

TECHNICAL MEMORANDUM

To: Emma Blondin
Cc: Chris VanArsdale and Mark James
Jeff Utz
From: Drew Ackermann
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Date: March 21, 2022
Subject: Transportation Statement for Z.C. Case No. 21-18, Consolidated PUD and Map Amendment at 4608-4618 14th Street NW

Introduction

This memorandum presents the findings of a Transportation Statement for the proposed PUD at 4608-4618 14th Street NW (the "Project"), in Washington, DC. Figure 1 displays the site's location within the District, and Figure 2 displays the location of the site in relation to the surrounding neighborhood. 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 development site is currently occupied by a strip of small commercial buildings, a furniture store, and the Dance Loft dance studio. 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 40-space parking supply is 15 spaces below the baseline ZR16 requirement of 55 spaces. While the site is located within ¼ mile of a Priority Corridor Network Metrobus Route, the 14th Street Line, the section of 14th Street NW adjacent to the site is currently designated as RPP eligible, despite not being signed for RPP parking. Therefore, the Project would not be eligible for the 50 percent vehicular parking reduction from the Zoning Regulations' parking requirement permitted under Subtitle C, Section 702. The Project is therefore proposing to remove the RPP designation for 14th Street NW adjacent to the site between the alley north to Crittenden Street. No known residences are present along this section, and removal of the RPP designation would make the future tenants of the proposed new residential building ineligible for RPP. If the RPP designation is not removed, the Project

requests flexibility in applying the 50% reduction criteria as it relates to RPP being present along the site frontage or relief from the Zoning Regulations' parking requirement (15-space reduction).¹

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 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 Transportation Statement is to:

- Review existing site conditions and details of the proposed development plans;
- Review the major transportation elements of the site plan and the pedestrian, bicycle, and transit facilities in the vicinity of the site;
- Assess the parking requirements and eligibility for parking reductions from the baseline ZR16 parking requirements;
- Provide a Loading Management Plan (LMP) for the Project;
- Provide a Transportation Demand Management (TDM) plan for the Project; and
- 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 provide sufficient short- and long-term bicycle parking;
- The Project will meet vehicular parking requirements with either the proposed removal of the RPP designation for 14th Street adjacent to the site, the request for flexibility in applying the 50% eligibility reduction per Section 702 or parking relief (15-space reduction) or the adoption of the pending text amendment to reduce the parking requirements for affordable housing. The on-street parking occupancy study prepared to accompany this request supports such a reduction in on-site parking;
- The Project will provide loading facilities accessed from an existing alley, limiting the impacts of loading activity in public space;
- The Project will include a LMP to manage loading operations;
- The Project will include TDM measures that adequately promote non-vehicular modes of travel, including the expansion of an existing Capital Bikeshare station from 11 to 19 docks; and
- The Project is not expected to have a detrimental impact on the surrounding transportation network, surrounding parking, or the surrounding alley network.

¹ A text amendment to the Zoning Regulations currently pending before the Zoning Commission would remove the parking requirement for any residential units offered as affordable at or below 80% MFI and would reduce the ratio for market rate units in a building with voluntarily provided affordable units. In the event that amendment is adopted as proposed, then the Project's minimum parking requirement would be 23 parking spaces. The Zoning Commission is scheduled to hold a public hearing on this pending text amendment on April 11, 2022.



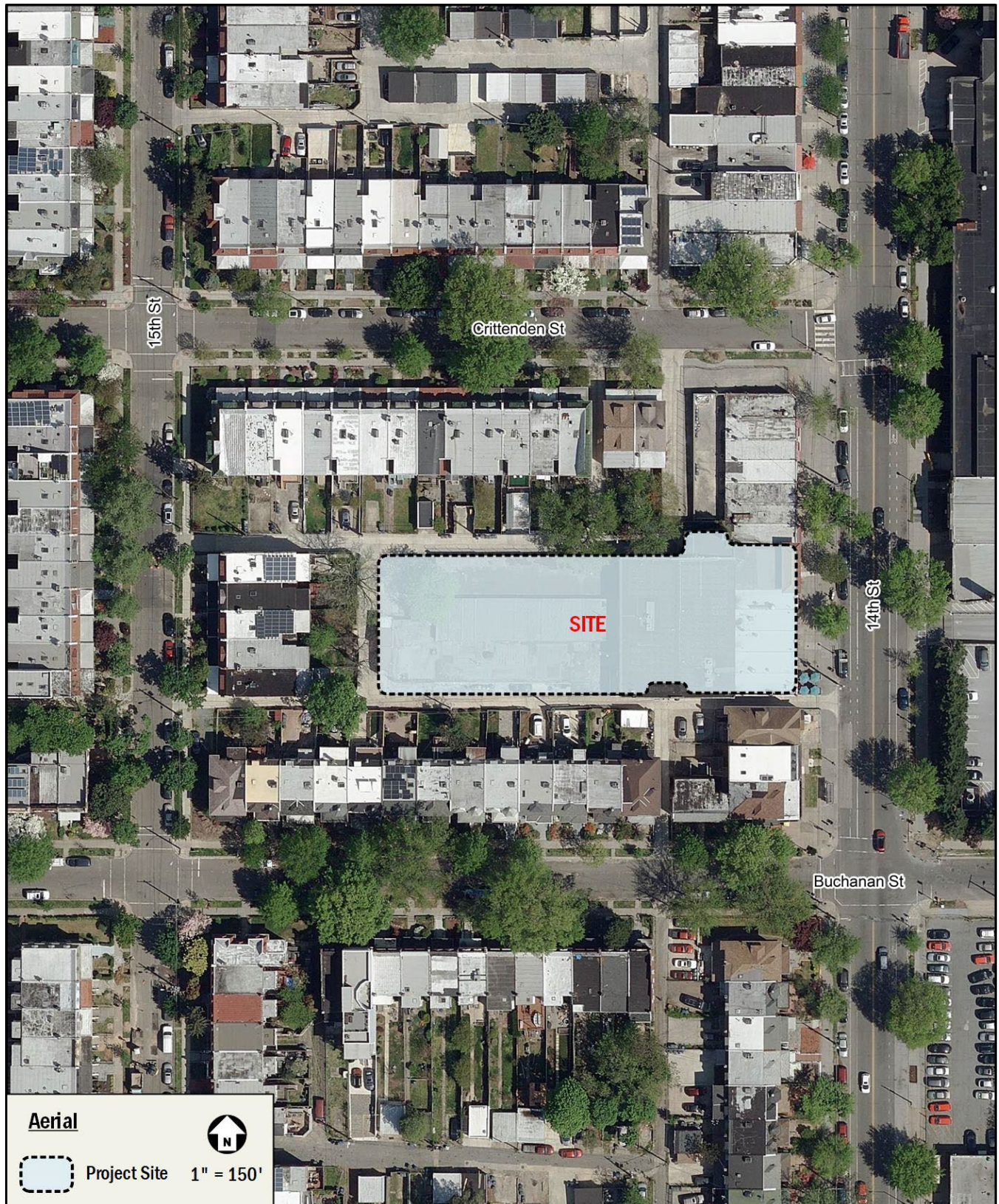


Figure 2: Project Location (Aerial)

Existing Transportation Conditions

This section reviews the existing vehicular, transit, bicycle, and pedestrian facilities in the vicinity of the site. 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.

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 3, the Project is served by seven (7) Metrobus lines carrying eight (8) designated routes. Table 1 shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop. Table 2 shows WMATA's recommended amenities for each type of bus stop, and Table 3 shows a detailed inventory of the amenities appearing at each of the existing bus stops within the transit study area.

The Project is located within ¼-mile of a specified Priority Corridor Network Metrobus Route, the 14th Street Line.

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 3.

Table 1: Local Bus Route Information

Route Number	Route Name	Service Hours at Stop Closest to Site			Headway (minutes)	Walking Distance to Nearest Stop
		Weekdays	Saturdays	Sundays		
52, 54	14th Street Line	4:30am-2:19am	4:33am-2:23am	5:02am-2:27am	6 - 30	100 ft (1 min)
59	14th Street Limited Line	6:37am-9:13am; 4:16pm-7:24pm	-	-	9 - 15	100 ft (1 min)
70	Georgia Ave-7th St Line	4:15am-2:27am	4:14am-2:22am	4:13am-2:09am	10 - 20	0.4 mi (8 min)
79	Georgia Ave Limited	6:00am-9:00pm	6:00am-7:00am; 7:00pm-9:00pm	6:00am-7:00am; 7:00pm-9:00pm	10 - 15	0.4 mi (8 min)
D33	16th Street-Tenleytown Line	8:00am (WB), 3:49pm (EB)	-	-	One trip in each direction	0.2 mi (4 min)
S2	16th Street Line	4:18am-2:15am	4:32am-2:19am	4:46am-2:15am	2 - 30	0.2 mi (4 min)
S9	16th Street Limited Line	5:17am-11:35pm	6:23am-11:26pm	6:48am-9:12pm	6 - 12	0.2 mi (4 min)

Table 2: WMATA Bus Stop Amenity Guidance

Amenity	Basic Stop		Enhanced Stop	Transit Center Stop
	< 50 daily boardings	≥ 50 daily boardings		
Bus stop flag	●	●	●	●
Route map and schedule	●	●	●	●
5' x 8' landing pad	●	●	●	●
40'/60' x 8' landing pad			●	●
4' sidewalk	●	●	●	●
Bench		●	●	●
Shelter		●	●	●
Lighting (on shelter or within 30' if overhead)	Required for stops with early morning and evening service		●	●
Dynamic information signage	Contingent on presence of shelter			
Trash and recycling receptacles	Recommended where surrounding uses may generate trash			

Table 3: Local Bus Stop Information

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & schedule	Landing pad	Side walk	Bench	Shelter	Dynamic info sign	Lighting	Trash Recp.
14th St & Buchanan St NW (NB)	1002429	52, 54, 59	●	●	●	●				●	●
14th St & Buchanan St NW (SB)	1002463	52, 54, 59	●	●	●	●	●	●	●	●	●
14th St & Decatur St NW (NB)	1002483	52, 54	●	●	●	●				●	●
14th St & Decatur St NW (SB)	1002486	52, 54	●	●	●	●	●	●		●	●
14th St & Emerson St NW (SB)	1003771	52, 54	●	●	●	●				●	●
14th St & Gallatin St NW (NB)	1002538	52, 54	●	●	●	●				●	●
14th St & Gallatin St NW (SB)	1002541	52, 54	●	●	●	●	●	●		●	●
14th St & Upshur St NW (NB)	1002338	52, 54, 59	●	●	●	●	●	●		●	●
14th St & Upshur St NW (SB)	1002333	52, 54, 59	●	●	●	●				●	●
14th St & Webster St NW (NB)	1002408	52, 54	●	●	●	●				●	●
14th St & Webster St NW (SB)	1002405	52, 54	●	●	●	●	●	●	●	●	●
16th St & Allison St NW (NB)	1002917	D33, S2, W45	●	●	●	●				●	●
16th St & Allison St NW (SB)	1002863	D33, S2, W45	●	●	●	●				●	●
16th St & Blagden Ave NW (SB)	1002906	D33, S2, W45	●	●	●	●	●			●	●
16th St & Buchanan St NW (NB)	1002436	D33, S2, S9, W45	●	●	●	●				●	●
16th St & Buchanan St NW (SB)	1002862	D33, S2, S9, W45	●	●	●	●	●	●	●	●	●
16th St & Decatur St NW (NB)	1002496	D33, S2, W45	●	●	●	●				●	●
16th St & Decatur St NW (SB)	1002907	D33, S2, W45	●	●	●	●				●	●
16th St & Emerson St NW (NB)	1002514	D33, S2, W45	●	●	●	●				●	●
16th St & Upshur St NW (NB)	1002340	D33, S2, W45	●	●	●	●				●	●
16th St & Upshur St NW (SB)	1002865	D33, S2, W45	●	●	●	●				●	●
16th St & Varnum St NW (SB)	1002864	D33, S2, W45	●	●	●	●				●	●
16th St & Webster St NW (NB)	1002916	D33, S2, W45	●	●	●	●				●	●
Georgia Ave & Buchanan St NW (NB)	1002431	70	●	●	●	●				●	●
Georgia Ave & Buchanan St NW (SB)	1002453	70	●	●	●	●				●	●
Georgia Ave & Decatur St NW (NB)	1003613	70, 79	●	●	●	●	●	●		●	●

