Traffic and Parking Assessment

Georgetown University
McDonough School of Business and Multisport Facility

November 8, 2005

Prepared For:
Georgetown University
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Washington, D.C. 20057-1175

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ZONING COMMISSION
District of Columbia
CASE NO.05-31
EXHIBIT NO.17D



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EXECUTIVE SUMMARY

The following report presents the findings of a traffic and parking assessment for Georgetown University specifically due to the development of two proposed new GU buildings: a McDonough School of Business and a Multisport Facility.

In 2000, Georgetown University adopted and the Board of Zoning Adjustment (BZA) approved a Campus Master Plan that addresses parking and traffic impacts due to new development on the campus. The Transportation Management portion of the Campus Master Plan included several key components such as:

- A parking cap which places a maximum on the number of parking spaces creating a finite limit on personal vehicle use;
- An effective public transportation policy and the provision of bus service;
- A set of parking policies which discourage personal vehicle use, but at the same time encourage those who drive to park on campus rather than in the adjoining neighborhoods; and
- Other demand management measures that complement the University's student housing policies to minimize the University's community impacts on traffic and parking.

Based on other Gorove/Slade studies for Georgetown University analyzing peak hour traffic volumes, as well as from the collection of additional parking and traffic data collected on-site during the fall 2005 Homecoming Weekend, we conclude that the McDonough School of Business and a Multisport Facility will not increase vehicular traffic and will not create additional parking demand on the residential streets surrounding the University's main campus. There will be some minor change to traffic patterns internal to the Georgetown University campus with the relocation of 194 parking spaces to a proposed parking garage to be constructed with the McDonough School of Business. The change in traffic patterns will occur at off-peak times when demand on the local roadway network is not at its greatest.

INTRODUCTION

This report presents an assessment of traffic and parking impacts for the planned construction of a new McDonough School of Business (MSB) facility and a new Multisport Facility (MSF) at Georgetown University's (GU) main campus in the Northwest Quadrant of Washington, D.C. The primary purpose of this study is to evaluate the local parking and traffic impacts of the MSB and MSF developments on the surrounding roadway network and on neighborhood residents.

The MSB facility will consist of a 171,051 square foot, 5 story academic building and a 194 space parking structure. The project is expected to be completed in the summer of 2008. The MSB will provide the physical infrastructure to house all business programs, teaching, staff, classroom, and informal meeting facilities within a single building. The facility will signify the University's commitment to state-of-the-art business education and support educational quality at a level commensurate with peer institutions. The facility will allow the University to fulfill major objectives related to its academic mission and student life.

The MSF will be a 41,397 square foot structure and is expected to be completed in August 2008. The facility will be a new sports facility for football, lacrosse, and soccer including support spaces and seating for 4,500 people. The existing facility is in roughly the same location (Harbin Field) and includes a field and stands for 3,700 people with no support facilities. The new MSF will include locker rooms, training rooms, concessions, restrooms, press boxes, and other related spaces. The new MSF will not have parking, but most of the spectators at the various events are students on campus who walk to the facility. Almost all of the events will be scheduled for evenings or weekends.

As part of this assessment, the following tasks were completed:

- Performed a peak hour volume traffic analysis for both the MSB and MSF as part of the Environmental Impact Screening Form (EISF);
- Collected traffic data and parking observations during the fall 2005 Homecoming Weekend to identify traffic and parking issues associated with this worst-case scenario event that occurs just once per year; and
- Reviewed GU's campus-wide parking and transportation management policies, including interviews with University officials and collection of background information.

EXISTING PARKING CONDITIONS

Campus parking facilities are gated and monitored closely to prevent unauthorized persons from parking on campus. All undergraduate and graduate students who live in campus-owned housing are not permitted to have vehicles on campus. Students who reside in the District and areas in Northern Virginia with good transit access are not permitted to use on-campus parking facilities. A limited number of spaces are available for commuter students at satellite lots in Rosslyn, Virginia. Georgetown University Transportation Shuttle (GUTS) service connects these lots to the main campus. Most commuter students commute to campus on foot, bicycle, GUTS or via Metrobus.

