Government of the District of Columbia

Department of Transportation







d. Planning and Sustainability Division

MEMORANDUM

TO: Sara Bardin

Director, Office of Zoning

Anna Chamberlin, AICP/ Associate Director FROM:

DATE: June 3, 2022

SUBJECT: ZC Case No. 22-13 – 4500 Massachusetts Avenue NW (Wesley Theological Seminary)

APPLICATION

Wesley Theological Seminary of the United Methodist Church (the "Applicant") seeks approval for a new 10-year Campus Plan for the period of 2022 through 2032. The Wesley Theological Seminary is located on a 9-acre site that abuts Massachusetts Avenue NW to the north and University Avenue to the west and the American University (AU) campus to the east and south. The previous 10-year Plan approved by the Zoning Commission in 2006 (ZC 05-40) was subsequently extended through 2025 in ZC 05-40A.

This Campus Plan proposes to demolish two (2) 1960-era dormitories (Straughn Hall and Carrol Hall) with 90 beds and demolish the Old President's House (including parking area, driveway and curb cut) on University Avenue and re-landscape that area, including a small neighborhood playground. The existing surface parking lot and adjacent one-story maintenance building will be demolished and replaced with a new dormitory with approximately 659 beds and 350 underground parking spaces. The new dormitory will be primarily for AU students.

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 review of the case materials submitted by the Applicant, DDOT finds:

- The proposal results in a net increase of 569 beds and 207 parking spaces;
- The campus is missing a sidewalk, curb ramps, crosswalks, and leadwalk along the east side of University Avenue NW. To improve pedestrian connectivity and access to the campus, the Applicant should install these missing pedestrian facilities and wayfinding signage on campus;
- The CTR identified impacts at the intersection of Massachusetts Avenue at Wesley Circle. In lieu of signal timing adjustments or geometric changes to the intersection, the Applicant should improve the TDM Plan with additional strategies, such as installation of the missing pedestrian facilities to encourage use of more non-auto modes (see TDM section of this report); and
- The CTR did not include a Performance Monitoring Plan (PMP), which DDOT requires of all Campus Plans. The Applicant should review and build off of the PMP approved with the prior 2006 Campus Plan (ZC 05-40A) and incorporate the items noted at the end of this report.

RECOMMENDATION

DDOT has no objection to the approval of this Campus Plan application with the following conditions:

- The Applicant shall implement a Performance Monitoring Plan (PMP) and Transportation Demand Management (TDM) plan for the life of the project.
 - The proposed TDM Plan in the April 29, 2022 CTR (Exhibit 15) will be updated with the additions noted in the TDM section at the end of this report and a PMP will be developed in coordination with DDOT.
 - Prior to approval by the Zoning Commission, DDOT requests the Applicant provide a
 'clean' document to the record that includes the final agreed to Transportation Demand
 Management Plan and Performance Monitoring Plan for inclusion in the Order. After
 the Applicant has provided a draft to DDOT addressing comments in this report, there
 may be additional feedback and revisions.

CONTINUED COORDINATION

Given the complexity and size of the Campus Plan, the Applicant is expected to continue to work with DDOT on the following matters outside of the zoning process:

- Any proposed public space improvements, including curb and gutter, street trees and landscaping, streetlights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards;
- During public space permitting, coordinate with DDOT's Planning and Sustainability Division (PSD) and Road Safety Branch (RSB) on the need for implementing any of the turn restrictions considered in the CTR study at the intersection of Massachusetts Avenue and the site driveway;
- Coordinate with DDOT's Transportation Demand Management (TDM) team and goDCgo
 regarding the implementation of the TDM and PMP programs. Submit future performance
 monitoring reports to the TDM Team for review, concurrence, and adjustment; and
- Coordinate with DDOT's Urban Forestry Division (UFD) and the Ward 3 Arborist regarding the preservation and protection of existing small street trees, as well as the planting of new street trees, in bioretention facilities or a typical expanded tree planting space.

