

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: June 29, 2015

SUBJECT: Zoning Commission Case No. 14-19 – 300 M Street NE

PROJECT SUMMARY

M Street Development Group, LLC and Square 772 Development Group, LLC (together the “Applicant”) seeks approval of a Planned Unit Development (“PUD”) and related map amendment to permit construction of a mixed-use residential with ground floor retail development located at 300 M Street, NE (Square 772, Lots 1, 2, 6, 7, 19, 801, and 802). The Applicant seeks relief from one 55’ loading berth, side yard, and roof structure. The project is comprised of:

- 416 residential dwelling units;
- 12,900 square feet of ground floor retail;
- 187 vehicle parking spaces (167 spaces for residential and 20 spaces for retail);
- 140 long-term bicycle parking spaces; and
- 32 short-term bicycle parking spaces (16 racks).

SUMMARY OF DDOT REVIEW

DDOT is committed to achieving an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District’s multimodal transportation network.

The purpose of DDOT’s review is to assess the potential safety and capacity impacts of the proposed action on the District’s transportation network and, as necessary, propose mitigations that are commensurate with the action. After an extensive, multi-administration review of the case materials submitted by the Applicant, DDOT finds:

Site Design

- The Applicant proposes widening a portion of an existing 14.75' public alley to 24';
- Vehicle, loading, and trash access is proposed via the alley network so that no back-in maneuvers are proposed, and is in keeping with DDOT standards;
- Primary pedestrian access points are located on 3rd Street and M Street with some limited access to residential entrances on 4th Street;
- Curb extensions at the southeast and southwest corners of M Street and 4th Street are proffered as an amenity and are in conflict with planned cycle tracks on M Street and 4th Street;
- Special paving, bollards, knee walls, and re-grading of public space are proposed and are not supported by DDOT; and
- Utility vaults are proposed in the alley on private space, and is in keeping with DDOT's standards.

Travel Assumptions

- The action is expected to generate a high number of new vehicle and transit trips; and
- Bicycle mode share can be enhanced due to the proximity of existing and proposed bicycle facilities.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- Impacts to the intersections of New York Avenue/1st Street/ O Street and 3rd Street/H Street are not known because recent traffic counts were not included as was agreed in the Comprehensive Transportation Review (CTR) scope;
- Four intersections are impacted by the proposed project: Delaware Avenue/M Street; 4th Street/N Street/Florida Avenue; New York Avenue/Florida Avenue; and Florida Avenue/O Street;
- Existing Metrorail service should have capacity to accommodate future demand;
- Existing bus service does not have capacity to accommodate future demand, but a planned new route and a planned expansion of an existing route should accommodate future demand;
- Increasing the bicycle mode share is necessary to reduce the bus mode share and ensure bus capacity; and
- The proposed TDM plan could be enhance to support an increase in bicycle mode share.

Mitigations

DDOT has no objection to the requested PUD with the following conditions:

- Provide annual bikeshare membership to all residential tenants and retail employees for three years; and
- Provide two (2) additional long-term secure bicycle parking spaces for retail employees.

Continued Coordination

The Applicant is expected to continue to work with DDOT on the following matter:

- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards. Careful attention should be paid to pedestrian and bicycle connections along the site's perimeter and adjacent infrastructure. All on-site and off-site streetscape improvements will be reviewed as part of the public space permitting process and may be subject to Public Space Committee approval. If non-standard materials are proposed and supported by DDOT, a covenant of maintenance will be required.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

Site Design

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

Site Access

The Applicant proposes widening a portion of an existing 14.75' public alley to 24'. The proposed widened alley runs east-west between 3rd and 4th Streets and connects to an existing north-south public alley that is adjacent to the site. The widened alley would extend onto the Applicant's private space through an easement beginning at its intersection with 3rd Street. Widening the alley will enable vehicular, loading, and trash access as trucks can perform turning maneuvers. The proposed site access location and size complies with DDOT's approach to site access.

Loading

DDOT's practice is to accommodate vehicle loading in a safe and efficient manner, while at the same time preserving safety across non-vehicle modes and limiting any hindrance to traffic operations. For new developments, DDOT requires that loading take place in private space and that no back-up maneuvers occur in the public realm. This often results in loading being accessed through an alley network.