The campus parking policy has been effective in limiting the number of students commuting via private vehicle. A parking cap of 4,080 parking spaces was set as part of the 2000 Campus Master Plan. For instance, the Main Campus Office of Transportation Management has issued only 9 full-time parking decals to commuter students for the 2005-2006 Academic Year. The remaining spaces are for the use of staff, faculty, and visitors to the University.

The University has also instituted visitor-parking policies aimed at limiting the number of drivers, but encouraging those who do drive, to park on campus. Further encouraging visitors to park on campus is the fact that street parking around campus is severely limited and strictly enforced by the D.C. police (MPD) and the D.C. Department of Public Works (DPW). Most streets require a Zone 2 residential permit issued by the District of Columbia for on-street parking longer than two hours. A limited number of metered spaces are available on Reservoir Road, 37th Street, and Prospect Street.

Most on-campus visitor parking is located in the Southwest Quadrangle Garage or in the Leavey Center. Visitor parking on campus is limited, but permits can be obtained from the parking attendant upon entering the University on an hourly or daily basis. Off-campus students can drive and park on campus occasionally as visitors, but during daytime hours, visitor parking rates are $12 per day, which is not conducive to daily student use. Graduate student parking is $2 after 5:00 p.m. weekdays and free all day on Saturdays and Sundays. The reduced parking rates, strict enforcement, and available parking during the evenings and weekends encourage visitors and evening graduate students to park on campus and not in the community.

EXISTING TRANSPORTATION CONDITIONS

The GU Campus is divided into northern and southern sections and the roadway networks of each section are physically separated. The northern portion of the campus houses the University Medical Center and Hospital and is used primarily for medical purposes. The southern portion of the campus, or the main campus, is used primarily for academic purposes. Both the new MSB and MSF buildings will be located in the southern portion of the campus. The current vehicular entrances to the main academic campus and parking lots are from the Canal Road (South Entrance) or the Prospect Street (East Entrance) as shown in Figure 1. Visitors and commercial vehicles are required to use the Canal Road entrance. Georgetown employees with parking permits and Georgetown University vehicles are permitted to use the Prospect Street entrance.

The current configuration of Canal Road entrance forces vehicles to make right turns only. A temporary traffic signal is installed at this intersection but currently operates in flash mode. This signal was installed by the District Department of Transportation (DDOT) Traffic System Signal Division for temporary construction use on a prior GU project. The University also has a temporary permit to allow construction vehicles to make left turns from the South Entrance. For all other vehicles, barriers along Canal Road also prevent traffic from turning left in to and out of the South Entrance. While the Federal Highway Administration (FHWA) has planned improvements to the South Entrance that would include a permanent traffic signal and full traffic movements, it was assumed that the current intersection situation will remain when the new MSB and MSF facilities are complete.

The intersection of GU's Prospect Street entrance with 37th Street is an all-way stop controlled intersection with one travel lane on each approach. The Prospect Street entrance is accessed via local streets within the Georgetown residential neighborhood. Since vehicles are not permitted to turn left in to or out of the Canal Road entrance, access limitations exist. Vehicles arriving from the west must use the Prospect Street entrance by way of Reservoir Road or 35th Street. Vehicles arriving from the east, including from Virginia via the Key Bridge, can enter from Canal Road, but must depart by way of Prospect Street to return to the east or to the Key Bridge to Virginia.