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & schedule	Landing pad	Side walk	Bench	Shelter	Dynamic info sign	Lighting	Trash Recp.
Georgia Ave & Decatur St NW (SB)	1002495	70, 79	●	●	●	●	●	●	●	●	●
Georgia Ave & Webster St NW (NB)	1002404	70	●	●	●	●				●	●
Georgia Ave & Webster St NW (SB)	1002401	70	●	●	●	●	●	●		●	●
Iowa Ave & Emerson St NW (NB)	1002504	52, 54	●	●	●	●				●	●

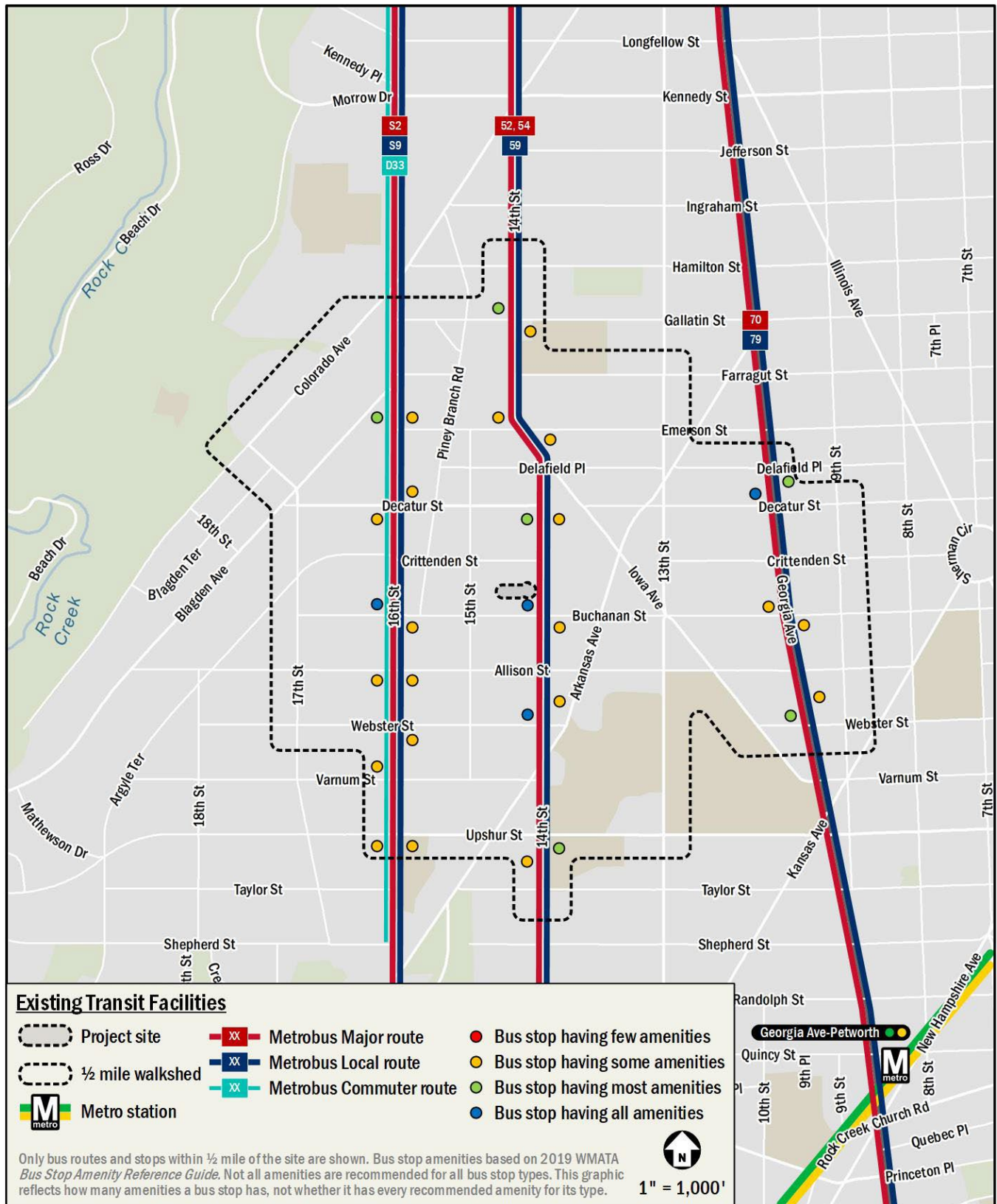


Figure 3: Existing Transit Facilities

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. Figure 4 illustrates the existing bicycle facilities near the site.

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 5 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 10-dock station located at 14th Street & Crittenden Street, NW, less than 0.10 miles from the site.

The location of this station is shown in Figure 4 and Figure 5.

Dockless E-Scooters and E-Bicycles

Personal Mobility Device (PMD) service in the District is provided by eight (8) electric-assist scooter (e-scooter) and electric-assist bicycle (e-bike) companies including Bird, Helbiz, Jump, Lime, Lyft, Razor, Skip, and Spin. These PMDs are provided by private companies that give registered users access to a variety of e-scooter and e-bike options. These devices are used through each company-specific mobile phone application. Many PMDs do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare; instead, they are parked in public space, most commonly in the "furniture zone" (the portion of sidewalk between where people walk and the curb, often where other street signs, street furniture, trees, parking meters, etc. are found).

In addition to existing bicycle facilities, the Project is proposing to provide short-term and long-term bicycle parking spaces on site, making bicycle and scooter travel an attractive option for those traveling to and from the site.

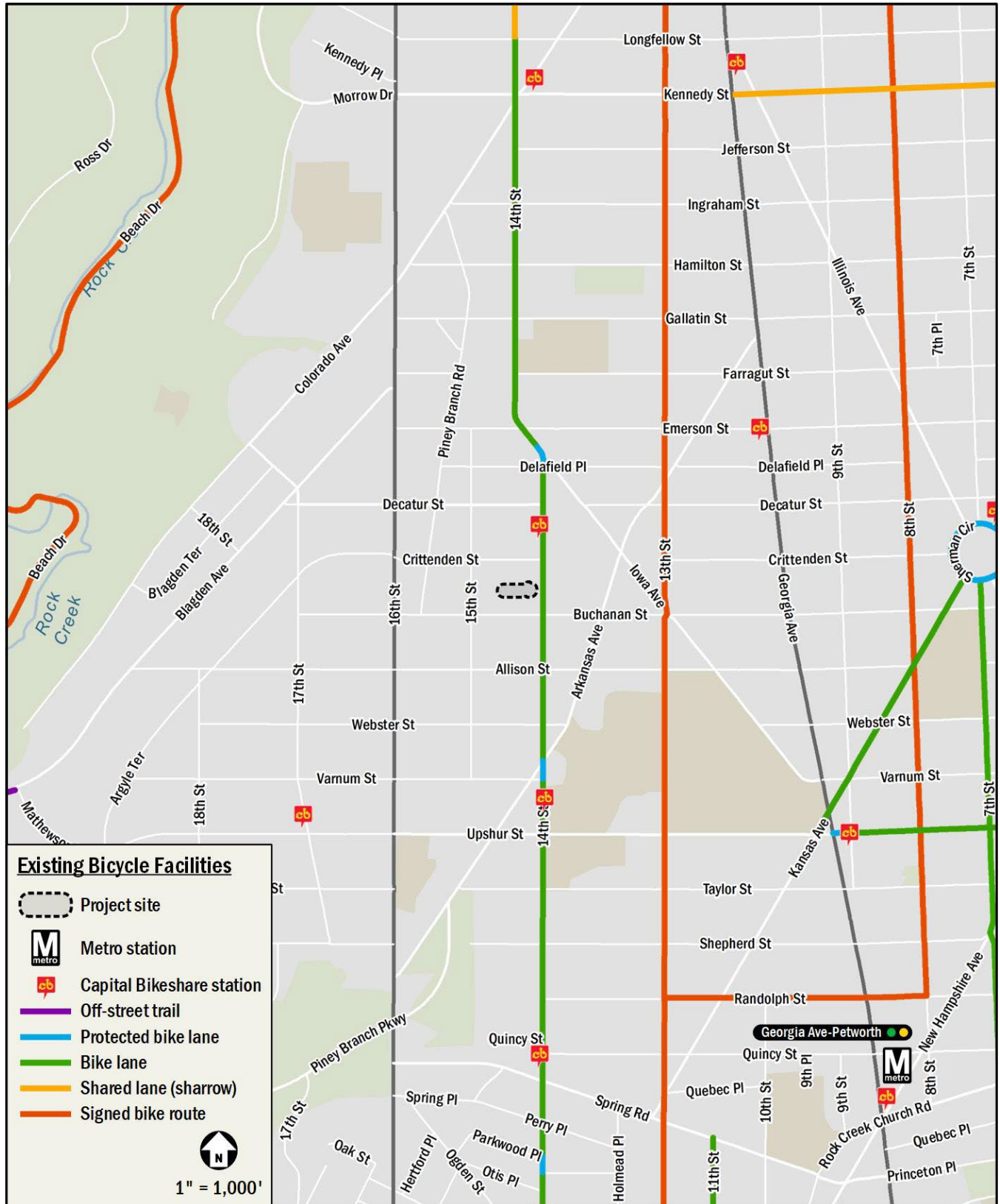


Figure 4: Existing Bicycle Facilities

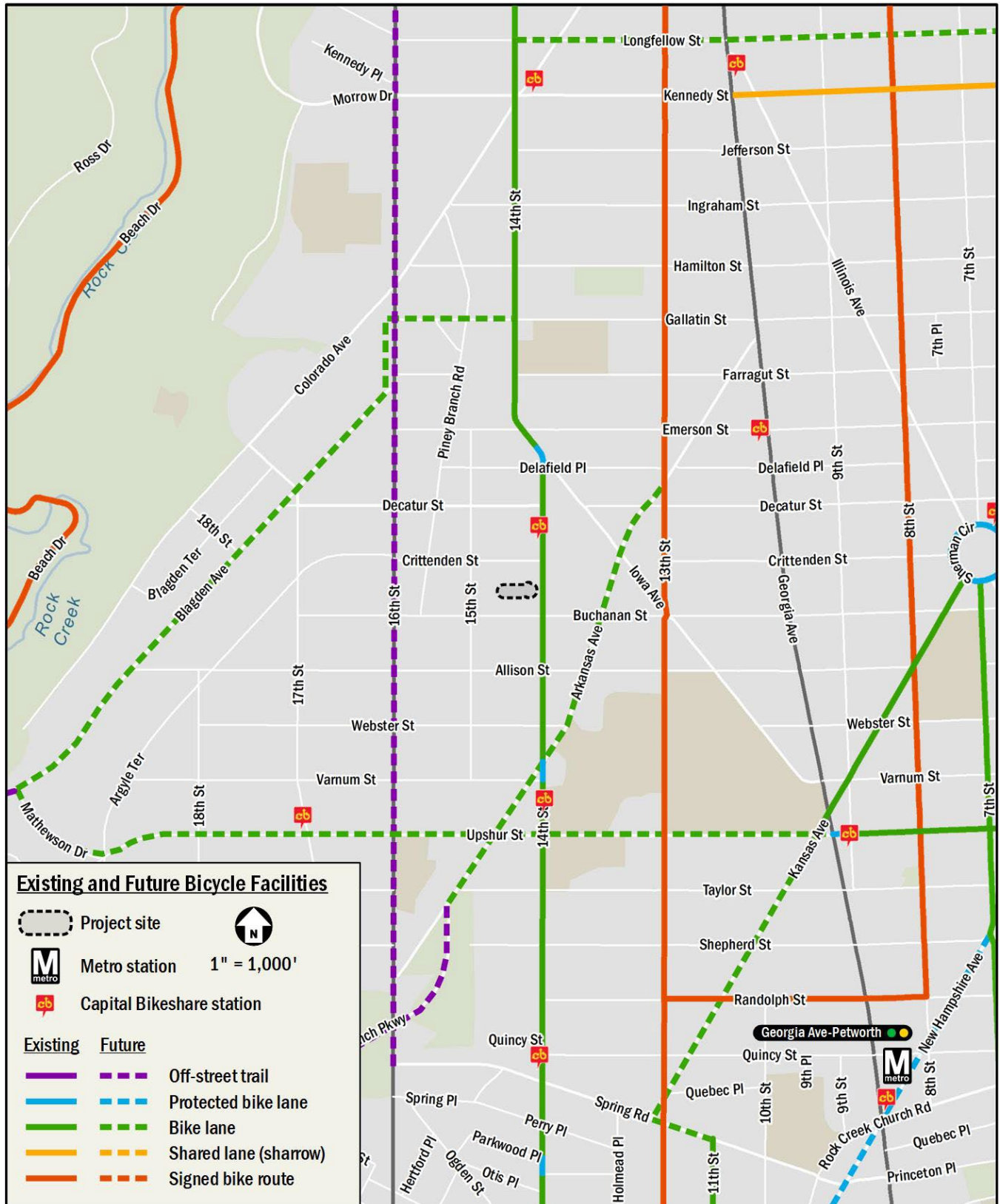


Figure 5: Existing and Future Bicycle Facilities

Pedestrian Facilities

Existing Pedestrian Facilities

Overall, the pedestrian facilities within the study area provide excellent connectivity to major local destinations. A summary of pedestrian facilities within a quarter-mile area is shown on Figure 6, with a summary of sidewalk width requirements shown in Table 4.