The Applicant proposes to provide two 30-foot deep loading berths, rather than the required single 55-foot deep loading berth. The loading berths are accessed from the 3rd Street widened alley. The Applicant's proposed loading locations comply with DDOT's loading requirements. The Applicant's analysis includes AutoTurn diagrams showing that truck maneuvers can be accommodated in the alley,

in keeping with DDOT standards. The design of the loading facilities would enable simultaneous loading for both residential and retail uses, for which loading is not required. Given the proposed land uses, this relief is appropriate and unlikely to negatively impact the District's transportation network. Trucks that are too large to utilize the on-site loading facility may occasionally need to serve the project and can apply for Emergency No Parking signs for curbside access on 3rd Street.

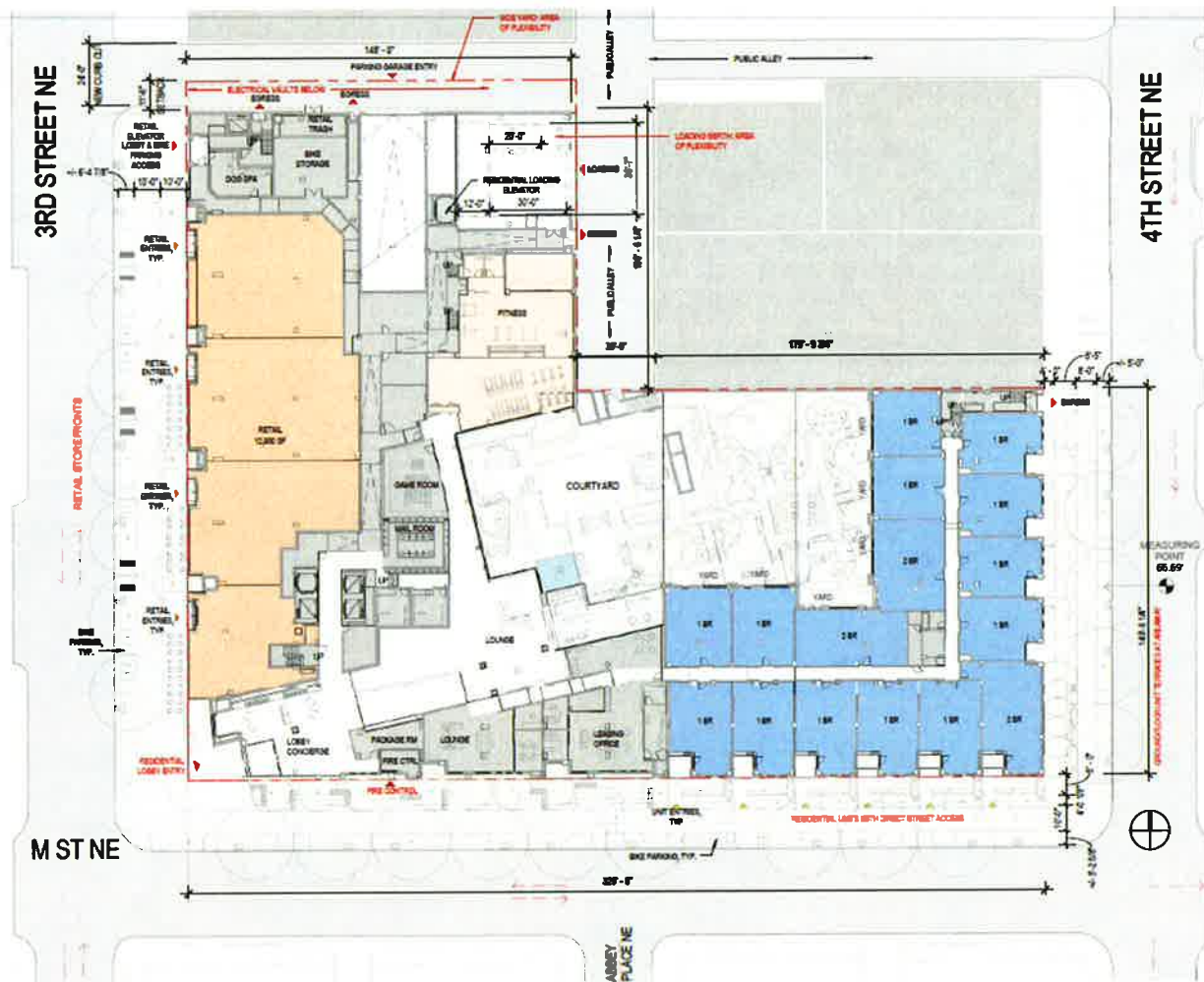


Figure 1 Site Design and Access (Source: Gorove/Slade)

Streetscape and Public Realm

In line with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the property lines. This includes curb and gutters, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site.