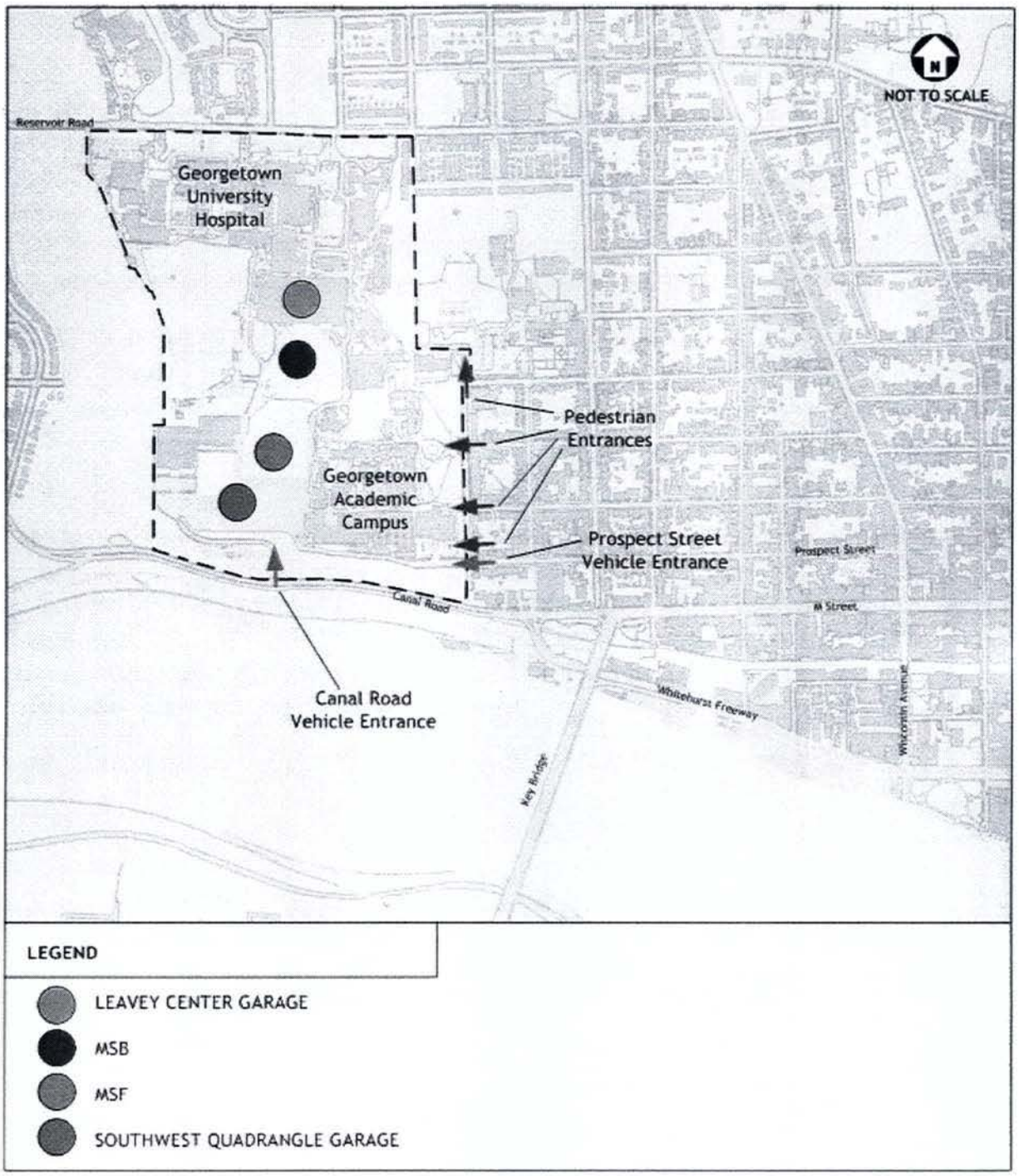


Figure 1 – Georgetown Academic Campus Vehicular Access

Campus Transportation Management Program

The GU campus parking supply is limited to 4,080 parking spaces by a parking cap that was established in the 2000 Campus Master Plan Additional parking cannot be added to the campus without adjusting this established parking cap and receiving approval from the D C Zoning Commission As a result of this limitation on parking, the University has devised measures to ensure that campus expansion does not generate new vehicular trips To satisfy this intention, GU has enacted a very comprehensive Transportation Management Program (TMP)

The parking policies described above are a critical part of this TMP Components of the program include the following

- Creation of a carpool program that provides incentives such as reduced individual cost, free parking passes for those days when one member of the carpool must arrive earlier or leave later than the other member(s),
- Activation of a parking fee structure to manage demand for on-campus parking,
- Restriction on parking privileges for students who live on-campus and tight control of the commuting student population parking requirements,
- Coordination with the surrounding neighborhoods to address issues that may arise with parking, traffic congestion, special event parking, and other transportation-related issues,
- Operation of the GUTS shuttle service, dramatically reducing on-campus-parking demand;
- Operation of a GUTS commuter bus between the free parking at the Park 'N Ride lot at Montgomery Mall and the main campus,
- Coordination with transit agencies to provide a total transit program thereby working to reduce single-occupant vehicle trips to and from the campus,
- Option to enroll in the WMATA Metrochek/SmarTrip program through the Office of Transportation Management, and
- Association with local transportation agencies to assist with the dissemination of regional transportation information to the University community

