GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF PUBLIC WORKS

OFFICE OF INTERMODAL PLANNING

Memorandum

To: Jerrily R. Kress, FAIA
Director
Office of Zoning

From: Kenneth Laden
Administrator

Date: June 8, 2000

Subject: BZA Application No. 16566 – Review and Approval of the Georgetown University Campus Plan for Years 2000-2010

The Department of Public Works (DPW) has reviewed the Georgetown University Campus Plan for the years 2000 – 2010. This report addresses the transportation elements of the proposal.

The Proposal

The Campus Plan proposes to add 1,272,263 square feet of gross floor area by the year 2010. This additional space includes 739,527 square feet of academic/administrative space, 88,500 square feet of residential/campus/athletic space and 444,236 square feet of medical/health care space.

According to the applicant, the undergraduate enrollment is expected to increase from the current student cap of 5,627 full time equivalent to a revised student cap of 6,016 full time equivalent students, or an increase of 389 new full time undergraduate students above the present cap. Likewise, full time equivalent graduate students will increase from the current 2,589 to 3,873, or an increase of 1,284 graduate students. The University anticipates changes in faculty and staff levels and projects future levels at 6,687 on-campus employees compared to the current 5,621 on -campus employees, an increase of 1,066. Finally medical visitors are expected to increase from 2,243 per day to 3,000 per day. The anticipated future total of students and faculty/staff will remain below the current approved ceilings.

BZA
Case No. 16566
Exhibit No. 57

Board of Zoning Adjustment
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CASE NO.16566
EXHIBIT NO.57

Daily visitors to the University and to the Hospital will increase from the current 2,650 to 3,488 visitors. It should be noted that the main increase is due to the proposed new physician office building, which will generate approximately 540 daily visitors. The number of parking spaces will be maintained within the 4,080 spaces established as a cap by the Board under the 1989 Plan.

The Transportation System

The Georgetown University is served by several streets which include Reservoir Road, a minor arterial street adjacent to the campus on the north, Canal Road, a principal arterial on the south, and several local residential streets on the east side, such as Prospect Street, 37th, 36th, O, and P Streets. Parking on most of these streets is controlled by Residential Permit Parking requirements. The University is not directly served by the Metrorail system, but several Metrobus routes operate within walking distance from the campus. They include the G2, D1, D2, D6, 30, 32, 34, 35, 36, and 38B. Some of these routes connect the Georgetown University campus to the Metrorail System at Dupont Circle, Tenleytown and the Foggy Bottom GWU Stations. In addition, the University operates its own transit system known as the Georgetown University Transportation Society (GUTS). Presently, the fleet has 14 buses and link the campus to both the Rosslyn and Dupont Circle Metrorail stations as well as North Arlington, the Law Center in Downtown and Wisconsin Avenue. According to the applicant, GUTS ridership increased from 54,065 in 1990 to 828,000 in 1999.

The Impact of the Proposal

Our transportation impact analysis includes the following:

- Efforts to minimize the impact of traffic generated by the University,
- Traffic circulation and level of service, and
- Parking facilities

Minimizing Traffic Volume and Impacts

The Department believes that one of the best and most effective ways to minimize traffic to and from the campus is to provide on-campus housing for students presently living off-campus. Currently, the University has 4,273 beds on campus with an undergraduate student population of 5,516. Accordingly, the University was able to house approximately 77 percent of the undergraduate student body.

With the implementation of the Southwest Quadrangle housing, 780 beds will be added to the existing inventory for a proposed total of 5,053 beds. Based on the projected enrollment, the University would house approximately 84 percent of its undergraduate students. In the Department's opinion this would have an extremely beneficial improvement on local traffic.

A second most effective way to decrease traffic volume to and from the campus is to encourage the use of the available public transportation and the GUTS by both the University's faculty/staff and the Medical Staff. We recognize the effort made by the University during the last 10 years with respect to the use and expansion the GUTS service. The May 30, 2000 Traffic and Parking Analysis prepared by Gorove/Slade Associates for the University provided the results of a transportation mode choice survey which found that 52% of University faculty and staff drove to work (another 10% arrived as automobile passengers). 47% of the medical staff drove automobiles and another 13% arrived as automobile passengers.

