TECHNICAL MEMORANDUM

To: Chris VanArsdale and Mark James Heleos

From: Drew Ackermann
William Zeid, P.E.
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Date: April 4, 2022

Subject: Supplemental Transportation Assessment for 4608-4618 14th Street NW
Z.C. Case No. 21-18, Consolidated PUD and Map Amendment

Introduction

This memorandum presents a supplemental transportation assessment for the 4608-4618 14th Street PUD (the "Project").

A full Transportation Statement dated March 21, 2022 (the "Transportation Statement") was scoped and submitted to DDOT and the Zoning Commission as part of the PUD process. The purpose of this assessment is to provide a review of the traffic capacity under existing and future conditions at the intersections adjacent to the Project on 14th Street NW. The intersections adjacent to the Project along 14th Street NW at Crittenden Street NW, Buchanan Street NW and the mid-block alley were selected for additional vehicular analyses as they represent the intersections that would process the vast majority of Project generated traffic. The volume of traffic that will access the garage from the west is expected to be minimal given then Project's widening of the alley connection between the garage and 14th Street NW and the connectivity of 14th Street NW to/from the north and south of the site. In addition, signs inside the Project's garage will direct users to enter and exit the garage only via the alley to 14th Street NW. All truck traffic to the Project will be limited to the 14th Street NW alley entrance. As discussed in the Project's Transportation Statement, the proposed uses are not expected to generate 25 or more peak hour peak direction trips. As a result, DDOT's evaluation criteria did not require vehicular analyses as part of the Comprehensive Transportation Review (CTR) process. However, this supplemental assessment with vehicular analyses is intended to provide an enhanced review of the Projects' potential transportation network impacts, even though not required by DDOT and related scoping or assessment policies or regulations.

As shown on Figure 1, the Project is bordered by 14th Street NW to the east, a public alley to the south, a public alley and private lots to the west, and a public alley and adjacent retail space to the north. The Project includes removal of the existing structures and the redevelopment of the site with a single mixed-use building to serve the following uses:

- Approximately 101 residential dwelling units;
- Approximately 1,888 square feet of ground floor retail space; and
- An approximately 9,459 square foot dance studio with an additional approximately 10,847 square feet of rental theater space.

The Project will include 40 parking spaces, 21 of which will be stacked spaces, in addition to one (1) 12' x 30' loading berth and one (1) 10' x 20' loading/delivery space. The Project will also include 47 long-term and 10 short-term bicycle parking spaces, exceeding zoning requirements. No new curb cuts are proposed as part of the Project.

The Project includes widening of the alley adjacent to the site between the garage entrance and 14th Street to accommodate loading vehicles for the Project; however, the alley to the west of the Project's garage entrance will continue to provide 10 feet

of width with some existing occasional obstructions that further reduce lateral clearance for vehicles. Based on input received from the community, the Project proposes to include signage at the entrance to the alley from 14th Street prohibiting through truck traffic (except garbage trucks), subject to DDOT review and approval.

The purpose of this memorandum is to:

- Review existing site conditions and details of the proposed development plans;
- Review the major transportation elements of the Project and the pedestrian, bicycle, and transit facilities in the vicinity of the Project;
- Provide an analysis and discussion of the vehicular impacts of the Project;
- Determine whether the Project will have a detrimental impact on the surrounding transportation network.

The findings of this study conclude that:

- **The 4608-4618 14th Street NW site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an excellent environment for safe and effective non-vehicular transportation;**
- **The Project will include expansion of the nearby existing 11-dock CaBi station to a 19-dock station;**
- **The Project will provide sufficient short- and long-term bicycle parking;**
- **The Project will provide 40 on-site garage parking spaces;**
- **The Project will provide loading facilities accessed from an existing alley, limiting the impacts of loading activity in public space; and**
- **The Project is not expected to have a detrimental impact on the surrounding transportation network, surrounding parking, or the surrounding alley network.**

Figure 1: Project Location (Aerial)

Existing Transportation Conditions

This section reviews the existing vehicular, transit, bicycle, and pedestrian facilities in the vicinity of the site. A more in-depth review of these features is provided in the Transportation Statement. The 4608-4618 14th Street NW site is easily accessible from major roadways, is served by eight (8) Metrobus routes, and is within a 20-minute walk of the Metrorail Green and Yellow Lines. The site is also surrounded by a robust pedestrian and bicycle network that consists of well-connected sidewalks, crosswalks, and bicycle facilities. This accessibility will result in an increased non-auto mode share for Project related trips.

Vehicular Facilities

The site is located within a half-mile of the principal arterial roads Georgia Avenue (US-29) and 16th Street NW. These roads connect the site to the Capital Beltway (I-495), which provides access to communities and points of interest throughout the Washington, DC region and links to other Interstate highways, including I-95 and I-270. The minor arterials 14th Street and Arkansas Avenue NW, along with a dense network of connector and local roadways, can be used to access the site from the major roadways. Vehicular access to the site will be provided via the existing alley connecting 14th Street and 15th Street NW that is proposed to be widened between the garage entrance and 14th Street to better accommodate vehicular and loading traffic.

Transit Facilities

The site is served by several bus routes along Georgia Avenue, 14th Street, and 16th Street NW with multiple bus stops located within a quarter-mile of the site. These bus lines connect the site to many areas of Washington, DC and Maryland as well as Metro stations where transfers can be made to reach further areas in the District, Virginia, and Maryland. As shown in Figure 2, the Project is served by seven (7) Metrobus lines carrying eight (8) designated routes.

The Project is located within ¼-mile of two (2) specified Priority Corridor Network Metrobus Routes, the 14th Street Line and the 16th Street Line, with the former running directly adjacent to the property with a southbound stop on the Project's block of 14th Street approaching Buchanan Street.

The closest Metro station to the site is the Georgia Avenue-Petworth station, which is served by the Green and Yellow Lines and located approximately 0.9 miles (a 19-minute walk) southeast of the site. The Yellow and Green Lines travel from Greenbelt, MD south through downtown Washington, DC with the Yellow Line continuing to Huntington, VA and the Green Line to Suitland, MD. As of February 2022, the Green and Yellow Lines ran every 10 to 12 minutes between 5:00am and 9:30pm on weekdays, every 15 minutes after 9:30pm on weekdays, and every 15 minutes on weekends.

Existing transit facilities surrounding the site are shown on Figure 2.

Bicycle Facilities

Existing Bicycle Facilities

The 4618 14th Street NW site will have access to existing on- and off-street bicycle facilities. The site is located alongside bicycle lanes on 14th Street NW and is two (2) blocks west of the signed bicycle route on 13th Street NW.

Future Bicycle Facilities

Several bicycle facilities are planned near the site. *MoveDC*, the District's long-range multimodal transportation plan, recommends several new facilities including bicycle lanes on Arkansas Avenue, Blagden Avenue, Gallatin Street, and Upshur Street NW as well as a multi-use path along 16th Street NW.

The Project's proposed Transportation Demand Management (TDM) plan will also include the expansion of the existing 11-dock Capital Bikeshare station at 14th Street and Crittenden Street NW to 19 docks.

Figure 3 shows the existing and future bicycle facilities near the site.

Capital Bikeshare

The Capital Bikeshare program provides additional cycle options for residents, employees, customers, and attendees of the proposed Project. The closest Capital Bikeshare station to the site is a 11-dock station located at 14th Street & Crittenden Street, NW, less than 0.10 miles from the site. **The Project is proposing to expand this existing Capital Bikeshare station with an additional 8-dock expansion, for a total of 19-docks, as part of the Project's robust TDM plan.**

The location of this station is shown in Figure 3.

Pedestrian Facilities

Existing Pedestrian Facilities

Overall, the pedestrian facilities within the study area provide excellent connectivity to major local destinations. As discussed in the Project's Transportation Statement, there are some existing pedestrian facilities that do not meet DDOT standards within the area. A summary of pedestrian facilities within a quarter-mile area is shown on Figure 4, with a summary of sidewalk width requirements shown in Table 1.

Along major pedestrian routes near the site, most sidewalks, crosswalks, and curb ramps meet DDOT and/or ADA standards. Pedestrian facilities immediately adjacent to the site meet DDOT and ADA standards, providing a quality walking environment.

Table 1: Minimum Sidewalk Requirements

Street Type	Tree/Furnishing Zone	Unobstructed Clear Width	Total Minimum Sidewalk Width
Low to Moderate Density Residential	4-6 feet	6 feet	10 feet
High Density Residential or Light Commercial	4-8 feet	8 feet	13 feet
Central DC and Commercial Areas	4-10 feet	10 feet	16 feet

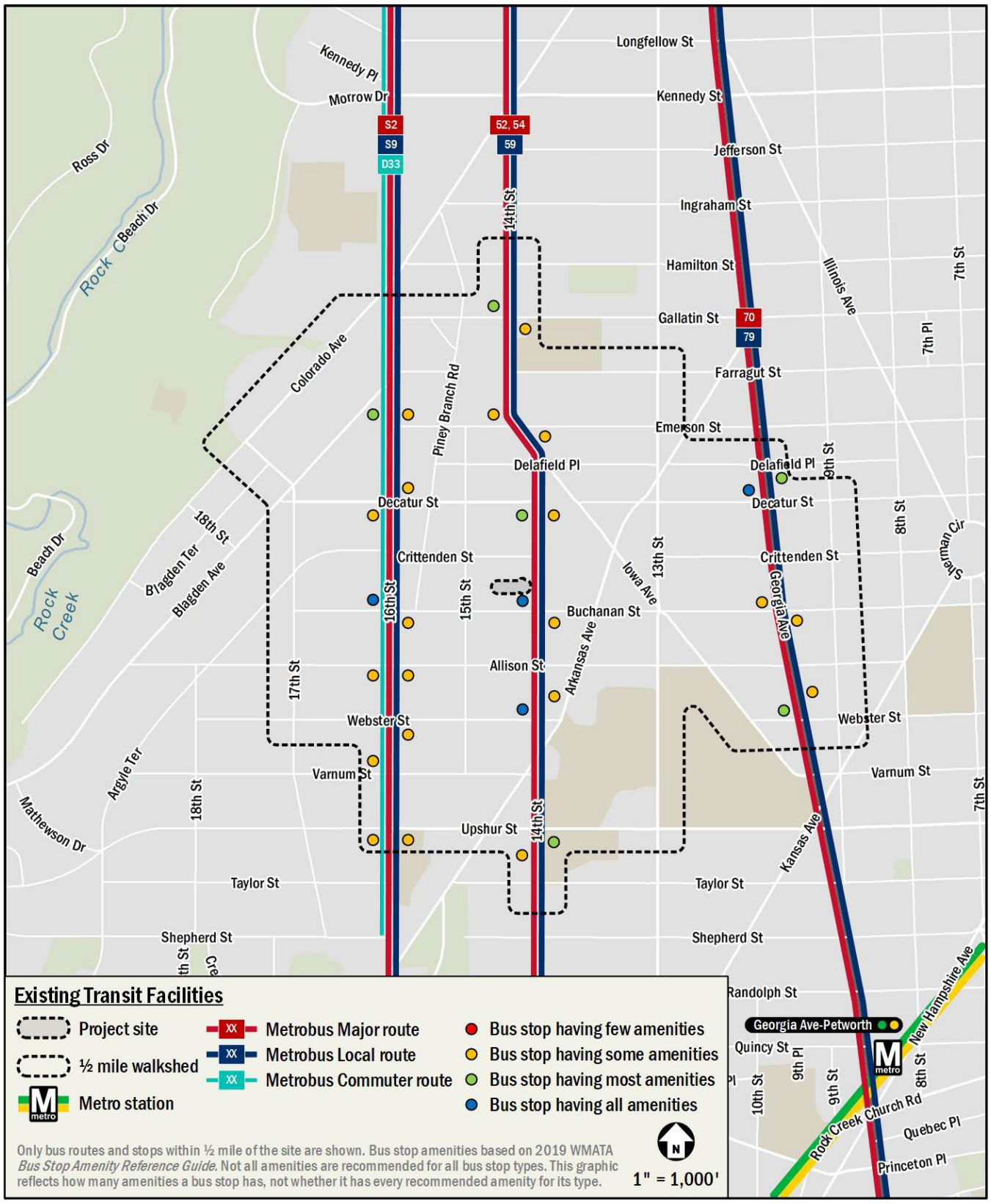


Figure 2: Existing Transit Facilities

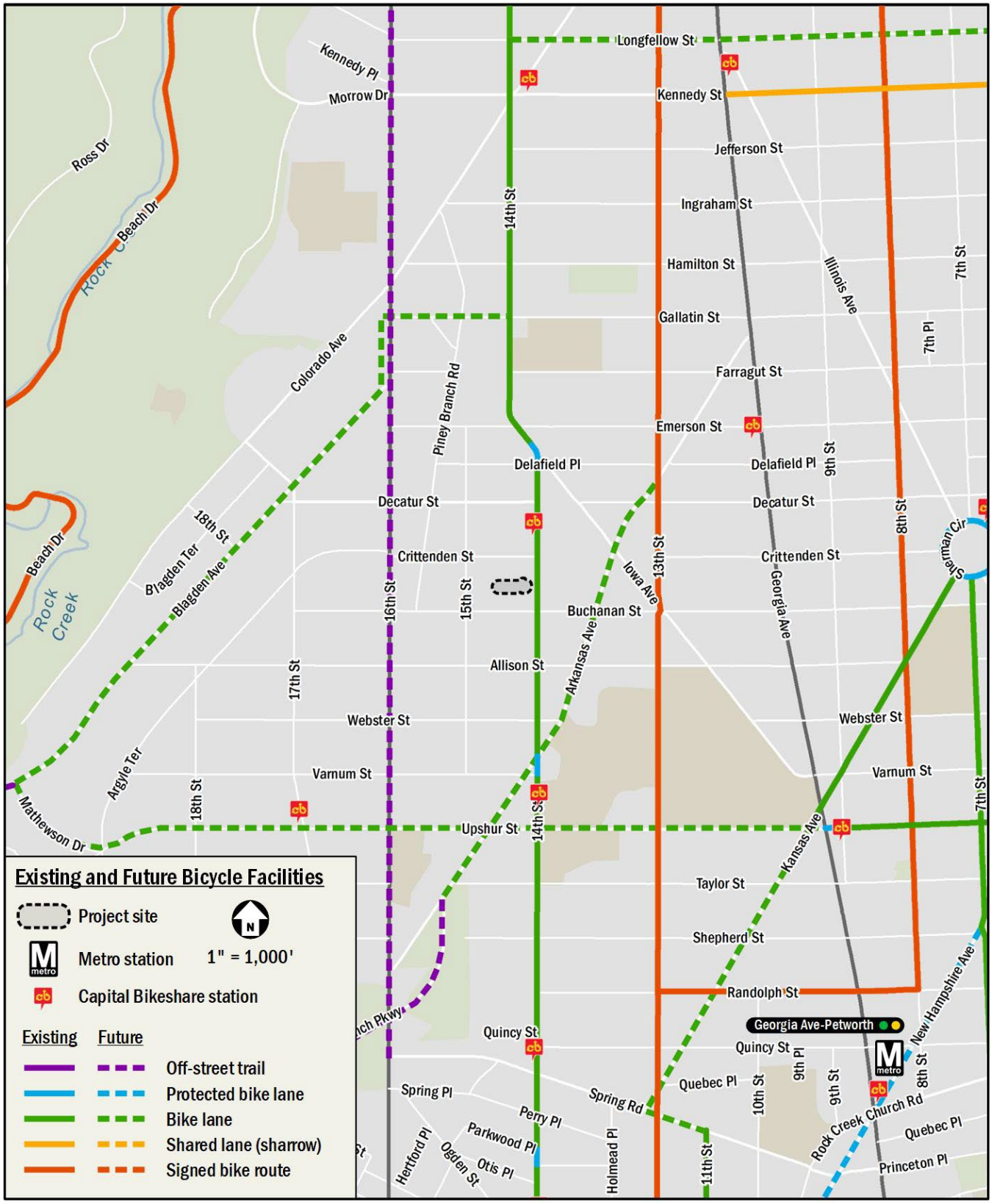


Figure 3: Existing and Future Bicycle Facilities

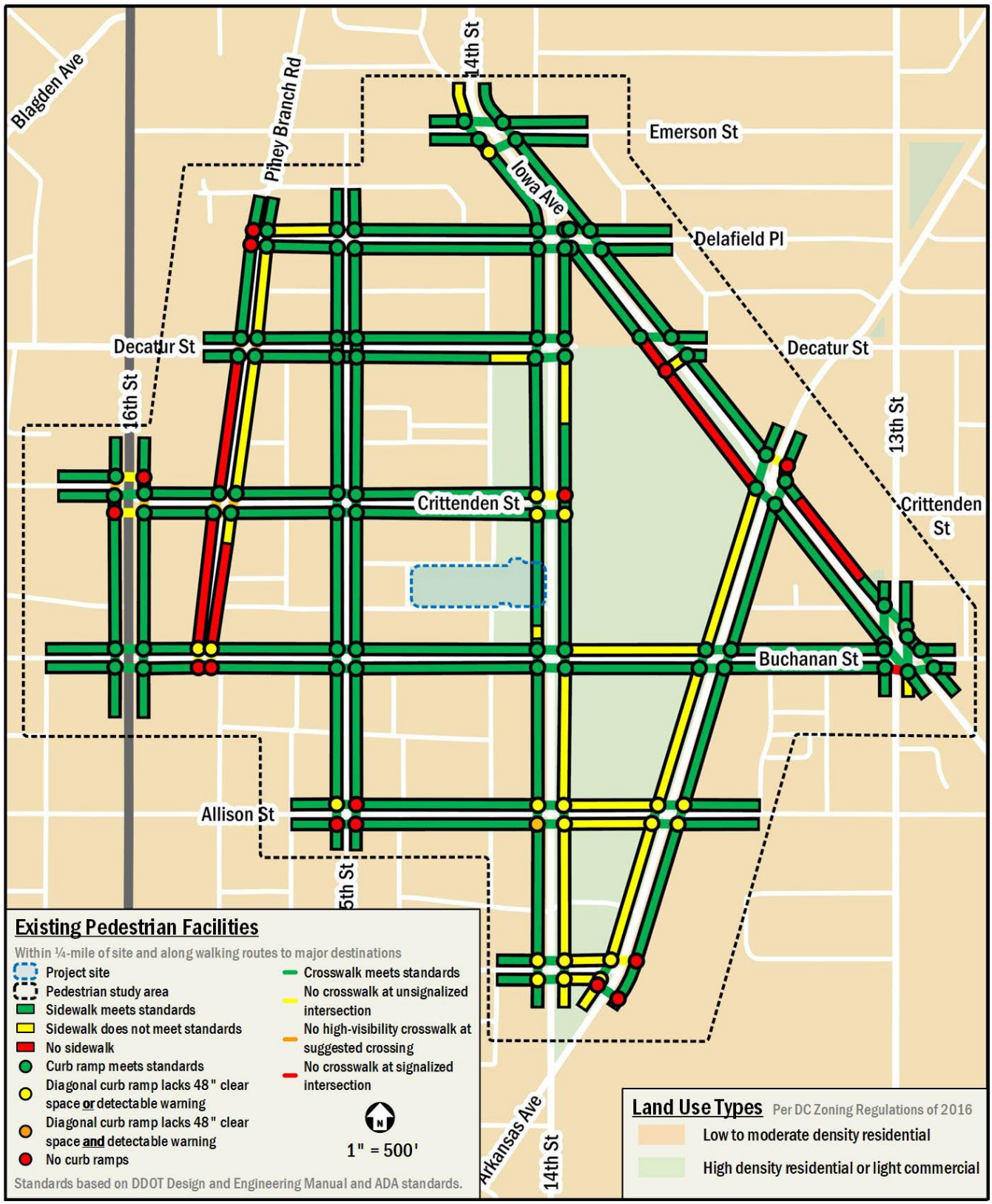


Figure 4: Existing Pedestrian Facilities

Site Trip Generation

Weekday peak hour trip generation was calculated for the Project as part of the DDOT-approved CTR process, as detailed in the Project's March 21, 2022 Transportation Statement, submitted under separate cover. The trip generation rates and mode split assumptions were reviewed and approved by DDOT.