Some areas warranting additional review were identified within the study area that may impact the quality and attractiveness of walking, such as the missing sidewalks along Piney Branch Road and Iowa Avenue and the sidewalks along 14th Street and Arkansas Avenue. These areas do not meet DDOT's minimum width requirements. Within the study area, the majority of roadways fall under the Low to Moderate Density Residential category in Table 4. Most of the sidewalks that do not meet width requirements for the appropriate street type are located along High Density Residential or Light Commercial streets and at least meet the requirements for Low to Moderate Density Residential streets.

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks are not desired. As shown in Figure 6, under existing conditions, there are some crosswalks and curb ramps near the site that do not meet DDOT and/or ADA standards.

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 4: 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

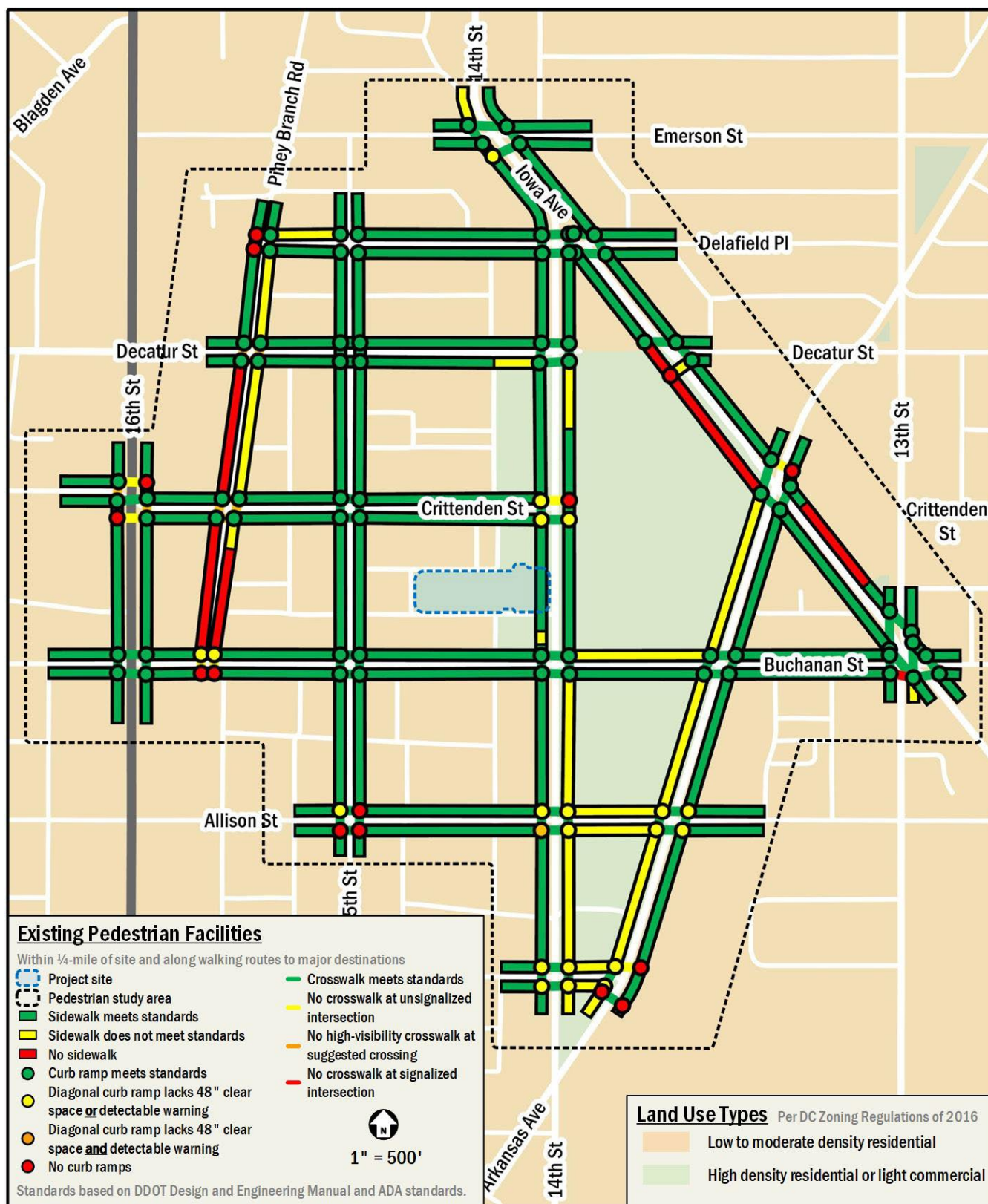


Figure 6: Existing Pedestrian Facilities

Parking Requirement

While the site is located within ¼ mile of a Priority Corridor Network Metrobus Route, the 14th Street Line, the section of 14th Street adjacent to the site is currently designated as RPP eligible, despite not being signed for RPP parking. Therefore, the Project would not be eligible for the 50 percent vehicular parking reduction from the Zoning Regulations' parking requirement permitted under Subtitle C, Section 702.

The parking requirement for the Project is 55 spaces without a reduction, and 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.

Therefore, the Project is requesting to remove the RPP designation along the section of 14th Street adjacent to the site between the alley and Crittenden Street, where no residences are currently present. With the removal of RPP along the site frontage, the Project will be eligible for the 50% reduction in the number of required spaces, per Section 702, and would meet the Zoning Regulations' parking requirement.

Alternatively, a pending text amendment to the Zoning Regulations would reduce the parking requirement to 23 parking spaces.

If the RPP designation is not removed or if the Zoning Regulations are not amended to reduce the parking requirement for the Project, then the Project requests flexibility in applying the 50% reduction criteria as it relates to RPP being present along the site frontage or relief from the parking requirement (a 15-space reduction). Therefore, an on-street parking occupancy study was prepared for the Project, as detailed in the following section.

On-street Parking Occupancy

A parking occupancy study was conducted to analyze on-street parking utilization within a study area containing two (2) blocks in each direction from the Project site, pursuant to a study methodology vetted and approved by DDOT during the scoping process prior to this memorandum. Occupancy counts of every block-face within the study area were conducted hourly between 6:00pm and 10:00pm on Saturday, February 26 and Tuesday, March 1, 2022, consistent with periods of expected peak demand based on the Project's mix of residential, retail and entertainment and arts uses. Each block-face in the study area was also surveyed to determine the approximate number of valid parking spaces and any applicable parking restrictions during the hours of the study.

Figure 7 shows the existing curbside designations and parking restrictions during the hours of the study, as well as the approximate number of valid parking spaces in each block-face within the parking study area. Figure 8 through Figure 12 show hourly on-street parking occupancies within the study area between 6:00pm and 10:00pm on Saturday, February 26, while Figure 13 through Figure 17 show the same for Tuesday, March 1.

As seen in these figures, overall parking occupancy on both days was highest within the commercial blocks of 14th Street NW where the Project site is located, with lower occupancies in the residential areas to the east and west. On both days, overall occupancy did not fluctuate substantially by hour, with Saturday's overall occupancy ranging between 60% and 64% and Tuesday's overall occupancy ranging between 66% and 68%. While there were isolated blocks of over 100% occupancy (indicating illegal parking), overall on-street parking demand within the study area stayed substantially below available supply throughout the entire study period.

The findings of this parking occupancy study support the Project's request for a reduction in on-site parking. The proposed Project will not have a detrimental impact on the surrounding parking supply.

