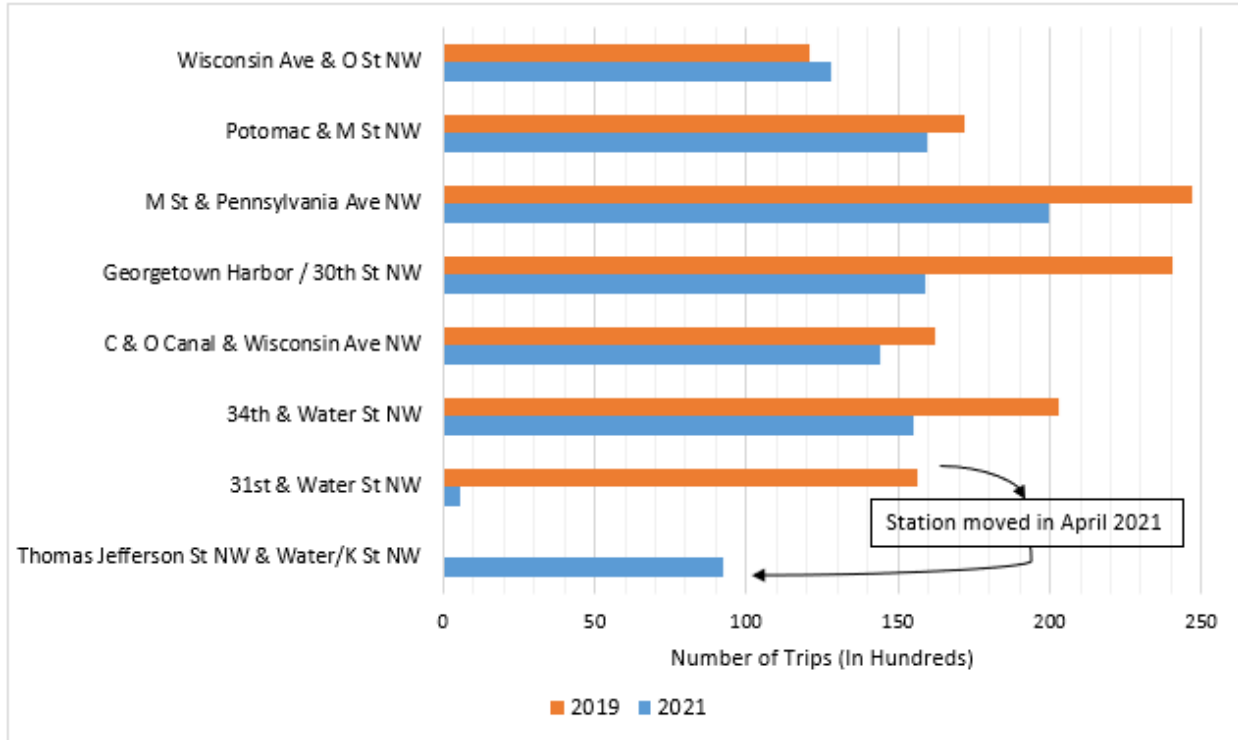


Figure 23: 2019 Versus 2021 Total Capital Bikeshare Origin and Destination Trips

SAFETY

The safety assessment will provide a qualitative analysis of study area intersections and areas that focus on Vision Zero Action Plan. Observations of pedestrian/vehicle conflicts were made. Safety observations along the M Street and Wisconsin Avenue corridors takes place during the AM, PM, and Saturday peak periods. The most recent safety data is from 2019, which is before the implementation of the sidewalk widening project. Thus, conclusions cannot be made from the data on how the study area was affected by the project in the safety aspect.

The DC Open Data in **Figure 24** illustrates concerns from the public regarding perceived dangers along the roadway. Two safety reports were made between 2017 and 2019 for locations within the study area.