TRANSPORTATION ANALYSIS

DDOT requires applicants requesting an action from the Zoning Commission complete a Comprehensive Transportation Review (CTR) study 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.

Site Design

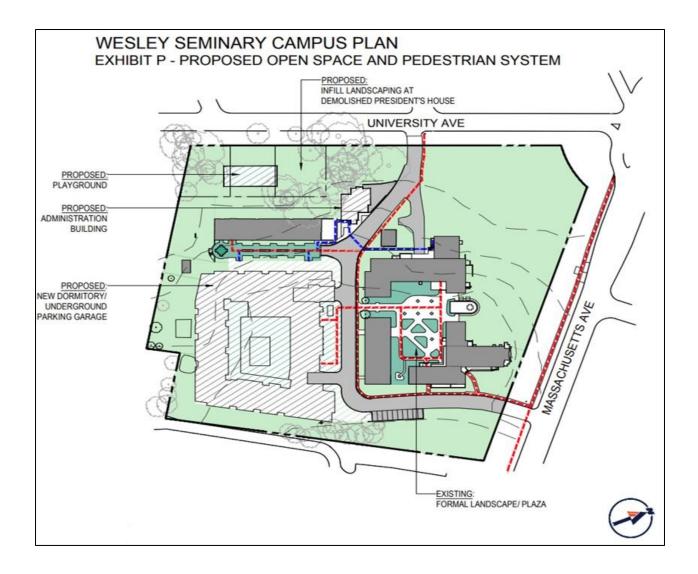
Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed 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 campus will continue to be accessed mainly through existing curb cuts on University Avenue for and Massachusetts Avenue NW. No vehicle access changes are proposed as part of the 2022 campus plan.

Pedestrian access is also mainly provided from Massachusetts Avenue as there is no sidewalk on University Avenue. There is a pedestrian connection between the Wesley Seminary and American University that is controlled by a pedestrian gate and key fob. No pedestrian access changes are proposed with the 2022 campus plan, however, DDOT is requesting the missing sidewalk, curb ramps, ADA facilities, and leadwalk be installed on the University Avenue side of Campus.

Figure 1 | Proposed Site Circulation



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. All loading including deliveries via Fed-Ex, UPS, USPS and trash pick up will be accessed through the curb cut and driveway to University Avenue. Deliveries are then distributed internally to individual buildings. Trucks are able to pull into/out of campus with head-in/head-out movements through the public sidewalk space and all turning movements occurring on private property.

Vehicle Parking

There are currently 174 vehicle parking spaces located on-campus that are used by students, faculty/staff, and visitors. 143 surface parking spaces will be removed, leaving 31 surface spaces, and will be replaced with a parking garage containing 350 parking spaces. The net change in parking as a result of the project is therefore 207 net additional spaces. The existing residential building being

removed provides 90 beds for Wesley Seminary use. The new 215-dwelling building will provide a total of 659 beds. 90 of those beds will be for Wesley Seminary use to replace the 90 beds being removed. Therefore, the new residential building will provide approximately 569 beds for non-Wesley Seminary residents. To minimize the amount of auto trips generated by the additional beds and parking spaces and encourage use of non-auto modes of travel, the Applicant should implement a robust TDM Plan, a Performance Monitoring Plan, and install missing pedestrian facilities along the University Avenue frontage. Additionally, the TDM Plan should state the number of electric vehicle (EV) charging stations to be provided; DDOT recommends one (1) for every 50 parking spaces.

Bicycle Parking

The District is committed to enhancing bicycle access by ensuring consistent investment in bicycle infrastructure by both the public and private sectors. DDOT expects the Campus to serve the needs of all trips they generate, including bicycling trips.

The Campus is proposing meet the zoning requirements for 215 dwelling units (659 beds) of 62 long-term bicycle parking spaces inside the garage and 11 short-term bicycle parking spaces. The Applicant is encouraged to work with DDOT on the short-term bicycle locations and ensure both short- and long-term bicycle parking spaces abide by the design and spacing guidelines outlined in the 2018 DDOT *Bike Parking Guide*.