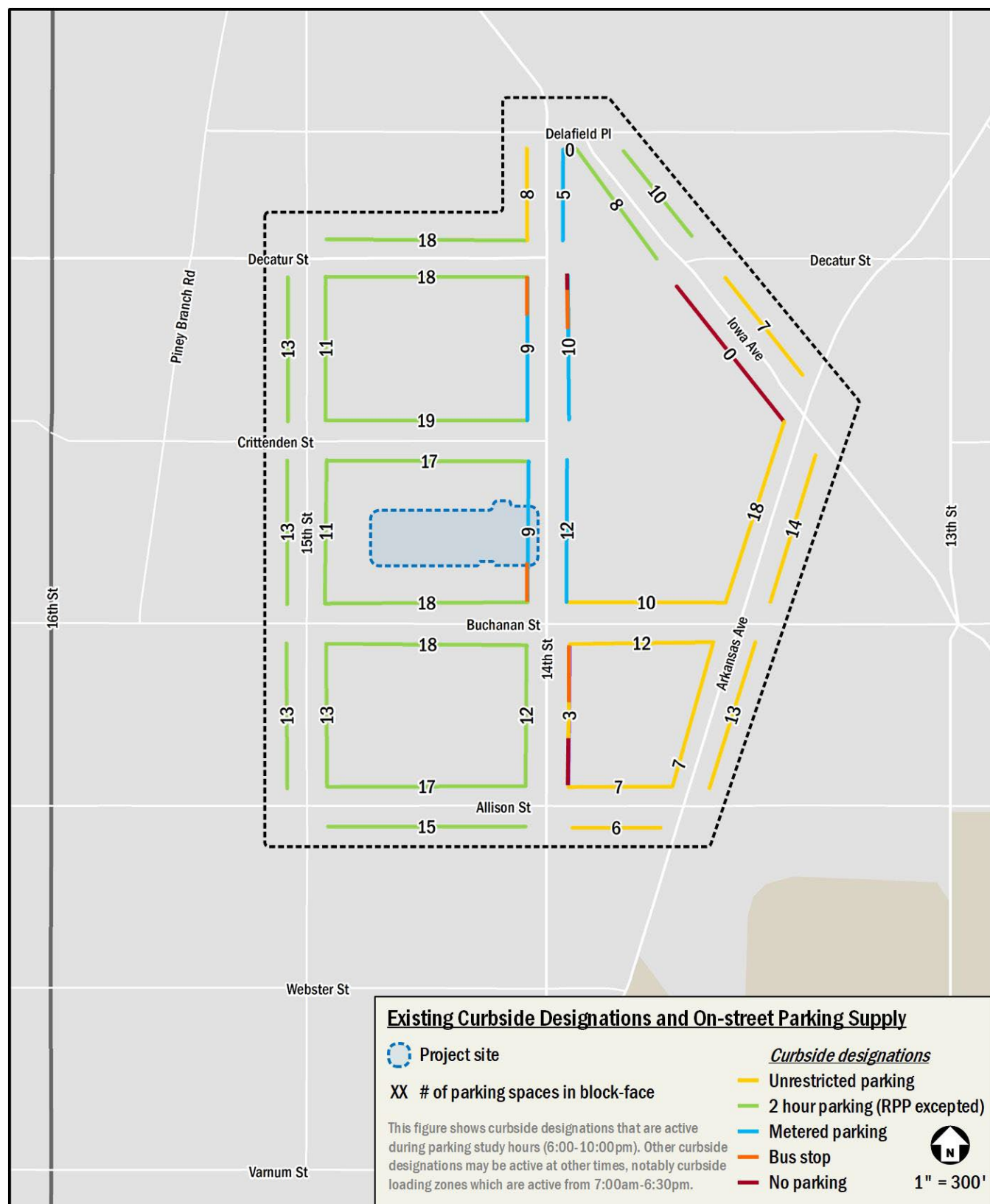


Figure 7: Existing Curbside Designations and On-street Parking Supply

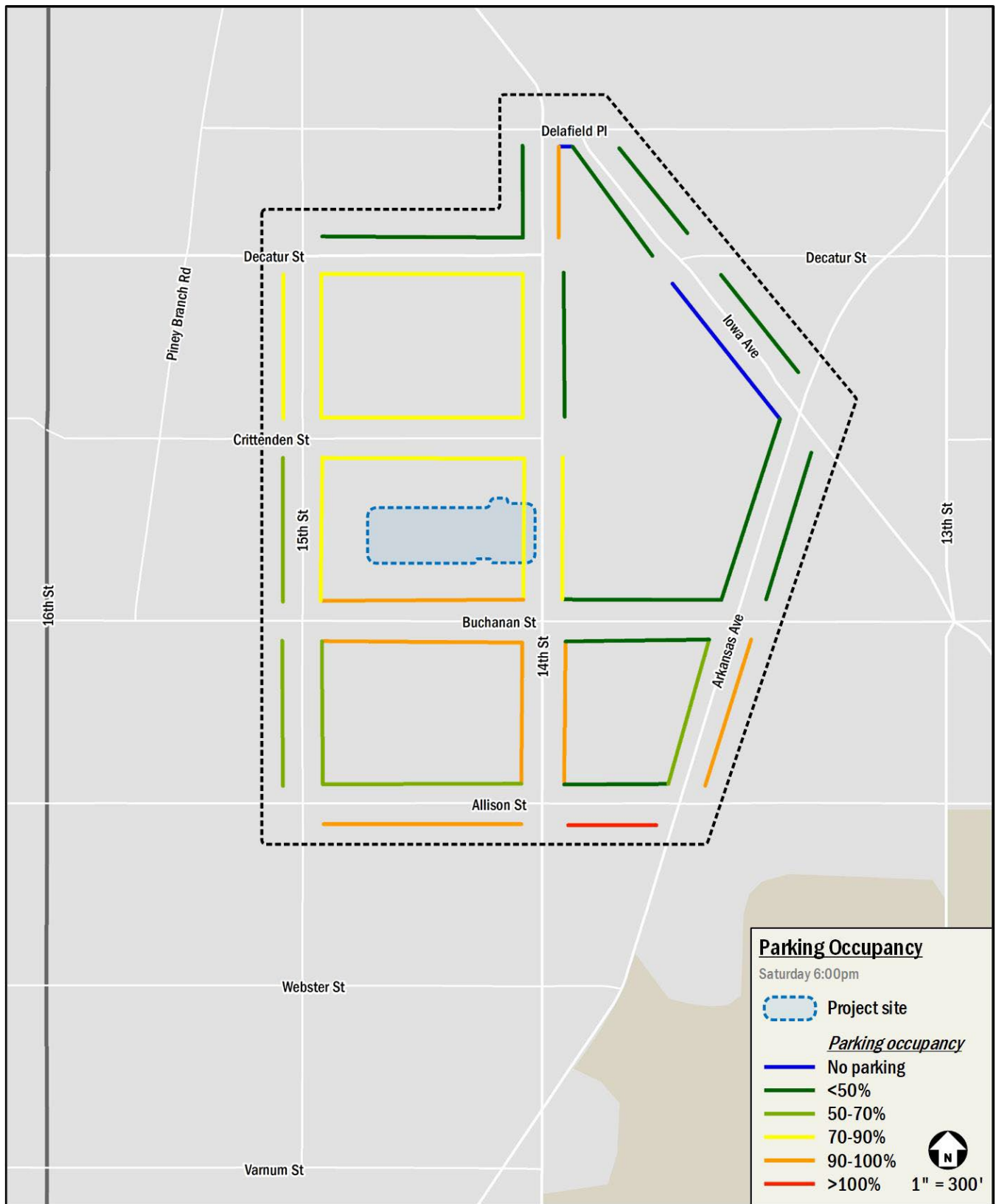


Figure 8: On-street Parking Occupancy (Saturday 6:00pm)

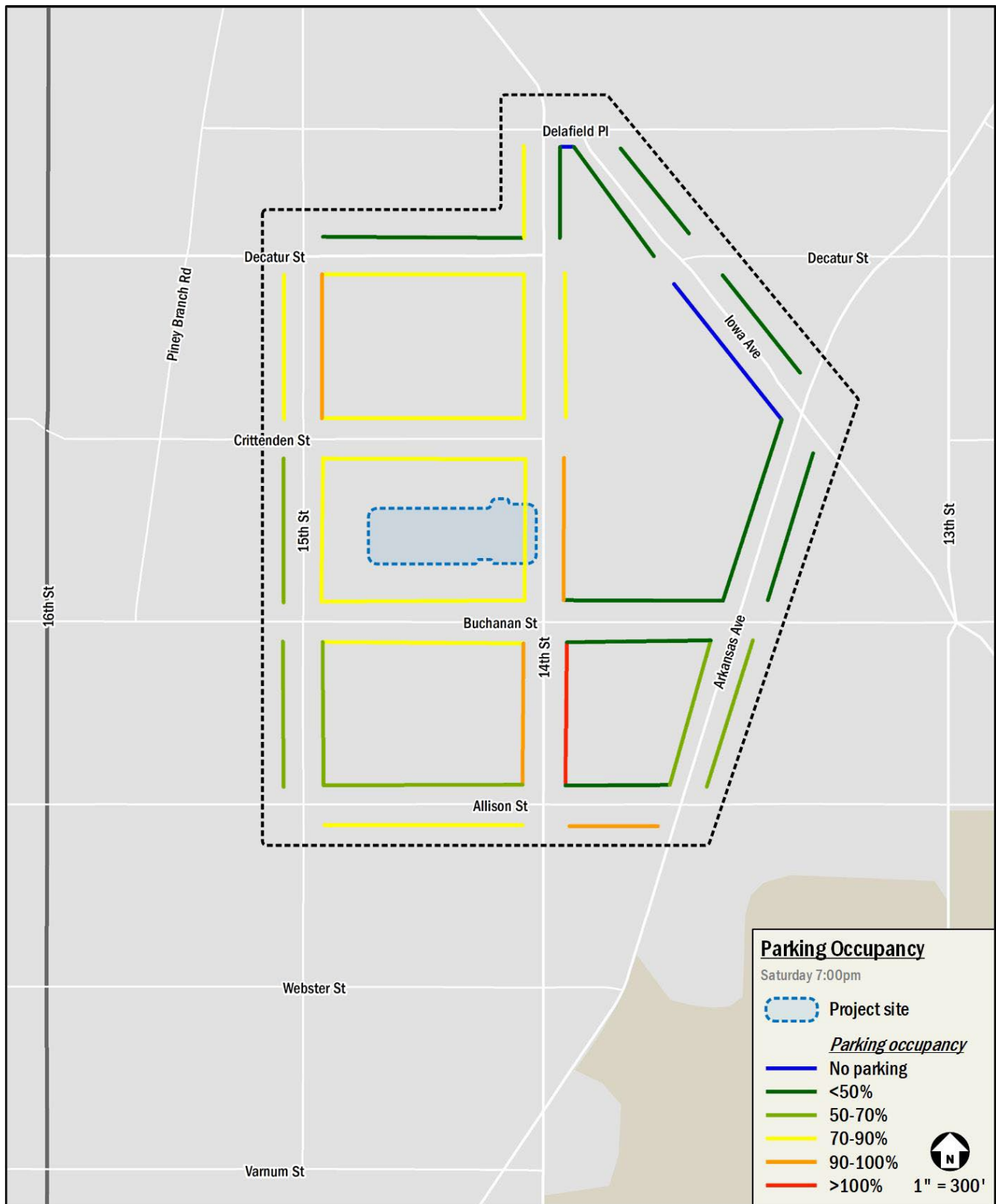


Figure 9: On-street Parking Occupancy (Saturday 7:00pm)

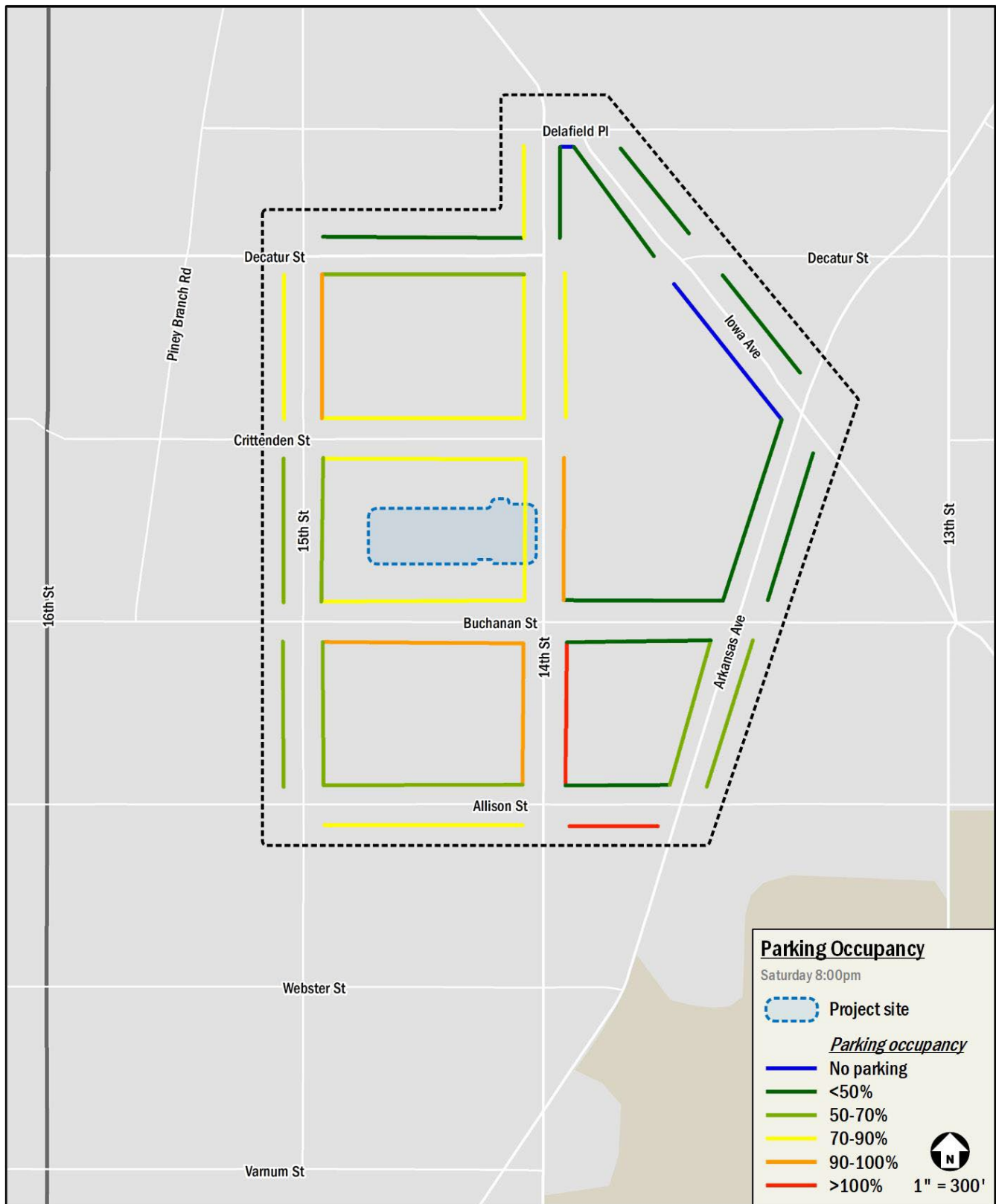


Figure 10: On-street Parking Occupancy (Saturday 8:00pm)