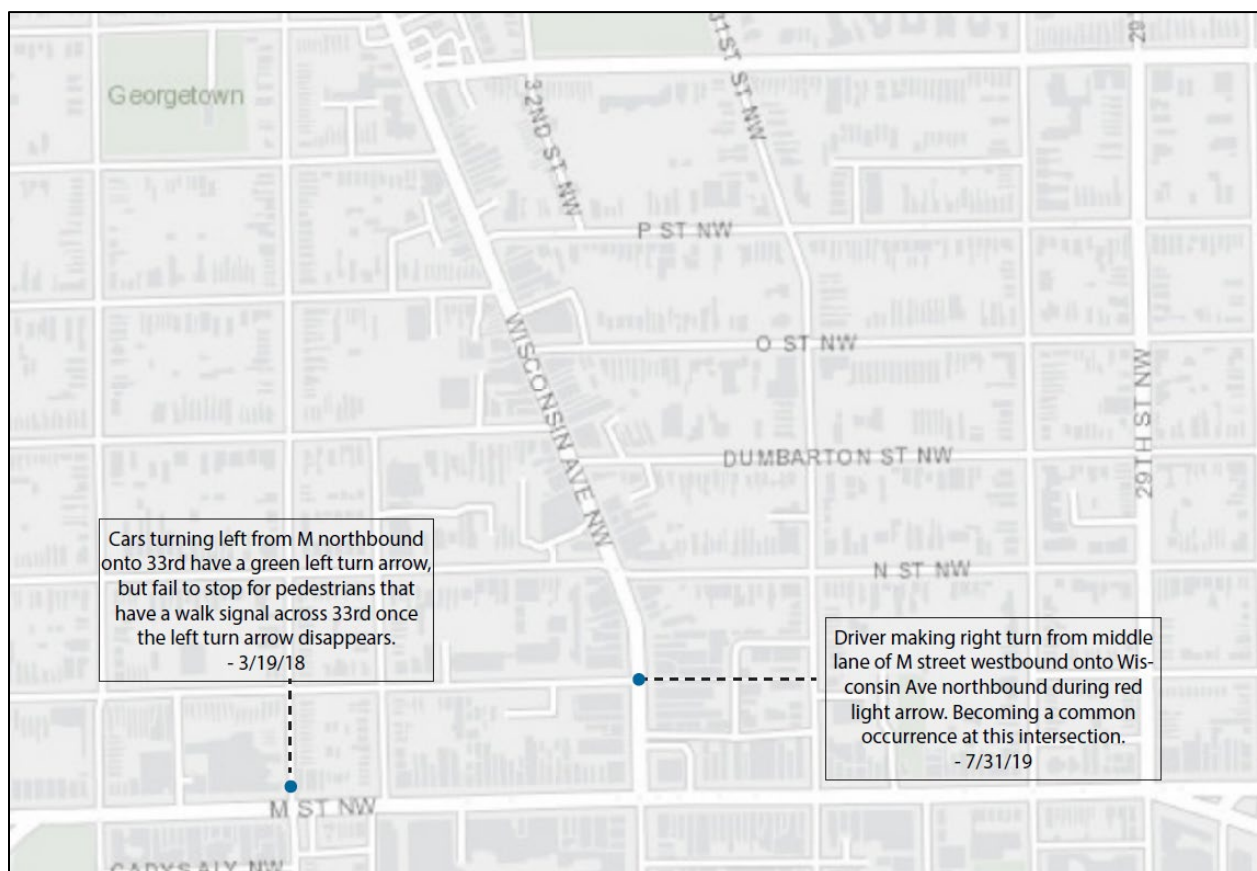


Figure 24: Community 311 Safety Data

Vision Zero

Crash data were retrieved from Open Data DC from 2017 to 2019⁵. The data represent the crash locations associated along the DDOT centerline network within the District of Columbia. These crash data are

⁵ Three-year crash data is typically assessed in safety studies; 2017 – 2019 was the most recent three-year crash data available.

derived from the Metropolitan Police Department's (MPD) crash data management system (COBALT) and represent DDOT's attempt to summarize some of the most requested elements of the crash data. In addition to locations, a related table consisting of crash details is available for each crash.

Vehicular crash data from 2017 to 2019 is illustrated **Figure 25**. As **Figure 25** illustrates, there were crashes along both M Street and Wisconsin Avenue. Considering the numerous crashes located throughout the study area, additional crash details were reviewed to determine which of the crashes resulted in minor or major injuries for passengers or drivers. As shown in **Figure 26**, most vehicular crashes with injuries occurred at or near the M Street/Wisconsin Avenue intersection.



Figure 25: Vehicular Crash Data (2017-2019)

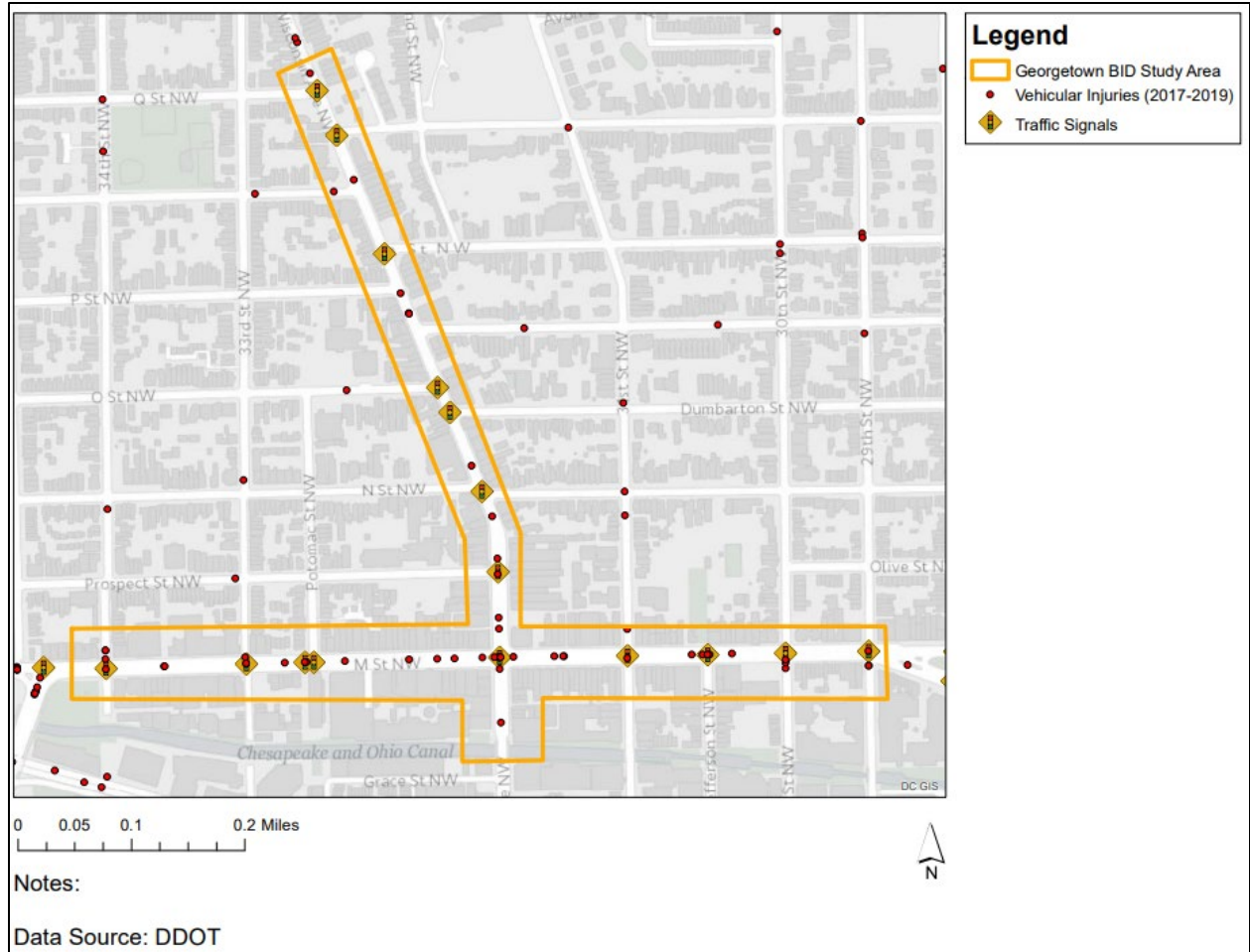


Figure 26: Vehicular Crash Data with Injuries (2017-2019)

There were fewer pedestrian related crashes that occurred in the study area between 2017-2019. See **Figure 27** for specific pedestrian crash locations that resulted in an injury. All ped crashes in the sidewalk widening study area occurred at signalized intersections and at areas without sidewalk widening.