Trip generation for the residential and retail portions of the proposed development was calculated using ITE land use 221, *Multifamily Housing (Mid-Rise),* and 820, *Shopping Center,* respectively. Trip generation for the theater portion of the development was calculated using ITE land use 460, *Arena* assuming 180 seats. Trip generation for these land uses was calculated using ITE's General Urban/Suburban context. The number of trips generated by the dance studio was estimated based on the studio's general operational characteristics, including its theater operations and administrative functions. However, it should be noted that the studio will offer classes in the late afternoon and evening on weekdays, consistent with the existing dance studio, and the majority of trips for that use are generated outside of the PM commuter peak period (after 7:00pm). While the dance studio's primary operations will occur outside the peak periods, trips were generated to provide a conservatively high estimate of the vehicular impact from those uses (meaning that a higher number of trips are studied than we believe are likely to result from the Dance Loft and associated theater space).

Table 2 shows mode split assumptions based on census (Traffic Analysis Zone) data for people who live and work near the site, as well as survey data from the National Capital Region Transportation Planning Board's (TPB) State of the Commute survey and the WMATA Ridership Survey. Detailed mode split information is provided in the Technical Attachments.

Table 3 shows a multimodal trip generation summary for the proposed development. Detailed trip generation information is provided in the Technical Attachments. As seen on Table 3, the Project will generate fewer than 25 net new peak hour vehicle trips in the peak direction in any study period. (As a result, a vehicular capacity analysis is not required pursuant to DDOT's guidelines, but is provided here for informational purposes.)

Table 2: Summary of Mode Split Assumptions

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	35%	50%	5%	10%
Retail	35%	40%	5%	20%
Theater	45%	45%	5%	5%
Dance Studio	35%	50%	5%	10%

Table 3: Multimodal Trip Generation Summary

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto (veh/hr)	Residential	3	10	13	9	6	15
	Retail	1	0	1	1	2	3
	Theater	--	--	--	4	6	10
	Dance Studio	--	--	--	10	10	20
	Total	**4**	**10**	**14**	**24**	**24**	**48**
Transit (ppl/hr)	Residential	6	15	21	16	10	26
	Retail	1	1	2	2	3	5
	Theater	--	--	--	8	14	22
	Dance Studio	--	--	--	24	24	48
	Total	**7**	**16**	**23**	**50**	**51**	**101**
Bike (ppl/hr)	Residential	1	1	2	2	1	3
	Retail	0	0	0	0	1	1
	Theater	--	--	--	1	1	2
	Dance Studio	--	--	--	2	3	5
	Total	**1**	**1**	**2**	**5**	**6**	**11**
Walk (ppl/hr)	Residential	0	4	4	3	2	5
	Retail	0	1	1	1	2	3
	Theater	--	--	--	1	1	2
	Dance Studio	--	--	--	5	4	9
	Total	**0**	**5**	**5**	**10**	**9**	**19**

Traffic Operations

This chapter provides an analysis of the existing and future roadway capacity surrounding the site. Included is an analysis of potential vehicular impacts of the Project.

The purpose of the capacity analysis is to:

- Determine the existing capacity of the study area roadways; and
- Determine the overall impact of the Project on the study area roadways.

This analysis was performed by determining the traffic volumes and roadway capacity for Existing Conditions, Background (no-build) Conditions, and Total Future (build) Conditions.

Study Area, Scope, & Methodology

This section outlines the vehicular trips generated in the study area along the vehicular access routes and defines the analysis assumptions.

The general methodology of the analysis follows national and DDOT guidelines on the preparation of transportation impact evaluations of site development.

Capacity Analysis Scenarios

The vehicular capacity analyses were performed to determine whether the vehicular trips added to the area road network by the Project will result in adverse impacts on traffic operations. A review of potential impacts to other modes is outlined later in this report. This is accomplished by comparing two (2) future scenarios:

- Future conditions without the Project (referred to as the Background Conditions); and
- Future conditions with the Project approved and constructed (referred to as the Total Future conditions).

Specifically, the roadway capacity analysis examines the following scenarios:

- Existing Conditions (2022 Existing Conditions);
- Future Conditions without the Project (2026 Background Conditions); and
- Future Conditions with the Project (2026 Total Future Conditions).

Study Area

Given the minimal vehicular trips expected to be generated by the Project, the intersections experiencing the most impact would be those located immediately adjacent to the Project. Therefore, the site access connection (public alley) and upstream and downstream intersections along 14th were assessed, as follows:

1. 14th Street and Crittenden Street NW (to the north of the Project)
2. 14th Street and Public Alley NW (site access located along public alley to the west of 14th Street)
3. 14th Street and Buchanan Street NW (to the south of the Project)

The existing and future lane configurations and traffic controls at these intersections are shown on Figure 5.

Traffic Volume Assumptions

The following section reviews the traffic volume assumptions and methodologies used in the roadway capacity analyses.

2022 Existing Traffic Volumes

The existing traffic volumes are comprised of turning movement count data collected on Wednesday, March 23, 2022, a typical weekday when public schools and local government were in session. Further, the Dance Loft studio was in full operation with rehearsals and classes on the day traffic counts were collected. Traffic counts included vehicular turning movement observations between the hours of 6:30-9:30am (morning peak period) and 4:00-7:00pm (evening peak period). Based on these observations, the highest one-hour of vehicular traffic was identified at each intersection during the morning peak period (the AM peak hour) and during the PM peak period (the PM peak hour). The results of these traffic counts are included in the Technical Attachments. For all intersections, the individual morning and afternoon peak hours were used, as shown on Figure 5.

Further observations were made at the alley intersection with 14th Street NW to identify the number of trucks entering and exiting the alley during these periods. As shown in the peak period volumes, the vehicular volumes along the alley were very low, with one (1) entering vehicle during the AM peak hour and two (2) entering vehicles during the PM peak hour. No exiting vehicles were observed during the AM or PM peak hours.

One (1) truck was observed during each of the peak hours entering the alley.

2026 Background Traffic Volumes (without the Project)

The traffic projections for the 2026 Background Conditions consist of the 2022 Existing volumes with the addition of inherent growth on the roadway (representing regional traffic growth).

No nearby developments were identified that have current development approvals and are planned for completion prior to this Project that would have a significant traffic impact at the studied intersections. Following national and DDOT methodologies, a background development must meet the following criteria to be incorporated into the analysis:

- Be located in the study area, defined as having an origin or destination point within the cluster of study area intersections;
- Have entitlements; and
- Have a construction completion date prior or close to the future analysis year of 2026.

Based on a review of developments in the Project area, there are no developments meeting the above criteria; therefore, no background developments are included in this analysis.

It is noted that the WMATA Northern Bus Garage Reconstruction Project is located on the east side of 14th Street NW, also along the 4600 block. While this site is undergoing renovation/redevelopment and will ultimately contribute traffic along 14th Street NW, sufficient details are not currently available to estimate the net increase trips for this site relative to the existing operations for this garage It is noted that the results of this assessment indicate significant capacity is available at the intersections studied along 14th Street NW to accommodate additional traffic that will be generated by the WMATA bus garage site, once reopened. While the findings of this report do not measure the potential impact of future development at the WMATA garage site, we do note that the results of this assessment indicate significant capacity is available at the intersections studied along 14th Street NW to accommodate additional traffic that will be generated by the WMATA bus garage site, once reopened.

Volumes Generated by Regional Traffic Growth

Regional traffic growth is typically accounted for using growth rates. The growth rates used in this analysis are based on MWCOG's currently adopted regional transportation model, comparing the difference between the year 2022 and 2026 model scenarios. The growth rates observed in this model served as a basis for analysis assumptions, and a conservatively high 0.10 percent annual growth rate was applied to roadways where a decline in volumes were observed, or roadways where neither historic AADT data or MWCOG model data was available. The applied growth rates are shown in Table 4. The traffic volumes generated by the inherent growth along the network between 2022 and 2026 are shown on Figure 6.

The existing peak hour volumes presented in Figure 5 were combined with the background growth peak hour volumes shown in Figure 6 to establish the 2026 Background traffic volumes. The traffic volumes for the 2026 Background Conditions are shown in Figure 7.

Table 4: Applied Annual and Total Growth Rates

Roadway	Dir.	Proposed Annual Growth Rate Between 2022 and 2026		Proposed Total Growth Between 2022 and 2026	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
14th St NW	NB	0.10%	0.10%	0.40%	0.40%
	SB	0.50%	0.10%	2.02%	0.40%
Crittenden St NW [1]	EB	0.10%	0.10%	0.40%	0.40%
	WB	0.10%	0.10%	0.40%	0.40%
Buchanan St NW [1]	EB	0.10%	0.10%	0.40%	0.40%
	WB	0.10%	0.10%	0.40%	0.40%
Public Alley [1]	EB	0.10%	0.10%	0.40%	0.40%
	WB	0.10%	0.10%	0.40%	0.40%

[1] Neither AADT nor MWCOG data is available for these streets; therefore a conservative 0.1% annual growth rate was used.

2026 Total Future Traffic Volumes (with the Project)

The 2026 Total Future traffic volumes consist of the following:

- Existing volumes, shown on Figure 5;
- Inherent growth on study area roadways, shown on Figure 6; and
- Site-generated volumes, shown on Figure 8.

Site-Generated Volumes

Trip distribution for the site-generated trips was determined based on: (1) Census Transportation Planning Products (CTPP) Traffic Analysis Zone (TAZ) data, and (2) existing and expected future travel patterns in the study area.

Based on this review and the site access locations, the site-generated trips were distributed through the study area intersections. Trip distribution assumptions and specific routings were analyzed for inbound and outbound trips. Inbound and outbound distribution assumptions for the Project, as well as site-generated peak hour volumes, are shown on Figure 8.

The traffic volumes for the 2026 Total Future Conditions are shown on Figure 9.

Vehicular Analysis Results

Intersection Capacity Analysis

Intersection capacity analyses were performed for the three (3) scenarios outlined previously at the intersections contained within the study area during the AM and PM peak hours. *Synchro* version 10 was used to analyze the study intersections based on the Highway Capacity Manual (HCM) 2000 methodology, consistent with DDOT methodology for assessing traffic capacity at an intersection.

The results of the capacity analyses are expressed in level of service (LOS) and delay (seconds per vehicle) for each approach. A LOS grade is a letter grade based on the average delay (in seconds) experienced by motorists traveling through an intersection. LOS results range from “A” being the best to “F” being the worst. LOS D is typically used as the acceptable LOS threshold in the District, although LOS E or F is sometimes accepted in urbanized areas if vehicular improvements would be a detriment to safety or non-auto modes of transportation.

The LOS capacity analyses were based on: (1) the intersection peak hour traffic volumes; (2) the lane use and traffic controls; and (3) the HCM methodologies (using *Synchro* software). The average delay of each approach and LOS is shown for all

intersections in addition to the overall average delay and intersection LOS grade. Detailed LOS descriptions and the analysis worksheets are contained in the Technical Attachments.

The results shown on Table 5 include LOS and average delay per vehicle (in seconds) for the 2022 Existing, 2026 Background, and 2026 Total Future scenarios. These results indicate that all study intersections currently operate at acceptable levels of delay under existing conditions and are expected to continue to do so under both future conditions with and without the proposed Project. Further, the site is expected to have a negligible impact to traffic along 14th Street NW with added average delays along the north-south corridor of less than one (1.0) second per vehicle.

Queuing Analysis

In addition to the capacity analyses presented above, a queuing analysis was performed at each of the study intersections. The queuing analysis was performed using *Synchro* software. The 50th percentile and 95th percentile maximum queue lengths are shown for each lane group at the study area's signalized intersections. The 50th percentile maximum queue is the maximum back of queue on a typical cycle. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. For unsignalized intersections, the 95th percentile queue is reported for each lane group (including free-flowing left turns and stop-controlled movements) based on the HCM calculations.

The queuing results at each of the study intersection are shown in Table 6, including 50th and 95th percentile queues for the 2022 Existing, 2026 Background, and 2026 Total Future scenarios. The results of the queuing analyses indicate that none of the study intersections experience queues that exceed available storage in any scenario.

The site traffic added along 14th Street NW is not expected to noticeably impact vehicle queuing with added queues of less than one (1.0) vehicle length along the north-south corridor.

Table 5: Delay/LOS Comparison

Intersection and Approach	Existing (2022)				Background (2026)				Future (2026)			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. 14th St & Crittenden St NW												
Eastbound	12.1	B	11.4	B	12.2	B	11.4	B	12.3	B	11.6	B
Northbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
Southbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
2. 14th St & Alley NW												
Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	12.2	B	12.8	B
Northbound	0.0	A	0.0	A	0.0	A	0.0	A	0.1	A	0.5	A
Southbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
3. 14th St & Buchanan St NW												
Overall	**8.5**	**A**	**13.0**	**B**	**8.5**	**A**	**13.0**	**B**	**8.7**	**A**	**13.5**	**B**
Eastbound	36.9	D	37.0	D	36.9	D	37.0	D	36.9	D	37.0	D
Westbound	38.2	D	36.4	D	38.2	D	36.4	D	38.2	D	36.7	D
Northbound	8.7	A	11.1	B	8.7	A	11.1	B	8.7	A	11.2	B
Southbound	2.6	A	9.7	A	2.8	A	9.7	A	3.0	A	9.9	A

Table 6: 50th & 95th Percentile Queuing Comparison (in feet)

Intersection and Lane Group	Storage Length (ft)	Existing (2022)				Background (2026)				Future (2026)			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
1. 14th St & Crittenden St NW													
Eastbound LR	430	-	5	-	6	-	5	-	6	-	5	-	6
Northbound T	330	-	0	-	0	-	0	-	0	-	0	-	0
Southbound T	330	-	0	-	0	-	0	-	0	-	0	-	0
2. 14th St & Alley NW													
Eastbound LR	430	-	0	-	0	-	0	-	0	-	2	-	4
Northbound LT	80	-	0	-	0	-	0	-	0	-	0	-	1
Southbound TR	210	-	0	-	0	-	0	-	0	-	0	-	0
3. 14th St & Buchanan St NW													
Eastbound LTR	430	14	31	16	32	14	31	16	32	14	31	16	32
Westbound LTR	310	23	52	8	18	23	52	8	18	23	52	9	18
Northbound LT	330	58	92	124	153	58	93	124	153	58	93	126	156
Northbound R	60	0	0	0	0	0	0	0	0	0	0	0	0
Southbound LT	330	12	18	90	121	13	19	90	122	15	21	95	129
Southbound R	80	0	m0	0	0	0	m0	0	0	0	m0	0	0

Summary of Project Impact

Based on DDOT standards, a Project is considered to have an impact at an intersection within the study area if any of the following conditions are met:

- The capacity analyses show a LOS E or F at an intersection or along an approach in Future conditions with the Project where one does not exist in Background Conditions;
    - **None of the study intersections meet this criteria during the existing or future conditions assessments.**
- There is an increase in delay at any approach or overall intersection operating under LOS E or F of greater than five (5) percent when compared to Background Conditions;
    - **None of the study intersections meet this criteria during the existing or future conditions assessments.**
- A 95th percentile queue exceeds storage along an approach in Future Conditions with the Project where it does not in Background Conditions; or
    - **None of the study intersections meet this criteria during the existing or future conditions assessments.**
- There is an increase in the 95th percentile queue by more than 150 feet along an approach in that exceeds storage in Background Conditions.
    - **None of the study intersections meet this criteria during the existing or future conditions assessments.**

Given the minimal trip generation for the Project, which is below DDOT's threshold to require vehicular analyses, and the results of this assessment indicating none of the above criteria would be met at the intersections most impacted by site traffic, the Project is not expected to have an adverse vehicular impact within the road network surrounding the site.