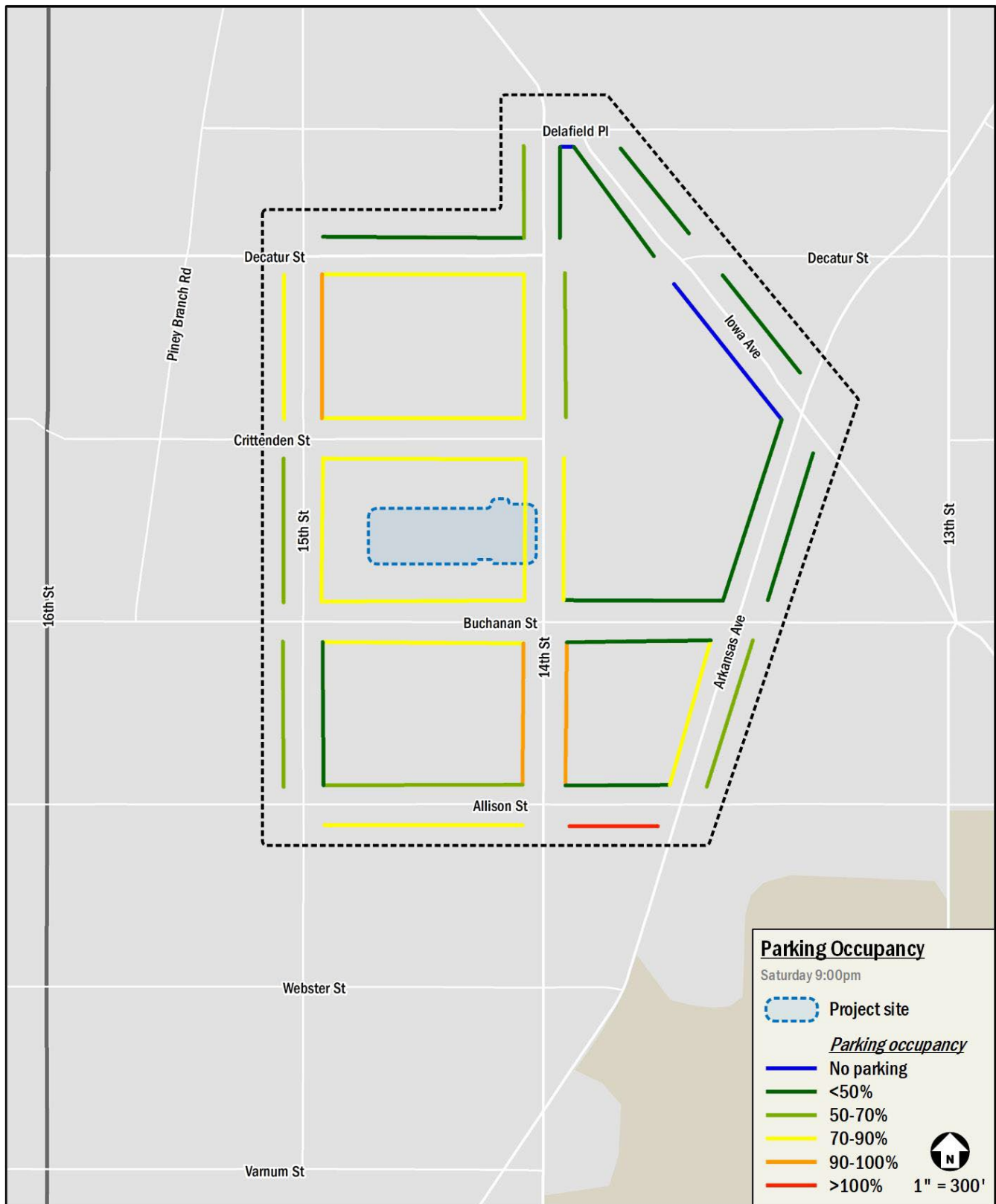


Figure 11: On-street Parking Occupancy (Saturday 9:00pm)

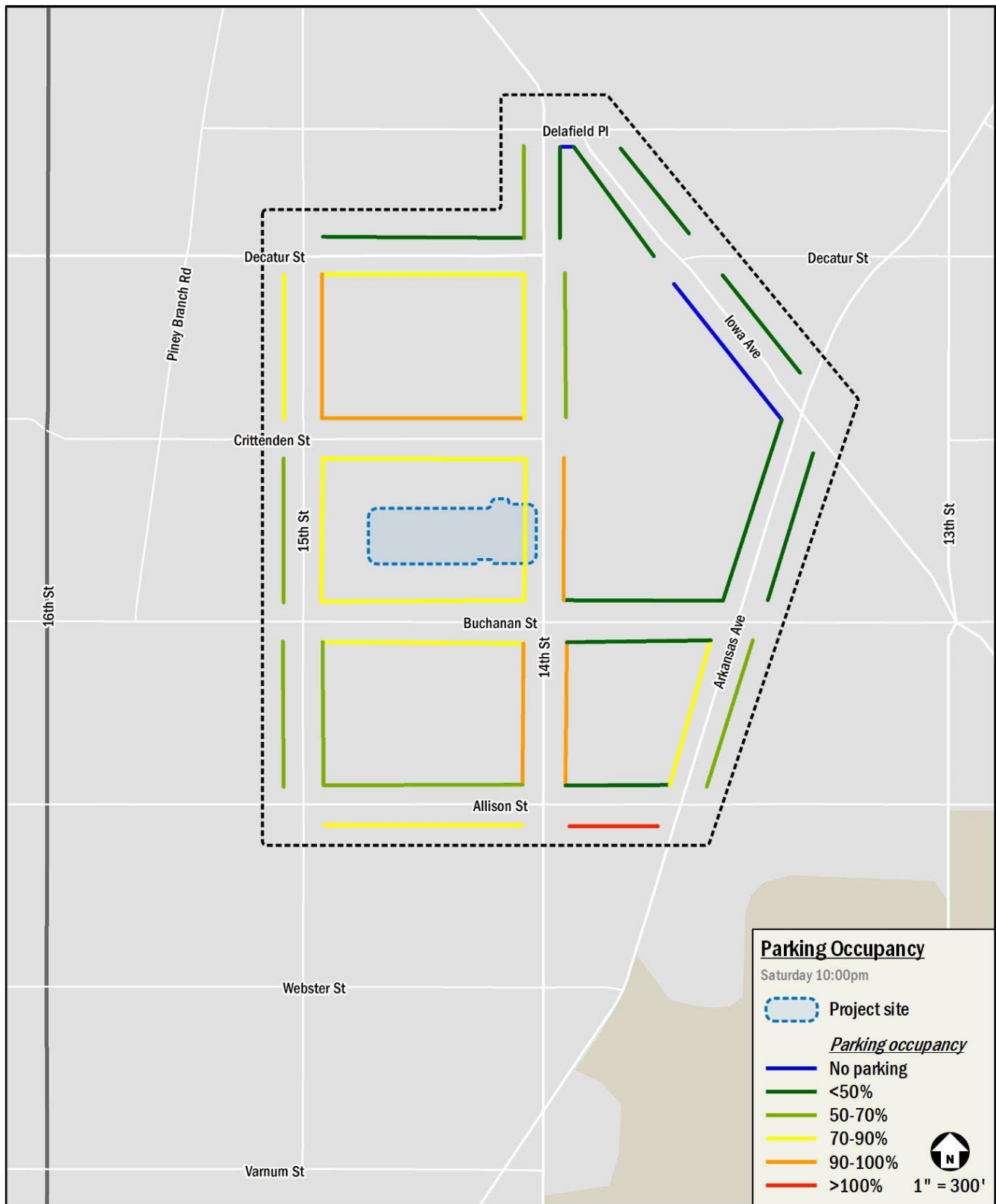


Figure 12: On-street Parking Occupancy (Saturday 10:00pm)

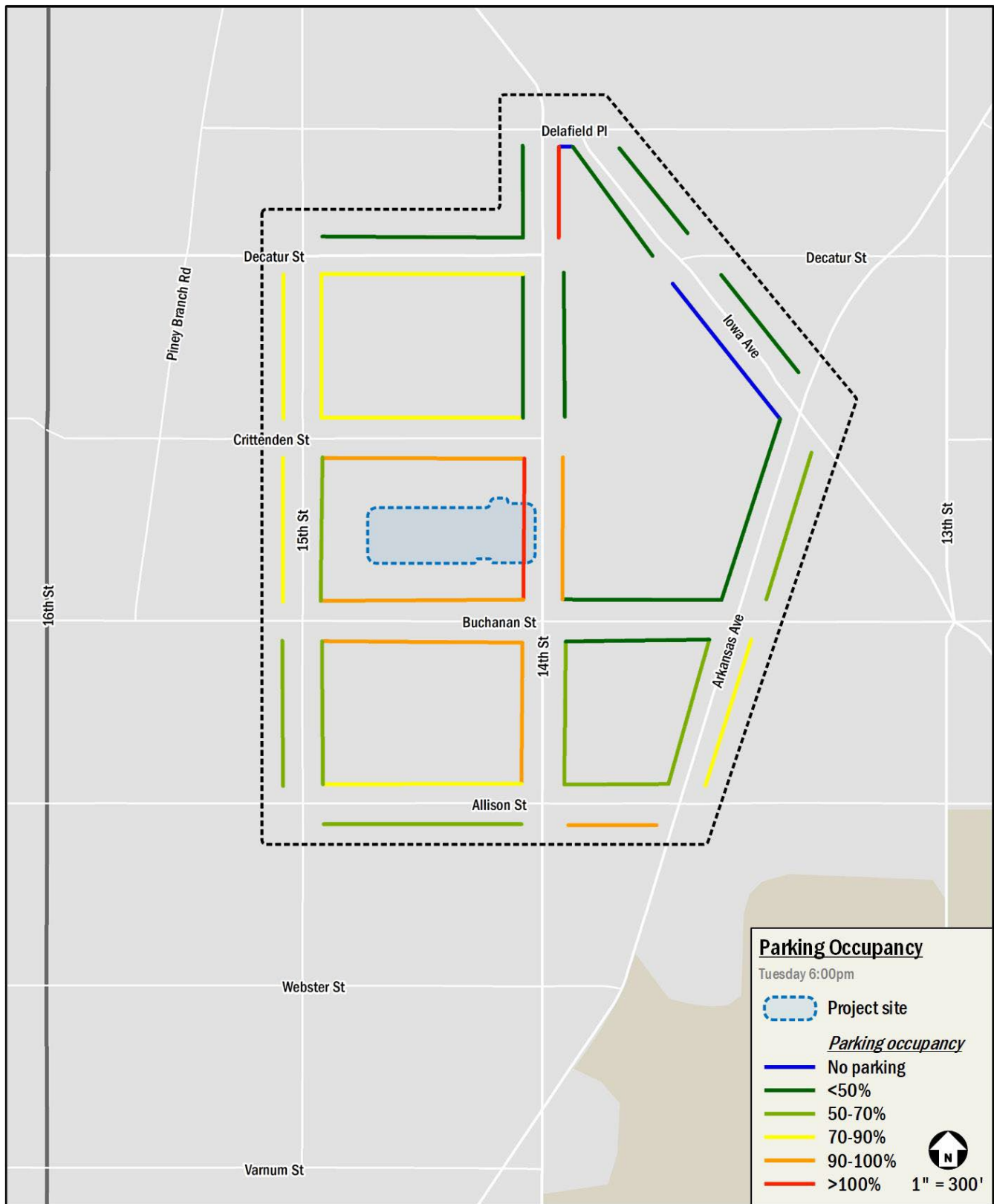


Figure 13: On-street Parking Occupancy (Tuesday 6:00pm)