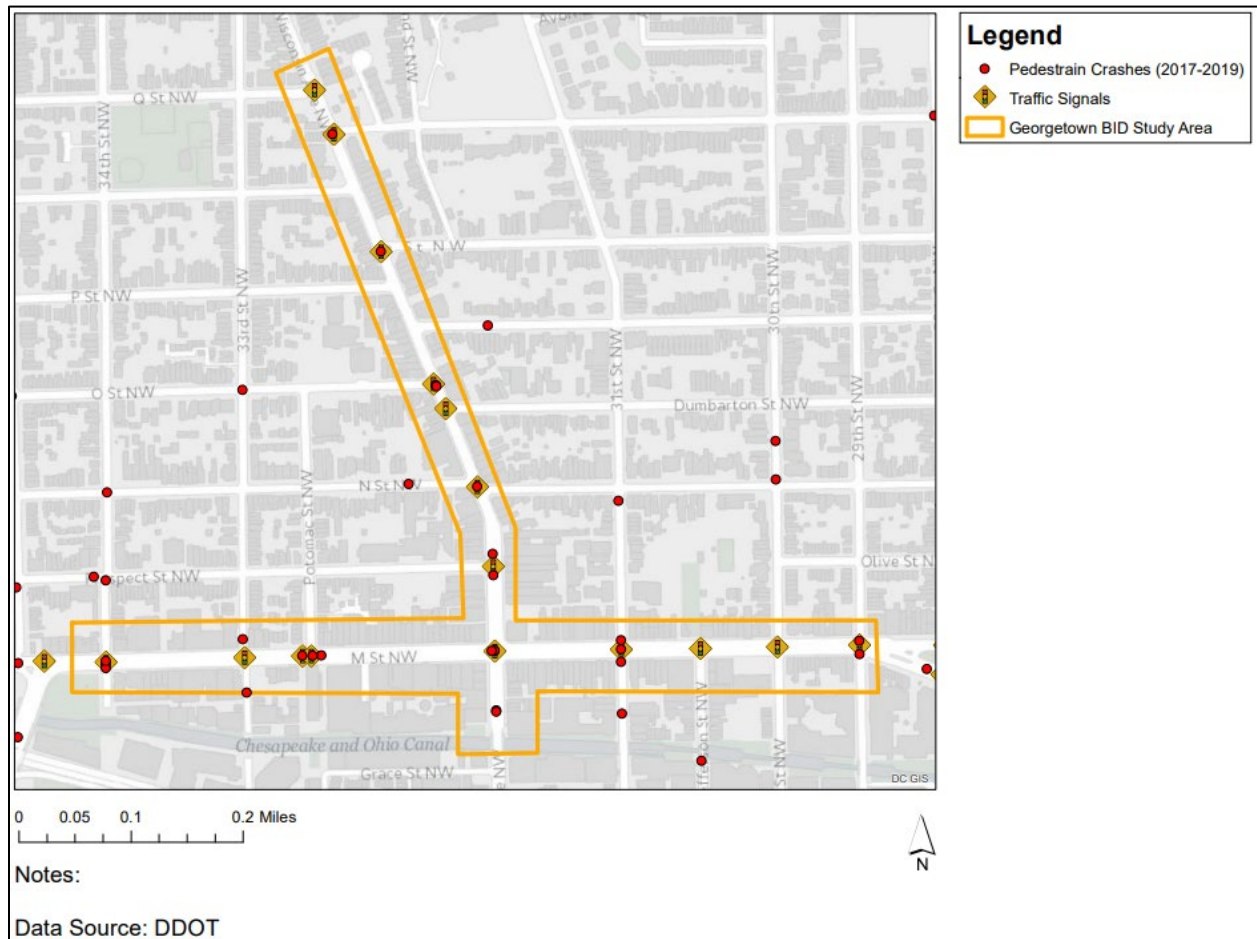


Figure 27: Pedestrian Crash Data (2017-2019)

Bicycle related crashes that resulted in an injury have occurred throughout the study area, particularly at the following intersections:

- M Street and 33rd Street
- M Street and Wisconsin Avenue
- M Street and 31st Street
- M Street and 29th Street
- Wisconsin Avenue and N Street

Specific bicycle crash locations are shown in **Figure 28**.



Figure 28: Bicycle Crash Data (2017-2019)

High Crash Locations

As outlined in DDOT’s High Crash Intersection Site Visits Summary and Next Steps Report (January 2016), the M Street NW and Wisconsin Avenue NW was listed as one of the five high crash intersections visited in 2015. M Street and Wisconsin Avenue NW is at the heart of the Georgetown shopping district and serves a busy mix of vehicles, bicyclists, pedestrians, and transit vehicles. The intersection experiences

high turning volumes, a high bus volume demand, and heavy peak-period demand by all modes of travel. The M Street corridor itself is a congested vehicular route daily, particularly leading towards the Key Bridge.

The sidewalk widening project would not result in any changes to pedestrian conditions or vehicular operations at the intersection.

Speed Data

The posted speed limit on Wisconsin Avenue is 25 mph. The posted speed limit is 25 mph on M Street east of Wisconsin Avenue and 20 mph west of Wisconsin Avenue. **Table 17** displays the results of speed data collected at two locations from October 12-17th, 2021 from 12AM-12AM. The 85th percentile speed at each location in each direction is at or close to the posted speed limit.

Table 17: Speed Data

		85th Percentile (mph)	Mean Speed (mph)
M Street between Wisconsin Avenue and Potomac Street, NW	EB	25	18
	WB	26	18
Wisconsin Avenue between O Street and P Street, NW	NB	23	14
	SB	24	15

Observations

Safety observations were conducted on Saturdays October 2nd and 9th, 2021. Some conflicts were observed between pedestrians and vehicles, but they were managed by traffic control guards on both visits. No sidewalk cafes encroached into the pedestrian clear path. No sight distance issues were observed.

A dump truck was seen at the intersection of Wisconsin Avenue and M Street (**Figure 29**) making a southbound right turn from M Street on Thursday October 21, 2021. The truck had to back up to make the turn without hitting anything. The deck is designated as bicycle and scooter parking and is necessary to have. The BID has moved the barrier back from the intersection by approximately 20 feet, so that trucks can turn with ease and keep part of the area as is for bicycle and scooter parking.



Figure 29: M Street/Wisconsin Avenue Where Dump Truck was Seen Backing Up

PARKING

The sidewalk widening project has resulted in the displacement of approximately 130 on-street metered parking spaces during the non-rush hour time periods. The on-street spaces have been replaced with deck panels for dining, sidewalk widening, PUDO, and loading spaces. The number of parking spaces converted to loading/PUDO was 25 spaces assuming 22 feet per car length. The parking section examines the potential impacts associated with the loss of metered parking spaces. The assessment includes a review of on-street parking occupancy on the surrounding streets and parking garage occupancy.

On-Street Parking

Parking study area and type of parking along roadways are displayed in **Figure 30**. The study area is in Ward 2 and is entirely in Advisory Neighborhood Commission (ANC) 2E. **Figure 31** shows the ANC 2E district map. Parking data was provided by DDOT and the BID. There are 6,847 Residential Permit Parking (RPP) spaces, 4,501 registered cars, and 4,100 issued RPP permits in ANC 2E. There is a total of 15,682 issued RPP permits in Zone 2. There are also 256 reciprocity permits.