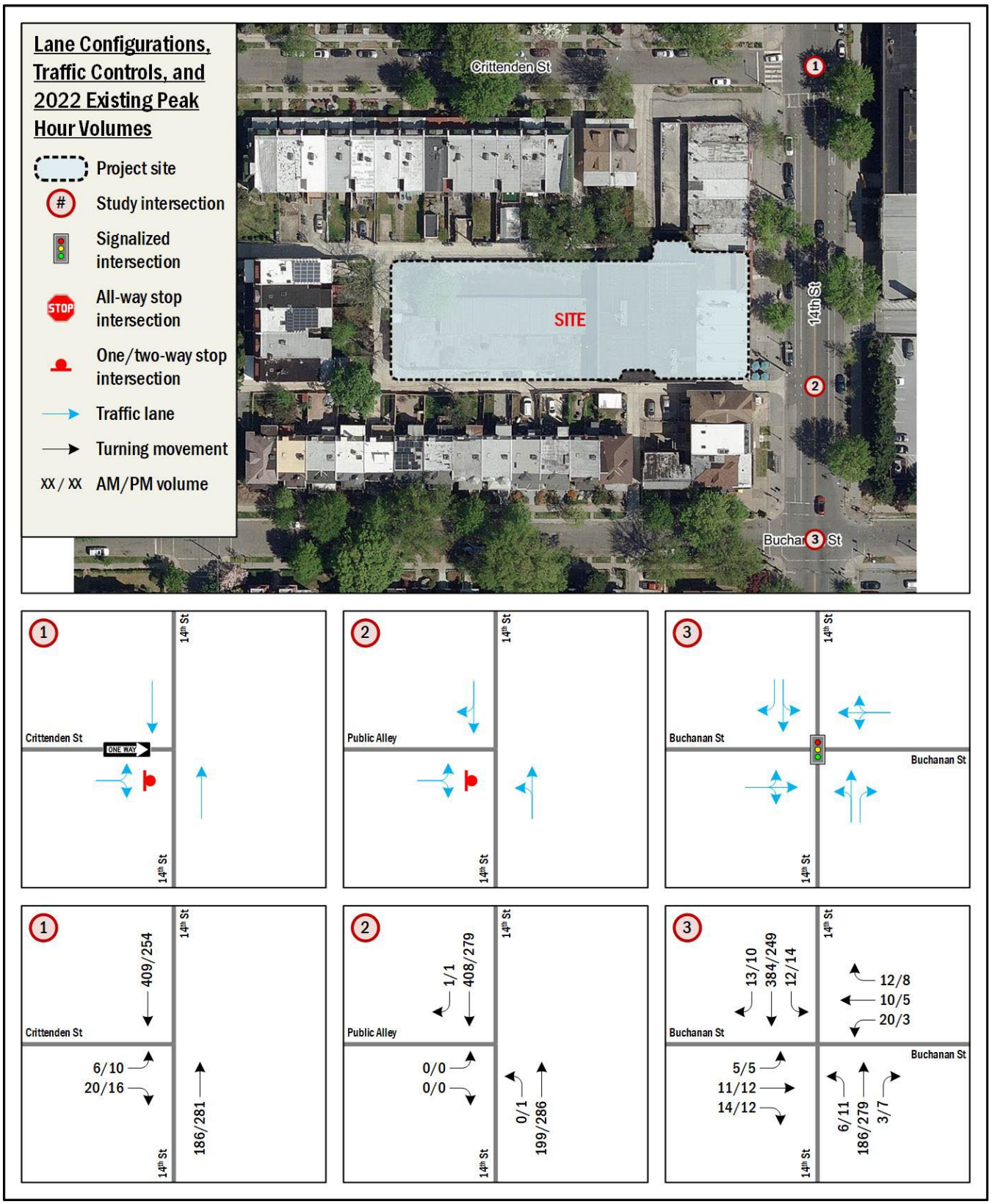


Figure 5: Lane Configurations, Traffic Controls, and 2022 Existing Peak Hour Volumes

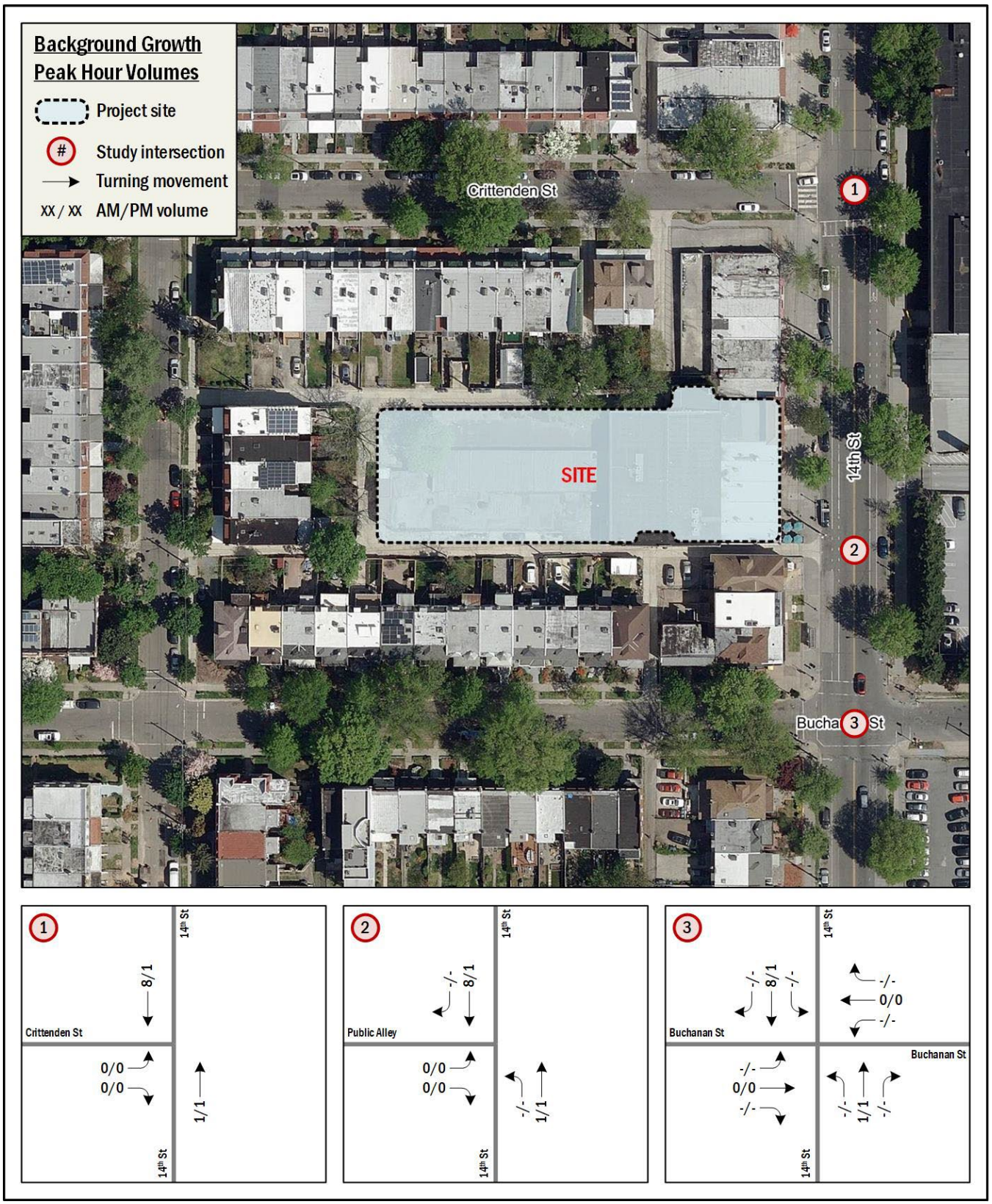


Figure 6: Background Growth Peak Hour Volumes

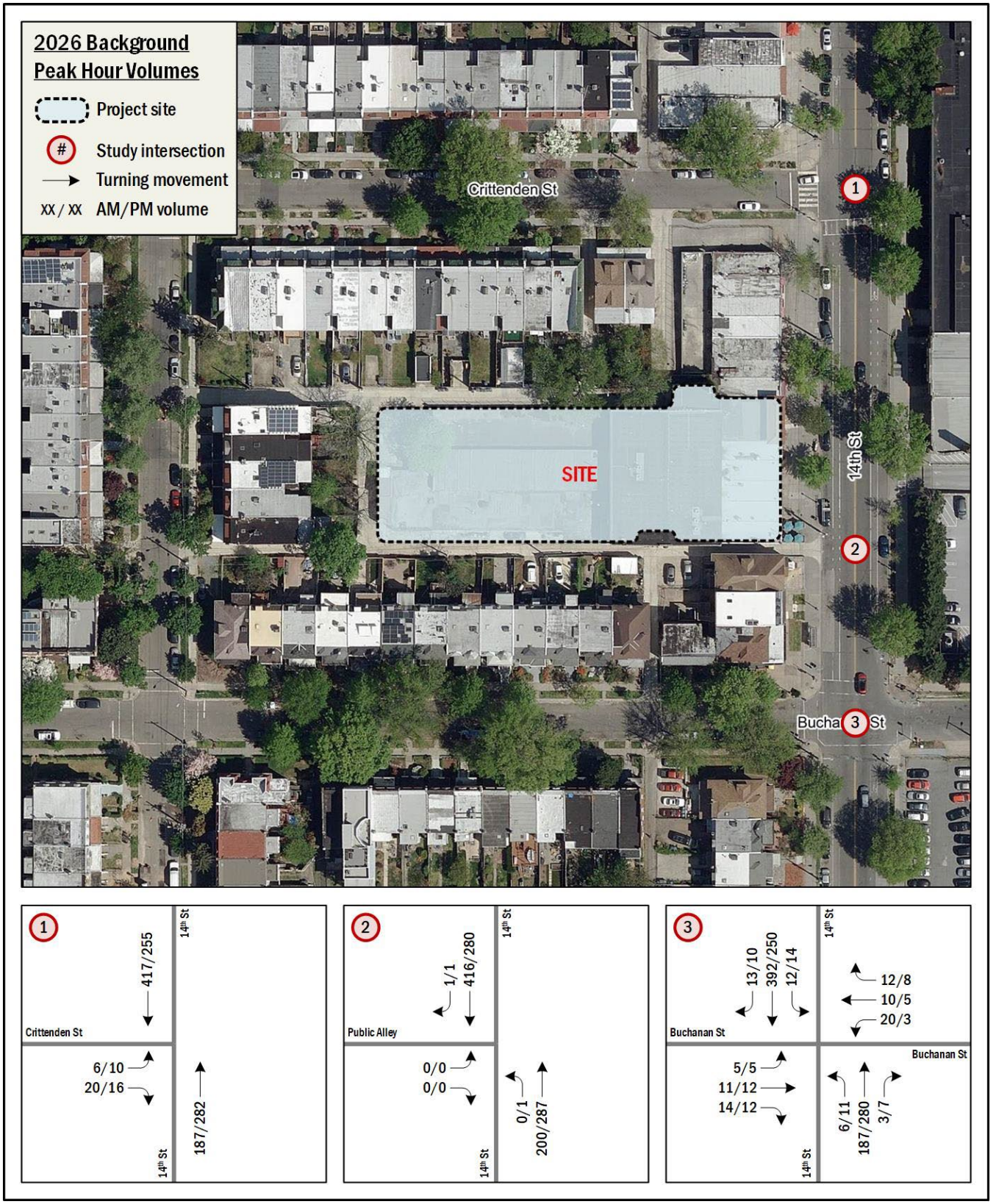


Figure 7: 2026 Background Peak Hour Volumes

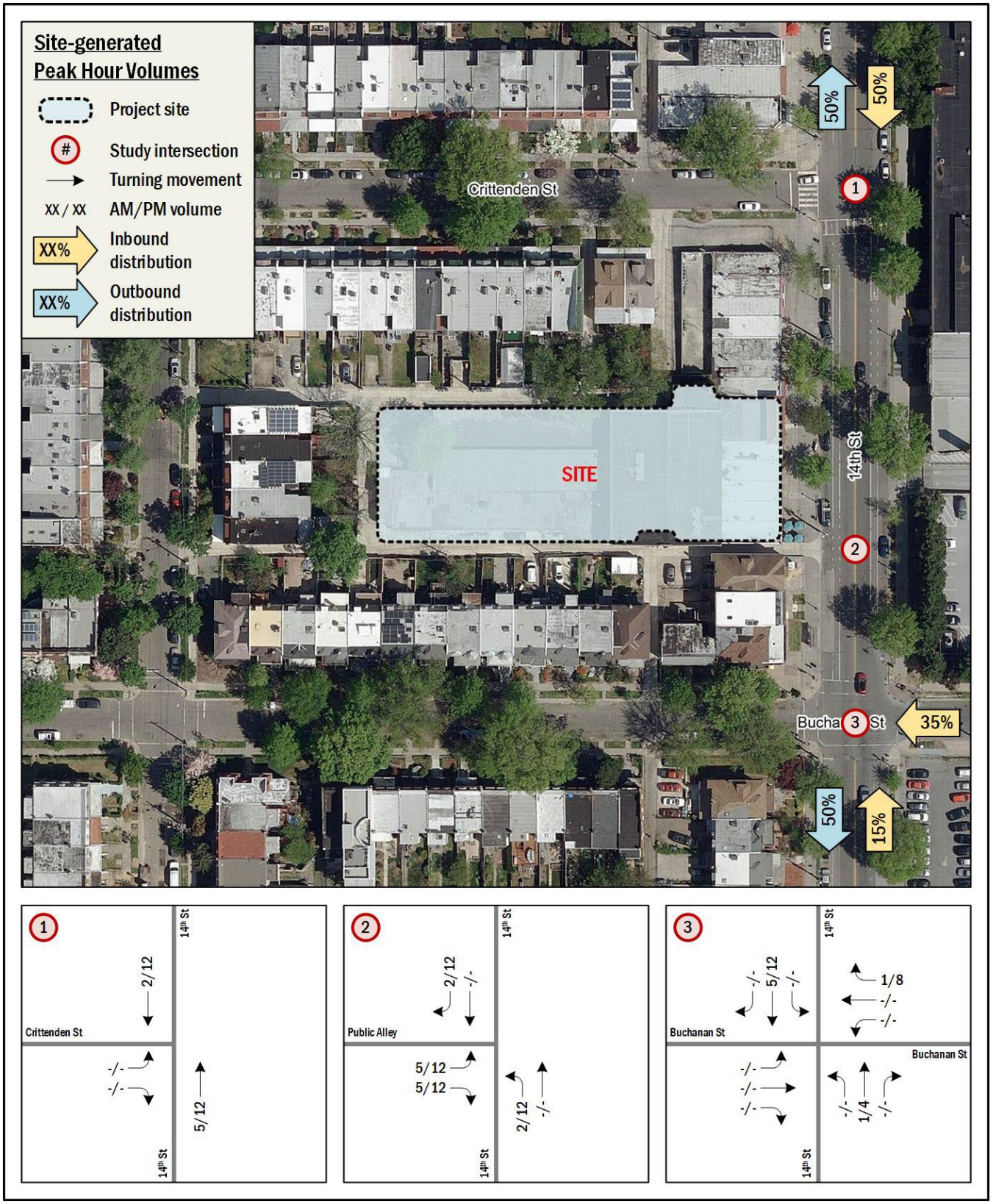


Figure 8: Site-generated Peak Hour Volumes

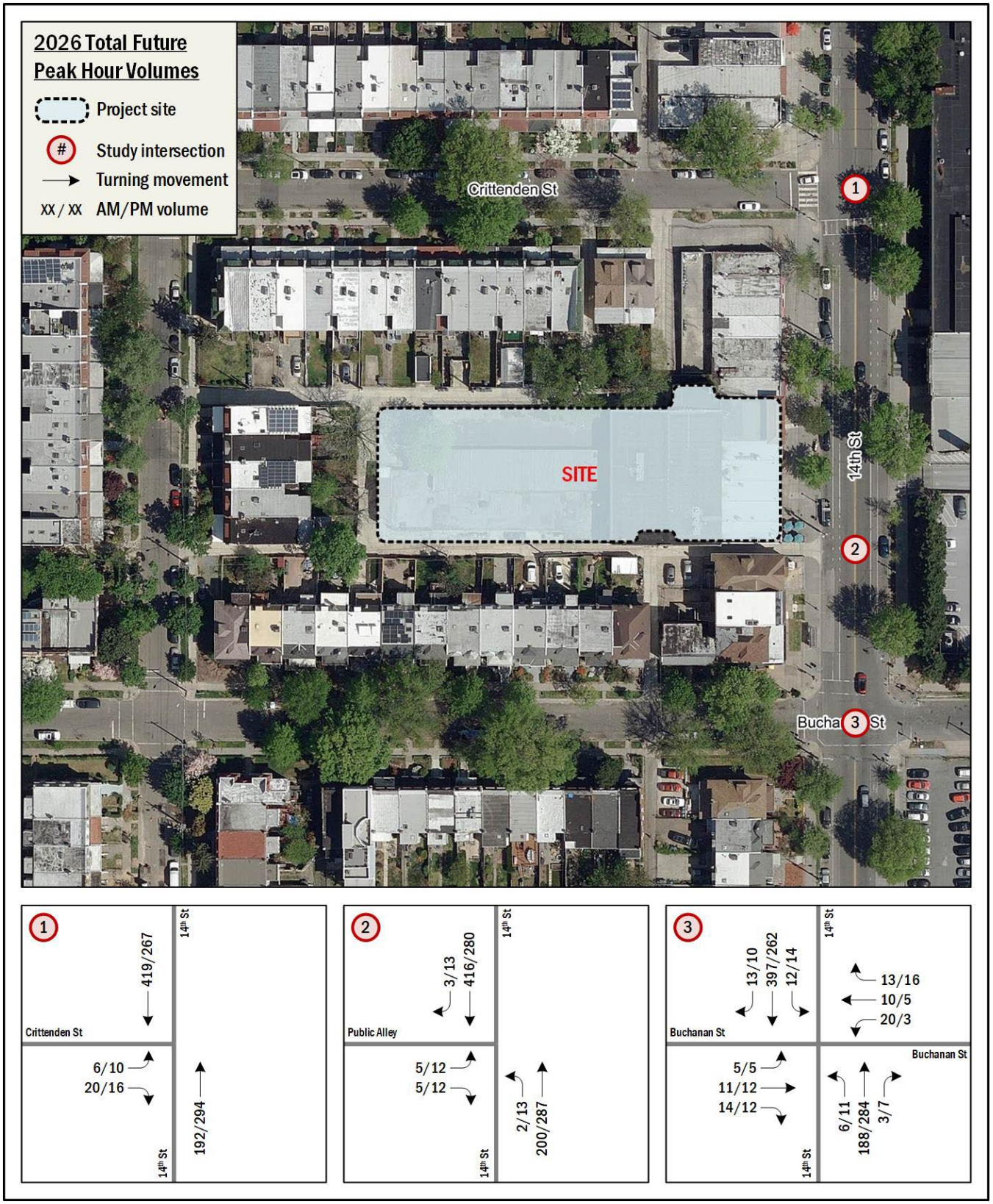


Figure 9: 2026 Total Future Peak Hour Volumes

Project Design

This section provides an overview of the on-site transportation features of the proposed development, including an overview of site access by pedestrians, bicycles, private vehicles, and loading vehicles.