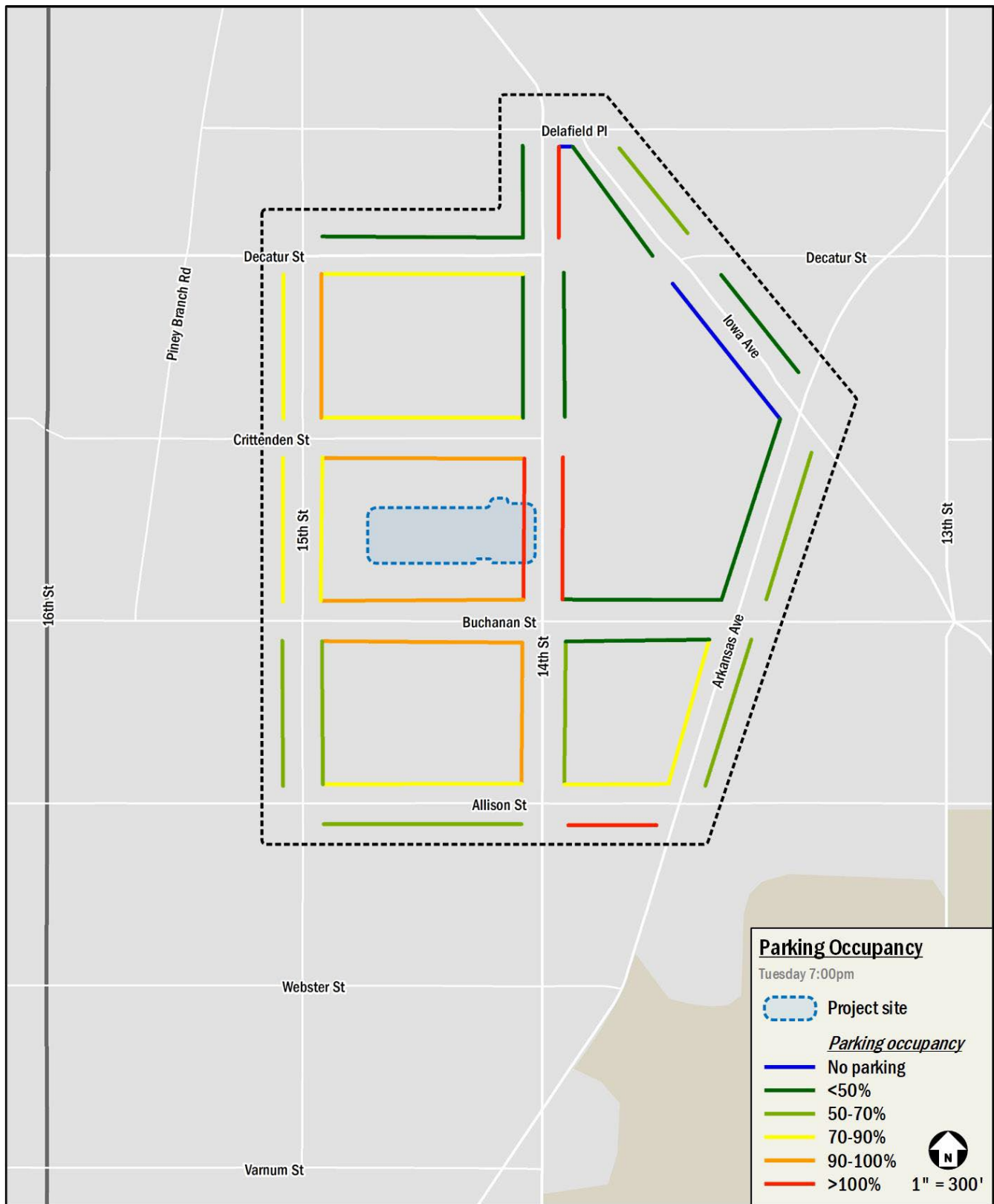


Figure 14: On-street Parking Occupancy (Tuesday 7:00pm)

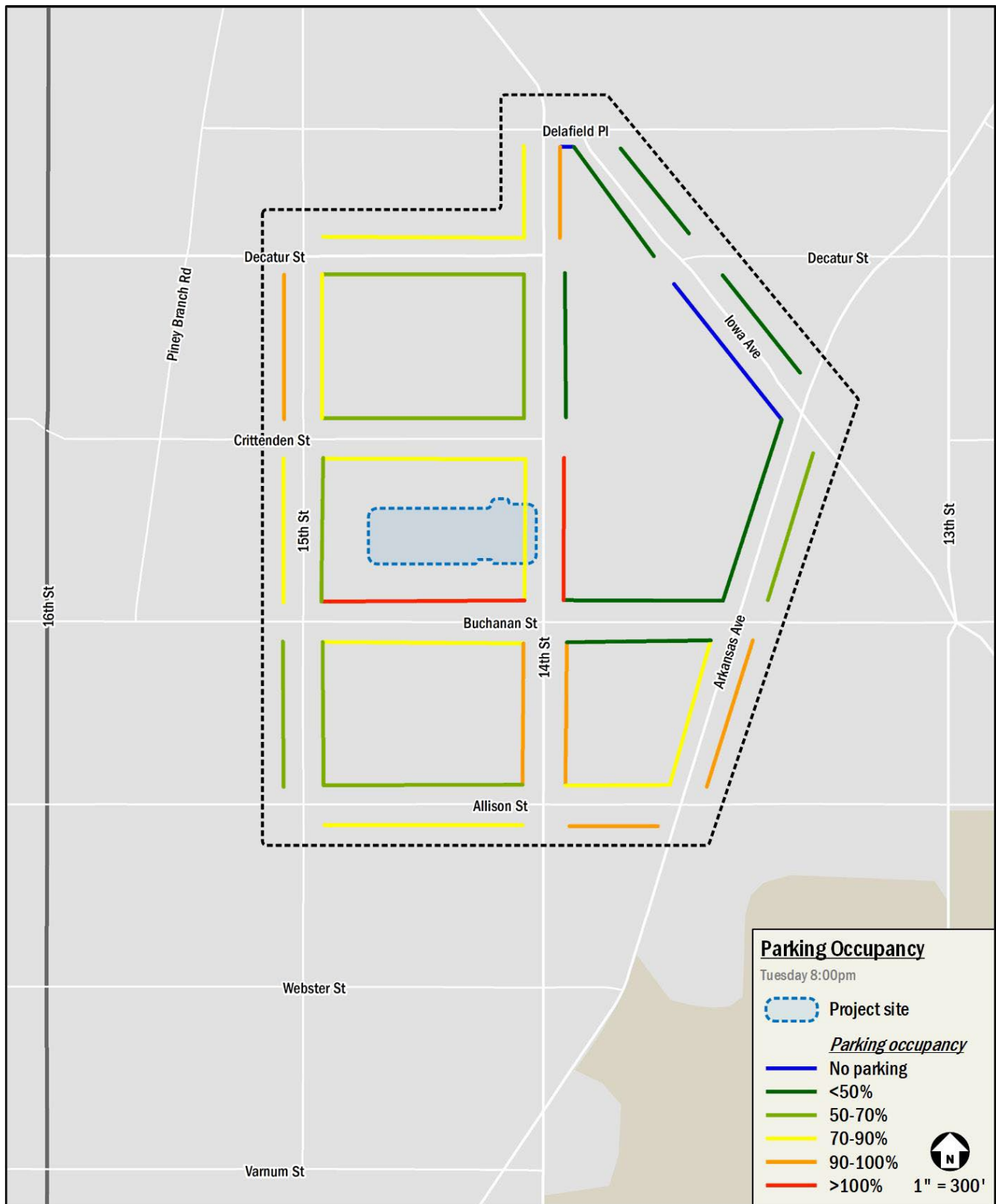


Figure 15: On-street Parking Occupancy (Tuesday 8:00pm)

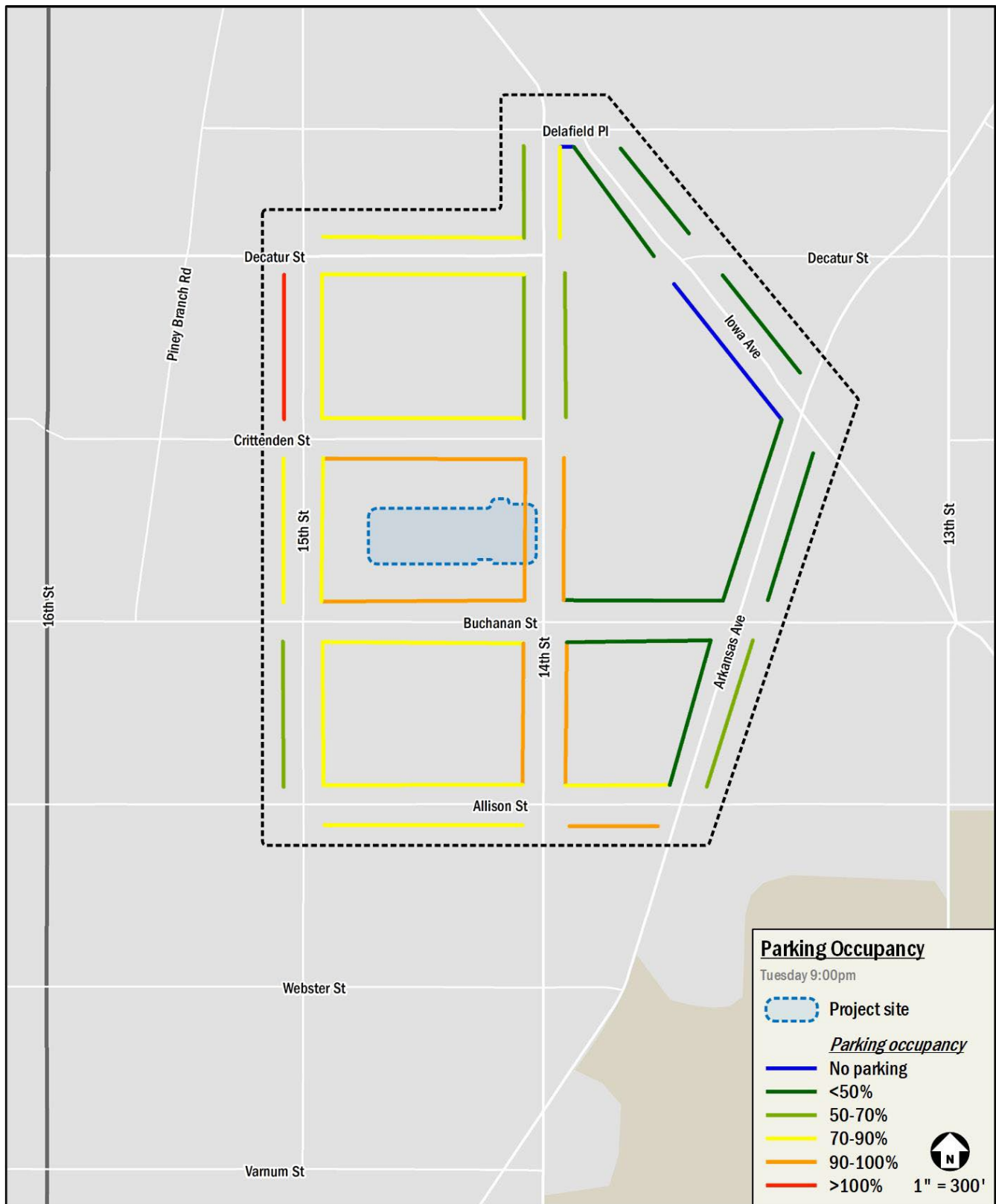


Figure 16: On-street Parking Occupancy (Tuesday 9:00pm)

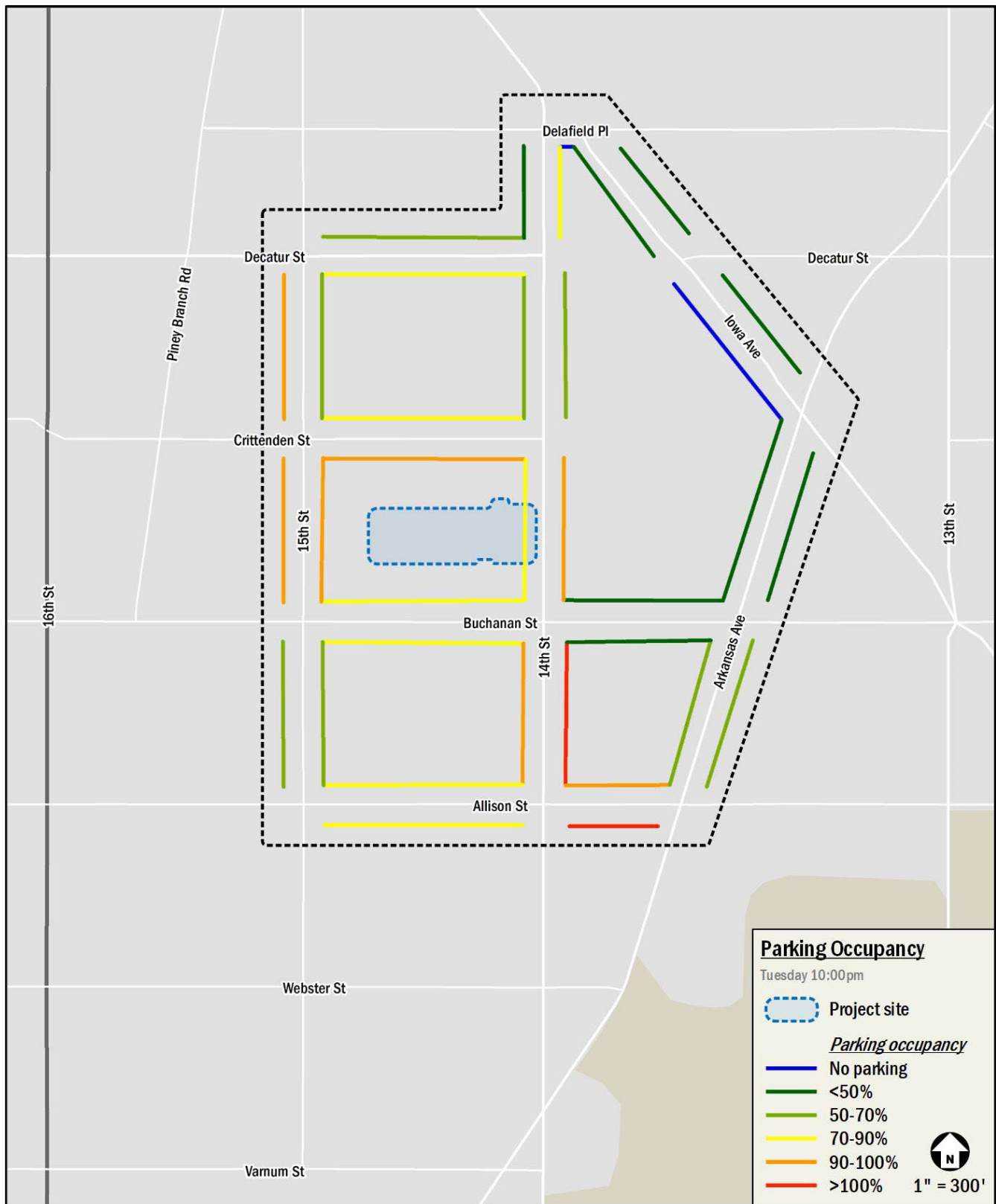


Figure 17: On-street Parking Occupancy (Tuesday 10:00pm)

Future Projects

There are several District initiatives located in the vicinity of the site. These planned and proposed projects are summarized below.