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, streetlights, 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 (OP) 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 Titles 11, 12A, and 24 of the DCMR, DDOT's most recent version of the *Design and Engineering Manual (DEM)* and the *Public Realm Design Manual* will serve as the main public realm references for the Applicant.

Designs of the requested sidewalk, curb ramps, and crosswalks on University Avenue NW, as well as evaluation of the turning restrictions to/from Massachusetts Avenue will be reviewed in further detail during the public space permitting process. DDOT staff will be available to provide additional guidance during these processes and encourages the Applicant to participate in a Preliminary Design Review Meeting (PDRM) to address design related comments provided by DDOT and OP.

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.

Mode Split and Trip Generation

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, and 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, completeness of pedestrian network, proximity to transit options, availability and cost of vehicle parking, among many others.

The CTR provided trip generation estimates for 659 beds and 1,535 SF using land use categories #225 (Off-Campus Student Apartment) and #820 (Shopping Center) from the ITE Trip Generation Manual, 10th Edition. The trip generation estimates are shown in Figure 2 below.

Figure 2 | Multi-Modal Trip Generation

Mode	Mode Split	Land Use		AM Peak Hou	ir.	PM Peak Hour		
			In	Out	Total	In	Out	Total
Auto (veh/hr)	20%	Residential	5	8	13	14	16	30
	50%	Retail	1	0	1	2	1	3
(VCIVIII)		Total	6	8	14	16	Out 16	33
5757 2500	50%	Residential	16	22	38	44	43	87
Transit (ppl/hr)	25%	Retail	1	0	1	1	2	3
(ppmi)		Total	17	22	39	14 16 2 1 16 17 44 43 1 2 45 45 4 5 0 1 4 6 22 21 1 1	45	90
Bike (ppl/hr)	5%	Residential	2	2	4	4	5	9
	5%	Retail	0	0	0	0	1	1
(ppini)		Total	2	2	4	4	Out 16 1 17 43 2 45 5 1 6 21	10
Walk (ppl/hr)	25%	Residential	8	11	19	22	21	43
	20%	Retail	0	0	0	1	1	2
(PPMIII)		Total	8	11	19	23	17 43 2 45 5 1 6	45

Source: Table 2, CTR, Gorove/Slade, April 29, 2022

The above trip generation applies only during the AM and PM commuter peak hours for the proposed residential (659 beds) and retail (1,535 SF) components of the project. The project's parking facility will also serve general campus trips outside of residents and staff, much of which will occur outside of the commuter peak periods. These existing vehicular campus trips, which were established previously with turning movement counts at the site driveways, are presented in Figure 3 alongside the project-generated trips.

Figure 3 | Existing Versus Proposed Trip Generation

Mode	Land Use		AM Peak Hour			PM Peak Hour		
Mode			Out	Total	In	Out	Total	
	Proposed Residential		8	13	15	15	30	
Auto (veh/hr)	Proposed Retail	1	0	1	2	1	3	
	Net New Trip Generation		8	14	17	16	33	
	Existing Campus	25	11	36	31	37	68	
	Total Campus Trip Generation	31	19	50	48	53	101	

Source: Scoping Form, Appendix C of CTR, Gorove/Slade, April 29, 2022

Multi-Modal Network Evaluation

Pedestrian Facilities

The District of Columbia is committed to enhance 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. As such, DDOT requested the Applicant provide an inventory of the current pedestrian network conditions surrounding the site and a circulation analysis internal to the campus.

The Applicant's inventory of the pedestrian infrastructure in the vicinity of the campus, as shown in Figure 4 shows that there are significant missing connections in the study area, particularly along University Avenue. To help offset the projected increase in traffic volumes and to encourage non-automotive trave to and from Campus, DDOT requests the Applicant commit in the TDM Plan and PMP to installing the missing sidewalk along University Avenue, including the missing ADA facilities with a leadwalk into campus, and install wayfinding signage on-site for residents seeking to walk to American University campus.