Site Access and Circulation

Primary pedestrian access to the site for all uses is proposed from 14th Street NW. Additional, secondary pedestrian access to the dance studio for secondary pick-up/drop-off purposes only will be provided from the alley north of the site.

Bicyclists will access the ground-floor bike room from the parking garage entrance in the alley. A total of 36 long-term and eight (8) short-term bicycle parking spaces are required, and 47 long term and 10 short term bicycle spaces are proposed on-site. Additionally, the Project's proposed Transportation Demand Management (TDM) plan includes the expansion of the existing 11-dock Capital Bikeshare station at 14th Street and Crittenden Street NW to 19 docks.

Vehicular access to the site's parking garage will be provided via the existing public alley connecting 14th Street and 15th Street NW, which is proposed to be widened between the garage entrance and 14th Street to better accommodate vehicular and loading traffic. No new curb cuts are proposed as part of this Project. Note that there is an existing no parking / loading zone located adjacent to the site on the west side of 14th Street just north of the alley that is proposed to be maintained with the proposed redevelopment. This area provides space to facilitate the primary pick-up/drop-off operations for the Dance Loft studio.

Loading and deliveries, including trash pick-up and residential move-ins, will occur in the loading area within the parking garage, and access will be provided from the alley running between 14th Street and 15th Street NW. The section of the alley between the garage entrance and 14th Street is proposed to be widened to better accommodate loading traffic. With this improvement and the proposed loading facilities, loading operations would occur head-in and head-out to/from the public space. The 30' x 12' loading berth will be used for moving trucks and other larger delivery vehicles. The 20' x 10' surface loading area will be used for smaller delivery vehicles.

The anticipated demand for the proposed loading facilities is up to approximately two (2) loading vehicles per day. Based on the sizes of the residential and non-residential portions of the development, most of this demand is expected to originate from the non-residential uses. With 101 dwelling units and assuming an average 18-month turnover, residential moving truck demand will be approximately 11 trucks per month, or approximately one (1) every three (3) days, including both move-in and move-out activities. The remaining loading demand is expected to originate from the retail, dance studio, and theater uses.

While the Project includes widening of the alley adjacent to the site between the garage entrance and 14th Street to accommodate loading vehicles for the Project, the alley to the west of the garage will continue to provide 10-feet of width with some existing occasional obstructions that further reduce lateral clearance for vehicles.

Based on input received from the community and subject to DDOT review and approval, the Project proposes to include signage at the entrance to the alley from 14th Street prohibiting through truck traffic (except garbage trucks).

Further, the Project's building design has been updated to also include chamfered corners at the loading entrance. These modifications and the widening of the alley between the garage/loading entrance and 14th Street are targeted at improving clearance and maneuverability for vehicles, trucks and trash service within the alley system surrounding the Project.

Parking

The Project proposes 40 parking spaces within a ground level structured parking garage to be accessed from the alley along the south side of the building. Within the garage, 33 of the spaces will be provided as stacked parking spaces (33 parked vehicles within 12 spaces containing sets of 2 or 3 stacked vehicles) and the balance will be surface parking spaces.

The Applicant anticipates that the majority of the parking provided will be used by building residents. Additionally, the Project proposes funding the expansion of the existing 11-dock Capital Bikeshare station at 14th Street and Crittenden Street NW to 19 docks, which is expected to reduce demand for parking and vehicular trips to and from the site.

One (1) of the provided parking spaces will include electric vehicle (EV) stations and an additional seven (7) will be EV ready, for a total of 20%.

Table 7: Parking

Land Use	Size	DC Zoning Regulations (ZR16)		With 50% Reduction [1]	DDOT-preferred maximum [2]		Proposed spaces
		Calculation	Spaces		Calculation	Spaces	
Residential	101 DU	1 per 3 units in excess of 4 units	32	-	0.35 per unit	35	-
Retail	1,888 SF	1 per Ksf in excess of 3 Ksf	0	-	1.25 per Ksf	2	-
Entertainment (dance studio + theater)	11,277 SF[3]	2.00 per Ksf	23	-	90% of ZR16	21	-
Total			**55**	**28**		**58**	**40**

[1] Includes 50% reduction for being within ¼ mile of Priority Corridor Network – assumes flexibility allowed in applying the standard with RPP present or the removal of the RPP designation along the site frontage.
[2] Rate for developments less than ¼ mile from Priority Transit; DDOT sets a target limit on the number of parking spaces that may be provided.
[3] Excludes cellar GFA per Subtitle C Section 709.1 as Project will be zoned MU-5

Dance Loft – Pick-Up and Drop-Off

The Project proposes to accommodate pick-up and drop-off operations for the Dance Loft space via two (2) PUDO locations. One location consists of utilizing the existing no-parking (loading) zone adjacent to the site along 14th Street NW and the second location includes the addition of a new entrance to the Dance Loft space to be located along the alley on the north side of the building.

As previously discussed, the Dance Loft studio does not generate appreciable traffic during the commuter peak periods, and with the proposed provision of two (2) locations for PUDO operations, minimal conflict with vehicular traffic along the adjacent roadways is expected. The proposed Project is not expected to have a detrimental impact on the surrounding transportation network or alley network.

Summary and Conclusions

The findings of this study conclude the following:

- **The 4608-4618 14th Street NW site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an excellent environment for safe and effective non-vehicular transportation;**
- **The Project will include expansion of the nearby existing 11-dock CaBi station to a 19-dock station;**
- **The Project will provide sufficient short- and long-term bicycle parking;**
- **The Project will provide 40 on-site garage parking spaces;**
- **The Project will provide loading facilities accessed from an existing alley, limiting the impacts of loading activity in public space; and**
- **The Project is not expected to have a detrimental impact on the surrounding transportation network, surrounding parking, or the surrounding alley network.**

Transportation Technical Attachments

4608-4618 14th Street NW

Washington, DC

April 4, 2022

GOROVE SLADE
Transportation Planners and Engineers

CONTENTS

(Note: Click on heading to navigate directly to each section of the Technical Attachments)

A. Detailed Mode Split and Trip Generation Information

Mode Split Assumptions

Proposed mode splits based on pertitent mode split data from other sources, as well as the propject's proposed parking supply. ZR16 requires 56 spaces, while DDOT's preferred maximum is 58 spaces for the project. The proposed parking supply is 40 spaces.

Residential Component

Pertinent Mode Split data from other sources:

Information Source	Mode							
	SOV	Carpool	Rideshare	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Residents (TAZ 10134)	40%	6%	---	39%	7%	1%	7%	---
State of the Commute 2016 (of District residents)	35%	4%	---	42%	16%		3%	
Census Tract 25.01 Residents	37%	6%	---	48%	4%	1%	4%	---
WMATA Ridership Survey Table 9 (U Street/African-Amer Civil War Memorial/Cardozo)	22%		---	51%	27%		---	
WMATA Ridership Survey Table 10 (Residential Mode Share: Inside Beltway)	39%		---	49%	14%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Residential	35%	50%	5%	10%	---

Retail Component

Pertinent Mode Split data from other sources:

Information Source	Mode							
	SOV	Carpool	Rideshare	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Workers (TAZ 10134)	67%	15%	---	0%	0%	0%	18%	0%
Adjacent CTPP - TAZ Workers (TAZ 10133)	53%	6%	---	18%	2%	4%	17%	0%
State of the Commute 2019 (of DC Workers)	32%	6%	---	53%	7%		---	
WMATA Ridership Survey Table 15 (Average Among Retail Sites)	36%			37%	27%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Retail	35%	40%	5%	20%	---

Theater Component

Pertinent Mode Split data from other sources:

Information Source	Mode							
	SOV	Carpool	Rideshare	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Workers (TAZ 10134)	67%	15%	---	0%	0%	0%	18%	0%
Adjacent CTPP - TAZ Workers (TAZ 10133)	53%	6%	---	18%	2%	4%	17%	0%
State of the Commute 2019 (of DC Workers)	32%	6%	---	53%	7%		---	
WMATA Ridership Survey Table 15 (Average Among Retail Sites)	36%			37%	27%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Theater	45%	45%	5%	5%	---

Dance Studio Component

Pertinent Mode Split data from other sources:

Information Source	Mode							
	SOV	Carpool	Rideshare	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Workers (TAZ 10134)	67%	15%	---	0%	0%	0%	18%	0%
Adjacent CTPP - TAZ Workers (TAZ 10133)	53%	6%	---	18%	2%	4%	17%	0%
WMATA Ridership Survey Table 12 (U Street Main Street Retail)	19%		---	57%	25%		---	
WMATA Ridership Survey Table 12 (Crystal City - Crystal Plaza Shops)	24%		---	41%	36%		---	
WMATA Ridership Survey Table 12 (Retail Sites)	36%			37%	27%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Dance Studio	35%	50%	5%	10%	---

Residential Trip Generation

101 du

Step 1: Base trip generation using ITEs' *Trip Generation* 10th Edition

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Apartments	221	101 du	9 veh/hr	27 veh/hr	36 veh/hr	27 veh/hr	17 veh/hr	44 veh/hr	549 veh	24 veh/hr	25 veh/hr	49 veh/hr
		Calculation Details:	*26%*	*74%*	*=0.36X*	*61%*	*39%*	*=0.44X*	*=5.45X+-1.75*	*49%*	*51%*	*=.42X+6.73*

Note: Setting used for trip generation above is General Urban/Suburban

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
		In	Out	Total	In	Out	Total	Total	In	Out	Total
Apartments	1.18 ppl/veh	11 ppl/hr	31 ppl/hr	42 ppl/hr	32 ppl/hr	20 ppl/hr	52 ppl/hr	648 ppl	28 veh/hr	30 veh/hr	58 veh/hr

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Apartments	Auto	35%	4 ppl/hr	11 ppl/hr	15 ppl/hr	11 ppl/hr	7 ppl/hr	18 ppl/hr	227 ppl	10 ppl/hr	10 ppl/hr	20 ppl/hr
Apartments	Transit	50%	6 ppl/hr	15 ppl/hr	21 ppl/hr	16 ppl/hr	10 ppl/hr	26 ppl/hr	324 ppl	14 ppl/hr	15 ppl/hr	29 ppl/hr
Apartments	Bike	5%	1 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr	32 ppl	1 ppl/hr	2 ppl/hr	3 ppl/hr
Apartments	Walk	10%	0 ppl/hr	4 ppl/hr	4 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr	65 ppl	3 ppl/hr	3 ppl/hr	6 ppl/hr

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
		In	Out	Total	In	Out	Total	Total	In	Out	Total
Apartments	1.18 ppl/veh	3 veh/hr	10 veh/hr	13 veh/hr	9 veh/hr	6 veh/hr	15 veh/hr	192 veh	8 veh/hr	9 veh/hr	17 veh/hr

Trip Gen Summary for Proposed Land Uses

Mode	AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
	In	Out	Total	In	Out	Total	Total	In	Out	Total
Auto	3 veh/hr	10 veh/hr	13 veh/hr	9 veh/hr	6 veh/hr	15 veh/hr	192 veh	8 veh/hr	9 veh/hr	17 veh/hr
Transit	6 ppl/hr	15 ppl/hr	21 ppl/hr	16 ppl/hr	10 ppl/hr	26 ppl/hr	324 ppl	14 ppl/hr	15 ppl/hr	29 ppl/hr
Bike	1 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr	32 ppl	1 ppl/hr	2 ppl/hr	3 ppl/hr
Walk	0 ppl/hr	4 ppl/hr	4 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr	65 ppl	3 ppl/hr	3 ppl/hr	6 ppl/hr

Retail Trip Generation

1,888 sf

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Retail	820	1,888 sf	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	4 veh/hr	7 veh/hr	71 veh
		Calculation Details:	*62%*	*38%*	*=0.94(X/1000)*	*48%*	*52%*	*=3.81(X/1000)*	*=37.75(X/1000)*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	2 ppl/hr	2 ppl/hr	4 ppl/hr	5 ppl/hr	8 ppl/hr	13 ppl/hr	129 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Retail	Auto	35%	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr	45 ppl
Retail	Transit	40%	1 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr	52 ppl
Retail	Bike	5%	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	6 ppl
Retail	Walk	20%	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	26 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	1 veh/hr	0 veh/hr	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	25 veh

Trip Gen Summary for Retail

Mode	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	Total
Auto	1 veh/hr	0 veh/hr	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	25 veh
Transit	1 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr	52 ppl
Bike	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	6 ppl
Walk	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	26 ppl

Theater Trip Generation

180 seats

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Theater	460	180 seats	0 veh/hr	0 veh/hr	0 veh/hr	8 veh/hr	15 veh/hr	23 veh/hr	0 veh
		Calculation Details:	*0%*	*100%*	*=X*	*36%*	*64%*	*=0.13X*	*=X*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Theater	2.10 ppl/veh	0 ppl/hr	0 ppl/hr	0 ppl/hr	17 ppl/hr	31 ppl/hr	48 ppl/hr	0 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Theater	Auto	45%	0 ppl/hr	0 ppl/hr	0 ppl/hr	8 ppl/hr	14 ppl/hr	22 ppl/hr	0 ppl
Theater	Transit	45%	0 ppl/hr	0 ppl/hr	0 ppl/hr	8 ppl/hr	14 ppl/hr	22 ppl/hr	0 ppl
Theater	Bike	5%	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr	0 ppl
Theater	Walk	5%	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr	0 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Theater	2.10 ppl/veh	0 veh/hr	0 veh/hr	0 veh/hr	4 veh/hr	6 veh/hr	10 veh/hr	0 veh

Trip Gen Summary for Theater

Mode	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	Total
Auto	--	--	--	4 veh/hr	6 veh/hr	10 veh/hr	0 veh
Transit	--	--	--	8 ppl/hr	14 ppl/hr	22 ppl/hr	0 ppl
Bike	--	--	--	1 ppl/hr	1 ppl/hr	2 ppl/hr	0 ppl
Walk	--	--	--	1 ppl/hr	1 ppl/hr	2 ppl/hr	0 ppl

Trip Generation - Dance Studio

Approximately 48 students

Step 1: Person Trips based on class schedule

Land Use	AM Peak Hour*			PM Peak Hour		
	In	Out	Total	In	Out	Total
Dance Studio	--	--	--	48 ppl/hr	48 ppl/hr	96 ppl/hr

**Peak Hour Classes are only scheduled in the late afternoon/evening hours.*

Step 2: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Dance Studio	Auto	35%	--	--	--	17 ppl/hr	17 ppl/hr	34 ppl/hr
Dance Studio	Transit	50%	--	--	--	24 ppl/hr	24 ppl/hr	48 ppl/hr
Dance Studio	Bike	5%	--	--	--	2 ppl/hr	3 ppl/hr	5 ppl/hr
Dance Studio	Walk	10%	--	--	--	5 ppl/hr	4 ppl/hr	9 ppl/hr

Step 3: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Dance Studio	1.67 ppl/veh	--	--	--	10 veh/hr	10 veh/hr	20 veh/hr

Trip Gen Summary for Dance Studio

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	--	--	--	10 veh/hr	10 veh/hr	20 veh/hr
Transit	--	--	--	24 ppl/hr	24 ppl/hr	48 ppl/hr
Bike	--	--	--	2 ppl/hr	3 ppl/hr	5 ppl/hr
Walk	--	--	--	5 ppl/hr	4 ppl/hr	9 ppl/hr

B. Turning Movement Count Data

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

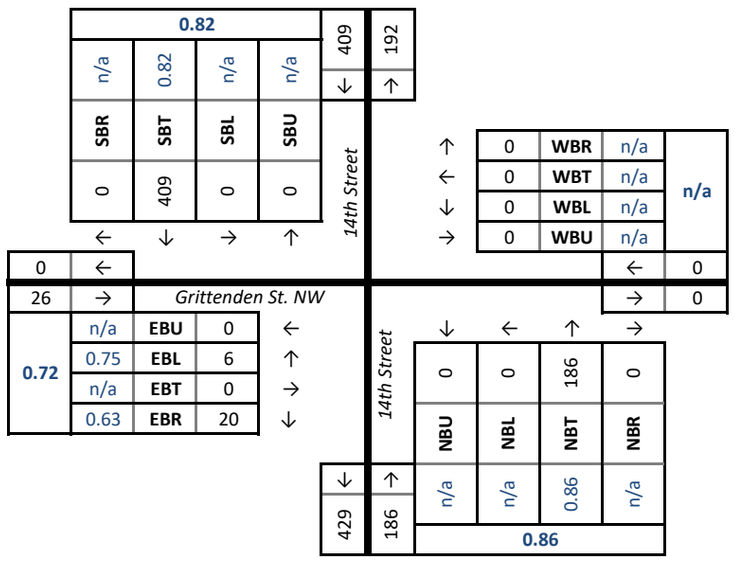
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 08:00 AM to 09:00 AM
System Peak Hour (all vehicles): 07:45 AM to 08:45 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. 14th Street & /Grittenden St. NW

ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street										14th Street					Grittenden St. NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	0	46	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	3	2
06:45 AM	to 07:00 AM	0	0	41	0	0	0	0	0	0	0	0	0	15	0	1	0	1	0	3	3
07:00 AM	to 07:15 AM	0	0	48	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	4	0
07:15 AM	to 07:30 AM	0	0	55	0	0	0	0	0	0	0	0	0	31	0	0	0	1	0	1	1
07:30 AM	to 07:45 AM	0	0	61	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	5	2
07:45 AM	to 08:00 AM	0	0	62	0	0	0	0	0	0	0	0	0	45	0	2	0	0	0	9	3
08:00 AM	to 08:15 AM	0	0	104	0	0	0	0	0	0	0	0	0	44	0	1	0	2	0	6	2
08:15 AM	to 08:30 AM	0	0	124	0	0	0	0	0	0	0	0	0	49	0	0	0	1	0	8	4
08:30 AM	to 08:45 AM	0	0	106	0	0	0	0	0	0	0	0	0	54	0	0	0	2	0	3	4
08:45 AM	to 09:00 AM	0	0	75	0	0	0	0	0	0	0	0	0	39	0	1	0	1	0	3	5
09:00 AM	to 09:15 AM	1	0	59	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	1	4
09:15 AM	to 09:30 AM	0	0	46	0	0	0	0	0	0	0	1	0	39	0	0	0	0	0	1	1
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
INT. PEAK HR (ALL VEH)		409				0	0				0	186				2	26				15
08:00 AM	to 09:00 AM	0	0	409	0		0	0	0	0		0	0	186	0		0	6	0	20	
Peak Hour Factor (PHF)	Overall 0.85	U n/a	Left n/a	Thru 0.82	Right n/a	**SB 0.82**	U n/a	Left n/a	Thru n/a	Right n/a	**WB n/a**	U n/a	Left n/a	Thru 0.86	Right n/a	**NB 0.86**	U n/a	Left 0.75	Thru n/a	Right 0.63	**EB 0.72**