MoveDC

MoveDC is an implementation-based plan that provides a vision for the future of DC's transportation system. As the District grows, so must the transportation system, specifically in a way that expands transportation choices while improving the reliability of all transportation modes.

The *MoveDC* report outlines recommendations by mode with the goal of having them complete by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus);
- 200 miles of on-street bicycle facilities or trails;
- Sidewalks on at least one side of every street;
- New street connections;
- Road management/pricing in key corridors and the Central Employment Area;
- A new downtown Metrorail loop;
- Expanded commuter rail; and
- Water taxis.

In direct relation to the proposed development, the *MoveDC* plan recommends the following:

- Bicycle lanes along Arkansas Avenue, Blagden Avenue, Gallatin Street, and Upshur Street NW;
- A multi-use path along 16th Street NW between Spring Road NW and the Maryland/District of Columbia border;
- High-capacity transit along 16th Street NW between H Street NW and the Maryland/District of Columbia border.

DC Comprehensive Plan

The *DC Comprehensive Plan* is a high-level guiding document that sets a positive long-term vision for physical growth and change of the District. The existing Comprehensive Plan was enacted in 2006 and updated most recently in 2021.

The proposed development is located within the Central 14th Street NW Policy Focus Area within the Rock Creek East Policy Area. The Comprehensive Plan contains the following policy and action regarding this Policy Focus Area which is supported by the proposed development:

- *"Policy RCE-2.7.1: Central 14th Street NW Nodal Development.* Support the nodal redevelopment opportunities of 14th Street NW: Intermediary Node Two (Webster to Decatur Streets NW) can become a neighborhood-serving retail area with potential for additional uses in conjunction with the reconstruction of the existing bus barn."
- *"Action RCE-2.7.A: Land Use Change.* Encourage moderate-density, mixed-use commercial uses for properties, where appropriate, along 14th Street NW and Arkansas Avenue NW between Webster and Decatur Streets NW to support mixed-use redevelopment of commercial properties."
- The proposed development supports this policy by redeveloping a section of 14th Street NW's commercial properties into a mixed-use building with neighborhood-serving retail in addition to community amenities in the theater and dance studio.

Sustainable DC 2.0 Plan

Sustainable DC is the District of Columbia's major planning effort to make DC the most sustainable city in the nation. It proposes a variety of sustainability goals, targets, and actions related to the built environment, transportation, and other topics.

The 2019 iteration of the plan, the *Sustainable DC 2.0 Plan*, includes the following proposed action which is supported by the 4618 14th Street NW development:

- “BE2.3 Locate affordable, high-density housing close to commercial zones and high capacity transit.”
 - The proposed development supports this action with its location near frequent bus routes along 14th Street, 16th Street, and Georgia Avenue NW as well as the commercial strip along 14th Street between Decatur Street and Buchanan Street NW.

Rock Creek East II Livability Study

This study was undertaken by DDOT in order to improve the daily quality of life of residents, patrons, and employees that commute to, from, or through the study area. To meet this goal, DDOT analyzed the local street network and identified actions which could be taken to increase safety and improve connectivity and accessibility. The study goals included:

- Developing a comprehensive approach to traffic calming and operational improvements for all users living in and visiting the area;
- Identifying specific issues that impact safety and comfort of multimodal users while also accommodating freight and delivery needs;
- Designing cost-effective and measurable improvements that benefit all users;
- Investigating and mitigating freight impacts on the area;
- Emphasizing safety and access improvements around neighborhood facilities including, but not limited to: schools, churches, parks recreation centers, and other key community facilities; and
- Enhancing comfort and livability for residents and visitors to the project areas.

The study recommends improvements for pedestrians (visibility, sidewalks), bicyclists (additional facilities and bikeshare locations), and overall safety (signal optimization reviews).

Site Trip Generation

Weekday peak hour trip generation was calculated based on the methodology outlined in ITE *Trip Generation*, 10th Edition. This methodology was supplemented to account for the urban nature of the site (ITE *Trip Generation* provides data for non-urban, low transit use sites) and to generate trips for multiple modes.

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 operational characteristics. Since the studio offers classes in the late afternoon and evening on weekdays, the majority of trips for that use are currently, and are expected to continue to be, generated outside of the PM commuter peak period (after 7pm). Therefore, the trip generation calculations provide a conservative trip generation estimate for the Dance Loft space (meaning that a higher number of trips are studied than we believe will result from the Dance Loft space). Similarly, events within the theater space would generally occur Friday through Sunday with typical show times of 7-8pm and with some weekend shows as early as 4pm. Events are not expected to occur on weekdays during the commuter peak periods. To be conservative (meaning that a higher number of trips are studied than we believe will result from the Dance Loft space), trips were generated for the theater space using the closest relatable ITE land use code.

Table 5 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 6 shows a multimodal trip generation summary for the proposed development. Detailed trip generation information is provided in the Technical Attachments. As seen on Table 6, the Project will generate fewer than 25 net new peak hour vehicle trips in the peak direction in any study period. Therefore, vehicular capacity analysis is not required pursuant to DDOT's guidelines.

Table 5: 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 6: 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

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.

The proposed development is located in the Sixteenth Street Heights neighborhood of Washington, DC. The property 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 development site is currently occupied by a small strip of commercial buildings. The development plan includes removal of the existing structures and redevelopment of the site with a single building accommodating the following mix of uses:

- Approximately 101 residential dwelling units;
- Approximately 1,888 square feet of ground floor retail space;
- 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 installed in accordance with DDOT's Bike Parking Guide.

The site plan is shown in Figure 18.

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 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, and that alley 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. Existing and proposed curbside conditions adjacent to the site are shown in Figure 19. 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 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. Truck turning diagrams assessing the proposed alley widening and internal garage configuration are provided in the technical attachments. 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 be attributable to 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 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).

A circulation plan with expected pedestrian, bicycle, vehicle, and loading routes is shown in Figure 18. Internal routing from the loading area to different parts of the building is shown in Figure 20.

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.

As shown in Table 7, the Project's parking requirement, before any reductions, is 55 parking spaces, and the DDOT preferred maximum is 58 parking spaces.

The site is located within ¼ mile of a Priority Corridor Network Metrobus Route, the 14th Street Line; however, the section of 14th Street adjacent to the site is currently designated as RPP eligible, despite not being signed for RPP parking. Therefore, the Project is requesting to remove the RPP designation along the section of 14th Street adjacent to the site between the alley and Crittenden Street, where no residences are currently present. With the removal of RPP along the site frontage, the Project will be eligible for a 50% reduction in the number of required spaces, per Section 702, and would meet the parking requirement with the proposed 40-space parking supply. If the RPP designation is not removed, the Project requests flexibility in applying the 50% reduction criteria as it relates to RPP being present along the site frontage or relief from the parking requirement (15-space reduction). As noted above, if the Zoning Commission adopts the pending text amendment to reduce the parking requirement for affordable housing, then the Project's requirement would be 23 spaces even without the 50% reduction for 14th Street.

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

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 (see Figure 19), 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 (see Figure 18).

As previously discussed, the Dance Loft studio does not generate appreciable traffic during the commuter peak period, 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 will not have a detrimental impact on the surrounding transportation network or alley network.