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual* will serve

as the main public realm references for the Applicant. DDOT staff will be available to provide additional guidance during the public space permitting process. Specifically, DDOT suggests that the Applicant participate in a Preliminary Design Review Meeting (PDRM) to address design related issues prior to the submission of public space permit applications.

DDOT finds that several proposed streetscape elements do not comply with DDOT standards or District of Columbia Municipal Regulations, including special paving, bollards, knee walls, and re-grading of public space. While the exact dimensions of special paving are not shown, special paving is only permitted at a primary building entrance double the width of a doorway and can extend only one-third the distance from the property line to the sidewalk. DDOT does not support the amount of special paving as shown. All special paving requires approval by the Public Space Committee. Additionally, DDOT does not support the proffered curb extensions at the southeast and southwest corners of M Street and 4th Street because they are in conflict with planned cycle tracks on M Street and 4th Street.

Site plans show and the amenities package indicates that street furniture, public art, and reconstruction of sidewalks not adjacent to the Applicant's site are proposed. While DDOT does not object to these elements at this time, these elements are all subject to public space approval.

Travel Assumptions

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants account for future growth in traffic on the network or what is referred to as background growth. Thirteen entitled projects with an origin or destination within the study area were included in the analysis.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate or by evaluating growth patterns forecast in MWCOG's regional travel demand model. Although background developments typically only account for local growth, the high number of background developments in the immediate vicinity of this site indicates a rapidly redeveloping area. Some regional trips may become local trips as individuals may relocate to one of these 13 background developments. Additionally, there has been a decrease in average daily traffic volumes along roadways in the study area in recent years. Therefore, a regional growth rate was not proposed. DDOT agrees with this assumption.

Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price and supply of parking spaces. However, in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, and proximity to transit.

The proposed site includes 167 residential and 20 retail parking spaces, for a total of 187 parking spaces on two underground levels. Zoning requires 104 residential and 14 retail parking spaces, for a total of

118 parking spaces. The spaces would be unbundled from residential units and leased or sold at the market rate of other nearby spaces. The ratio of 1 space for each 2.5 units would provide 61% more residential parking than zoning parking requirements, and the Applicant provides 43% more retail parking spaces than required by zoning.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual. The Applicant utilized the following ITE land uses in their trip generation estimation:

- Residential: Apartment (Code 220)
- Retail: Shopping center (Code 820)

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, etc. The means of travel is referred to as a 'mode' of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others.

The Applicant developed mode split assumptions informed by WMATA's *2005 Development-Related Ridership Survey* and the U.S. Census data. Based on the mode splits assumed in other nearby studies and nearby developments, DDOT and the Applicant agreed to a conservative vehicular mode split of 50% auto, 40% transit, 7% walk, and 3% bicycle.

Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation:

Trip Gen Summary for Residential						
Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	22 veh/hr	88 veh/hr	110 veh/hr	85 veh/hr	45 veh/hr	130 veh/hr
Transit	20 veh/hr	80 veh/hr	100 veh/hr	77 veh/hr	41 veh/hr	118 veh/hr
Bike	2 veh/hr	6 veh/hr	8 veh/hr	6 veh/hr	3 veh/hr	9 veh/hr
Walk	4 veh/hr	14 veh/hr	18 veh/hr	14 veh/hr	7 veh/hr	21 veh/hr
Trip Gen Summary for Retail						
Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	4 veh/hr	2 veh/hr	6 veh/hr	12 veh/hr	12 veh/hr	24 veh/hr
Transit	4 veh/hr	3 veh/hr	7 veh/hr	13 veh/hr	13 veh/hr	26 veh/hr
Bike	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	2 veh/hr	5 veh/hr
Walk	2 veh/hr	2 veh/hr	4 veh/hr	7 veh/hr	6 veh/hr	13 veh/hr
Total Trip Gen Summary						
Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	26 veh/hr	90 veh/hr	116 veh/hr	97 veh/hr	57 veh/hr	154 veh/hr
Transit	24 veh/hr	83 veh/hr	107 veh/hr	90 veh/hr	54 veh/hr	144 veh/hr
Bike	3 veh/hr	7 veh/hr	10 veh/hr	9 veh/hr	5 veh/hr	14 veh/hr
Walk	6 veh/hr	16 veh/hr	22 veh/hr	21 veh/hr	13 veh/hr	34 veh/hr

