

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Richard Nero
Acting Director, Office of Zoning

FROM: Sam Zimbabwe
Associate Director, PPSA *82*

DATE: November 23, 2011

SUBJECT: Zoning Commission Case 11-15
Howard University Central Campus Plan (2011)

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PROJECT SUMMARY

The President of Howard University (Applicant) has submitted, pursuant to 11 DCMR §§ 3104.1 § 210, special exception review and request for approval of its 2011 Howard University Central Campus Master Plan. The Applicant has also submitted, pursuant to 11 DCMR §§ 3104.1, 210 and 507, for special exception review and approval of further processing of an approved Campus Plan for its Central Campus. The further processing entails the construction of a residence hall at the southeast corner of the intersection of 4th and College Streets, N.W. and 4th and Bryant Streets, NW, more particularly described as Square 3068, a portion of Lot 30; and the construction of a residence hall on the east side of 4th Street, N.W., between W and Bryant Streets, more particularly described as Square 3069, Lot 66. The subject properties are in the SP-2 and R-5-B Zone Districts, respectively. The details of mitigations for the further processing application will be addressed by DDOT in a separate report.

The Howard University Campus is located at 2400 6th Street N.W. The central Howard Campus is made up of 118 acres and contains most of the University's academic and administrative activities. The campus is bounded by Harvard Street to the north; Florida Avenue to the south; 4th Street NW to the east; and Sherman Avenue to the west. The central campus is surrounded

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by the residential neighborhoods of Shaw, LeDroit Park, Bloomingdale, Pleasant Plains, Park View and Columbia Heights. The northern and eastern boundaries of the campus include the McMillan Reservoir.

One of the key inputs required to support the transportation elements of the Campus Plan is the provision of a comprehensive Transportation Impact Study. DDOT acknowledges that the Applicant has provided a copy of its Transportation Impact Study on October 28, 2011 prior to the 45 day deadline.

RECOMMENDATIONS IN BRIEF

Overall, the purpose of DDOT's review is to assess the potential impact of the project to determine if it will, "affect adversely, the use of neighboring property in accordance with the Zoning Regulations and Zoning Maps" (§3104.01). After an extensive agency evaluation, DDOT recommends approval of the Howard University Campus Plan subject to the conditions below:

- Coordinate closely with DDOT regarding the roadway design of Georgia Avenue to ensure successful improvement of transit facilities, changes to curbside parking, and minimization of vehicular delay on the corridor;
- Install a new traffic signal at the intersection of College Street and 4th Street NW;
- Further define and commit to a suite of Transportation Demand Management (TDM) measures for immediate implementation;
- Establish specific performance indicators and TDM targets, such as campus mode shares;
- Commit to an on-going, regular monitoring and reporting program of campus transportation activity, parking, and progress on TDM targets;
- Purchase and install at least one Capital Bikeshare station; and install additional bicycle parking in University garages and at building entrances.

With the anticipated addition of approximately 1000 students over 10 years, DDOT anticipates that the changes proposed in the Campus Plan will yield some modest impacts on the transportation network in terms of vehicular delay and cut-through traffic. However, DDOT believes these impacts can be significantly mitigated. Moreover, many of the changes proposed in the Campus Plan will create a net positive benefit for the transportation network and neighborhood connectivity.

TRANSPORTATION ANALYSIS

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. Central to this vision is improving energy efficiency and modern mobility by providing next generation alternatives to single occupancy driving in the city. As

one means to achieve the agency mission, DDOT works through the zoning process to ensure that new land development is compatible with a multi-modal urban transportation system.

The following analysis evaluates the Applicant's Transportation Impact Study (TIS) to determine its accuracy and consistency with District policy goals.

STRATEGIC PLANNING

As noted, DDOT expects all Applicants undergoing zoning review to conduct a comprehensive multi-modal evaluation of the impacts of proposed action. In the case of the Howard University Campus Plan, the Applicant has performed its Transportation Impact Study in accordance with DDOT and national standards specifically outlined in the *DDOT Design and Engineering Manual*, and in light of DDOT staff direction. The study has taken into account planned land developments in the immediate vicinity as well as regional growth forecasts established by the Metro Washington Council of Governments (MWCOG). A more detailed review of the Applicant's TIS Methodology can be provided upon request.

The TIS must consider and apply direction from the District of Columbia's primary planning documents including the DC Comprehensive Plan, Small Area Plans, Modal Master Plans, Corridor Plans and other relevant publications. In this case, the Duke Small Area Plan, approved by the DC Council, contains several pertinent recommendations related to the street network. In particular, it highlights the need for re-establishing key east-west connections through the Howard University campus to enhance porosity through the site and improve neighborhood linkages.