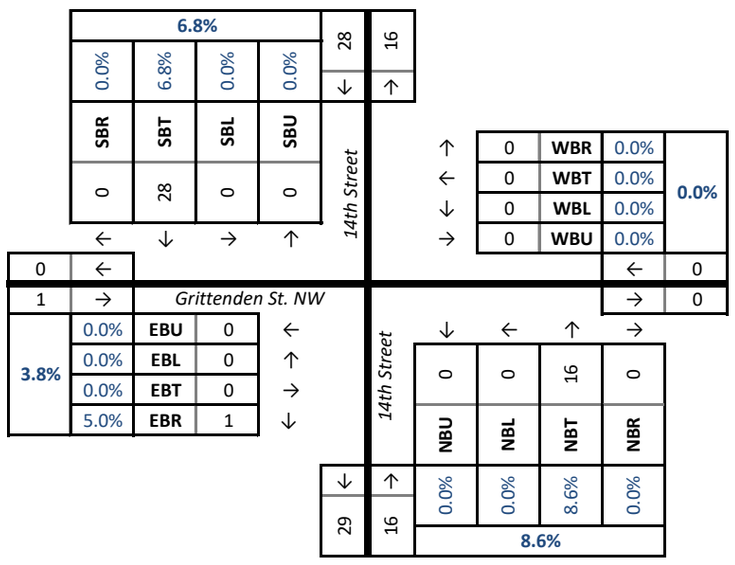
VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	14th Street										14th Street					Grittenden St. NW				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	3	0		0	0	0	0		0	0	3	0		0	0	0	0	
06:45 AM	to 07:00 AM	0	0	4	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:00 AM	to 07:15 AM	0	0	5	0		0	0	0	0		0	0	2	0		0	0	0	0	
07:15 AM	to 07:30 AM	0	0	4	0		0	0	0	0		0	0	4	0		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	2	0		0	0	0	0		0	0	4	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	7	0		0	0	0	0		0	0	5	0		0	0	0	0	
08:00 AM	to 08:15 AM	0	0	5	0		0	0	0	0		0	0	5	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	10	0		0	0	0	0		0	0	3	0		0	0	0	1	
08:30 AM	to 08:45 AM	0	0	8	0		0	0	0	0		0	0	2	0		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	5	0		0	0	0	0		0	0	6	0		0	0	0	0	
09:00 AM	to 09:15 AM	0	0	4	0		0	0	0	0		0	0	1	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	0	3	0		0	0	0	0		0	1	5	0		0	0	0	1	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
INT. PEAK HR (ALL VEH)		28					0					16					1				
08:00 AM	to 09:00 AM	0	0	28	0		0	0	0	0		0	0	16	0		0	0	0	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	6.8%	0.0%	**6.8%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	8.6%	0.0%	**8.6%**	0.0%	0.0%	0.0%	5.0%	**3.8%**
INT. PEAK HR (HV ONLY)		30					0					15					1				
07:45 AM	to 08:45 AM	0	0	30	0		0	0	0	0		0	0	15	0		0	0	0	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	7.6%	0.0%	**7.6%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	7.8%	0.0%	**7.8%**	0.0%	0.0%	0.0%	3.8%	**3.2%**

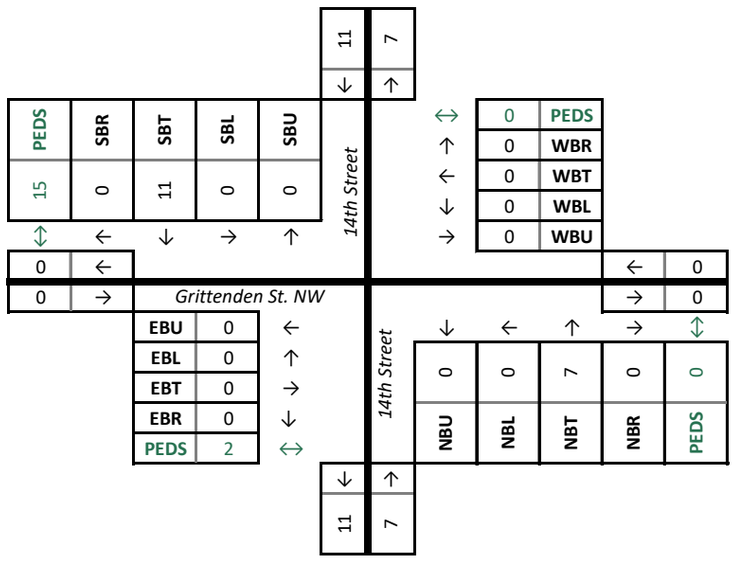
HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)



BICYCLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	14th Street										14th Street					Grittenden St. NW				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:45 AM	to 07:00 AM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 AM	to 07:15 AM	0	0	3	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:15 AM	to 07:30 AM	0	0	0	0		0	0	0	0		0	0	2	0		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	3	0		0	0	0	0		0	0	2	0		0	0	0	0	
08:00 AM	to 08:15 AM	0	0	4	0		0	0	0	0		0	0	2	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	2	0		0	0	0	0		0	0	2	0		0	0	0	0	
08:30 AM	to 08:45 AM	0	0	2	0		0	0	0	0		0	0	1	0		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	3	0		0	0	0	0		0	0	2	0		0	0	0	0	
09:00 AM	to 09:15 AM	0	0	5	0		0	0	0	0		0	0	1	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
INT. PEAK HR (ALL VEH)		11					0					7					0				
08:00 AM	to 09:00 AM	0	0	11	0		0	0	0	0		0	0	7	0		0	0	0	0	
INT. PEAK HR (BIKES)		11					0					7					0				
07:45 AM	to 08:45 AM	0	0	11	0		0	0	0	0		0	0	7	0		0	0	0	0	

PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

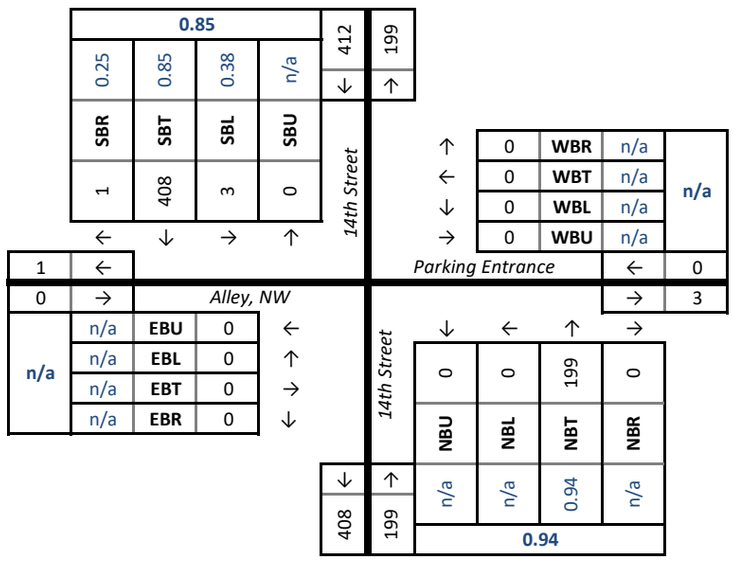
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:45 AM to 08:45 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. 14th Street & Parking Entrance/Alley, NW

ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street					Parking Entrance					14th Street					Alley, NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	1	49	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	2
06:45 AM	to 07:00 AM	0	0	48	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	5
07:00 AM	to 07:15 AM	0	1	49	0	0	0	0	0	0	1	0	0	15	1	0	0	0	0	0	2
07:15 AM	to 07:30 AM	0	0	51	0	0	0	0	0	0	3	0	0	31	1	0	0	0	0	0	2
07:30 AM	to 07:45 AM	0	0	65	0	0	0	0	0	0	3	0	0	36	0	0	0	0	0	0	1
07:45 AM	to 08:00 AM	0	2	73	0	0	0	0	0	0	2	0	0	53	0	0	0	0	0	0	2
08:00 AM	to 08:15 AM	0	1	109	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	3
08:15 AM	to 08:30 AM	0	0	120	1	0	0	0	0	0	1	0	0	51	0	0	0	0	0	0	6
08:30 AM	to 08:45 AM	0	0	106	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	7
08:45 AM	to 09:00 AM	0	0	78	0	0	0	0	0	0	1	0	0	39	1	0	0	0	0	0	8
09:00 AM	to 09:15 AM	0	0	62	0	0	0	0	0	0	2	0	0	45	2	0	0	0	0	0	5
09:15 AM	to 09:30 AM	0	0	45	0	0	0	0	0	0	1	0	0	41	0	0	0	0	0	1	6
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
INT. PEAK HR (ALL VEH)		412				0	0				3	199				0	0				18
07:45 AM	to 08:45 AM	0	3	408	1		0	0	0	0		0	0	199	0		0	0	0	0	
Peak Hour Factor (PHF)	Overall **0.89**	U n/a	Left 0.38	Thru 0.85	Right 0.25	**SB 0.85**	U n/a	Left n/a	Thru n/a	Right n/a	**WB n/a**	U n/a	Left n/a	Thru 0.94	Right n/a	**NB 0.94**	U n/a	Left n/a	Thru n/a	Right n/a	**EB n/a**

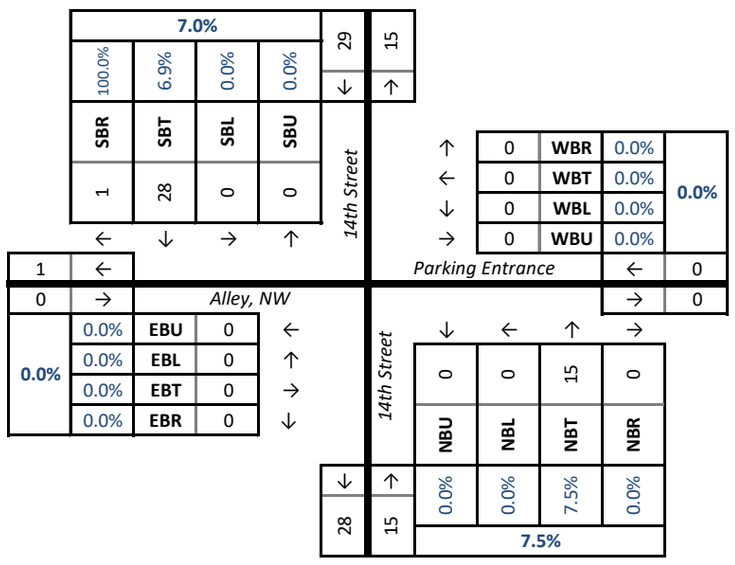
VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	14th Street					Parking Entrance					14th Street					Alley, NW				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM to 06:45 AM	0	0	2	0		0	0	0	0		0	0	2	0		0	0	0	0	
06:45 AM to 07:00 AM	0	0	5	0		0	0	0	0		0	0	2	0		0	0	0	0	
07:00 AM to 07:15 AM	0	0	5	0		0	0	0	0		0	0	0	1		0	0	0	0	
07:15 AM to 07:30 AM	0	0	4	0		0	0	0	0		0	0	3	1		0	0	0	0	
07:30 AM to 07:45 AM	0	0	2	0		0	0	0	0		0	0	3	0		0	0	0	0	
07:45 AM to 08:00 AM	0	0	7	0		0	0	0	0		0	0	6	0		0	0	0	0	
08:00 AM to 08:15 AM	0	0	5	0		0	0	0	0		0	0	5	0		0	0	0	0	
08:15 AM to 08:30 AM	0	0	7	1		0	0	0	0		0	0	2	0		0	0	0	0	
08:30 AM to 08:45 AM	0	0	9	0		0	0	0	0		0	0	2	0		0	0	0	0	
08:45 AM to 09:00 AM	0	0	6	0		0	0	0	0		0	0	4	1		0	0	0	0	
09:00 AM to 09:15 AM	0	0	5	0		0	0	0	0		0	0	1	2		0	0	0	0	
09:15 AM to 09:30 AM	0	0	5	0		0	0	0	0		0	0	3	0		0	0	0	1	
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
INT. PEAK HR (ALL VEH)	29					0					15					0				
07:45 AM to 08:45 AM	0	0	28	1		0	0	0	0		0	0	15	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	6.9%	100.0%	**7.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	7.5%	0.0%	**7.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)	29					0					15					0				
07:45 AM to 08:45 AM	0	0	28	1		0	0	0	0		0	0	15	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	6.9%	100.0%	**7.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	7.5%	0.0%	**7.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

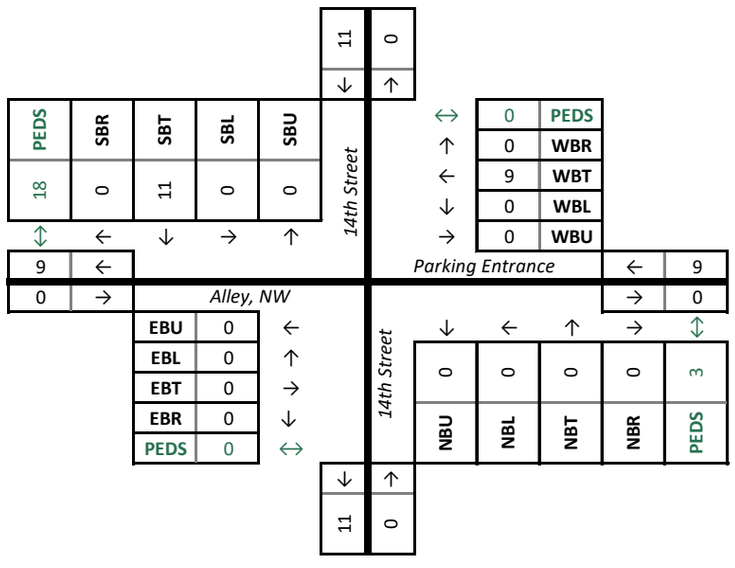
HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)



BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	14th Street				Parking Entrance				14th Street				Alley, NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0
07:30 AM to 07:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM to 08:00 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0
08:00 AM to 08:15 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	3	0	0	0	1	0	0	0	0	1	0	0	0	0
09:00 AM to 09:15 AM	0	0	2	0	0	0	1	0	0	0	0	2	0	0	0	0
09:15 AM to 09:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
INT. PEAK HR (ALL VEH)	11				9				0				0			
07:45 AM to 08:45 AM	0	0	11	0	0	0	9	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)	11				9				1				0			
08:00 AM to 09:00 AM	0	0	11	0	0	0	9	0	0	0	0	1	0	0	0	0

PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:45 AM to 08:45 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. 14th Street & Buchanan St. NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	14th Street					Buchanan St. NW					14th Street					Buchanan St. NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	3	45	1	0	1	1	0	4	3	0	0	16	0	0	0	0	4	2	3
06:45 AM to 07:00 AM	0	2	46	0	3	0	0	0	2	1	0	0	15	1	3	0	0	0	4	5
07:00 AM to 07:15 AM	0	2	47	0	4	0	1	0	0	2	0	0	16	0	1	0	0	0	1	3
07:15 AM to 07:30 AM	0	2	48	1	3	0	0	0	1	1	0	1	31	0	1	0	0	0	1	2
07:30 AM to 07:45 AM	0	0	62	3	5	0	4	6	4	4	0	0	31	0	4	0	1	2	3	6
07:45 AM to 08:00 AM	0	2	69	2	1	0	5	2	5	2	0	1	48	0	6	0	1	0	1	9
08:00 AM to 08:15 AM	0	3	104	3	4	0	4	0	2	3	0	1	41	1	3	0	0	5	6	2
08:15 AM to 08:30 AM	0	3	112	5	4	0	6	2	3	0	0	3	47	1	6	0	1	2	5	3
08:30 AM to 08:45 AM	0	4	99	3	4	0	5	6	2	3	0	1	47	1	5	0	3	4	2	8
08:45 AM to 09:00 AM	0	3	73	2	6	0	2	1	2	5	0	0	38	2	1	0	0	1	4	4
09:00 AM to 09:15 AM	0	5	53	4	4	0	0	1	4	4	0	2	43	1	3	0	0	0	2	3
09:15 AM to 09:30 AM	0	0	43	3	3	0	0	1	2	3	0	0	38	2	1	0	1	0	2	0
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
INT. PEAK HR (ALL VEH)	409				13	42				8	192				20	30				22
07:45 AM to 08:45 AM	0	12	384	13		0	20	10	12		0	6	183	3		0	5	11	14	
Peak Hour Factor (PHF) Overall **0.89**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.75	0.86	0.65	**0.85**	n/a	0.83	0.42	0.60	**0.81**	n/a	0.50	0.95	0.75	**0.94**	n/a	0.42	0.55	0.58	**0.68**

