

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION**



**d. Planning and Sustainability Division**

**MEMORANDUM**

**TO:** Sara Bardin  
Director, Office of Zoning

**FROM:** James Sebastian   
Acting Associate Director

**DATE:** April 24, 2017

**SUBJECT:** ZC Case No. 16-20 – 3450 Eads Street NE

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**PROJECT SUMMARY**

344 Benning, LLC (the “Applicant”) seeks approval of a Consolidated Planned Unit Development (“PUD”) and Zoning Map Amendment in order to construct an affordable housing development focused on senior housing. The site is bounded by public alleys to the north and west, Eads Street to the south, and a vacant property to the east (Square 5017, Lots 839-842 and a public alley abutting Lots 839 and 840). The PUD includes:

- 70 dwelling units;
- 17 vehicle parking spaces; and
- 20 long-term and 8 short-term bicycle parking spaces.

**SUMMARY OF DDOT REVIEW**

The District Department of Transportation (DDOT) is committed to achieve an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, safer streets, and 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 to close a north-south public alley that runs through a portion of the site. Since the east-west and another north-south public alley will remain open, DDOT finds the remaining public alley network sufficient for the needs of the square;
- Vehicular, loading, and long-term bicycle access is proposed from the public alleys;
- A preliminary assessment by DDOT's Urban Forestry Administration (UFA) identified zero Heritage Trees on site.

## Travel Assumptions

- The background growth, mode split, and trip generation assumptions proposed by the Applicant are reasonable;
- The Applicant utilized sound methodology to perform the analysis; and
- The action is expected to generate a low number of new vehicle, transit, bicycle, and pedestrian trips.

## Analysis

- The action is not projected to increase travel delay in the area;
- The amount of short-term bicycle parking is appropriate;
- The amount of long-term bicycle parking is below zoning requirements but appropriate because the majority of units are intended as senior housing; and
- The proposed Transportation Demand Management (TDM) plan is not in accordance with other TDM plans that DDOT typically sees for similar projects.

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

## Mitigations

- The Applicant agreed to provide the following TDM mitigations, which DDOT agrees with:
  - The Applicant will unbundle the cost of residential parking from the cost of lease or purchase of the units;
  - The Applicant will install a Transportation Information Center Display (electronic screen) within the residential lobby, containing real-time information related to local transportation alternatives;
  - The Applicant will provide a bicycle repair station;
  - The Applicant will identify a TDM Coordinator (for planning, construction, and operations). The TDM Coordinator will work with residents and employees to distribute and market transportation alternatives;
  - The Applicant will provide TDM materials to new residents in the Residential Welcome Package;
- The Applicant agreed to provide a one-time annual car sharing membership, one-time Capital Bikeshare membership, or a one-time credit to a commuter shuttle service to the first tenant or each residential unit as a part of their TDM plan. Additionally, the Applicant agreed to provide a one-time \$50 SmarTrip card to each residential tenant and employee in the building. DDOT requests the following modification:
  - For the first three years after the building opening, provide the equivalent value of an annual Capital Bikeshare membership (currently \$85) *or* credit for a commuter shuttle service equal to the value of an annual bikeshare membership to all new residents. This benefit shall be codified in rental/condominium documents; and

- The Applicant will provide updated contact information for the TDM Coordinator and report TDM efforts and amenities to goDCgo staff once per year.

### **Continued Coordination**

Given the complexity and size of the action, the Applicant is expected to continue to work with DDOT outside of the Zoning Commission process on the following matters:

- 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, including upgrading all crosswalks to high visibility crosswalks and installing ADA-compliant curb ramps.

### **TRANSPORTATION ANALYSIS**

DDOT requires applicants requesting an action from the Zoning Commission complete a Comprehensive Transportation Review (CTR) in order to determine the action'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 proposed project is located adjacent to two public alleys to the north and west, Eads Street to the south, and a vacant property to the east. Another north-south public alley bisects a portion of the site, which the Applicant proposes to close. Since the public alleys to the north and west will remain open, DDOT finds the remaining public alley network sufficient for the needs of the square. Vehicular, loading, trash, and long-term bicycle access is proposed from the two public alleys to the north and west of the site. While DDOT does not object at this time to the closure of one of the north-south public alleys, this report does not serve as the approval process for an alley closure; the Applicant must apply through the Surveyor's Order process, which will also require Council approval.