Campus Transit Access

GU is served by a number of bus transit lines offering fast and frequent service between the main campus area and nearby Metrorail stations, including Foggy Bottom, Dupont Circle, and Rosslyn These transit services are described below and are shown in Figure 2

- *Georgetown University Transportation Shuttle (GUTS)*
  The University is presently served by its own shuttle bus system The GUTS system, consisting of fourteen buses, serves the campus with five main routes With these routes, the GUTS system provides service to the Rosslyn and Dupont Circle Metrorail stations, as well as North Arlington, the Law Center, and Wisconsin Avenue All GUTS buses enter the University at the Canal Road and Reservoir Road entrances and terminate at the Leavey Center The areas served by GUTS have become established as desired living areas for students, faculty, and staff

- *Georgetown Metro Connection*
  The Georgetown Metro Connection is operated by the Georgetown Partnership BID District and provides two service lines within a few blocks of GU that offer connections to nearby Metrorail stations, including Dupont Circle, Foggy Bottom, and Rosslyn

- *Metrobus*
  The Washington Metropolitan Area Transit Authority (WMATA) provides Metrobus service to the campus along several routes These routes connect the campus to Downtown, the Wisconsin Avenue corridor, and the Palisades neighborhood Metrobus service brochures, printed especially for the University, are distributed at registration and throughout the year