In the most current Campus Plan submission, Howard University shows the reconnection of Bryant Street between Georgia Avenue and Sherman Avenue; W Street between Georgia Avenue and 9th Street NW; and College Street between Georgia Avenue and 6th Street NW. These elements represent a major achievement and the result of extensive negotiations between the District and the Applicant. Howard University deserves commendation for working these rights of way into their plans for redevelopment of campus properties.

The Georgia Avenue – Great Streets planning effort also requires special attention and is described below.

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. Analysis provided by the Applicant suggests that the traffic impacts of trips produced by the Campus Plan will produce modest increases in delay.

Georgia Avenue is a major arterial in the District of Columbia network and an evacuation route. The land use along the avenue is primarily commercial but also serves as a major connection between the Central Business District and Montgomery County in Maryland. In an effort to tie

together the community and the business along Georgia Avenue, the District embarked on a major planning effort six years ago that would eventually transform Georgia Avenue into a "Great Street" destination for residents and visitors alike. The Great Streets plan identified a section of Georgia Avenue between Florida Avenue and Barry Place as a potential segment to implement a transit-only (dedicated bus) lane to serve the high number of transit users in this area. Last year DDOT was awarded federal grant money to implement the transit-only lane and is now in the latter stages of engineering design.

The TIS demonstrates that Georgia Avenue will experience serious delay at the intersections along the campus frontage. In order to mitigate this outcome, the Applicant explores several possible scenarios in the TIS. Scenarios that remove the transit-only lane are not viable options for accommodating increased trips created by the Howard University Campus Plan. At this time, the Applicant must assume the transit-only lane as a baseline condition for traffic analysis. The remaining possibilities in the TIS follow:

- 1) Add left turn lanes to Georgia Avenue: As suggested, this scenario would install turn lanes within the existing roadway and assign five lanes of travel between Florida Avenue and Barry Place. Unfortunately, there is not enough space available in the current cross section to accommodate this proposal; at minimum DDOT would need 52' in curb to curb width. Georgia Avenue is classified as a major arterial that carries all classes of vehicles; and 9-10 foot lanes would not provide adequate and safe clearance. DDOT can explore the possibility of setting back buildings with the Applicant to allow left turn lanes, but DDOT understands this option is constrained and possibly undesirable for the University.
- 2) Restrict left turns: As suggested, this scenario would restrict left turn movements at the intersections of Barry Place, Bryant Street, W Street, and V Street. DDOT believes that a variation of this option may be the most realistic way to deal with the forecast congestion and protect successful operations of the transit lanes. However, DDOT does not expect that the left turn restrictions would be designed / implemented in the manner described in the TIS.

Because DDOT is currently in design of Georgia Avenue, DDOT will continue its coordination with Howard University and determine the best way to address left turn restrictions and other operations, signal timings, etc. related to the side streets. Preliminary ideas on the matter include peak-period left turn restrictions onto the side streets, while allowing through and turning movements coming out of the side streets.

Additional changes to curbside management have been proposed by the Applicant.

- 1) At Sherman Avenue and Barry Place, the applicant requests restricting on-street parking on the southbound approach during the morning peak periods to improve traffic flow. At this time Sherman Avenue is being reconstructed and the curb line will be moved, resulting in only one through lane in each direction. DDOT will determine if this

proposed mitigation is feasible once Sherman Avenue is finalized and additional observations are made. If deemed appropriate, the related signal and roadway design changes will be the responsibility of the Applicant.

- 2) At Georgia Avenue and Barry Place, the Applicant requests removing 2-3 parking spaces along the eastbound approach to install a new left turn lane. This mitigation measure would improve operations however there are safety concerns that require additional analysis. DDOT and the Applicant will need to resolve this through the Georgia Avenue transit-lane design process referenced above. If the action is deemed appropriate it will be the responsibility of the Applicant.

Finally, the Applicant has determined that the Campus Plan (will generate additional vehicular and pedestrian traffic at the intersection of 4th Street and College Street and necessitate a new traffic signal. DDOT concurs with these findings and notes that this mitigation will be the responsibility of the Applicant, as well as any additional warrant studies if desired by DDOT's Transportation Operations Administration. A new signal will not only address vehicular delay but will improve the quality and safety of pedestrian crossing for Howard students and DC citizens alike. The Applicant must install the signal in advance of opening the first of the two proposed Residential Halls.

BICYCLE AND PEDESTRIAN FACILITIES

The District of Columbia is committed to enhancing the walk-ability and bike-ability of the city by ensuring consistent investment in pedestrian and bike infrastructure on the part of both the public and private sectors. DDOT generally expects new developments to serve the needs of all trips they generate, including pedestrian and bicycle trips.

As discussed in many of DDOT's meetings with the Applicant, increased bicycling demand is expected to occur as a consequence of the Campus Plan and current trends in the District. DDOT has requested that Howard University install at least one Bikeshare station in the central campus in order to help meet this demand and connect with new activity centers and residential nodes where Bikeshare bicycles and docks have already been installed.