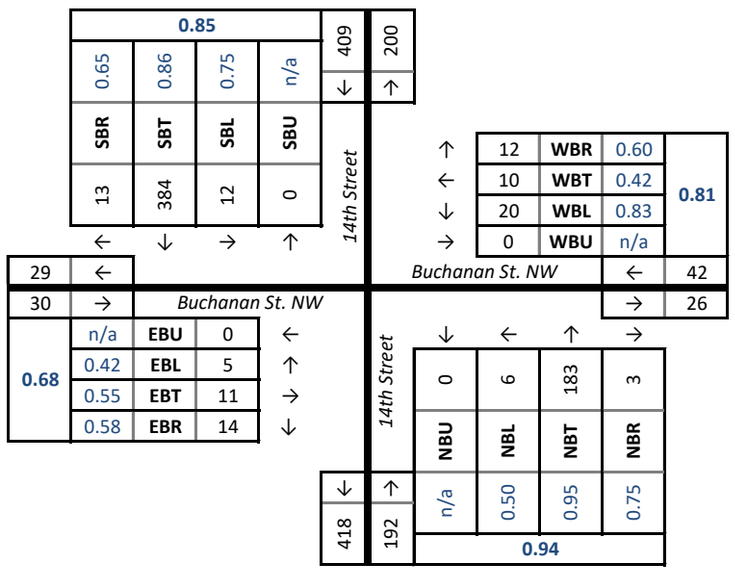
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	14th Street				Buchanan St. NW				14th Street				Buchanan St. NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0
07:15 AM to 07:30 AM	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	1
07:45 AM to 08:00 AM	0	0	7	0	0	0	0	0	0	0	6	0	0	0	0	0
08:00 AM to 08:15 AM	0	0	4	1	0	0	0	0	0	0	5	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	4	3	0	0	0	0	0	0	2	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	8	1	0	0	0	0	0	0	2	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	5	1	0	0	0	0	0	0	5	0	0	0	0	0
09:00 AM to 09:15 AM	0	1	3	1	0	0	0	0	0	1	2	0	0	0	0	0
09:15 AM to 09:30 AM	0	0	4	1	0	0	0	0	0	0	4	0	0	1	0	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
INT. PEAK HR (ALL VEH)	28				0				15				0			
07:45 AM to 08:45 AM	0	0	23	5	0	0	0	0	0	0	15	0	0	0	0	0
Heavy Vehicle % (PHV):	0.0%	0.0%	6.0%	38.5% **6.8%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	0.0%	8.2%	0.0% **7.8%**	0.0%	0.0%	0.0%	0.0% **0.0%**
INT. PEAK HR (HV ONLY)	28				0				15				0			
07:45 AM to 08:45 AM	0	0	23	5	0	0	0	0	0	0	15	0	0	0	0	0
Heavy Vehicle % (PHV):	0.0%	0.0%	6.0%	38.5% **6.8%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	0.0%	8.2%	0.0% **7.8%**	0.0%	0.0%	0.0%	0.0% **0.0%**

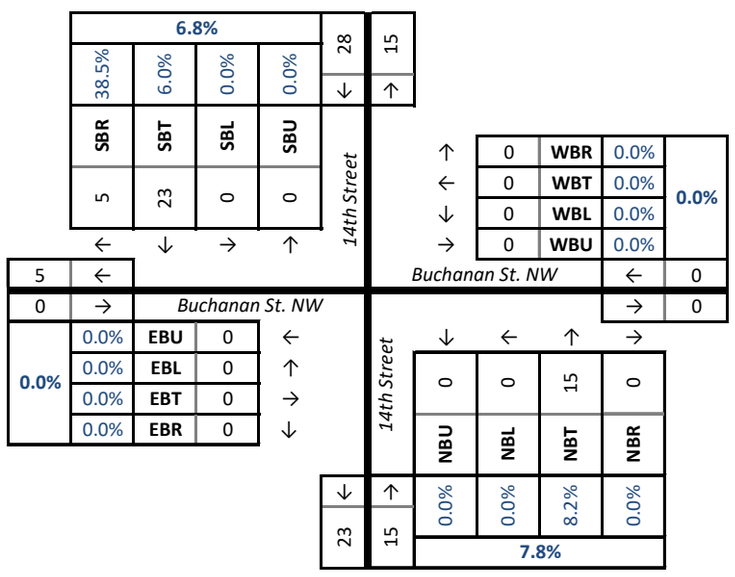
BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	14th Street				Buchanan St. NW				14th Street				Buchanan St. NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0
06:45 AM to 07:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:45 AM to 08:00 AM	0	0	5	0	0	1	0	0	0	0	1	0	0	0	0	0
08:00 AM to 08:15 AM	0	0	2	0	0	1	0	0	0	0	3	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0
09:00 AM to 09:15 AM	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0
09:15 AM to 09:30 AM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
INT. PEAK HR (ALL VEH)	12				2				10				0			
07:45 AM to 08:45 AM	0	0	12	0	0	2	0	0	0	0	10	0	0	0	0	0
INT. PEAK HR (BIKES)	12				2				10				0			
07:45 AM to 08:45 AM	0	0	12	0	0	2	0	0	0	0	10	0	0	0	0	0

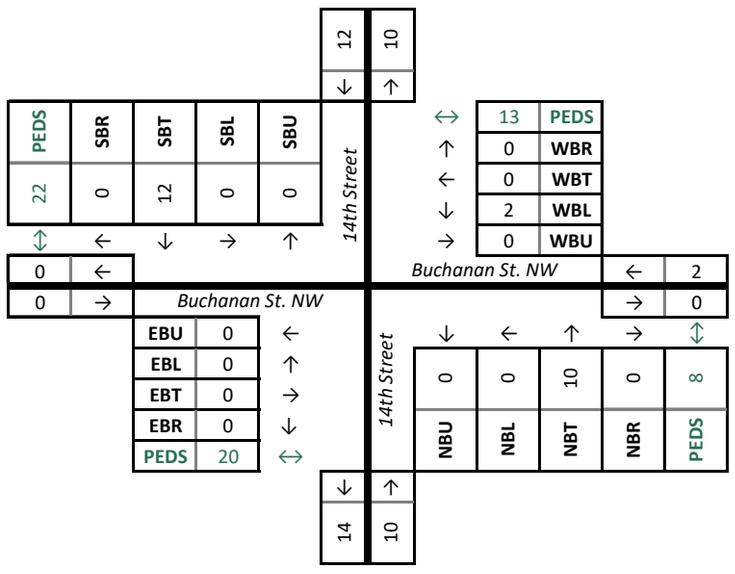
VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

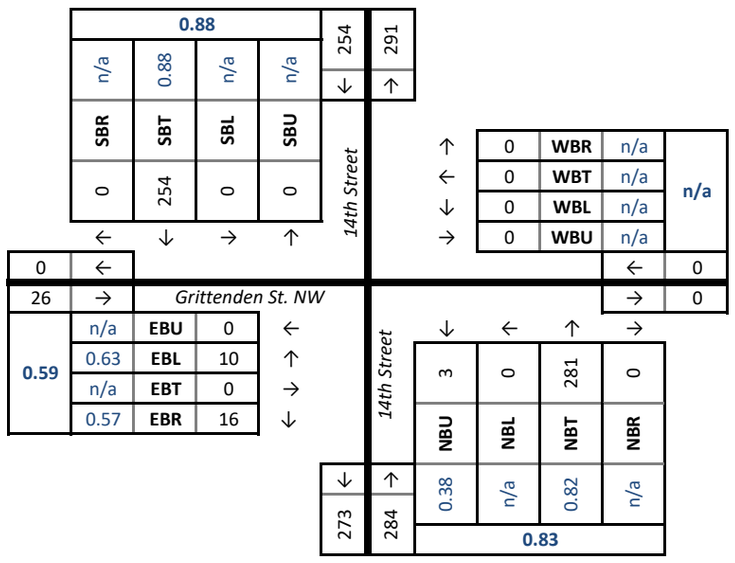
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. 14th Street & /Grittenden St. NW

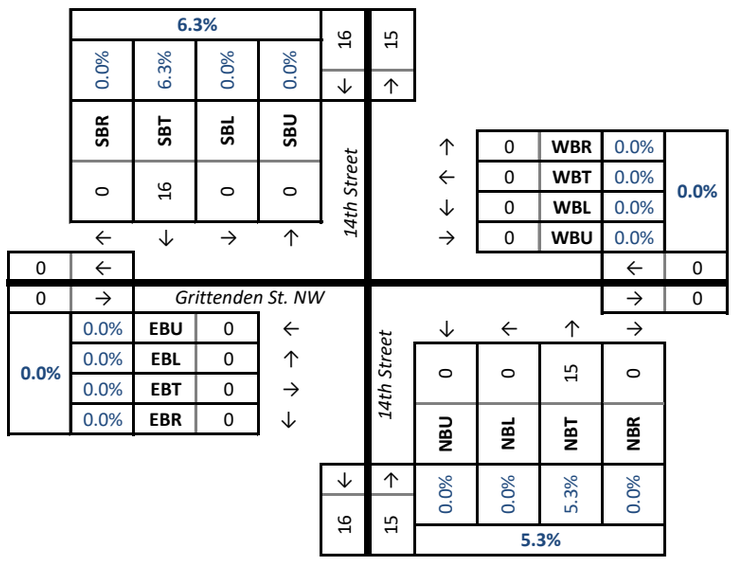
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street										14th Street					Grittenden St. NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	2	0	58	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	4	14
04:15 PM	to 04:30 PM	2	0	57	0	0	0	0	0	0	0	0	0	74	0	0	0	2	0	4	3
04:30 PM	to 04:45 PM	0	0	49	0	0	0	0	0	0	0	0	0	70	0	0	0	1	0	2	5
04:45 PM	to 05:00 PM	0	0	51	0	0	0	0	0	0	0	0	0	64	0	0	0	3	0	2	4
05:00 PM	to 05:15 PM	0	0	66	0	0	0	0	0	0	0	0	0	86	0	1	0	4	0	7	2
05:15 PM	to 05:30 PM	0	0	72	0	0	0	0	0	0	0	1	0	67	0	4	0	2	0	3	7
05:30 PM	to 05:45 PM	0	0	65	0	0	0	0	0	0	0	2	0	64	0	2	0	1	0	4	1
05:45 PM	to 06:00 PM	1	0	49	0	0	0	0	0	0	0	1	0	52	0	1	0	3	0	6	5
06:00 PM	to 06:15 PM	0	0	51	0	0	0	0	0	0	0	2	0	72	0	2	0	1	0	4	13
06:15 PM	to 06:30 PM	0	0	48	0	1	0	0	0	0	0	1	0	68	0	1	0	5	0	6	5
06:30 PM	to 06:45 PM	0	0	51	0	0	0	0	0	0	0	2	0	55	0	10	0	1	0	3	2
06:45 PM	to 07:00 PM	0	0	40	0	0	0	0	0	0	0	0	0	51	0	0	0	1	0	6	3
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
INT. PEAK HR (ALL VEH)		254				0	0				0	284				7	26				14
04:45 PM	to 05:45 PM	0	0	254	0		0	0	0	0		3	0	281	0		0	10	0	16	
Peak Hour Factor (PHF)	Overall **0.87**	U n/a	Left n/a	Thru 0.88	Right n/a	**SB 0.88**	U n/a	Left n/a	Thru n/a	Right n/a	**WB n/a**	U 0.38	Left n/a	Thru 0.82	Right n/a	**NB 0.83**	U n/a	Left 0.63	Thru n/a	Right 0.57	**EB 0.59**

VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



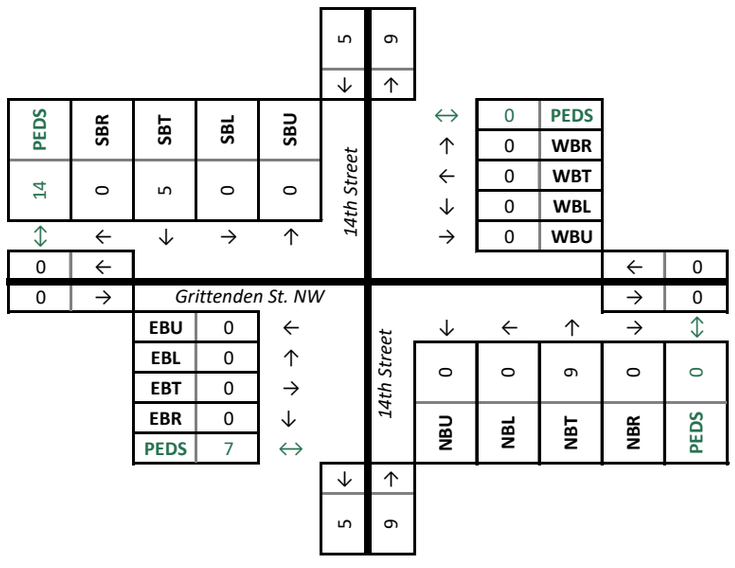
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	14th Street								14th Street				Grittenden St. NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	0	6	0	0	0	0	0	0	0	3	0	0	0	0	0
04:15 PM	to 04:30 PM	0	0	2	0	0	0	0	0	0	0	5	0	0	0	0	0
04:30 PM	to 04:45 PM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
04:45 PM	to 05:00 PM	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0
05:00 PM	to 05:15 PM	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0
05:15 PM	to 05:30 PM	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0
05:30 PM	to 05:45 PM	0	0	5	0	0	0	0	0	0	0	3	0	0	0	0	0
05:45 PM	to 06:00 PM	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0
06:00 PM	to 06:15 PM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
06:15 PM	to 06:30 PM	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0
06:30 PM	to 06:45 PM	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0
06:45 PM	to 07:00 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
INT. PEAK HR (ALL VEH)		16				0				15				0			
04:45 PM	to 05:45 PM	0	0	16	0	0	0	0	0	0	0	15	0	0	0	0	0
Heavy Vehicle % (PHV):		0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%
INT. PEAK HR (HV ONLY)		16				0				15				0			
04:45 PM	to 05:45 PM	0	0	16	0	0	0	0	0	0	0	15	0	0	0	0	0
Heavy Vehicle % (PHV):		0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%

HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	14th Street								14th Street				Grittenden St. NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
04:15 PM	to 04:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
04:30 PM	to 04:45 PM	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0
04:45 PM	to 05:00 PM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
05:00 PM	to 05:15 PM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
05:15 PM	to 05:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
05:30 PM	to 05:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
05:45 PM	to 06:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	to 06:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0
06:15 PM	to 06:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
06:30 PM	to 06:45 PM	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0
06:45 PM	to 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
INT. PEAK HR (ALL VEH)		5				0				9				0			
04:45 PM	to 05:45 PM	0	0	5	0	0	0	0	0	0	0	9	0	0	0	0	0
INT. PEAK HR (BIKES)		7				0				11				0			
04:15 PM	to 05:15 PM	0	0	7	0	0	0	0	0	0	0	11	0	0	0	0	0

PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

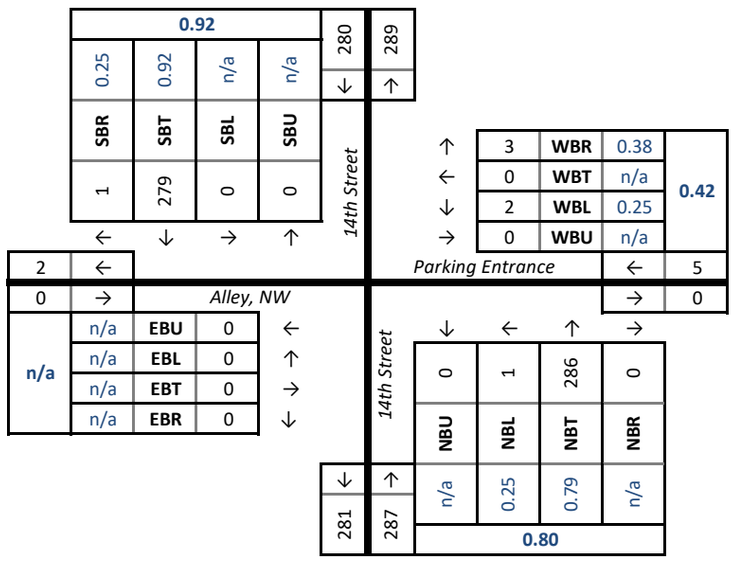
Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 05:00 PM to 06:00 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. 14th Street & Parking Entrance/Alley, NW

ALL VEHICLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street					Parking Entrance					14th Street					Alley, NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	0	0	65	0	0	0	0	0	0	2	0	0	71	0	0	0	0	0	0	18
04:15 PM	to 04:30 PM	0	0	55	0	0	0	0	0	0	3	0	0	75	0	0	0	0	0	0	21
04:30 PM	to 04:45 PM	0	0	51	0	0	0	0	0	0	2	0	0	68	0	0	0	0	0	0	8
04:45 PM	to 05:00 PM	0	0	51	0	0	0	0	0	2	0	0	0	63	0	0	0	0	0	0	10
05:00 PM	to 05:15 PM	0	0	76	0	0	0	0	0	2	1	0	0	90	0	0	0	0	0	0	8
05:15 PM	to 05:30 PM	0	0	73	0	0	0	2	0	1	1	0	0	69	0	0	0	0	0	0	12
05:30 PM	to 05:45 PM	0	0	71	0	0	0	0	0	0	4	0	1	68	0	0	0	0	0	0	7
05:45 PM	to 06:00 PM	0	0	59	1	0	0	0	0	0	2	0	0	59	0	0	0	0	0	0	7
06:00 PM	to 06:15 PM	0	0	53	1	0	0	1	0	0	0	0	2	65	0	0	0	0	0	0	10
06:15 PM	to 06:30 PM	0	0	61	0	0	0	0	0	0	0	0	0	74	0	0	0	0	0	0	7
06:30 PM	to 06:45 PM	0	0	51	0	0	0	3	0	0	0	0	1	54	0	0	0	0	0	0	6
06:45 PM	to 07:00 PM	0	0	48	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	9
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
INT. PEAK HR (ALL VEH)		280				0	5				8	287				0	0				34
05:00 PM	to 06:00 PM	0	0	279	1		0	2	0	3		0	1	286	0		0	0	0	0	
Peak Hour Factor (PHF)	Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	0.85	n/a	n/a	0.92	0.25	**0.92**	n/a	0.25	n/a	0.38	**0.42**	n/a	0.25	0.79	n/a	**0.80**	n/a	n/a	n/a	n/a	**n/a**

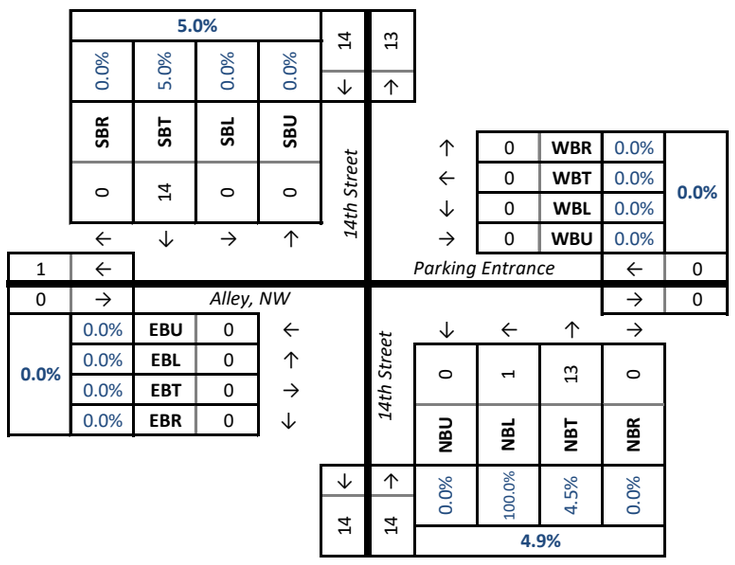
VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