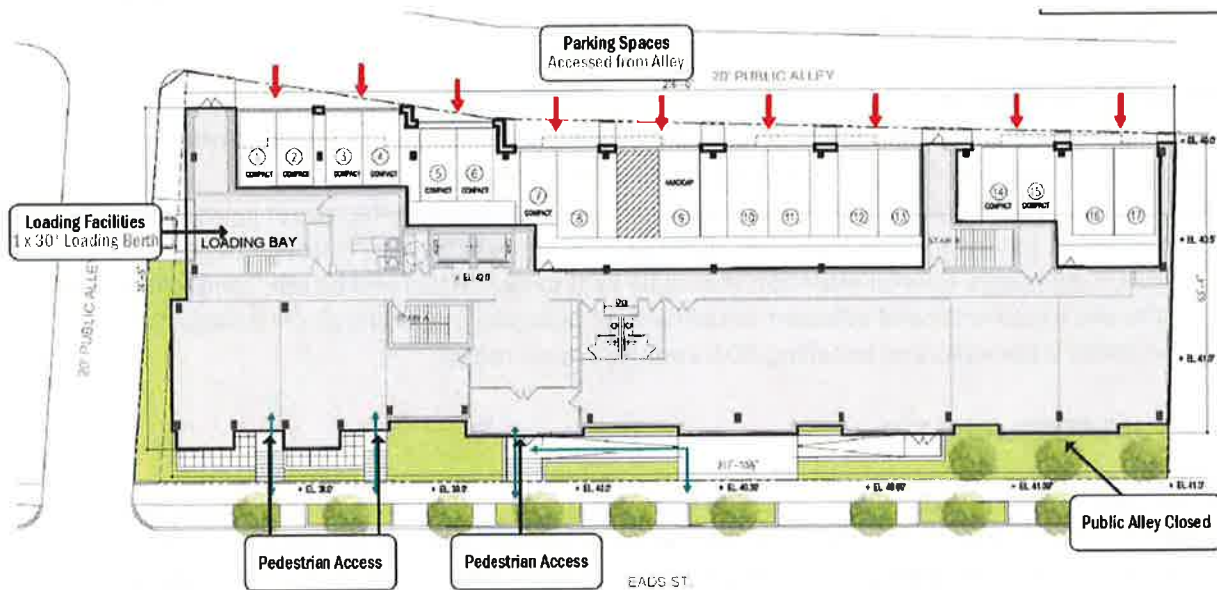


Figure 1: Site Design and Access (Source: Grove/Slade Associates)

### 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.

Zoning requires the provision of one 30-foot loading berth with a 14-foot vertical clearance and a 20-foot service/deliver space. The Applicant proposes one 30-foot loading berth with a 12-foot vertical clearance. Typical moving trucks that can be accommodated by a 30-foot loading berth are a maximum of 11 feet in height. As the Applicant noted in their CTR, in the event that a larger vehicle attempts to access the site, Emergency No Parking signs will be requested from DDOT. Trash collection will be accessed from the public alley. The Applicant also proposed the following loading management plan:

- The designated loading facility manager will coordinate with residents to schedule deliveries and to ensure conflicts with pedestrians who may be in the alley will be minimized;
- All residents will be required to schedule deliveries that utilize the loading docks – defined here as any loading operation conducted using a truck 20 feet in length or larger; and
- Should a truck that requires a clearance of greater than 12 feet need to service the development, they will be required to obtain temporary parking restrictions along Eads Street from DDOT.

DDOT finds the proposed loading design and loading management plan appropriate.