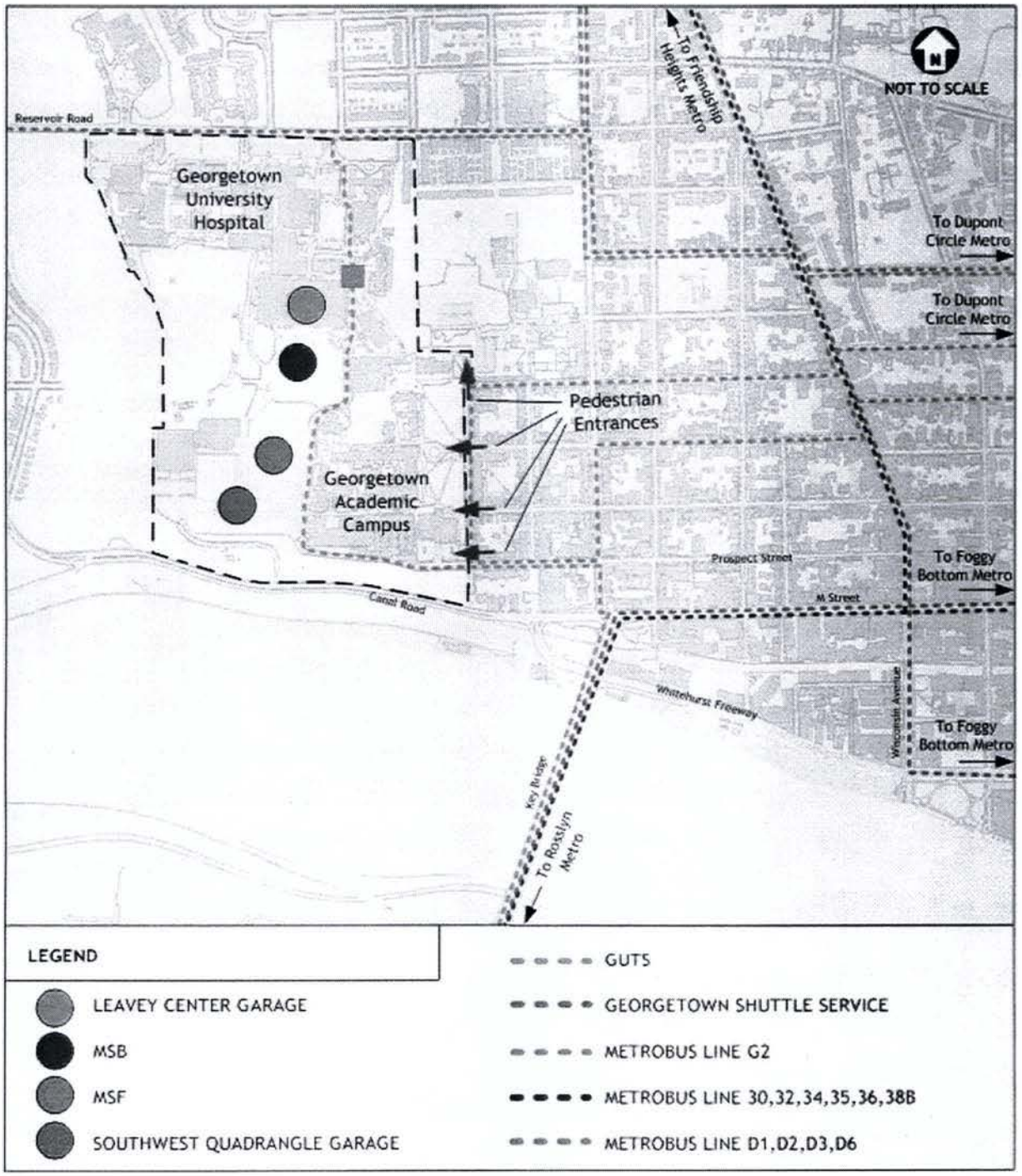


Figure 2 – Georgetown Academic Campus Transit Access

Special Campus Events

The purpose of studying the Homecoming Weekend was to identify traffic and parking problems associated with this worst-case scenario that occurs just once per year.

Data on Homecoming Weekend-related traffic and parking was collected through the following means:

- Automatic Traffic Recorder (ATR) counts at both the Canal Street and Prospect Street vehicular entrances;
- Surveys at the four pedestrian-only entrances to the south campus, with the goal of determining how people arrive to campus by interviewing a sample of pedestrians;
- General observations on parking in the neighborhood immediately to the east of GU to estimate how many people park in the neighborhood and attend GU events; and
- Parking Observations of the Southwest Quadrangle Parking Garage.

Traffic Volumes

Traffic counts were conducted at the two vehicular entrances (Canal Road and Prospect Street) to the campus. ATRs were installed at these entrances to record the total amount of vehicles entering and exiting the campus for the entire Homecoming weekend. Turning movement counts were conducted at the vehicular entrances from 10:00 a.m. to 11:00 a.m. on Homecoming day, Saturday, October 22, 2005 to validate the performance of the ATR equipment. Turning movement count and ATR summary sheets can be found in the Appendix.

Table 1 shows the peak hour volumes for the Saturday AM, Mid-day, and PM peaks. For the Canal Road entrance, the AM, Mid-day, and PM peaks were found to be from 9:45 to 10:45 a.m., 12:15 to 1:15 p.m., and 4:45 to 5:45 p.m., respectively. For the Prospect Street entrance, the AM, Mid-day, and PM peaks were found to be from 10:30 to 11:30 a.m., 2:45 to 3:45 p.m., and 5:30 to 6:30 p.m., respectively.

Table 1 – Peak Hour Volumes by GU Entrance

GU Entrance	Saturday Peak Hour Volumes								
	AM Peak Hour			*Mid-day Peak Hour*			*PM Peak Hour*		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Canal Road	183	37	220	219	84	303	33	178	261
Prospect Street	122	59	181	141	51	192	218	87	305
Total	305	96	401	360	135	495	251	265	566

According to field observations, the Southwest Quadrangle Garage, which contains 786 spaces, was mostly occupied by 11:00 a.m. Overflow parking was available, however, in the Leavey Center Garage and traffic was being directed to park in this facility.

Pedestrian Surveys

Pedestrians entering the GU campus on Homecoming, Saturday, October 22, 2005 were surveyed to determine their transit mode choice to campus. The pedestrians were surveyed at the four pedestrian entrances to the main campus; Prospect Street, N Street, O Street, and P Street between the hours of 11:00 a.m. and 1:00 p.m. It is likely that the pedestrians who were surveyed during this time were on campus for a Homecoming event from 11:00 a.m. to 2:00 p.m. in the McDonough parking lot. University officials estimate that approximately 2,900 persons attended this Homecoming event.