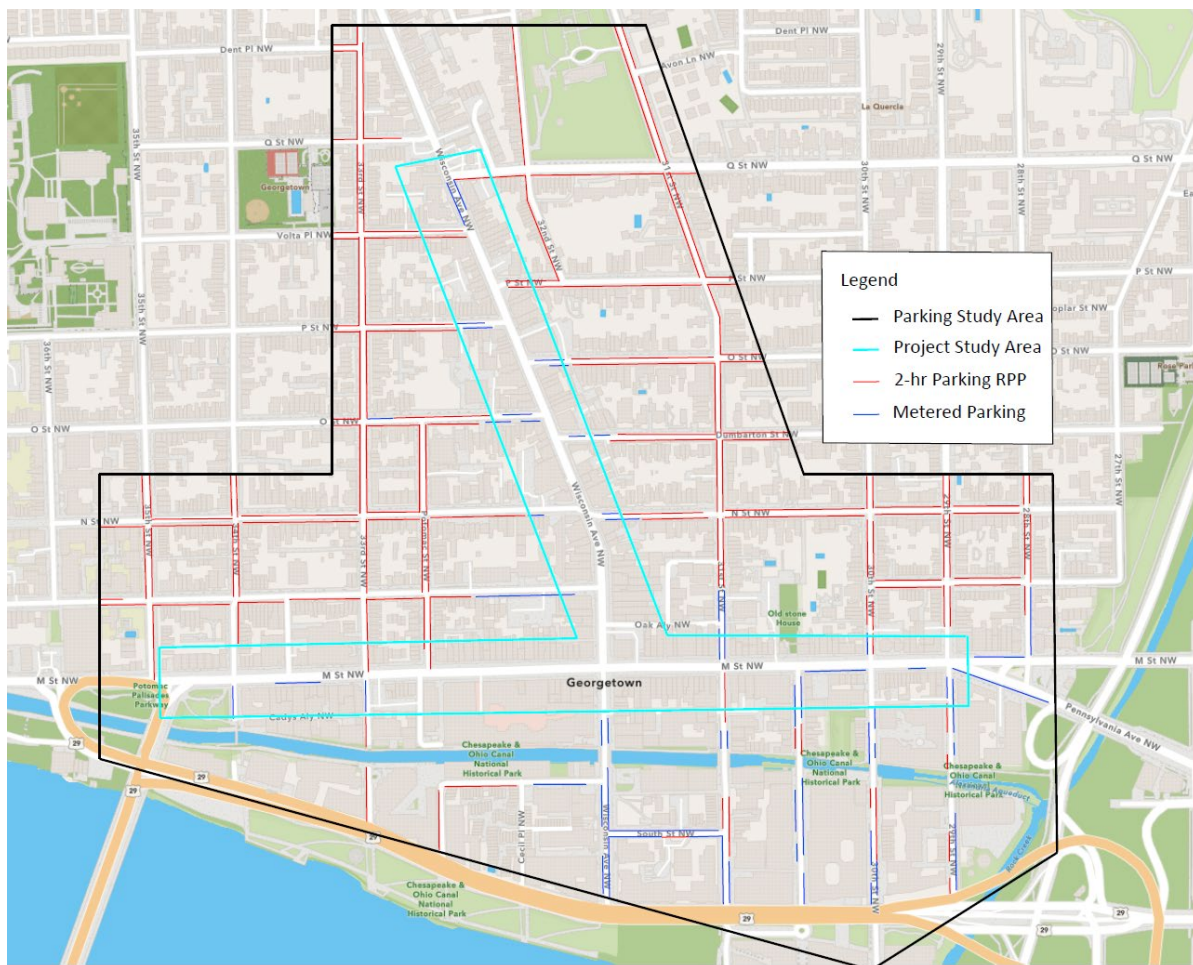


Figure 30: Parking Study Area and Parking Type

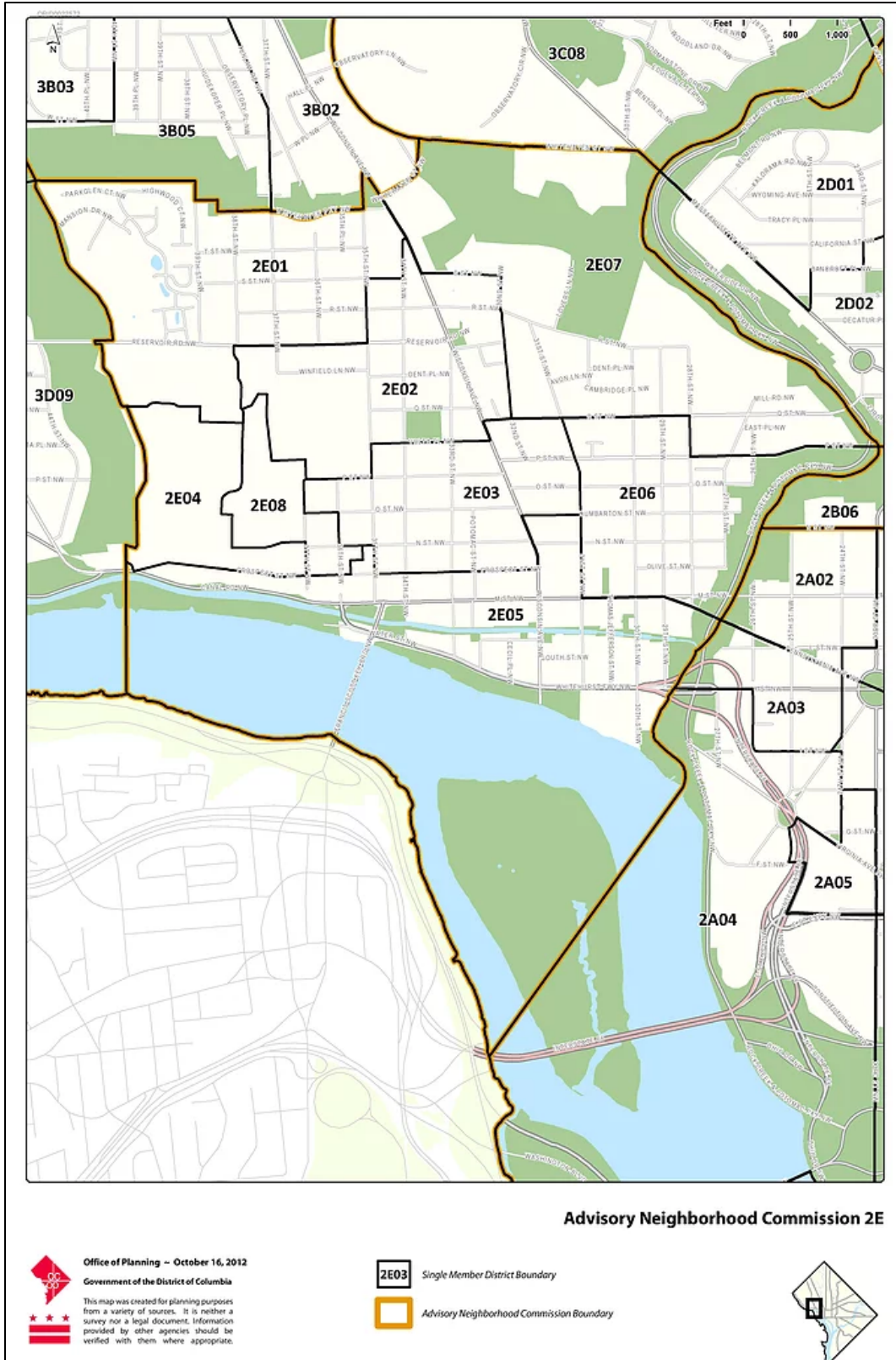


Figure 31: ANC 2E District Map

A summary of parking supply and control for the parking study area is provided in **Table 18**. All streets listed are 2-hour parking from 7AM-9PM Monday-Saturday (Zone 2 permit).

Table 18: On-Street Parking Supply and Control

Street	Block	Supply	Control/Restrictions/Notes
29th Street	M Street to N Street	45	24 metered spaces
30th Street	M Street to N Street	44	3 metered spaces
31st Street	M Street to N Street	51	20 metered spaces
Potomac Street	M Street to N Street	16	
33rd Street	M Street to N Street	22	
34th Street	M Street to N Street	26	
Prospect Street	Wisconsin Avenue to 34th Street	44	
N Street	Wisconsin Avenue to 30th Street	80	
N Street	Wisconsin Avenue to 33rd Street	46	5 metered spaces
Dumbarton St	Wisconsin Avenue to 30th Street	74	3 metered spaces
O Street	Wisconsin Avenue to 30th Street	63	5 metered spaces
O Street	Wisconsin Avenue to 34th Street	94	14 metered spaces
P Street	Wisconsin Avenue to 30th Street	54	
P Street	Wisconsin Avenue to 33rd Street	79	8 metered spaces
Volta Street	Wisconsin Avenue to 33rd Street	65	

On-street parking space occupancy in the parking study area was collected by the BID team on Thursday October 21st and Saturday October 23rd, 2021 during the AM and PM hours. The results are presented in **Figure 32** through **Figure 35**. There are multiple available spaces in the AM on both days, but there are fewer available spaces in the PM.