### 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.

### Heritage Trees and Street Trees

Heritage Trees are defined as a tree with a circumference of 100 inches or more and are protected by the Tree Canopy Protection Amendment Act of 2016. Non-Hazardous Heritage Trees may not be damaged or removed. A preliminary assessment by DDOT's Urban Forestry Administration (UFA) identified zero Heritage Trees on site. The Applicant should confirm the lack of Heritage Trees to ensure there are no conflicts between these protected trees, including on adjacent lots, and the proposed project. In the event that conflicts exist, the Applicant may be required to redesign the site plan in order to preserve any Non-Hazardous Heritage Trees. With approval by the Mayor and UFA, Heritage Trees might be permitted to be relocated.

### **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 to account for future growth in traffic on the network or what is referred to as background growth. The Applicant coordinated with DDOT on the appropriate background developments to include in the analysis. Only projects that are both approved and included an origin or destination within the study area are included in the analysis. Since no approved projects are within the study area, no projects were included as background developments.

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 MWCOC's regional travel demand model. The Applicant assumed an annual growth rate of 0.25% for all study area intersections other than Benning Road and assumed the following annual growth for Benning Road:

Roadway	AM Modeled Volumes		PM Modeled Volumes	
	Applied Growth	Total Growth	Applied Growth	Total Growth
Benning Road - Eastbound	2.50%	10.40%	1.00%	4.10%
Benning Road - Westbound	0.75%	3.00%	2.00%	8.20%

Figure 2: Applied Annual and Total Growth Rates (Source: Grove/Slade Associates)

DDOT finds this regional growth rate appropriate.

Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price/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.

Zoning requires 16 vehicle parking spaces for the project, and the Applicant proposes a total of 17 vehicle parking spaces, accessed along the public alley to the north.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9<sup>th</sup> Edition*. The Applicant utilized the following ITE land uses in their trip generation estimation: Residential Apartment (Code 220).

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, or transit. 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 the following mode split assumptions informed by WMATA’s 2005 *Development-Related Ridership Survey*, the U.S. Census data, and the amount of proposed vehicle parking supply. The mode split – and resulting trip generation assumptions – is reasonable for the proposed supply of vehicular parking if supported by an appropriate Transportation Demand Management (TDM) plan.

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	65%	30%	3%	2%

Figure 3: Mode Split (Source: Grove/Slade Associates)

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

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Residential	5 veh/hr	19 veh/hr	24 veh/hr	19 veh/hr	10 veh/hr	29 veh/hr
	<b>Total</b>	<b>5 veh/hr</b>	<b>19 veh/hr</b>	<b>24 veh/hr</b>	<b>19 veh/hr</b>	<b>10 veh/hr</b>	<b>29 veh/hr</b>
Transit	Residential	3 ppl/hr	10 ppl/hr	13 ppl/hr	10 ppl/hr	5 ppl/hr	15 ppl/hr
	<b>Total</b>	<b>3 ppl/hr</b>	<b>10 ppl/hr</b>	<b>13 ppl/hr</b>	<b>10 ppl/hr</b>	<b>5 ppl/hr</b>	<b>15 ppl/hr</b>
Bike	Residential	1 ppl/hr	1 ppl/hr	2 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr
	<b>Total</b>	<b>1 ppl/hr</b>	<b>1 ppl/hr</b>	<b>2 ppl/hr</b>	<b>1 ppl/hr</b>	<b>1 ppl/hr</b>	<b>2 ppl/hr</b>
Walk	Residential	1 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	0 ppl/hr	1 ppl/hr
	<b>Total</b>	<b>1 ppl/hr</b>	<b>0 ppl/hr</b>	<b>1 ppl/hr</b>	<b>1 ppl/hr</b>	<b>0 ppl/hr</b>	<b>1 ppl/hr</b>

Figure 4: Weekday Peak Hour Vehicle Trip Generation (Source: Grove/Slade Associates)

The proposed action is expected to generate a low number of vehicular, transit, bicycle, and pedestrian trips.

#### Trip Distribution and Assignment

The Applicant estimated trip distribution for the site based on: (1) CTPP TAZ flow data, (2) existing traffic volumes and travel patterns in the study area, and (3) proposed parking locations. DDOT is in agreement with the methodology used to determine trip distribution.