HEAVY VEHICLES (FHWA 4+)

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street					Parking Entrance					14th Street					Alley, NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM	to 04:15 PM	0	0	6	0		0	0	0	0		0	0	3	0		0	0	0	0	
04:15 PM	to 04:30 PM	0	0	1	0		0	0	0	0		0	0	4	0		0	0	0	0	
04:30 PM	to 04:45 PM	0	0	3	0		0	0	0	0		0	0	3	0		0	0	0	0	
04:45 PM	to 05:00 PM	0	0	4	0		0	0	0	0		0	0	2	0		0	0	0	0	
05:00 PM	to 05:15 PM	0	0	3	0		0	0	0	0		0	0	4	0		0	0	0	0	
05:15 PM	to 05:30 PM	0	0	3	0		0	0	0	0		0	0	4	0		0	0	0	0	
05:30 PM	to 05:45 PM	0	0	5	0		0	0	0	0		0	1	2	0		0	0	0	0	
05:45 PM	to 06:00 PM	0	0	3	0		0	0	0	0		0	0	3	0		0	0	0	0	
06:00 PM	to 06:15 PM	0	0	2	0		0	0	0	0		0	2	2	0		0	0	0	0	
06:15 PM	to 06:30 PM	0	0	2	0		0	0	0	0		0	0	4	0		0	0	0	0	
06:30 PM	to 06:45 PM	0	0	1	0		0	0	0	0		0	1	2	0		0	0	0	0	
06:45 PM	to 07:00 PM	0	0	2	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
INT. PEAK HR (ALL VEH)		14					0					14					0				
05:00 PM	to 06:00 PM	0	0	14	0		0	0	0	0		0	1	13	0		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	5.0%	0.0%	**5.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	4.5%	0.0%	**4.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)		15					0					13					0				
04:45 PM	to 05:45 PM	0	0	15	0		0	0	0	0		0	1	12	0		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	5.5%	0.0%	**5.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	4.1%	0.0%	**4.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

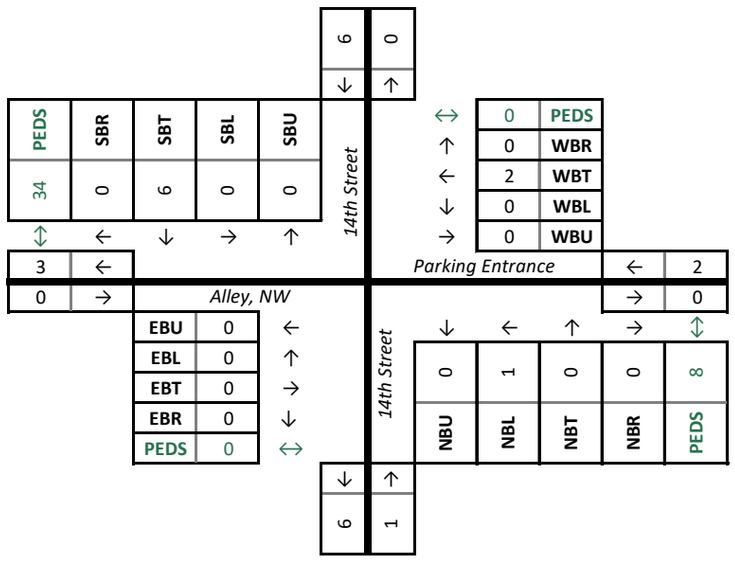
HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)



BICYCLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	14th Street					Parking Entrance					14th Street					Alley, NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM	to 04:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:15 PM	to 04:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:30 PM	to 04:45 PM	0	0	3	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:45 PM	to 05:00 PM	0	0	2	0		0	0	2	0		0	0	0	0		0	0	0	0	
05:00 PM	to 05:15 PM	0	0	2	0		0	0	2	0		0	0	0	0		0	0	0	0	
05:15 PM	to 05:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
05:30 PM	to 05:45 PM	0	0	2	0		0	0	0	0		0	1	0	0		0	0	0	0	
05:45 PM	to 06:00 PM	0	0	2	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:00 PM	to 06:15 PM	0	0	0	0		0	0	2	0		0	2	1	0		0	0	0	0	
06:15 PM	to 06:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:30 PM	to 06:45 PM	0	0	0	0		0	0	1	0		0	1	0	0		0	0	0	0	
06:45 PM	to 07:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
INT. PEAK HR (ALL VEH)		6					2					1					0				
05:00 PM	to 06:00 PM	0	0	6	0		0	0	2	0		0	1	0	0		0	0	0	0	
INT. PEAK HR (BIKES)		7					4					0					0				
04:15 PM	to 05:15 PM	0	0	7	0		0	0	4	0		0	0	0	0		0	0	0	0	

PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : 4618 14th Street NW
Project # : 3018-001
Location NW, Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Wednesday, March 23, 2022
Weather: Partly Cloudy

Volumes Displayed as: 1. Intersection Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. 14th Street & Buchanan St. NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	14th Street					Buchanan St. NW					14th Street					Buchanan St. NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	4	58	3	4	0	3	1	3	0	0	2	67	2	1	0	1	0	3	11
04:15 PM to 04:30 PM	0	2	48	5	4	0	1	6	2	3	0	2	72	2	2	0	1	4	1	4
04:30 PM to 04:45 PM	0	0	48	2	3	0	1	2	2	6	0	2	65	1	5	0	1	1	1	3
04:45 PM to 05:00 PM	0	1	46	4	3	0	0	2	1	2	0	3	62	1	7	0	0	5	3	4
05:00 PM to 05:15 PM	0	4	71	1	4	0	0	1	1	5	0	4	88	2	4	0	2	1	4	2
05:15 PM to 05:30 PM	0	5	68	2	6	0	2	1	4	2	0	4	64	2	2	0	1	6	4	2
05:30 PM to 05:45 PM	0	4	64	3	4	0	1	1	2	5	0	0	65	2	2	0	2	0	1	5
05:45 PM to 06:00 PM	0	3	53	2	3	0	0	3	3	2	0	4	53	0	3	0	3	2	1	3
06:00 PM to 06:15 PM	0	2	48	4	3	0	1	2	2	4	0	4	66	1	6	0	0	3	6	6
06:15 PM to 06:30 PM	0	4	53	4	2	0	0	2	1	0	0	5	71	2	2	0	2	5	5	3
06:30 PM to 06:45 PM	0	8	45	1	1	0	0	3	4	2	0	4	49	3	1	0	2	1	0	1
06:45 PM to 07:00 PM	0	4	44	0	1	0	0	2	2	0	0	2	51	3	2	0	0	4	5	3
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
INT. PEAK HR (ALL VEH)	273				17	16				14	297				15	29				13
04:45 PM to 05:45 PM	0	14	249	10		0	3	5	8		0	11	279	7		0	5	12	12	
Peak Hour Factor (PHF) Overall **0.86**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.70	0.88	0.63	**0.90**	n/a	0.38	0.63	0.50	**0.57**	n/a	0.69	0.79	0.88	**0.79**	n/a	0.63	0.50	0.75	**0.66**

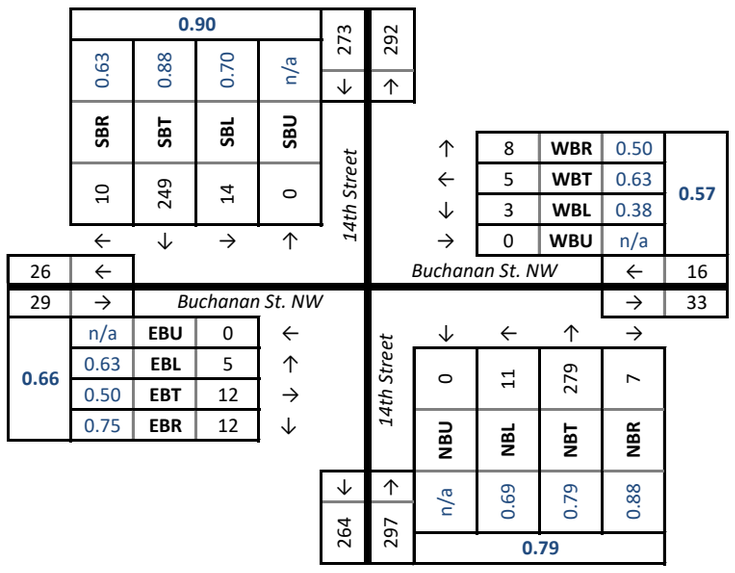
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	14th Street				Buchanan St. NW				14th Street				Buchanan St. NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	1	5	0	0	0	0	0	0	0	3	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	3	0	0	0	0	0	0	1	3	0	0	0	0	0
04:45 PM to 05:00 PM	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0
05:15 PM to 05:30 PM	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	5	0	0	0	0	0	0	0	3	0	0	0	0	0
05:45 PM to 06:00 PM	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0
06:15 PM to 06:30 PM	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
INT. PEAK HR (ALL VEH)	15				0				13				0			
04:45 PM to 05:45 PM	0	0	15	0	0	0	0	0	0	0	13	0	0	0	0	0
Heavy Vehicle % (PHV):	0.0%	0.0%	6.0%	0.0%	**5.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	4.7%	0.0%	**4.4%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)	15				0				13				0			
04:45 PM to 05:45 PM	0	0	15	0	0	0	0	0	0	0	13	0	0	0	0	0
Heavy Vehicle % (PHV):	0.0%	0.0%	6.0%	0.0%	**5.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	4.7%	0.0%	**4.4%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

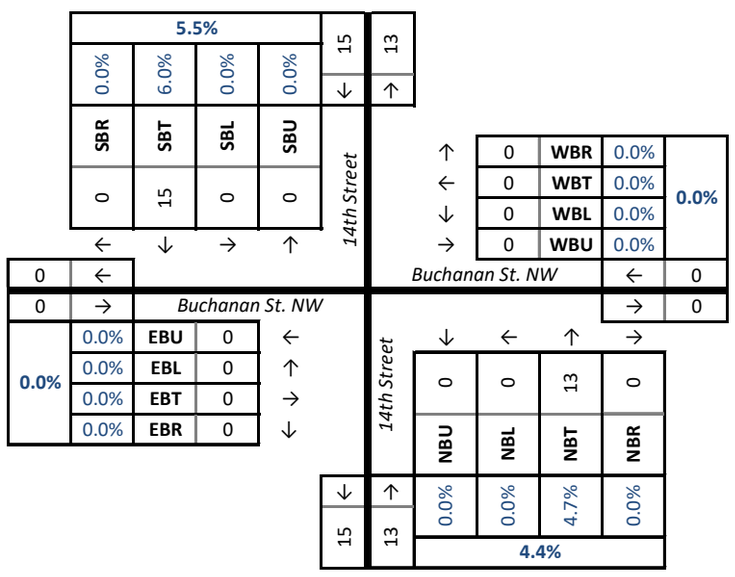
BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	14th Street				Buchanan St. NW				14th Street				Buchanan St. NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0
04:45 PM to 05:00 PM	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0
05:15 PM to 05:30 PM	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM to 06:00 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
06:15 PM to 06:30 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
INT. PEAK HR (ALL VEH)	6				1				6				0			
04:45 PM to 05:45 PM	0	0	6	0	0	0	0	1	0	0	6	0	0	0	0	0
INT. PEAK HR (BIKES)	7				1				10				0			
04:15 PM to 05:15 PM	0	0	7	0	0	0	0	1	0	0	10	0	0	0	0	0

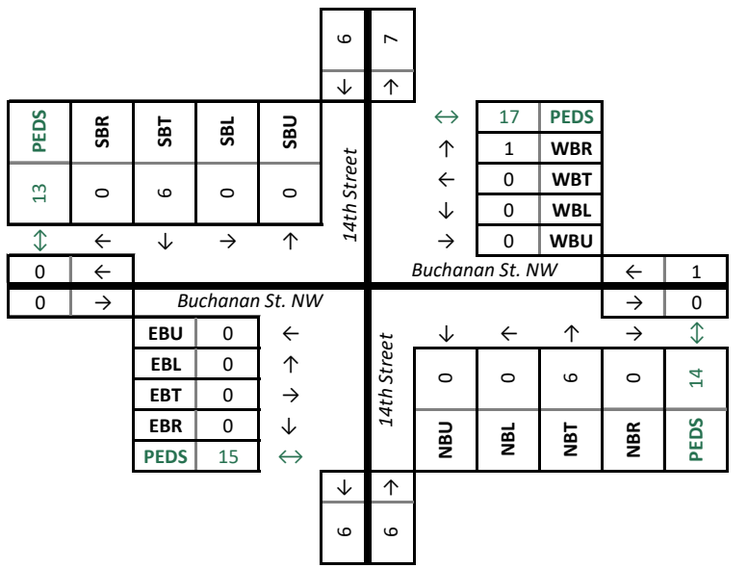
VEHICLE PEAK HOUR VOLS AND PHF: Intersection Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: Intersection Peak (vehicle)

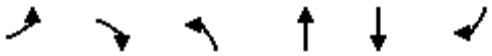


PED AND BIKE PEAK HOUR VOLUMES: Intersection Peak (vehicle)



DATA COLLECTION NOTES :

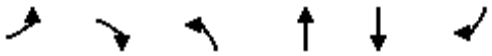
C. Existing Conditions Vehicular Capacity Analysis Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	20	0	186	409	0
Future Volume (Veh/h)	6	20	0	186	409	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.72	0.72	0.86	0.86	0.82	0.82
Hourly flow rate (vph)	8	28	0	216	499	0
Pedestrians	15			2		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				387	383	
pX, platoon unblocked	0.84	0.83	0.83			
vC, conflicting volume	730	516	514			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	525	314	312			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	98	95	100			
cM capacity (veh/h)	423	590	991			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	216	499
Volume Left	8	0	0
Volume Right	28	0	0
cSH	543	1700	1700
Volume to Capacity	0.07	0.13	0.29
Queue Length 95th (ft)	5	0	0
Control Delay (s)	12.1	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.1	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	199	408	1
Future Volume (Veh/h)	0	0	0	199	408	1
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.85	0.85
Hourly flow rate (vph)	0	0	0	212	480	1
Pedestrians	18					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				113	657	
pX, platoon unblocked	0.90	0.88	0.88			
vC, conflicting volume	710	498	499			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	507	356	356			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	100			
cM capacity (veh/h)	464	593	1009			

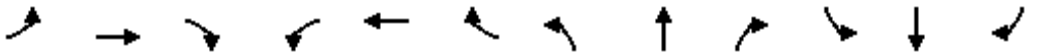
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	212	481
Volume Left	0	0	0
Volume Right	0	0	1
cSH	1700	1009	1700
Volume to Capacity	0.00	0.00	0.28
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	24.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	52	204	3	466	15
v/c Ratio	0.15	0.21	0.22	0.00	0.49	0.02
Control Delay	24.1	30.7	8.9	0.0	2.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	30.7	8.9	0.0	2.5	0.1
Queue Length 50th (ft)	14	23	58	0	12	0
Queue Length 95th (ft)	31	52	92	0	18	m0
Internal Link Dist (ft)	172	186	968		33	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	290	252	943	692	948	629
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.21	0.22	0.00	0.49	0.02

Intersection Summary

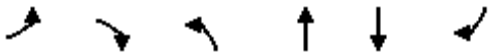
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	11	14	20	10	12	6	186	3	12	384	13
Future Volume (vph)	5	11	14	20	10	12	6	186	3	12	384	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.96			0.98			1.00	0.92		1.00	0.83
Flpb, ped/bikes		0.99			0.97			1.00	1.00		1.00	1.00
Frt		0.94			0.96			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1204			1151			1446	1019		1452	923
Flt Permitted		0.97			0.88			0.99	1.00		0.99	1.00
Satd. Flow (perm)		1174			1032			1432	1019		1440	923
Peak-hour factor, PHF	0.68	0.68	0.68	0.81	0.81	0.81	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	7	16	21	25	12	15	6	198	3	14	452	15
RTOR Reduction (vph)	0	16	0	0	12	0	0	0	1	0	0	5
Lane Group Flow (vph)	0	28	0	0	41	0	0	204	2	0	466	10
Confl. Peds. (#/hr)	13		20	20		13	22		8	8		22
Confl. Bikes (#/hr)									8			39
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	8%	8%	8%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	11	11	0	12	12
Parking (#/hr)	0	0	0	0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		273			240			942	670		948	607
v/s Ratio Prot												
v/s Ratio Perm		0.02			c0.04			0.14	0.00		c0.32	0.01
v/c Ratio		0.10			0.17			0.22	0.00		0.49	0.02
Uniform Delay, d1		36.1			36.7			8.2	7.0		10.4	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.09	1.00
Incremental Delay, d2		0.7			1.5			0.5	0.0		1.6	0.0
Delay (s)		36.9			38.2			8.7	7.0		2.5	7.1
Level of Service		D			D			A	A		A	A
Approach Delay (s)		36.9			38.2			8.7			2.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

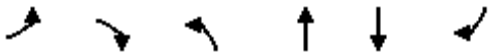
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	16	0	281	254	0
Future Volume (Veh/h)	10	16	0	281	254	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.59	0.59	0.83	0.83	0.88	0.88
Hourly flow rate (vph)	17	27	0	339	289	0
Pedestrians	14			7		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				376	394	
pX, platoon unblocked	0.93	0.97	0.97			
vC, conflicting volume	642	310	303			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	518	278	270			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	96	100			
cM capacity (veh/h)	482	733	1228			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	44	339	289
Volume Left	17	0	0
Volume Right	27	0	0
cSH	610	1700	1700
Volume to Capacity	0.07	0.20	0.17
Queue Length 95th (ft)	6	0	0
Control Delay (s)	11.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.4	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		



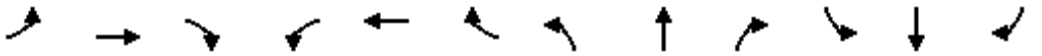
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	1	286	279	1
Future Volume (Veh/h)	0	0	1	286	279	1
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	0	0	1	358	303	1
Pedestrians	34					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	3					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				117	653	
pX, platoon unblocked	0.89					
vC, conflicting volume	698	338	338			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	595	338	338			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	405	689	1170			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	359	304
Volume Left	0	1	0
Volume Right	0	0	1
cSH	1700	1170	1700
Volume to Capacity	0.00	0.00	0.18
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	19.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	28	367	9	293	11
v/c Ratio	0.15	0.11	0.42	0.02	0.35	0.02
Control Delay	26.1	23.9	11.5	0.0	10.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	23.9	11.5	0.0	10.0	0.1
Queue Length 50th (ft)	16	8	124	0	90	0
Queue Length 95th (ft)	32	18	153	0	121	0
Internal Link Dist (ft)	172	186	968		37	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	288	260	871	589	849	563
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.11	0.42	0.02	0.35	0.02