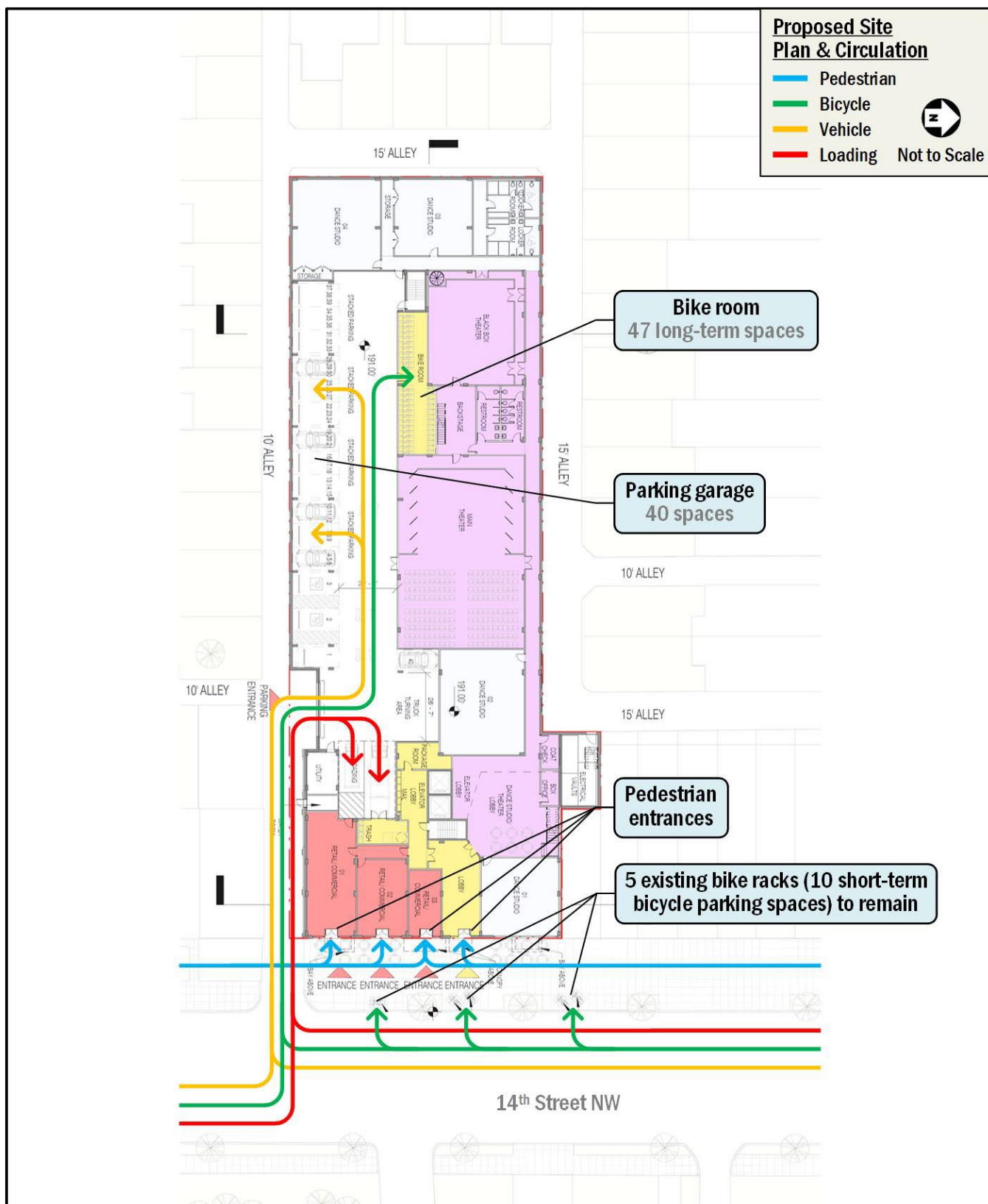


Figure 18: Site Plan

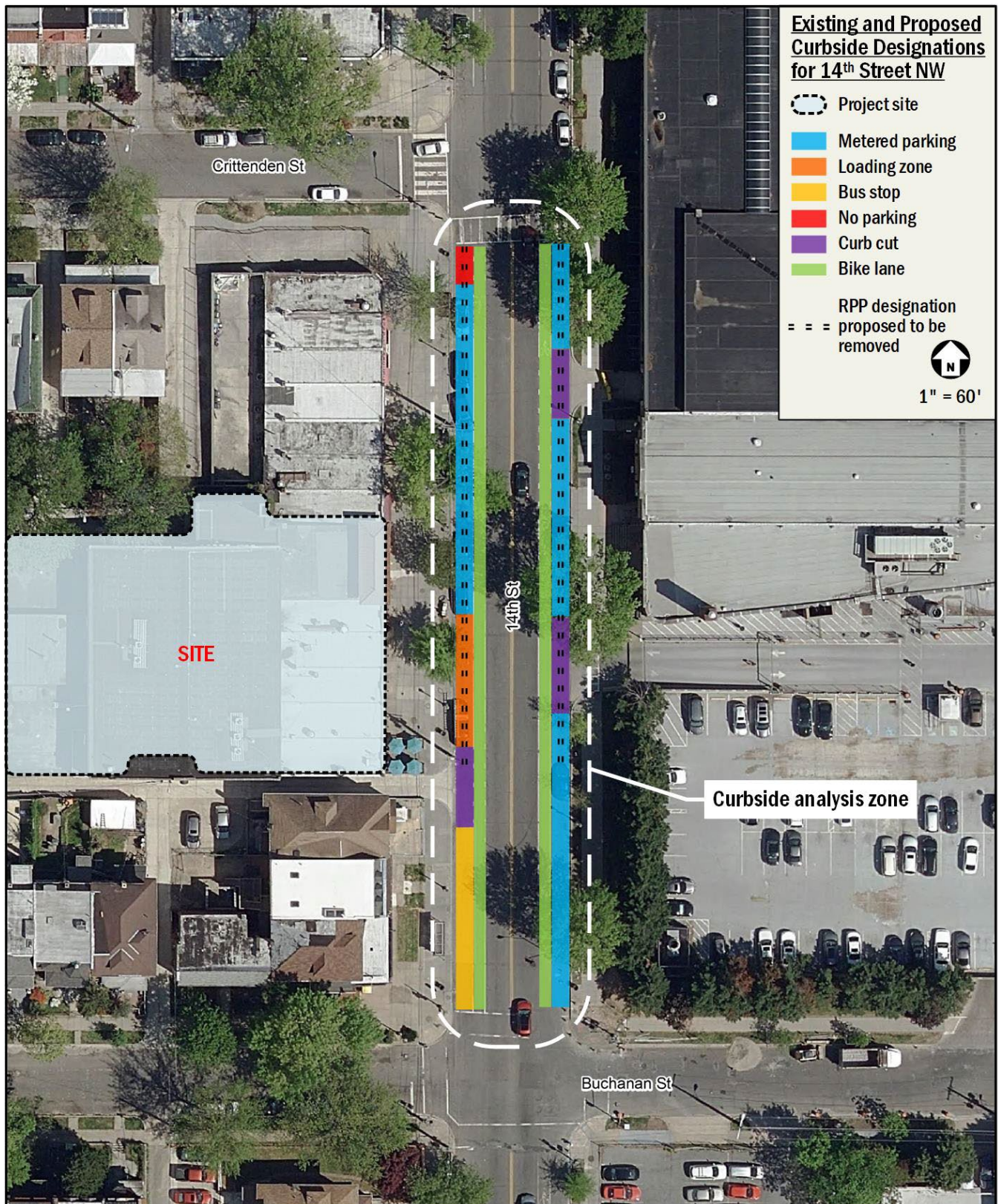


Figure 19: Existing and Proposed Curbside Designations for 14th Street NW



Transportation Demand Management

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or redistribute demand to other times or spaces. TDM focuses on reducing the demand of single-occupancy, private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods.

The following is a list of TDM strategies the Applicant proposes for the Project. For the overall Project, the Applicant proposes the following:

- Identify Transportation Coordinators for the planning, construction, and operations phases of development. The Transportation Coordinators will act as points of contact with DDOT, goDCgo, and Zoning Enforcement and will provide their contact information to goDCgo.
- Transportation Coordinator will conduct an annual commuter survey of building employees and residents on-site, and report TDM activities and data collection efforts to goDCgo once per year.
- Transportation Coordinators will develop, distribute, and market various transportation alternatives and options to residents, employees, and patrons, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on property website and in any internal building newsletters or communications.
- Transportation Coordinator will subscribe to goDCgo's residential newsletter and receive TDM training from goDCgo to learn about the transportation conditions for this project and available options for implementing the TDM Plan.
- Provide residents, employees, and patrons who wish to carpool with detailed carpooling information and refer them to other carpool matching services sponsored by the Metropolitan Washington Council of Governments (MWCOC) or other comparable service if MWCOC does not offer this in the future.
- Provide a copy of the Loading Management Plan (LMP) to the Transportation Coordinator so they are aware of this commitment.
- Post all TDM commitments on website, publicize availability, and allow the public to see what commitments have been promised.
- Provide a FREE SmarTrip card and a complimentary Capital Bikeshare coupon good for one ride to every new resident and employee.
- Exceed the Zoning Regulations' short- and long-term bicycle parking requirements of 8 and 36 spaces, respectively, by providing 47 long-term spaces and 10 short-term spaces. Long-term bicycle space will be provided free of charge to residents and employees.
- Long-term bicycle storage rooms will accommodate non-traditional sized bikes including cargo, tandem, and kids' bikes, with a minimum 5% of spaces (minimum 2) be designed for longer cargo/tandem bikes, and a minimum of 10% of spaces will be designed with electrical outlets for the charging of electric bikes and scooters. There will be no fee to the employees for usage of the bicycle storage room. There will be no fee to the residents for usage of the bicycle storage room and strollers will be permitted to be stored in the bicycle storage room.
- Install a minimum of one (1) electric vehicle (EV) charging stations and seven (7) additional spaces with EV-ready infrastructure, for a total of 20% of the proposed parking supply.
- Fund and install the expansion of the existing 11-dock Capital Bikeshare station at 14th Street and Crittenden Street NW to a 19-dock station.
- Following the issuance of a certificate of occupancy for the Project, the Transportation Coordinator shall submit documentation from DCRA summarizing compliance with the transportation and TDM conditions of the Order (including, if made available, any written confirmation from the Office of the Zoning Administrator) to the Office of Zoning for inclusion in the IZIS case record of the case.
- Following the issuance of a certificate of occupancy for the Project, the Transportation Coordinator will submit a letter to the Zoning Administrator, DDOT, and goDCgo every five (5) years (as measured from the final certificate of

occupancy for the Project) summarizing continued compliance with the transportation and TDM conditions in the Order.

Specifically for the residential portion of the Project, the applicant proposes the following:

- Unbundle the cost of vehicle parking from the lease or purchase agreement for each residential unit and charge a minimum rate based on the average market rate within a quarter mile of the Project.
- Provide welcome packets to all new residents that should, at a minimum, include the Metrorail pocket guide, brochures of local bus lines (Circulator and Metrobus), carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map. Brochures can be ordered from DDOT's goDCgo program by emailing info@godcgo.com.

Specifically for the retail portion of the Project, the applicant proposes the following:

- Unbundle the cost of parking from the cost to lease the building or unit and only hourly, daily, or weekly rates will be charged. Free parking, validation, or discounted rates will not be offered.
- Transportation Coordinator will require that tenants with 20 or more employees comply with the DC Commuter Benefits Law to participate in one of the three transportation benefits outlined in the law (employee-paid pre-tax benefit, employer-paid direct benefit, or shuttle service), as well as any other commuter benefits related laws that may be implemented in the future such as the Parking Cash-Out Law

Specifically for the theater/dance studio portion of the Project, the applicant proposes the following:

- Post "getting here" information in a visible and prominent location on the website with focus on non-automotive travel modes. Also, links will be provided to goDCgo.com, CommuterConnections.com, transit agencies around the metropolitan area, and instructions for patrons discouraging parking on-street in RPP zones.

Loading Management Plan

The Project provides one (1) 12' x 30' loading berth and one (1) 10' x 20' loading/delivery space, meeting the requirements of Subtitle Section 901.1 of the Zoning Regulations.

The following Loading Management Plan is proposed to be implemented with the proposed loading dock access via the existing alley connecting 14th Street and 15th Street NW. The goals of this plan are to maintain a safe environment for all users of the site, loading dock, streets, and nearby intersections; minimize undesirable impacts to pedestrians and to employees; reduce conflicts between truck traffic using the loading facilities and other street users; and ensure smooth operation of the loading facilities through appropriate levels of management and schedule operations. The components of the loading management plan that will be implemented for the life of the Project are as follows:

- A loading dock manager will be designated by the building management who will be on duty during delivery hours. The dock manager will be responsible for coordinating with vendors and tenants to schedule deliveries and will work with the community and neighbors to resolve any conflicts should they arise.
- Lease provisions will require tenants to use only the loading area for all deliveries and move-in and moveout activities.
- All tenants will be required to schedule deliveries that utilize the loading area (any loading operation conducted using a truck 20-feet in length or larger).
- The dock manager will schedule deliveries using the berths such that the dock's capacity is not exceeded. In the event that an unscheduled delivery vehicle arrives while the dock is full, that driver will be directed to return at a later time when a berth will be available so as to not compromise safety or impede the functionality of the existing alley between 14th Street and 15th Street NW.
- The dock manager will schedule residential loading activities so as not to conflict with retail, dance studio, or theater deliveries. All residential loading will need to be scheduled with the dock manager and it is anticipated that residential

loading will take place infrequently enough as to not often overlap with retail, dance studio, or theater loading activity. Based on the development size, an average of up to two (2) delivery vehicles per day are expected, including moving trucks for residential move-ins/move-outs and SU-30 trucks for retail, dance studio, and/or theater deliveries.

- The dock manager will monitor inbound and outbound truck maneuvers and will ensure that trucks accessing the loading dock do not block vehicular, bike, or pedestrian traffic along 14th Street NW or the existing alley except during those times when a truck is actively entering or exiting a loading berth.
- Service vehicle/truck traffic interfacing with 14th Street NW traffic will be monitored during peak periods and management measures will be taken if necessary to reduce conflicts between truck and vehicular movements.
- The dock manager will monitor the timing of the residential, retail, dance studio, and/or theater deliveries to see if any adjustments need to be made to ensure any conflicts with the various building uses' loading activities are minimized.
- Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle operation including but not limited to DCMR 20 – Chapter 9, Section 900 (Engine Idling), the goDCgo Motorcoach Operators Guide, and the primary access routes shown on the DDOT Truck and Bus Route Map (godcgo.com/freight). The dock manager will also distribute flyer materials, such as the MWCOC Turn Your Engine Off brochure and others from DDOT and goDCgo, to drivers as needed to encourage compliance with idling laws. The dock manager will also post these materials and other relevant notices in a prominent location within the loading area.
- The dock manager will be responsible for disseminating suggested truck routing maps to the building's tenants and to drivers from delivery services that frequently utilize the development's loading dock as well as notifying all drivers of any access or egress restrictions.

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 proposed Project will provide short- and long-term bicycle parking meeting or exceeding zoning requirements;
- The Project will meet vehicular parking requirements with either the proposed removal of the RPP designation for 14th Street adjacent to the site, the request for flexibility in applying the 50% eligibility reduction per Section 702 of the Zoning Regulations parking relief (15-space reduction), or the amendment of the Zoning Regulations. The on-street parking occupancy study prepared to accompany this request supports such a reduction in on-site parking.
- The Project's loading facilities will be accessed from existing alley, limiting impacts of loading activity on public space;
- The proposed Project will include a LMP to regulate loading operations;
- The proposed Project will include TDM measures that adequately promote non-vehicular modes of travel;
- The Project will include widening 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 garage will continue to provide 10-feet of width with some 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; and
- The proposed Project will not have a detrimental impact on the surrounding transportation network, surrounding parking, or the surrounding alley network.