Internal campus sidewalk to be removed with project Applicant coordinating with AU to maintain cross-campus pedestrian connection Land Use Types per DC Zoning Regulations of 2016 Low to moderate density residential High density residential or light commercial **Existing Pedestrian Facilities** Curb ramp meets standards Crosswak meets standards Diagonal curb ramp lacks 48* clear No emoswalk at unsignalized intersection WTS campus space or detectable warning Project site No high-viz crosswalk at suggested crossing Sidewalk meets standards O Diagonal curb ramp lacks 48 * clear No crosswalk at signalized intersection Sidewalk does not meet standards space and detectable warning Standards bood an DDOT Dosign and Engineering Manual and ADA standards.

Figure 4 | Existing Pedetrian Facilities

Source: Figure 25, CTR, Gorove/Slade, April 29, 2022

Bicycle Facilities

The District is committed to enhancing bicycle accessibility 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. Bicycling is expected to be an important mode of transportation for this project.

The Applicant will be upgrading all on-campus short-term bicycle parking to U-racks and installing an additional 10 bicycle racks due to increased demand. As shown on Figure 5 below, there are currently not many existing bicycle lanes or trails within ½ mile of the site, however there are several planned facilities in the future.

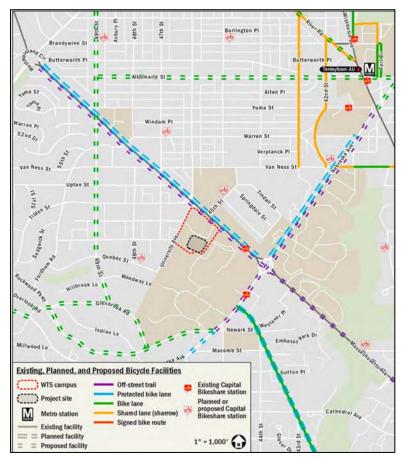


Figure 5 | Existing, Planned, and Proposed Bicycle Facilities

Source: Figure 27, CTR, Gorove/Slade, April 29, 2022

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 site is located with access to the Metrobus Route M4, N2, 4, and 6 that provides service to Tenleytown Metro Station. Additionally, the America University operates three (3) shuttles which is a free shuttle bus that provides service from Tenleytown Metro Station students, faculty/staff, and visitors.

Traffic Impact Analysis

To determine the proposed development's impacts on the transportation network, the Applicant completed a Traffic Impact Analysis (TIA) as a component of the larger CTR which includes an extensive analysis of existing conditions (2021 Existing), future with no development (2024 Background) and future conditions with development (2024 Future) scenarios.

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 and it was determined there were no major approved and funded pipeline developments near the study area anticipated to be constructed and open by 2024.

Applicants must account for regional growth through the build-out year of 2024. This can be done by assuming a general growth rate or by evaluating growth patterns forecast in MWCOG's regional travel demand model. The Applicant coordinated with DDOT on an appropriate measure to account for regional growth that accurately accounted for background growth on the network. Annually compounding background regional growth rates of between 0.10% and 2.00% were assumed in the study area, differing based on roadway and peak hour.

DDOT also requires applicants to consider future changes to the roadway network. It was determined in coordination with DDOT staff that no major changes to the local transportation network are anticipated before 2024.

Study Area and Data Collection

The Applicant in conjunction with DDOT identified seven (7) existing intersections (including the site driveways) where detailed vehicle counts would be collected 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 with the greatest potential to see impacts 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 would realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

The Applicant utilized weekday intersection traffic count data from 2012 and February 2020, prior to the COVID-19 emergency, while traffic volumes at study intersections were more representative of existing conditions. Had counts been collected between in March 2020 through 2021, they would have been unrealistically low. To replicate 2021 Conditions, an annual growth rate was applied to the volumes. DDOT is in agreement with this modified methodology given the COVID-19 pandemic's impact on traffic volumes.