Figure 2 Weekday Peak Hour Vehicle Trip Generation (Source: Gorove/Slade)

The proposed action is expected to generate 116 AM and 154 PM peak hour vehicle trips, 107 AM and 144 PM peak hour transit trips, 22 AM and 34 PM peak hour pedestrian trips, and 10 AM and 14 PM peak hour bicycle trips. US Census data was used to determine the distribution of site generated Metrorail and Metrobus trips; it is expected that approximately 50% of transit trips will be attributed to Metrorail and 50% of transit trips will be attributed to Metrobus (i.e., 72 PM peak hour trips).

Study Area and Data Collection

The Applicant in conjunction with DDOT identified 13 intersections where detailed vehicle Turning Movement Counts (TMCs) would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see impacts in vehicle delay.

The Applicant collected weekday intersection counts in March 2015, September 2014, and March 2013. In general, DDOT agrees with the time frame and collection dates. None of the collection dates occurred during Congressional recess or outside of the District of Columbia Public School calendar. However, the Applicant did not collect TMCs at two intersections that DDOT requested, (New York Avenue/1st Street/O Street and 3rd Street/H Street) and instead provided outdated TMCs. As a result, impacts to these intersections are not known.

Analysis

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and

future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above.

Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

The Applicant identified four intersections – Delaware Avenue/M Street, 4th Street/N Street/Florida Avenue, New York Avenue/Florida Avenue, and Florida Avenue/O Street – with capacity issues. Some approaches at intersections within the study area are projected to operate at failing levels under background conditions and remain at failing levels with only minor increases in vehicle delay. The intersection of Delaware Avenue and M Street operates at below acceptable levels of delay under future conditions and are significantly worsened by the development. A number of signal timing and phasing adjustments are suggested for these intersections, but signal timing adjustments cannot be completed in isolation, instead requiring a review of a network. Increasing the bicycle mode share, which can be achieved by incentivizing the use of Capital Bikeshare, could reduce vehicle trip generation rates and reduce impacts at the intersection of Delaware Avenue and M Street.

DDOT has recently studied the area in the vicinity of the site as part of the *Florida Avenue Multimodal Study*. The study, which is being finalized, recommends changes to the road network in order to better and more safely accommodate multiple modes of travel. DDOT finds that operations will be improved on Florida Avenue by DDOT's proposed improvements to the corridor.

Two intersections (New York Avenue/1st Street/O Street and 3rd Street/H Street) were not included in the Applicant's data collection, and DDOT is concerned that they will be impacted by the project. The Applicant provided an analysis of these intersections using outdated Turning Movement Counts (TMCs). Delays and queuing at these two intersections were shown in the analysis, but the full impact of these intersections is not known since the data was outdated.

Transit Service

The District and Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment.

The southeastern edge of the site is located approximately 0.1 miles, roughly a two minute walk, from the NoMa-Gallaudet U Metro Station. The station is served by the Red Line should have capacity to accommodate future demand.

The site is also served by several high-frequency bus routes. Bus routes include:

- 90, 92, 93 – U Street – Garfield Line
- X3 – Benning Road Line
- D3, D4 – Ivy City – Franklin Square/Dupont Circle Line
- D8 – Hospital Center Line

These bus routes provide frequent service with peak hour headways less than 10 minutes. The closest bus stops are 0.1 miles away at 3rd Street/Florida Avenue. The site is approximately 0.5 miles from the H Street Streetcar Line.

WMATA and DDOT's analysis of bus load factors revealed overcrowding conditions on the 90-92-93 and X2-X3 Lines. Recent studies of these routes recommended a WMATA Express route for the 90-92-93 Line in the future, and WMATA implemented the X9 Express route for the X2-X3 Line that is currently operating only at peak hours but is expected to increase its frequency and service hours. These routes should have capacity to accommodate future demand, but increasing the bicycle mode share, which can be achieved by incentivizing the use of Capital Bikeshare, is necessary to mitigate demand generated by this site and ensure bus capacity. Increasing the bicycle mode share, which can be achieved by incentivizing the use of Capital Bikeshare, is necessary to address deteriorating operations at the intersection of Delaware Avenue and M Street.