Students, faculty/staff, parents, alumni, and guests were asked a simple set of questions about their travel mode choice to arrive to campus. A sample survey is included in the Appendix. Of the 493 people surveyed at the pedestrian entrances, it was found that 161 drove and parked either on or off campus. The remaining 332 reached the campus by other travel modes including walking, bicycling, transit, taxi, or were dropped off. The survey results are shown in Table 2.

Table 2 – Mode Choice of Pedestrians by GU Affiliation

GU Affiliation	Travel Mode Choice				
	Personal Vehicle	*Taxi/Dropped Off*	*Transit*	*Walked*	*Total*
Student	47	59	2	172	*280*
Faculty/Staff	10	0	1	6	*17*
Parent	20	10	0	16	*46*
Alumnus	45	15	7	11	*78*
Guest	38	13	5	14	*70*
Total	160	97	15	219	*491*

Analysis of the pedestrian surveys shows that of those 160 persons surveyed that arrived to the Homecoming event in a personal vehicle, 22 indicated that they parked on-campus, while 138 indicated they parked on neighborhood streets. Therefore, of the approximately 2,900 people known to be on campus for this Homecoming event, less than 5% parked on neighborhood streets.

According to the surveys, the average vehicle occupancy ratio was approximately 2.17 persons per vehicle. Using this person to vehicle ratio, there were approximately 64 vehicles parked on neighborhood streets.

The number of people parking on neighborhood streets for Homecoming is likely higher than under normal conditions because this is a special annual event drawing large numbers of alumni, parents, students, and guests. Also, there are no restrictions on neighborhood parking on Saturdays and there is generally more on-street parking available. In addition, the number of drivers parking on neighborhood streets is significantly less than the number of drivers parking on-campus, particularly in the 786-space Southwest Quadrangle Garage, which was mostly occupied by 11:00 a.m. with the overflow parking in the Leavey Center Garage.

FUTURE PARKING AND TRANSPORTATION CONDITIONS

As previously mentioned, the GU campus parking supply is limited to 4,080 parking spaces by a parking cap that was established in the 2000 Campus Master Plan Additional parking can not be added to the campus without adjusting this established parking cap While the proposed MSB parking garage will consist of 194 parking spaces, a comparable number of surface spaces will be removed from the south campus as to not exceed the parking cap Parking for the MSF will be located in the Southwest Quadrangle Garage

Characteristics of the Proposed Projects

The MSB and MSF are not projected to increase traffic as the buildings are intended to serve mostly current students An increase in parking demand on the residential streets surrounding GU's main campus due to these buildings is not expected

Characteristics of the MSB and MSF that are expected to suppress traffic and parking demand are as follows

- Most of the new building changes on campus that are proposed in the 2000 Campus Master Plan, (including the MSB and MSF) are replacements for, and improvements to, existing campus facilities The MSB provides an opportunity for the University to combine disparate facilities into one structure Currently the business school is spread out in four different locations
- Since campus parking is capped and new parking facilities are replacements for surface parking lots due to new development, parking at the MSB will not change campus parking capacity or allocations In addition, since on-campus parking permits are not available for undergraduate and most full-time graduate students, there will be no change in traffic patterns or parking demand for undergraduate and full-time graduate students.
- While the MSB will not expand University undergraduate enrollment, a modest increase is expected in graduate and executive education programs for working professionals seeking a part-time degree The impacts of this increase will be limited to evenings and alternating weekends and not during peak hour travel times
- With the new MSB, a staff increase of three (3) percent is possible Because the number of parking spaces on campus is limited due to the parking cap, the University will adjust the distribution of staff parking permits and/or promote alternate travel modes
- The redesign of Harbin Field will replace the existing athletic field with the MSF to accommodate football, soccer, and lacrosse The facility will provide a net increase of 800 seats Pursuant to Condition 4 in the Campus Master Plan Order, athletic events at the MSF expected to draw over 100 visitors shall begin before 4.00 p m or after 7 00 p.m Also, GU personnel will be on hand as necessary to direct visitors to campus parking areas and to facilitate

smooth traffic flow in to and out of campus

- The University's calendar of athletic and performance events are scheduled at times that do not conflict with commuter traffic peaks with the exception of women's soccer, lacrosse, and field hockey, which are scheduled on weekday afternoons and evenings These conflicting events typically only draw 500 student spectators (at most) who are already on campus so they would not generate traffic or a parking demand The increased capacity of the MSF will not change the commuter peak period impacts of these particular athletic events
- The MSF will have the capacity to host higher levels of attendance for other events, as well as NCAA intercollegiate soccer and lacrosse tournaments, but these events will rarely occur and would primarily be held during off-peak times when there is abundant parking available on the campus, including the Southwest Quadrangle garage
- Construction traffic associated with the MSB and MSF will enter the University through the Canal Road entrance reducing impacts to the neighborhood streets