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 roadway capacity analysis provided in the CTR demonstrated that one (1) study intersection (Massachusetts Avenue at Wesley Circle) triggered DDOT's Level of Service (LOS) policy which, due to the addition of site-generated traffic, either results in a degradation from an LOS D or better to LOS E or worse or an LOS F that gets worse.

The analysis concluded that no signal timing adjustments or geometric changes could improve LOS back to Background (No Build) 2024 conditions. DDOT concurs with this conclusion and recommends the Applicant implement a robust TDM Plan with performance monitoring and installing missing pedestrian facilities as a way to reduce auto travel and encourage non-auto travel.

During permitting, DDOT and the Applicant will coordinate on the need for any changes to turn restrictions at intersections near campus along Massachussetts Avenue NW. The study indicated that LOS improvements could be achieved with implementation of such restrictions at the site driveway.

Mitigations

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, a reduction in parking and implementation of 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.

The following analysis is a review of the Applicant's proposed mitigations and a description of DDOT's suggested conditions for inclusion in the Zoning Order:

<u>Transportation Demand Management (TDM) and Performance Monitoring</u>

As part of all land development 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. For all Campus Plans, DDOT's 2022 *Guidance for Comprehensive Transportation Review* (CTR) requires a Performance Monitoring Plan (PMP) be developed to monitor the campus's on-going impacts to the transportation network and have a plan in place to remedy those impacts.

DDOT finds the proposed TDM Plan in the April 29, 2022 CTR not sufficiently robust to offset the identified intersection impact, to encourage use of non-auto travel modes, or to mitigate the potential induced demand for driving from the creation of 207 additional vehicle parking spaces. The Plan should be updated to include the following elements:

- Develop a Performance Monitoring Plan (PMP), consistent with DDOT's requirement that all Campus Plans implement a PMP. It should build upon the PMP approved as part of ZC 05-40A in 2012.
 - The PMP shall address strategies for pricing and permitting of on-campus parking spaces, staggering of class schedules, establish a trip threshold (similar to 05-40A) or mode share goal, and establish hours for data collection (vehicle trips, bicycle and vehicle parking occupancy), among other criteria typically included in a PMP.
 - The PMP shall be structured consistent with examples in Appendix D of the 2022 CTR
 Guidelines with PMP criteria, parking policies, TDM strategies, and physical non-auto
 network improvements (see below).
- Prior to the Spring 2024 semester, fund and construct the following pedestrian improvements:
 - A sidewalk along the east side of University Avenue NW between Massachusetts Avenue and Rodman Street, subject to DDOT approval, with a leadwalk into campus at the site driveway.
 - All missing curb ramps, crosswalks, and signage at the intersections of University
 Avenue at Rodman Street and University Avenue at Sedgwick Street/Site Driveway,
 subject to DDOT approval; and
 - Wayfinding signage on the Wesley Seminary campus directing students to the gated connection to the American University Campus.
- In the TDM Plan, state the minimum number of long-term and short-term bicycle parking spaces to be provided. Of the long-term spaces, clarify that at least 50% will be located horizontally on the floor of the storage room, 10% will be served by electrical outlets for e-bikes/scooters, and 5% will be designed to accommodate larger cargo/tandem bikes (10 feet by 3 feet size). Each bike storage room will include a repair station; and
- In the TDM Plan, state the number of electric vehicle charging stations to be provided, if any. DDOT recommends at least one (1) for every 50 parking spaces.

DDOT requests the Applicant revise the TDM Plan to include a PMP and the above noted items. The Applicant should submit a 'clean' document to the case record that has received concurrence from

DDOT prior to the Zoning Commission taking action to approve this Campus Plan. DDOT may have additional feedback and revisions once the Applicant has provided a draft TDM/PMP.

AC:sm