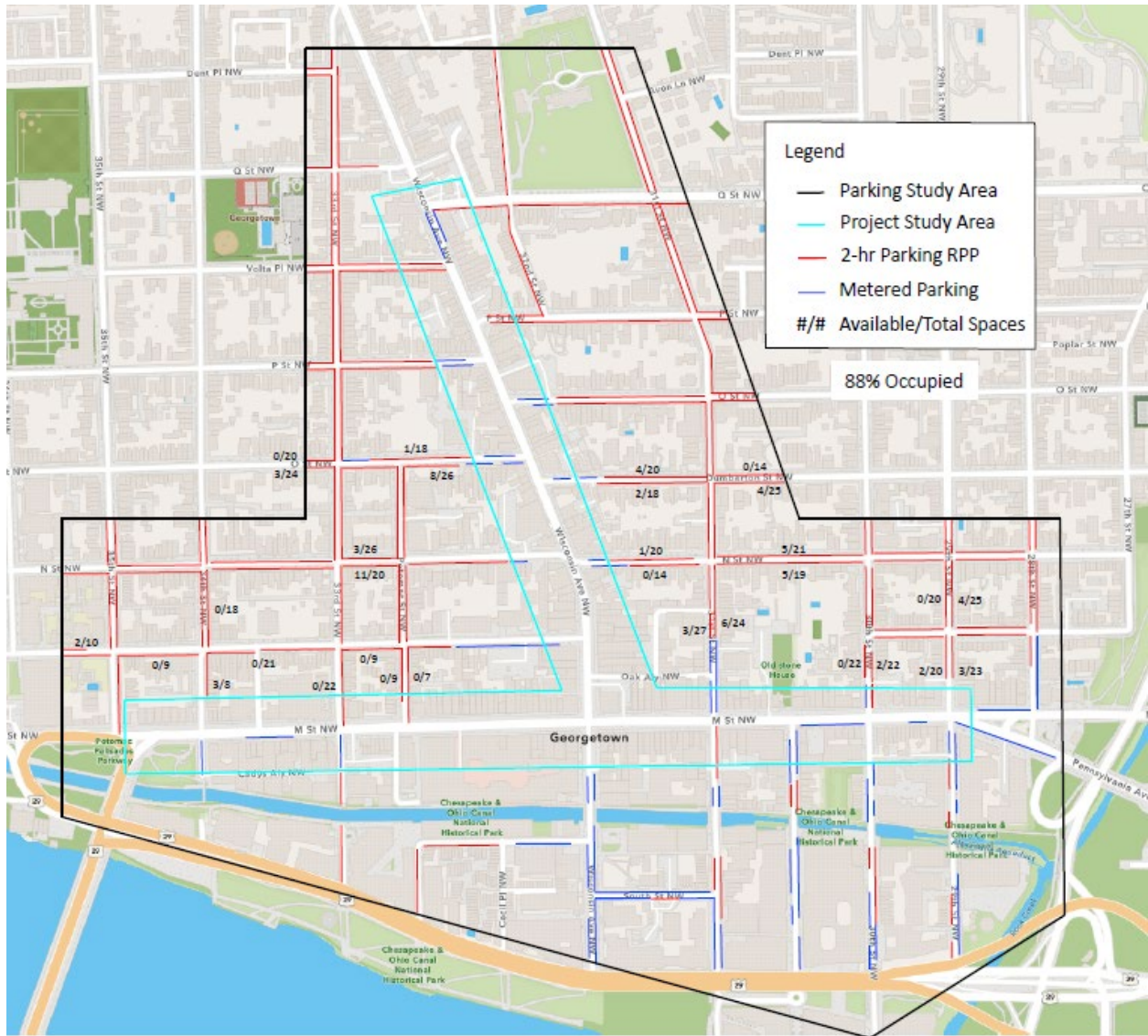


Figure 32: Thursday AM On-Street Parking Space Occupancy

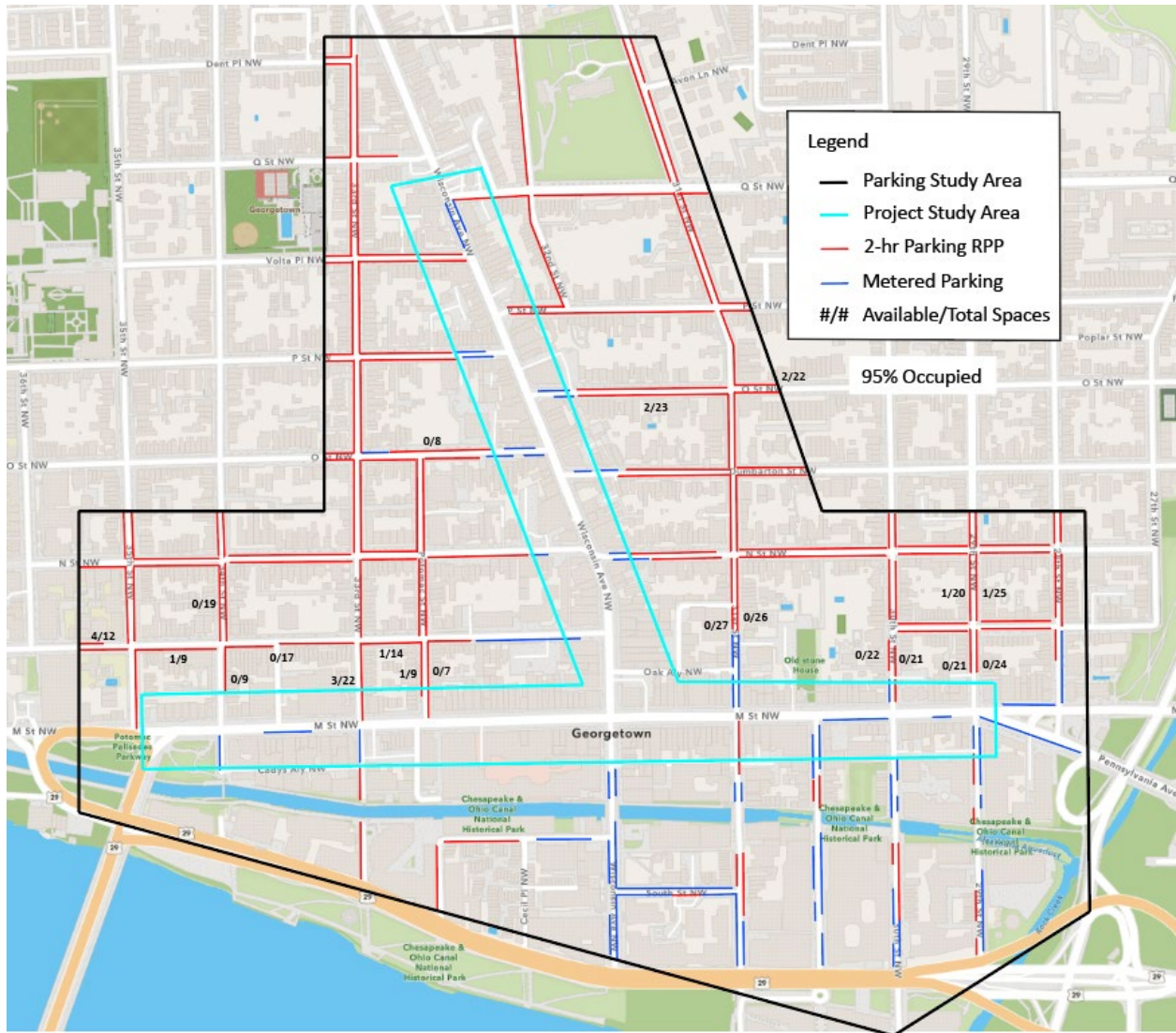


Figure 33: Thursday PM On-Street Parking Space Occupancy

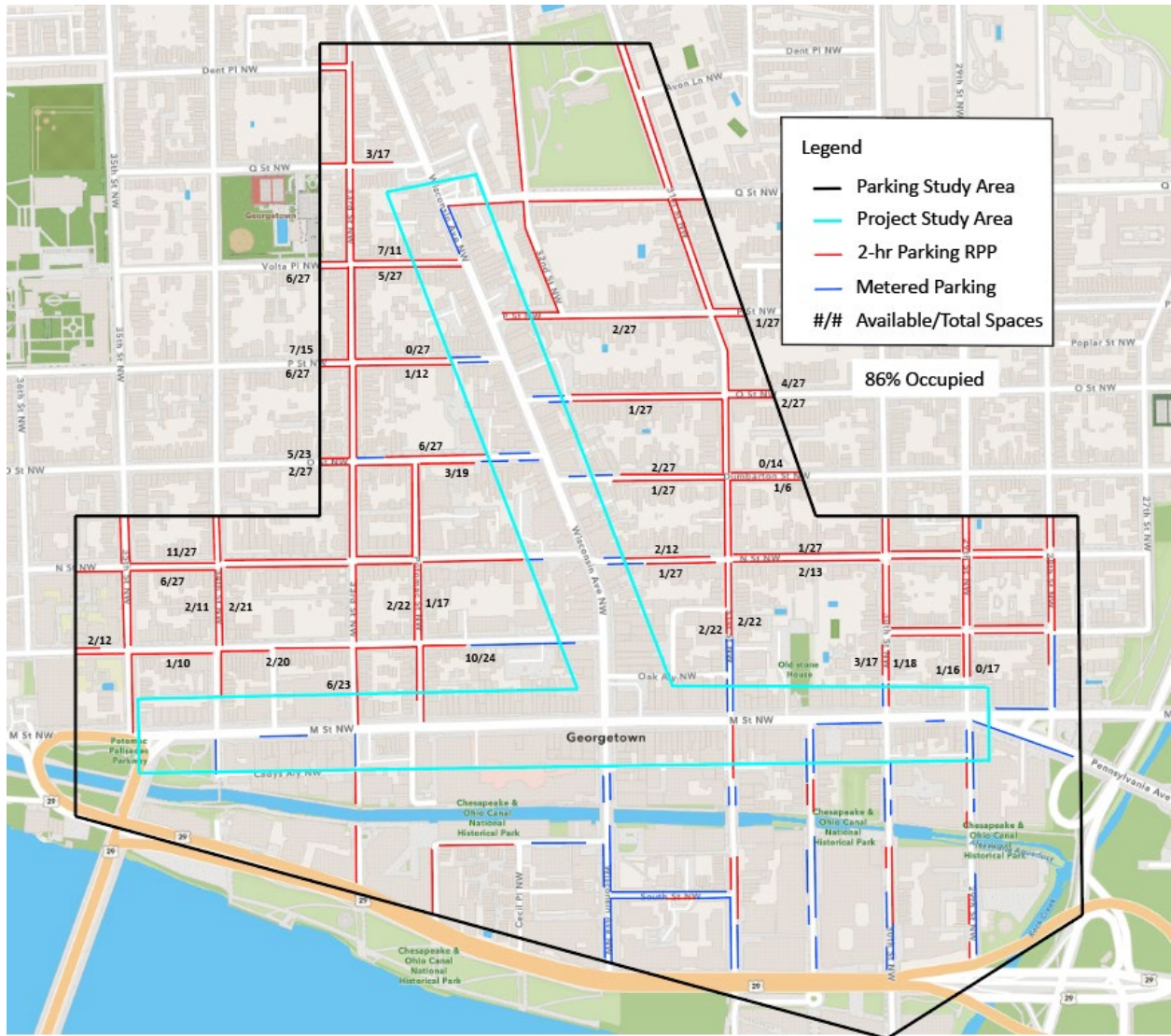


Figure 34: Saturday AM On-Street Parking Space Occupancy

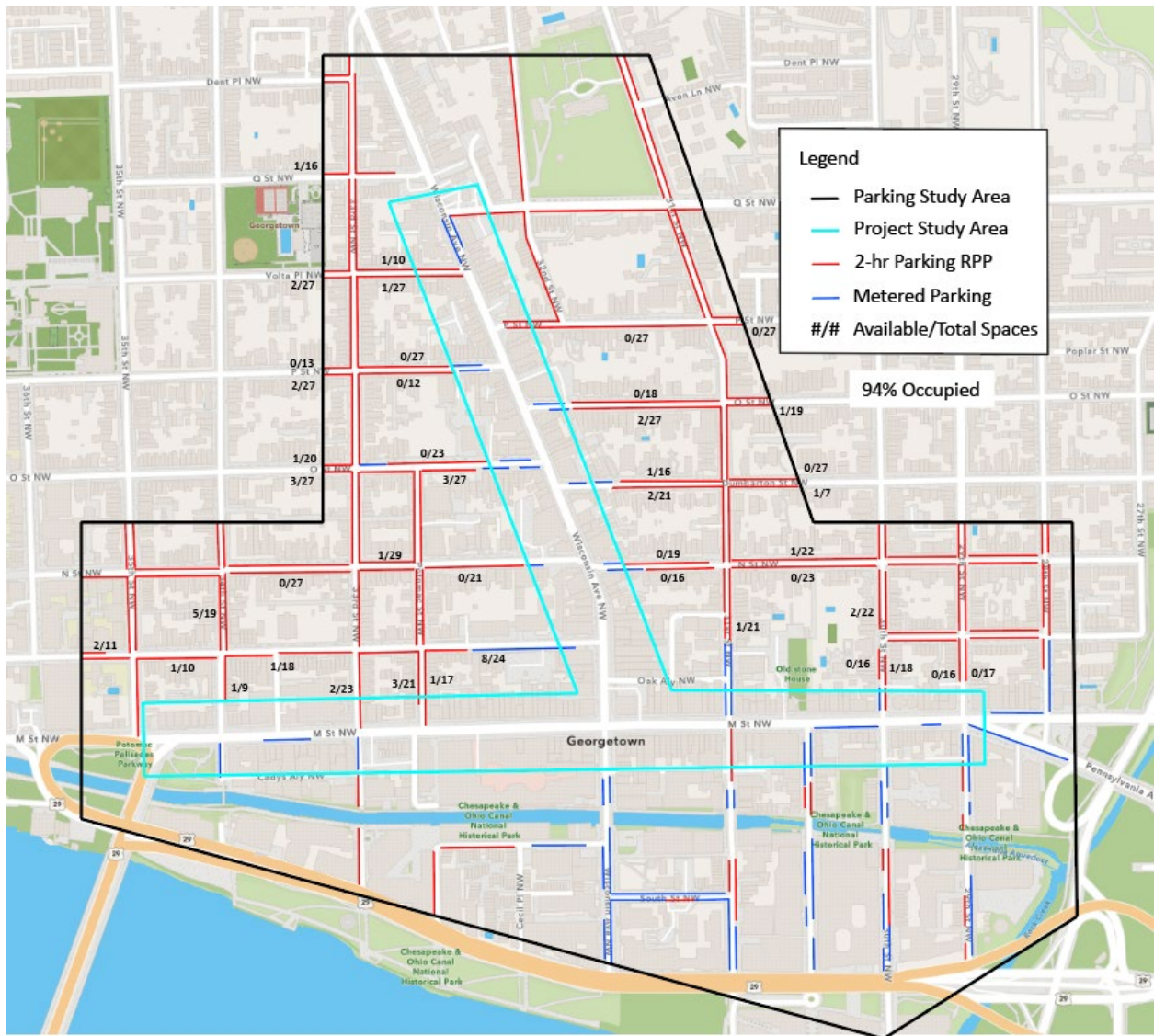


Figure 35: Saturday PM On-Street Parking Space Occupancy

Public Off-Street Parking

There are a couple of large parking garages within the study area. The 3307 M Street NW Garage is located on M Street between 33rd Street and Bank Alley. The 3333 M Street NW Garage is located on M Street between Bank Alley and 34th Street. The Georgetown Park garage (3222 M Street NW) is located on Wisconsin Avenue between M Street and Grace Street. **Figure 36** shows the average weekday utilization of the 3307 M Street NW Garage. The peak utilization period lasts from 8 AM to 1 PM. **Table 19** depicts the demand and capacity of the 3307 M Street and 3333 M Street garages. As shown, there is opportunity for visitors to use the parking garages instead of on-street parking.