The TIS identifies three locations for possible Bikeshare stations – near the intersection of W Street and Georgia Avenue, the intersection of 4th and Bryant Streets, and the intersection of 6th Street and Howard Place. These locations are recommended because of their close proximity to activity centers, residential halls and proximity to the campus academic core. DDOT will work the Applicant to situate and install, at the expense of the University all at least one, and preferably three Bike share stations.

Furthermore, bicycle parking and storage demands will increase in conjunction with the new campus buildings and the growing number of bicycle trips. Existing parking is limited and the parking that is available does not comply with DDOT standards. The Applicant must comply

with zoning standards for interior bicycle parking, and exterior parking racks (on the order of 20 spaces per building) at building entrances.

TRANSIT SERVICE

The District in cooperation with the Washington Metropolitan Transportation Authority (WMATA) has 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 well served by both local and regional public and private transit. The Shaw/Howard and U Street/Cardozo stations are about half a mile from the main campus providing access via the green line to Downtown and Prince George's County. Additionally, high frequency express and local bus service connect the site north into Maryland and south into downtown through Georgia Avenue/7th Street. Additional local service connects the site to other portions of the District. Transit accessibility and level of service to the site can be described as excellent.

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, and proximity to transit. With the Howard Campus location in such proximity to high quality transit, there is a tremendous opportunity to reduce demand for parking, and to limit vehicle trips, which are shown to create significant delay on area roadways, particularly Georgia Avenue.

The existing parking facilities at the Howard Central Campus are substantial and result in an oversupply of parking. The number of parking spaces currently attached to the Howard University campus, excluding Howard University Hospital, is 2,295 spaces spread over 36 facilities. Of those spaces, on average only 1,748 are used through the year. The proposed Campus Master Plan plans to reduce the number of available parking spaces to 1,400 by year 2021. This represents a reduction of supply of approximately 900 available spaces and a practical reduction of approximately 348 vehicles on site.

DDOT feels that a reduction of 348 or 20 % is insufficient to generate a dramatic change in the existing vehicle mode share. DDOT believes that parking demand for the Howard Campus could be significantly lower than 1,400 spaces. DDOT supports a reduction to 1100 spaces based upon the Applicant's TDM plan and expectations of mode splits. The existing parking facilities number does not include additional curb side metered parking along most of the streets that surround and crisscross the campus. The amount of curbside parking within the Campus Plan is sufficient to support any overflow parking needs which can be managed by meters.

DDOT believes that reducing the on-site parking and combining that with managing curbside parking will help minimize the vehicle trip generation and delay associated with the site and the potential impacts to the area. DDOT would recommend that on-site parking be limited to a maximum of 1,100 spaces in order to minimize impacts of the project on safety and circulation in the vicinity of the project.

Interestingly, the majority of the student body is taking the Howard Shuttle Bus or walking to school with only 9% using private vehicle as a transportation mode. These numbers reflect that faculty and staff use most of the parking spaces currently available and, as such, opportunities for TDM and mode share goals can be focused on this group.

Given the on-site campus parking resources, DDOT does not anticipate a substantial problem of spillover pressure on public curbside parking in surrounding neighborhoods. However, DDOT understands that new development on Campus and a market based approach to private parking on could lead to increased demand on surrounding residential streets. The Applicant must conduct periodic reviews of impacts to residential parking and, as necessary, propose measures to manage curbsides in light of future conditions. If it is determined in conjunction with area stakeholders and DDOT that impacts to neighborhood parking is unacceptable, then it will be the responsibility of the Applicant to fund changes to curbside regulations and/or additional TDM measures.

STREETSCAPE / 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 & gutter, 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 OP to ensure that the design of the public realm meets current standards, and will substantially upgrade the appearance, functionality and safety of the streetscape for public users needing to access the property or circulate around it. Final decisions will be made on these elements through the Public Space Permitting process.

The *DDOT Public Realm Design Manual* will serve as the main public realm reference for the Applicant; and the *DDOT Design & Engineering Manual* will serve as the main reference for roadway design related to loading, access, and other typical interactions with public space. DDOT staff will be available to provide additional guidance.

In addition to meeting transportation needs, public rights of way also serve a critical role in storm water retention and expansion of tree canopy. This function must also be considered in street design and meet best management practices laid out in Green Streets literature and the *DDOT Standard Specifications for Highways and Structures* (Blue Book).