#### Study Area and Data Collection

The Applicant in conjunction with DDOT identified four (4) intersections where detailed vehicle, bicycle, and pedestrian counts 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 moderate to significant increases in vehicle delay. DDOT acknowledges that not all affected intersections are included in the study area and there will be intersections outside of the study area which realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

Counts were conducted on Wednesday, May 25, 2016, while Congress and DC Public Schools were in session. DDOT agrees with the time frame and collection dates.

#### **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.

Analysis provided by the Applicant indicates that the development will minimally impact travel delay in the area. Three (3) of the four (4) study intersections operate at acceptable conditions during the morning and afternoon peak hours for the existing conditions, as well as in the future, both with and without the proposed project. The intersection of 34<sup>th</sup> Street and Benning Road operates at a LOS E in existing conditions, future conditions without the development, and future conditions with the development; the development increases delay by less than one second. With the low level of vehicle trip generation, the site will not exacerbate travel delay in the study area.

### 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 proposed project is located approximately 0.9 miles from the Minnesota Avenue Metro Station on the Orange and Silver Lines. Additionally, the site is served by several high-frequency bus routes, which operate with headways in the range of approximately 6 to 30 minutes. Bus routes include: U4, X1, X2, and X3. The Applicant's review of WMATA studies shows that sufficient capacity exist to absorb the expected increase of transit trips by this development.