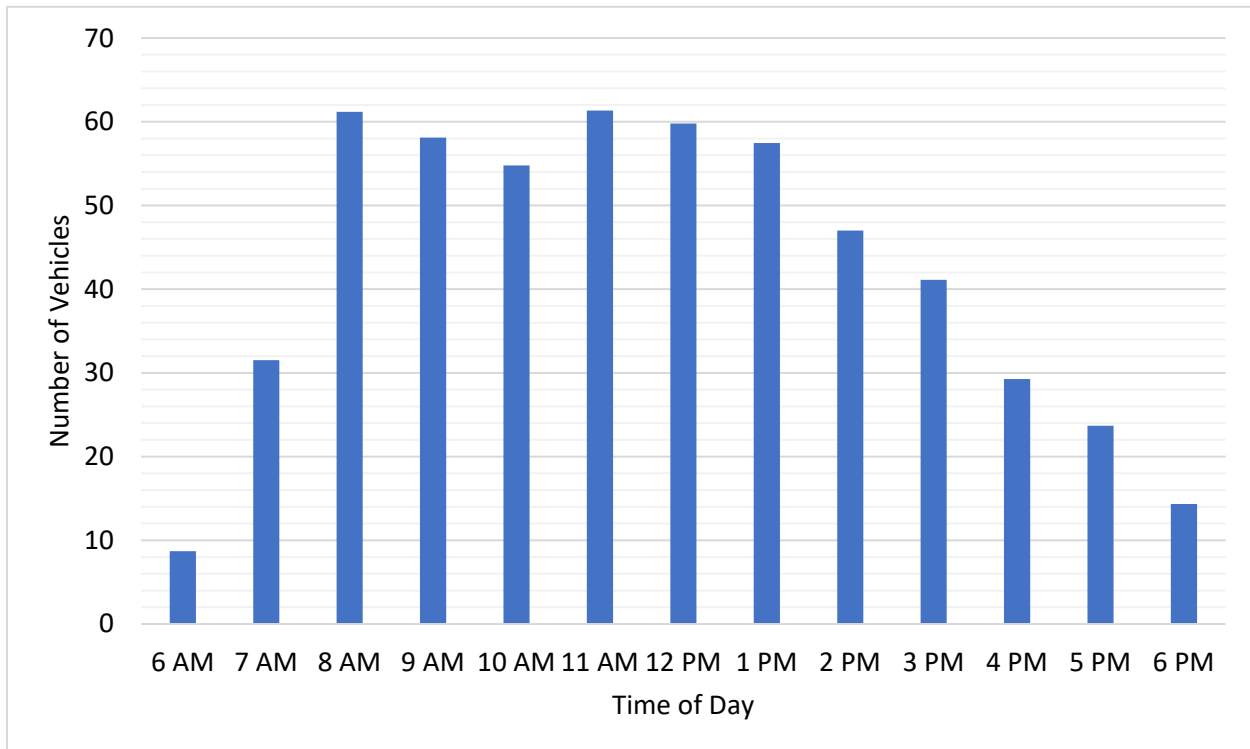


Figure 36: Weekday Average Parking Garage Utilization at 3307 M Street NW (2021)

Table 19: Garage Demand and Capacity

	3307 M Street			3333 M Street*		
	Demand	Capacity	D/C Ratio	Permits	Capacity	Ratio
2019	96	131	73%	89	91	98%
2020	35	131	27%	95	91	104%
2021	83	131	63%	85	91	93%

*Monthly permits not peak parking demand

RECOMMENDATIONS

Topic	Issue/Opportunity	Assessment	Recommendation
Loading Zones	<p>Businesses in the 1300 block of Wisconsin Avenue indicate delivery vehicles always have issues parking. Review of loading demand data (from business surveys) versus expected capacity of the loading zones on the 1300 block confirm there may be inadequate loading zones to support loading activity.</p>	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional loading zone.</p> <p>All loading zones on the 1300 block are also PUDO zones.</p> <p>Review of PUDO data does not indicate a need to add additional PUDO zones.</p>	<p>The deck on the west side of Wisconsin Avenue on the 1300 block across from Dumbarton Street is for extending the sidewalk and not used for dining or bus stops. Remove the deck and designate the two spaces as loading.</p> <p>Upon review: DDOT does not support loading or parking in the middle of the intersection and the loading should be moved, perhaps north of O Street which is proposed as Parking.</p>
Loading Zones	<p>Businesses in the 3200 block of M Street indicate more daily delivery vehicles than any other block in the study area. Some indicate delivery vehicles always having issues parking.</p> <p>Review of PUDO data indicates 168 daily pick-up/drop-off activity occur on the 3200 block, which is 27% of all PUDO activities on M Street.</p> <p>Clean Team observations indicate as many as ten double parking instances daily on the 3200 block.</p>	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional loading zone.</p> <p>All loading zones on the 3200 block are also PUDO zones.</p>	<p>The deck adjacent to the PUDO/loading area on the north side of the 3200 block is for extending the sidewalk and not used for dining or bus stops. Expand the PUDO/loading area to accommodate two more spaces.</p>

Topic	Issue/Opportunity	Assessment	Recommendation
PUDO Zones	Review of PUDO data indicates 38% of pick-up/drop-off activity on Wisconsin Avenue occur on the 1200 block.	<p>Current 2021 curbside uses and deck build out were reviewed to see if there was an opportunity to add an additional PUDO zone.</p> <p>There were 9 PUDO/loading zones in 2019 versus 3 PUDO/loading zones in 2021 on the 1200 block due to the sidewalk widening.</p>	<p>The deck on Wisconsin Avenue across from Prospect Street is for extending the sidewalk and not used for dining or bus stops. Remove the deck and designate the two spaces as PUDO only.</p> <p>Upon Review: DDOT does not support loading or parking in the middle of the intersection and the signage on Wisconsin Ave, across from Prospect Street should reflect that change.</p>
Bus Zone	Parking enforcement data indicates a noteworthy increase in violations of vehicles parking in the bus zone at Wisconsin Avenue and Dumbarton Street (17 in 2019 versus 48 in 2021).	There were no changes to the bus stop from 2019 to 2021. During observations, individuals were observed parking in the bus stop even though there were two available PUDO spaces adjacent to the bus stop.	Request increased enforcement of parking in bus stops. Ask DDOT to consider photo enforcement of illegal parking in the bus stop at Wisconsin Avenue and Dumbarton Street.
Safety	A dump truck was seen at the intersection of Wisconsin Avenue and M Street (Figure 34) making a southbound turn from M Street on Thursday October 21, 2021. The truck had to back up to make the turn without hitting the barrier adjacent to the designated bicycle/scooter parking spaces.	The space was established for bicycle/scooter parking, but not the entire space is needed.	Adjust approximately 20 feet of the barrier to be further south of the intersection of Wisconsin Avenue and M Street. (BID has already adjusted the barrier).