We encourage the University to continue its efforts to promote the use of mass transit and its shuttle bus service, especially among University and Medical Center faculty and staff. Encouraging these staff to use mass transit or other non-vehicular options would reduce traffic congestion on Reservoir Road.

Traffic Circulation and Level of Service

We have examined the traffic flow in and around the north campus. The Department notes that approximately 93 percent of the morning and evening peak automobile traffic flow occurs along Reservoir Road, a minor arterial street in the area. University related traffic flow along 38th and 39th Streets adjacent to the campus are respectively 9 percent and 2 percent. In our judgement, this amount of traffic is not significant to cause adverse traffic impact in the residential area. However, Reservoir Road suffers from traffic congestion, especially during the morning and evening peak hours, which severely affects local residents' ability to access Reservoir Road. The Department is currently investigating alternative traffic management strategies designed to reduce overall congestion on Reservoir Road in cooperation with the University, MedStar and local residents.

With regard to capacity and level of service, the applicant has performed a capacity analysis at the intersections of Reservoir Road and Foxhall Road and at 37th, 38th, 39th Streets and at the University entrances. The results of the analysis indicate that key intersections operate at different levels of service during both the A.M. and the P.M. peak hours. It is observed that most of the intersections approaching and leading to and from the campus operate at a level of service C or better. The worst congestion occurs at Reservoir Road and University Entrance 4 where the northbound approach operates at level of service E for the morning peak hour, and D for the evening peak hour. The northbound approach at Reservoir Road and Entrance 3 operates at a level D during the morning peak hour. The northbound approach to Reservoir Road and Entrance 2 operates at a level of service E during the morning peak hour. Finally, the intersection of Reservoir Road and Foxhall Road is currently operating at level of service F during both A.M. and P.M. peak hours. The applicant's traffic analysis found that the level of service at most intersections remained unchanged under the proposed campus plan. At Reservoir Road and Entrance 1, the morning level of service would decrease from B to C. The morning level of service at the French Embassy entrance decreased from C to D.

As part of a long-term effort to reduce University traffic impacts on Georgetown neighborhood streets, the District government is planning proposed improvements to the south entrance of the campus on Canal Road. Some of the traffic currently approaching the campus via Reservoir

Road may shift to the modified Canal Road entrance. Construction of the Canal Road improvements should begin in the spring of 2001.

Hillandale Homeowners Association Comments

The Hillandale Homeowners Association has asked a traffic consultant, Joseph Cutro, to review and comment upon the Georgetown University Campus Plan and the traffic impact analysis. The major concerns expressed in the report are that:

1. there are discrepancies in data presented by the applicant and the District government regarding the peak hour traffic along Reservoir Road,
2. increases in generated traffic is understated in the applicant's report,
3. transition of the management of the hospital to MedStar is not adequately assessed, which may increase traffic at key intersections, and
4. the applicant did not adequately assess traffic impacts on other local streets.

While there are some discrepancies in data based upon different sources, we believe that these differences result from traffic monitoring during different periods of time. We do not feel this affects the overall findings of the applicant's traffic report in that they generally used the higher (worst case) scenario in their findings.

We believe that the most accurate method of calculating future traffic generation is to look at new student, faculty and staff projections and compare them with current mode of travel to determine parking and traffic impacts.

Population Type	Current	Future Projection	Change
Undergraduate students	5,627	6,016	389 (.06%)
Graduate students	2,589	3,873	1,284 (50%)
Academic faculty & staff	3,184	3,730	546 (17%)
Academic visitors	407	488	81 (20%)
Hospital/Clinic staff	2,437	2,957	520 (21%)
Hospital/Clinic visitors	2,243	3,000	757 (34%)

Investigating the modal split for each population type, the undergraduate student population would have negligible impact on traffic and parking due to its small increase and limited automobile usage. Based upon the March 2000 modal survey, approximately one quarter of the graduate students would be expected to arrive by car, or approximately 308 new trips per day. This is the largest single increase in anticipated traffic generation. Since some graduate students are only preparing thesis or are taking a smaller number of courses, we would not expect that some of these graduate students would not attend class every day. Also, most if not all of these students would park in the south campus parking lot. While we would expect much of this traffic to be non-peak hour, we encourage the university to increase the mass transit usage among this population.