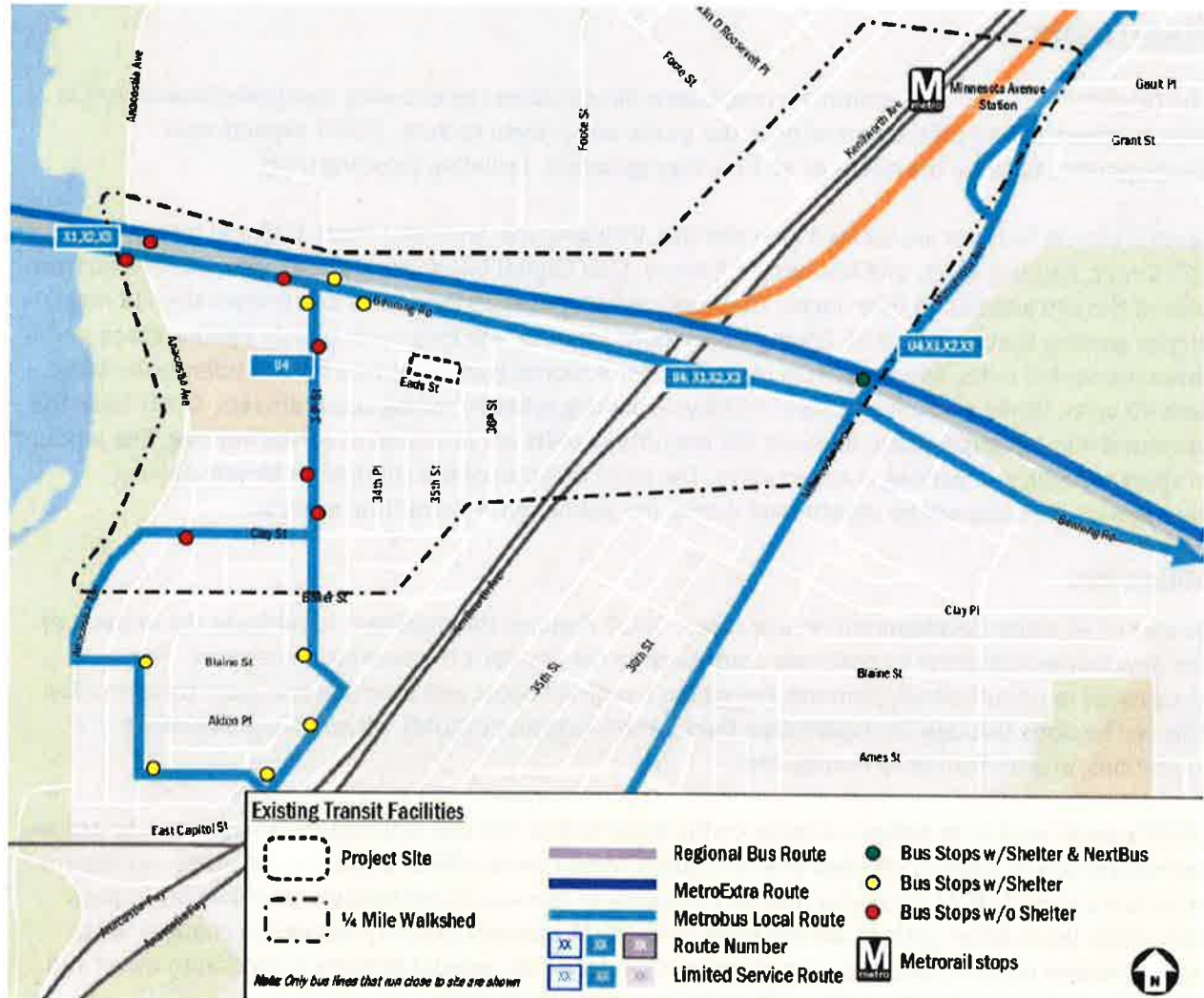


Figure 4: Existing Transit Service (Source: Grove/Slade Associates)

### 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 Applicant performed an inventory of the pedestrian infrastructure in the vicinity and noted any substandard conditions. While the existing pedestrian facilities generally meet DDOT standards for sidewalk width, there are portions of Benning Road and Kenilworth Avenue that do not have a tree space zone. The Applicant proposes to improve the pedestrian infrastructure and streetscape in front of their site.

## Bicycle Facilities

The District of Columbia 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.

Several bicycle facilities are located near the site, including the Anacostia River Trail and bike lanes along 36<sup>th</sup> Street, Benning Road, and Minnesota Avenue. One Capital bikeshare station exists within a quarter-mile of the site and has 15 bike docks. The Applicant proposes 20 long-term and 8 short-term (4 racks) bicycle parking spaces. The 2016 Zoning Regulations requires one long-term bicycle parking space per three residential units, which equates to 24 long-term bicycle parking spaces for a residential building with 70 units. While amount of long-term bicycle parking is below zoning requirements, DDOT finds the proposed number appropriate because the majority of units are intended as senior housing. The amount of short-term bicycle parking is appropriate. The exact location of the short-term bicycle parking, inverted-U bike racks will be determined during the public space permitting process.

## **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's 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 to minimize impact. 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 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:

- The Applicant will unbundle the cost of residential parking from the cost of lease or purchase of the units;
- The Applicant will install a Transportation Information Center Display (electronic screen) within the residential lobby, containing real-time information related to local transportation alternatives;
- The Applicant will offer the first tenant of each residential unit a one-time annual car sharing membership, a one-time annual Capital Bikeshare membership, or credits for use on Bridj commuter shuttles to help alleviate the reliance on personal vehicles. These incentives will be included in a move in transportation package that includes brochures for transit facilities as well as bicycle and car sharing services for the initial tenant of each residential unit;
- The Applicant will offer a one-time \$50 SmarTrip card to each initial residential tenant and employee in the building to encourage non-auto mode usage;
- The Applicant will provide a bicycle repair station;
- The Applicant will identify a TDM Coordinator (for planning, construction, and operations). The TDM Coordinator will work with residents and employees to distribute and market transportation alternatives; and
- The Applicant will provide TDM materials to new residents in the Residential Welcome Package.

DDOT finds the above TDM measures are not in accordance with other TDM plans that DDOT typically sees for similar projects. As such, DDOT expects the following modification or additional measures:

- In lieu of the Applicant providing a one-time SmarTrip card and carshare, bikeshare, or credits for a commuter shuttle service, the Applicant should provide the following:
  - For the first three years after the building opening, provide the equivalent value of an annual Capital Bikeshare membership (currently \$85) *or* credit for a commuter shuttle service equal to the value of an annual bikeshare membership to all new residents. This benefit shall be codified in rental/condominium documents; and
- The Applicant will provide updated contact information for the TDM Coordinator and report TDM efforts and amenities to goDCgo staff once per year.

JS:ei