Pedestrian Facilities

The District is committed to enhance the pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips. Walking is expected to be an important mode of transportation for this development.

The site generally has excellent pedestrian access to nearby destinations and transit. Significant substandard pedestrian facilities exist in the Florida Market area, but these facilities will be upgraded to meet DDOT standards for pedestrian facilities as the area redevelops. The Applicant proffers replacing the sidewalk, curb, and gutter on the south side of the 300 block of M Street across from the site; the Applicant is expected to work with DDOT through the public space permitting process and meet all DDOT standards for pedestrian facilities, including upgrading curb ramps and corresponding receiving ramps.

Bicycle Facilities

The District is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including bicycling trips. The site is currently well-served by bicycle infrastructure. The site is located in close proximity to a southbound bicycle lane on 4th Street south of Florida Avenue and a northbound bicycle lane on 6th Street south of Florida Avenue. DDOT recently installed a two-way cycle track on 6th Street north of Florida Avenue. Future plans include a cycle tracks along M Street and 4th Street, in front of the site, and a concept for a multiuse trail along New York Avenue that will connect through the Florida Market area via railroad right of way to the west of 4th Street.

The closest Capital Bikeshare station with 23 docks is located 0.1 miles from the site at the NoMa Metro Station, and another two stations are located within 0.35 miles of the site at 6th Street/Neal Place and 1st Street/M Street. In order to ensure bus capacity, DDOT recommends increasing the bicycle mode share, which is currently 3%, by further incentivizing biking and the use of bikeshare.

The Applicant is required to provide between 139 long-term bicycle parking spaces for the residential building, and DDOT recommends two (2) additional spaces for retail employees. The Applicant proposes 140 long-term spaces and 32 short-term bicycle parking spaces (16 racks) in public space, subject to DDOT public space approval.

Safety

DDOT requires that the Applicant conduct a safety analysis to demonstrate that the site will not create new, or exacerbate existing safety issues for all travel modes. DDOT asks for an evaluation of crashes at study area intersections as well as a site distance analysis along the public space where there is expected to be conflicts between competing modes (e.g., crosswalks, driveway entrances).

The Applicant's analysis of DDOT crash data reveals two intersections (Florida Avenue/New York Avenue and Florida Avenue/3rd Street) within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. A significant portion of the crashes are designated as "rear end" or "side swipe" crashes.

DDOT agrees with the Applicant's conclusion that based on the limited information provided, no discernable pattern, trend, or causation could be identified. The *Florida Avenue Multimodal Study*, which is being finalized, recommends changes to the road network in order to better and more safely accommodate multiple modes of travel.

Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior and minimize impacts. Only when these other options are exhausted will DDOT consider capacity-increasing changes to the transportation network because such changes often have detrimental impacts on non-auto travel and are often contrary to the District's multi-modal transportation goals.

Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan to help mitigate an action's transportation impacts. TDM is a set of strategies, programs, services, and physical elements that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve highly efficient and sustainable use of transportation facilities. In the District, this typically means implementing infrastructure or programs to maximize the use of mass transit, bicycle and pedestrian facilities, and reduce single occupancy vehicle trips during peak periods. The Applicant's proposed TDM measures play a role in achieving the desired and expected mode split.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The Applicant proposed the following TDM strategies:

- Designate a TDM coordinator responsible for organizing and marketing the TDM plan;
- Provide 140 long-term secure bicycle parking spaces;
- Provide a bike maintenance area with bike pump and tools within the bicycle storage room;
- Provide TDM information to all residents upon move-in, including website link to goDCgo.com;
- Unbundle parking costs from the price of lease or purchase; and
- Install a Transit Screen.

DDOT finds that increasing the bicycle mode share, which can be achieved by incentivizing bicycle travel, will relieve impacts to intersection capacity and bus demand and ensure capacity. Accordingly, DDOT requests the following additions to the Applicant's TDM plan as a condition of approval:

- Provide annual bikeshare membership to all residential tenants and retail employees for three years; and
- Provide 2 long-term secure bicycle parking spaces for retail employees.

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