TRANSPORTATION DEMAND MANAGEMENT

As part of all major development review cases, and in particular Campus Plan submissions, DDOT requires the Applicant to produce a Transportation Demand Management (TDM) Plan. 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 TDM is a critical component of the Howard University Campus Plan, as there is demonstrated need and significant opportunity to modify travel behavior and reduce car dependence on site. However, the Applicant did not submit its TDM plan until November 21, 2011, and DDOT has not had an adequate opportunity to discuss with the Applicant. DDOT appreciates the comprehensive nature of the plan, which thoroughly details existing conditions on campus, existing TDM strategies and proposed additional TDM strategies. DDOT supports the plan in principle, but would like to better understand what commitments the Applicant intends to make. Preliminary comments on specific items include:

- **TDM Culture:** The proposed TDM Coordinator should be required to meet regularly (at least annual y) with goDCgo staff. DDOT would like the Applicant to ensure that annual TDM monitoring reports are forwarded to DDOT.
- **Shuttle Service:** DDOT commends the extensive Howard University shuttle system that provides a valuable service to faculty, staff and primarily students. The University has committed to improve existing shuttles, including service to metro. DDOT would like to see what these planned improvements are and how it will impact mode split.
- **SmartBenefits:** According to the TDM Report, less than 6% of faculty and staff take advantage of the available SmartBenefits pre-tax program. This percentage is even less than the campus bus and rail mode split. DDOT would like to see a commitment to increasing the use of SmartBenefits that will result in a higher transit mode split for faculty and staff.
- **Parking Management:** DDOT fully support doubling the cost of annual faculty and staff parking permits from \$400 to \$800 for a reserved permit and from \$300 to \$600 for a non-reserved permit. DDOT suggests that this increase should be for all permits issued and not just at high-demand parking lots. Despite the fact that the drive alone rate for students is significantly less than for faculty and staff, DDOT also suggests considering raising the cost of parking permits for students. The current student rate translates to \$20 a month and at such a low cost, does little to discourage driving to campus. Additionally, as changes are being made to the parking program, this would be an ideal time to implement a carpool program which provides discounted or preferred parking to registered carpools.

- **Capital Bikeshare:** There are approximately 84 Capital Bikeshare stations scheduled to be installed in the District over the next 12-18 months. None of those stations are slated to be placed on Howard University Campus. With budget constraints it is unlikely that stations will be placed on campus without a financial commitment to Capital Bikeshare. DDOT suggests that the University fund new bikeshare stations on campus as well as subsidized memberships for students. Membership fees could be rolled into student fees. DDOT is willing to provide a discounted rate for Howard students, faculty, and staff.
- **Annual Monitoring and Reporting:** DDOT would like the Applicant to devise and commit to a clear set of monitoring and reporting tasks and targets related to TDM; not meeting these targets result in the implementation of additional TDM measures.

SAFETY

DDOT requires that the Applicant conduct a safety analysis to demonstrate that specific land developments will not create or exacerbate new or existing safety issues for all modes of travel. DDOT asks for an evaluation of crashes at intersections within the study area and an analysis of the public space in the immediate vicinity of the site. As further processing continues and specific projects approach final design and the public space permit process, DDOT expects the applicant to submit designs for the public space that address safety concerns. These plans will include design elements of the public realm that address site specific safety concerns. This includes and is not limited to:

- Reference to existing Highway Safety Improvement Reports within the Campus Plan including a brief analysis and end conclusion;
- Details (drawings: pavement marking and signage plans existing and proposed, site pictures, etc.) of proposed improvement, including an evaluation for the purpose of proposing engineering countermeasures intended to reduce crash occurrence, injury severity, property damage, as well as minimize conflicts between pedestrians and vehicles;
- Details of proposed safety improvements; transportation mobility, accessibility, and minimize traffic congestion;
- Descriptions of the location for each bus stop including a detailed analysis and site assessment and in conjunction with DDOT and WMATA, a plan for relocating any stops that have safety issues. For example - relocating the existing Mid-Block Bus stop, located between Euclid Street and Howard Place; and near side locations to far side locations for Georgia & Florida; Georgia and V.;
- Sight distance analysis - near-side and far-side parking restrictions, the trimming bushes, trees, and cutting vegetation, at the intersections adjacent to the Howard University Campus shall be done according to DDOT intersection sight distance standards (ISD);

- All existing driveways must be restored with new curb and gutter, tree space and sidewalk;
- All infrastructure including intersection wheelchair ramps must be upgraded to comply with current ADA guidelines.

CONCLUSION

In conclusion, based upon the careful evaluation of Howard University's Campus Plan application, DDOT supports the proposed developments on the Howard Central Campus. DDOT does expect the changes on campus to result in some impacts to the roadway network, which will require mitigation on the part of the Applicant. Adjustments to specific facilities include a new traffic signal at the intersection of College Street at 4th Street NW, and operational improvements on and around Georgia Avenue (in coordination with DDOT). The other mitigations are centered on reducing the overall vehicular trip generation through aggressive TDM actions. Many of these actions have been outlined in the body of this report, but require additional information from and interaction with the Applicant.