Approximately half of the academic faculty and staff arrive by vehicle, representing 284 new trips per day. Again, we would expect these trips to be scheduled throughout the day, and thereby not cause significant peak hour congestion. Approximately one quarter of the academic visitors arrive by motor vehicle, therefore this population type would generate approximately 19 new trips per day.

Approximately half of the hospital and clinic staff mode of choice is motor vehicle, therefore approximately 244 new trips per day would be expected. Again, we would expect these trips to be scheduled throughout the day, and thereby not cause significant peak hour congestion. Approximately 30 percent of patient visitors arrive by motor vehicle, therefore we would anticipate another 220 trips per day from this population. We would also expect this group would generally arrive throughout the day, and not during peak hours.

In summary, it would appear that under a total maximum population, using worst case travel assumption, approximately 1,075 new vehicle trips per day could be generated by the new population capacity of the university and medical complex. Generally we would anticipate that 10 percent of these daily trips would occur during peak hours. Approximately 308 new graduate student vehicle trips would be confined to the south campus parking area. We would not expect all drivers to travel to the university each day, and these vehicle trips would be spread out throughout the day. Therefore while the campus plan does project increases in traffic, we do not believe that this increase will significantly impact peak hour congestion on Reservoir Road. We strongly urge the university to increase graduate student and faculty and staff use of non-vehicular modes of transportation.

The transfer of the hospital to MedStar management is not as critical a factor as the anticipated traffic generated by the health care facilities located on the campus. Therefore we feel that the applicant adequately addressed this issue.

With respect to traffic on local streets, we feel the applicant adequately addressed this issue in the final report, showing very limited university related traffic on local streets. Our primary concern regarding the local streets is the difficulty residents have in accessing Reservoir Road during peak hours congestion on Reservoir Road.

Parking Facilities

The University maintains 4,029 on campus parking spaces, including 1,535 marked spaces on the main academic campus and 2,494 marked and stacked spaces on the north campus. This number of parking spaces is adequate for peak demand requirements. Future parking capacity is expected to increase slightly to a cap of 4,080 spaces. The campus plan calls for a significant reallocation of university-related parking to hospital-related parking.

An on street parking survey conducted by the applicant found that on the weekday surveyed, approximately one third of the available curb spaces were unoccupied, one third were occupied by cars with Ward 2 residential parking stickers, and one third were occupied by cars with no residential parking stickers. A weekend survey found approximately half of the curbside spaces were unoccupied and approximately one quarter of the spaces were occupied by cars with Ward

2 residential parking stickers and the remaining quarter of the spaces were occupied by cars without residential parking stickers. We would recommend greater enforcement of parking regulations in this area by Department of Public Works parking enforcement staff.

Realignment of Entrance #1 with 38th Street

The Department recommends the realignment Entrance #1 and 38th Street N.W. to improve traffic and pedestrian safety. We would require, however, that Entrance #1 be designed with channelization (and signage) to require all vehicles using this entrance to leave the university to turn either left or right, to eliminate cut-through traffic on 38th Street. The Department would require review and approval of the new alignment proposal.

Conclusion

The Department finds that the proposed Georgetown University Campus Plan will result in an increase in traffic generation at both the northern and southern entrances. However, much of this increase in traffic should be spread throughout the day, and should not significantly impact peak hour traffic congestion. The Department encourages the university to increase its efforts to encourage graduate students, faculty and staff to use non-vehicular modes of travel as much as possible to reduce overall congestion.

The Department, working with the university and local residents, will assess overall congestion on Reservoir Road, and will seek to implement traffic management and parking modifications to reduce congestion, especially during peak hours. The Department will also examine the potential of imposing parking restriction on the east side of 39th Street north of Reservoir Road.

The Department recommends the modification of Entrance #1 with 38th Street, with channelization and signage to restrict cut-through traffic on 38th Street.