Intersection Summary

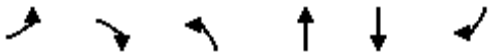


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	12	12	3	5	8	11	279	7	14	249	10
Future Volume (vph)	5	12	12	3	5	8	11	279	7	14	249	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.97			0.93			1.00	0.84		1.00	0.81
Flpb, ped/bikes		0.98			0.99			1.00	1.00		1.00	1.00
Frt		0.94			0.93			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1211			1098			1341	862		1321	823
Flt Permitted		0.96			0.97			0.99	1.00		0.97	1.00
Satd. Flow (perm)		1179			1072			1324	862		1291	823
Peak-hour factor, PHF	0.66	0.66	0.66	0.57	0.57	0.57	0.79	0.79	0.79	0.90	0.90	0.90
Adj. Flow (vph)	8	18	18	5	9	14	14	353	9	16	277	11
RTOR Reduction (vph)	0	14	0	0	11	0	0	0	3	0	0	4
Lane Group Flow (vph)	0	30	0	0	17	0	0	367	6	0	293	7
Confl. Peds. (#/hr)	34		16	16		34	28		20	20		28
Confl. Bikes (#/hr)									22			6
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	12	12	0	11	11
Parking (#/hr)	0	0	0	0	0	0		0	0		0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		275			250			871	567		849	541
v/s Ratio Prot												
v/s Ratio Perm		c0.03			0.02			c0.28	0.01		0.23	0.01
v/c Ratio		0.11			0.07			0.42	0.01		0.35	0.01
Uniform Delay, d1		36.2			35.8			9.7	7.1		9.1	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.96	1.00
Incremental Delay, d2		0.8			0.5			1.5	0.0		1.1	0.0
Delay (s)		37.0			36.4			11.2	7.1		9.8	7.1
Level of Service		D			D			B	A		A	A
Approach Delay (s)		37.0			36.4			11.1			9.7	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

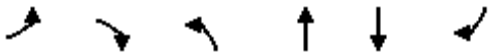
D. Background Conditions Vehicular Capacity Analysis Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	20	0	187	417	0
Future Volume (Veh/h)	6	20	0	187	417	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.72	0.72	0.86	0.86	0.82	0.82
Hourly flow rate (vph)	8	28	0	217	509	0
Pedestrians	15			2		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				387	383	
pX, platoon unblocked	0.84	0.83	0.83			
vC, conflicting volume	741	526	524			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	535	324	321			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	98	95	100			
cM capacity (veh/h)	416	582	981			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	217	509
Volume Left	8	0	0
Volume Right	28	0	0
cSH	535	1700	1700
Volume to Capacity	0.07	0.13	0.30
Queue Length 95th (ft)	5	0	0
Control Delay (s)	12.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.2	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	200	416	1
Future Volume (Veh/h)	0	0	0	200	416	1
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.85	0.85
Hourly flow rate (vph)	0	0	0	213	489	1
Pedestrians	18					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				113	657	
pX, platoon unblocked	0.89	0.87	0.87			
vC, conflicting volume	720	508	508			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	514	361	362			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	100			
cM capacity (veh/h)	459	587	1000			

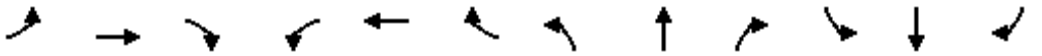
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	213	490
Volume Left	0	0	0
Volume Right	0	0	1
cSH	1700	1000	1700
Volume to Capacity	0.00	0.00	0.29
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	25.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	52	205	3	475	15
v/c Ratio	0.15	0.21	0.22	0.00	0.50	0.02
Control Delay	24.1	30.7	8.9	0.0	2.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	30.7	8.9	0.0	2.7	0.1
Queue Length 50th (ft)	14	23	58	0	13	0
Queue Length 95th (ft)	31	52	93	0	19	m0
Internal Link Dist (ft)	172	186	968		33	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	290	252	943	692	948	629
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.21	0.22	0.00	0.50	0.02

Intersection Summary

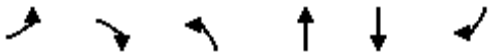
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	11	14	20	10	12	6	187	3	12	392	13
Future Volume (vph)	5	11	14	20	10	12	6	187	3	12	392	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.96			0.98			1.00	0.92		1.00	0.83
Flpb, ped/bikes		0.99			0.97			1.00	1.00		1.00	1.00
Frt		0.94			0.96			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1204			1151			1446	1019		1452	923
Flt Permitted		0.97			0.88			0.99	1.00		0.99	1.00
Satd. Flow (perm)		1174			1032			1432	1019		1441	923
Peak-hour factor, PHF	0.68	0.68	0.68	0.81	0.81	0.81	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	7	16	21	25	12	15	6	199	3	14	461	15
RTOR Reduction (vph)	0	16	0	0	12	0	0	0	1	0	0	5
Lane Group Flow (vph)	0	28	0	0	41	0	0	205	2	0	475	10
Confl. Peds. (#/hr)	13		20	20		13	22		8	8		22
Confl. Bikes (#/hr)									8			39
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	8%	8%	8%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	11	11	0	12	12
Parking (#/hr)	0	0	0	0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		273			240			942	670		948	607
v/s Ratio Prot												
v/s Ratio Perm		0.02			c0.04			0.14	0.00		c0.33	0.01
v/c Ratio		0.10			0.17			0.22	0.00		0.50	0.02
Uniform Delay, d1		36.1			36.7			8.2	7.0		10.5	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.09	1.00
Incremental Delay, d2		0.7			1.5			0.5	0.0		1.7	0.0
Delay (s)		36.9			38.2			8.7	7.0		2.6	7.1
Level of Service		D			D			A	A		A	A
Approach Delay (s)		36.9			38.2			8.7			2.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

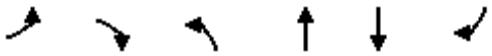
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	16	0	282	255	0
Future Volume (Veh/h)	10	16	0	282	255	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.59	0.59	0.83	0.83	0.88	0.88
Hourly flow rate (vph)	17	27	0	340	290	0
Pedestrians	14			7		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				376	394	
pX, platoon unblocked	0.93	0.97	0.97			
vC, conflicting volume	644	311	304			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	519	279	271			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	96	100			
cM capacity (veh/h)	480	732	1227			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	44	340	290
Volume Left	17	0	0
Volume Right	27	0	0
cSH	609	1700	1700
Volume to Capacity	0.07	0.20	0.17
Queue Length 95th (ft)	6	0	0
Control Delay (s)	11.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.4	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		



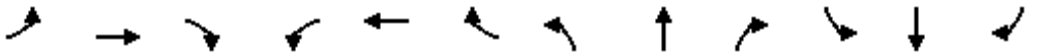
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	1	287	280	1
Future Volume (Veh/h)	0	0	1	287	280	1
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	0	0	1	359	304	1
Pedestrians	34					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	3					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				117	653	
pX, platoon unblocked	0.89					
vC, conflicting volume	700	338	339			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	597	338	339			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	404	688	1169			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	360	305
Volume Left	0	1	0
Volume Right	0	0	1
cSH	1700	1169	1700
Volume to Capacity	0.00	0.00	0.18
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	19.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	28	368	9	294	11
v/c Ratio	0.15	0.11	0.42	0.02	0.35	0.02
Control Delay	26.1	23.9	11.5	0.0	10.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	23.9	11.5	0.0	10.1	0.1
Queue Length 50th (ft)	16	8	124	0	90	0
Queue Length 95th (ft)	32	18	153	0	122	0
Internal Link Dist (ft)	172	186	968		37	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	288	260	871	589	849	563
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.11	0.42	0.02	0.35	0.02

Intersection Summary

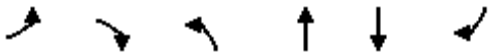


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	12	12	3	5	8	11	280	7	14	250	10
Future Volume (vph)	5	12	12	3	5	8	11	280	7	14	250	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.97			0.93			1.00	0.84		1.00	0.81
Flpb, ped/bikes		0.98			0.99			1.00	1.00		1.00	1.00
Frt		0.94			0.93			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1211			1098			1341	862		1321	823
Flt Permitted		0.96			0.97			0.99	1.00		0.97	1.00
Satd. Flow (perm)		1179			1072			1324	862		1291	823
Peak-hour factor, PHF	0.66	0.66	0.66	0.57	0.57	0.57	0.79	0.79	0.79	0.90	0.90	0.90
Adj. Flow (vph)	8	18	18	5	9	14	14	354	9	16	278	11
RTOR Reduction (vph)	0	14	0	0	11	0	0	0	3	0	0	4
Lane Group Flow (vph)	0	30	0	0	17	0	0	368	6	0	294	7
Confl. Peds. (#/hr)	34		16	16		34	28		20	20		28
Confl. Bikes (#/hr)									22			6
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	12	12	0	11	11
Parking (#/hr)	0	0	0	0	0	0		0	0		0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		275			250			871	567		849	541
v/s Ratio Prot												
v/s Ratio Perm		c0.03			0.02			c0.28	0.01		0.23	0.01
v/c Ratio		0.11			0.07			0.42	0.01		0.35	0.01
Uniform Delay, d1		36.2			35.8			9.7	7.1		9.1	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.96	1.00
Incremental Delay, d2		0.8			0.5			1.5	0.0		1.1	0.0
Delay (s)		37.0			36.4			11.2	7.1		9.8	7.1
Level of Service		D			D			B	A		A	A
Approach Delay (s)		37.0			36.4			11.1			9.7	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

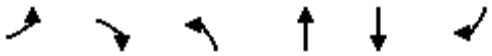
E. Total Future Conditions Vehicular Capacity Analysis Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	20	0	192	419	0
Future Volume (Veh/h)	6	20	0	192	419	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.72	0.72	0.86	0.86	0.82	0.82
Hourly flow rate (vph)	8	28	0	223	511	0
Pedestrians	15			2		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				387	383	
pX, platoon unblocked	0.84	0.83	0.83			
vC, conflicting volume	749	528	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	546	326	324			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	98	95	100			
cM capacity (veh/h)	410	580	979			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	223	511
Volume Left	8	0	0
Volume Right	28	0	0
cSH	531	1700	1700
Volume to Capacity	0.07	0.13	0.30
Queue Length 95th (ft)	5	0	0
Control Delay (s)	12.3	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.3	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	5	2	200	416	3
Future Volume (Veh/h)	5	5	2	200	416	3
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.85	0.85
Hourly flow rate (vph)	6	6	2	213	489	4
Pedestrians	18					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				113	657	
pX, platoon unblocked	0.89	0.87	0.87			
vC, conflicting volume	726	509	511			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	518	362	364			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	99	99	100			
cM capacity (veh/h)	455	586	997			

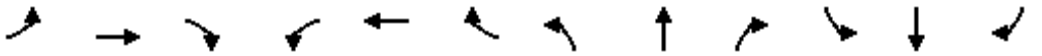
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	12	215	493
Volume Left	6	2	0
Volume Right	6	0	4
cSH	512	997	1700
Volume to Capacity	0.02	0.00	0.29
Queue Length 95th (ft)	2	0	0
Control Delay (s)	12.2	0.1	0.0
Lane LOS	B	A	
Approach Delay (s)	12.2	0.1	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	53	206	3	481	15
v/c Ratio	0.15	0.21	0.22	0.00	0.51	0.02
Control Delay	24.1	30.2	8.9	0.0	2.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	30.2	8.9	0.0	2.9	0.1
Queue Length 50th (ft)	14	23	58	0	15	0
Queue Length 95th (ft)	31	52	93	0	21	m0
Internal Link Dist (ft)	172	186	968		33	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	290	252	943	692	948	629
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.21	0.22	0.00	0.51	0.02

Intersection Summary

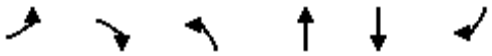
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	11	14	20	10	13	6	188	3	12	397	13
Future Volume (vph)	5	11	14	20	10	13	6	188	3	12	397	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.96			0.98			1.00	0.92		1.00	0.83
Flpb, ped/bikes		0.99			0.97			1.00	1.00		1.00	1.00
Frt		0.94			0.96			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.98			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1204			1149			1446	1019		1452	923
Flt Permitted		0.97			0.88			0.99	1.00		0.99	1.00
Satd. Flow (perm)		1174			1032			1432	1019		1441	923
Peak-hour factor, PHF	0.68	0.68	0.68	0.81	0.81	0.81	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	7	16	21	25	12	16	6	200	3	14	467	15
RTOR Reduction (vph)	0	16	0	0	12	0	0	0	1	0	0	5
Lane Group Flow (vph)	0	28	0	0	41	0	0	206	2	0	481	10
Confl. Peds. (#/hr)	13		20	20		13	22		8	8		22
Confl. Bikes (#/hr)									8			39
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	8%	8%	8%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	11	11	0	12	12
Parking (#/hr)	0	0	0	0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		273			240			942	670		948	607
v/s Ratio Prot												
v/s Ratio Perm		0.02			c0.04			0.14	0.00		c0.33	0.01
v/c Ratio		0.10			0.17			0.22	0.00		0.51	0.02
Uniform Delay, d1		36.1			36.7			8.2	7.0		10.5	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.11	1.00
Incremental Delay, d2		0.7			1.5			0.5	0.0		1.7	0.0
Delay (s)		36.9			38.2			8.7	7.0		2.8	7.1
Level of Service		D			D			A	A		A	A
Approach Delay (s)		36.9			38.2			8.7			3.0	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

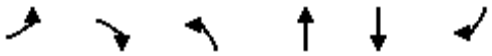
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	16	0	294	267	0
Future Volume (Veh/h)	10	16	0	294	267	0
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.59	0.59	0.83	0.83	0.88	0.88
Hourly flow rate (vph)	17	27	0	354	303	0
Pedestrians	14			7		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				376	394	
pX, platoon unblocked	0.94	0.97	0.97			
vC, conflicting volume	671	324	317			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	556	292	285			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	96	100			
cM capacity (veh/h)	461	719	1213			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	44	354	303
Volume Left	17	0	0
Volume Right	27	0	0
cSH	591	1700	1700
Volume to Capacity	0.07	0.21	0.18
Queue Length 95th (ft)	6	0	0
Control Delay (s)	11.6	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.6	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		



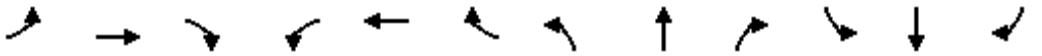
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	12	13	287	280	13
Future Volume (Veh/h)	12	12	13	287	280	13
Sign Control	Stop			Free	Free	
Grade	0%			4%	2%	
Peak Hour Factor	0.90	0.90	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	13	13	16	359	304	14
Pedestrians	34					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	3					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				117	653	
pX, platoon unblocked	0.88					
vC, conflicting volume	736	345	352			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	636	345	352			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	98	99			
cM capacity (veh/h)	377	683	1157			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	26	375	318
Volume Left	13	16	0
Volume Right	13	0	14
cSH	486	1157	1700
Volume to Capacity	0.05	0.01	0.19
Queue Length 95th (ft)	4	1	0
Control Delay (s)	12.8	0.5	0.0
Lane LOS	B	A	
Approach Delay (s)	12.8	0.5	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	42	373	9	307	11
v/c Ratio	0.15	0.16	0.43	0.02	0.36	0.02
Control Delay	26.1	19.8	11.6	0.0	10.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	19.8	11.6	0.0	10.2	0.1
Queue Length 50th (ft)	16	9	126	0	95	0
Queue Length 95th (ft)	32	18	156	0	129	0
Internal Link Dist (ft)	172	186	968		37	
Turn Bay Length (ft)				165		100
Base Capacity (vph)	288	262	871	589	850	563
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.16	0.43	0.02	0.36	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	12	12	3	5	16	11	284	7	14	262	10
Future Volume (vph)	5	12	12	3	5	16	11	284	7	14	262	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	8	8	8	11	11	8	11	11	8
Grade (%)		-5%			6%			2%			2%	
Total Lost time (s)		4.0			4.0			3.0	3.0		3.0	3.0
Lane Util. Factor		1.00			1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.97			0.90			1.00	0.84		1.00	0.81
Flpb, ped/bikes		0.98			0.99			1.00	1.00		1.00	1.00
Frt		0.94			0.91			1.00	0.85		1.00	0.85
Flt Protected		0.99			0.99			1.00	1.00		1.00	1.00
Satd. Flow (prot)		1212			1050			1342	862		1322	823
Flt Permitted		0.96			0.98			0.98	1.00		0.98	1.00
Satd. Flow (perm)		1178			1033			1324	862		1292	823
Peak-hour factor, PHF	0.66	0.66	0.66	0.57	0.57	0.57	0.79	0.79	0.79	0.90	0.90	0.90
Adj. Flow (vph)	8	18	18	5	9	28	14	359	9	16	291	11
RTOR Reduction (vph)	0	14	0	0	21	0	0	0	3	0	0	4
Lane Group Flow (vph)	0	30	0	0	21	0	0	373	6	0	307	7
Confl. Peds. (#/hr)	34		16	16		34	28		20	20		28
Confl. Bikes (#/hr)									22			6
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	12	12	0	11	11
Parking (#/hr)	0	0	0	0	0	0		0	0		0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)		26.0			26.0			77.0	77.0		77.0	77.0
Effective Green, g (s)		28.0			28.0			79.0	79.0		79.0	79.0
Actuated g/C Ratio		0.23			0.23			0.66	0.66		0.66	0.66
Clearance Time (s)		6.0			6.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)		274			241			871	567		850	541
v/s Ratio Prot												
v/s Ratio Perm		c0.03			0.02			c0.28	0.01		0.24	0.01
v/c Ratio		0.11			0.09			0.43	0.01		0.36	0.01
Uniform Delay, d1		36.2			36.0			9.8	7.1		9.2	7.1
Progression Factor		1.00			1.00			1.00	1.00		0.96	1.00
Incremental Delay, d2		0.8			0.7			1.5	0.0		1.2	0.0
Delay (s)		37.0			36.7			11.3	7.1		10.0	7.1
Level of Service		D			D			B	A		A	A
Approach Delay (s)		37.0			36.7			11.2			9.9	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group