CONCLUSION

Based on other Gorove/Slade studies for Georgetown University (GU), as well as from the collection of additional parking and traffic data collected on-site during the fall 2005 Homecoming Weekend, we conclude that the MSB and MSF will not generate an increase in traffic and additional parking demand on the residential streets surrounding GU's main campus The facilities are intended to be used by students who are either on campus, already commuting to campus, or used during off-peak times when demand on the local roadway network and the on-street parking supply is not at its greatest

Analysis of the Homecoming Weekend data shows that of the 2,900 persons known to be in attendance at the Homecoming event on Saturday, less than 5% parked in the neighborhood Because this event represents a "worst case scenario" when a large number of people are on campus, all other events throughout the year will produce less traffic and parking demand on neighborhood streets

Visitor traffic is prohibited from using the Prospect Street entrance, which feeds directly into the adjacent residential streets The Canal Road entrance provides direct access into the Southwest Quadrangle's new underground parking structure, as well as to the new MSB parking garage

This report concludes that the MSB and MSF facilities will not result in any significant increase in traffic or parking demand on residential streets surrounding the campus due to the established parking restrictions, vehicle access policies, availability of alternate modes of transportation, and the relocation of personnel to off-campus locations

APPENDIX

Gorove/Slade Associates

Project Name :	Georgetown University
Project # :	7400-190
Location	Georgetown, Washington DC
Data Source:	Gorove/Slade Associates

Intersection: Georgetown University Access at Canal Road

AM PEAK

	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Gerogetown Access				Canal Road				No Approach				Canal Road			
	Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
10:00 AM to 10:15 AM		12	0	0	0	38	187	0	0	0	0	0	0	0	220	0	0
10:15 AM to 10:30 AM		1	0	0	0	28	166	0	0	0	0	0	0	0	215	0	0
10:30 AM to 10:45 AM		11	0	0	0	43	185	0	0	0	0	0	0	0	242	0	0
10:45 AM to 11:00 AM		11	0	0	0	25	214	0	0	0	0	0	0	0	254	0	0
11:00 AM to 11:15 AM																	
11:15 AM to 11:30 AM																	
11:30 AM to 11:45 AM																	
11:45 AM to 12:00 PM																	
12:00 PM to 12:15 PM																	
12:15 PM to 12:30 PM																	
12:30 PM to 12:45 PM																	
12:45 PM to 1:00 PM																	

PM PEAK

	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Gerogetown Access				Canal Road				No Approach				Canal Road			
	Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
4:00 PM to 4:15 PM																	
4:15 PM to 4:30 PM																	
4:30 PM to 4:45 PM																	
4:45 PM to 5:00 PM																	
5:00 PM to 5:15 PM																	
5:15 PM to 5:30 PM																	
5:30 PM to 5:45 PM																	
5:45 PM to 6:00 PM																	
6:00 PM to 6:15 PM																	
6:15 PM to 6:30 PM																	
6:30 PM to 6:45 PM																	
6:45 PM to 7:00 PM																	

PEAK HOURS

	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Gerogetown Access				Canal Road				No Approach				Canal Road			
	Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
AM INTERSECTION PEAK HOUR																	
10:00 AM to 11:00 AM		35	0	0	0	134	752	0	0	0	0	0	0	0	931	0	0
PM INTERSECTION PEAK HOUR																	
4:00 PM to 5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM SYSTEM PEAK HOUR																	
10:00 AM to 11:00 AM		35	0	0	0	134	752	0	0	0	0	0	0	0	931	0	0
PM SYSTEM PEAK HOUR																	
4:00 PM to 5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PEAK HOUR FACTORS

	Southbound				Westbound				Northbound				Eastbound			
	Gerogetown Access				Canal Road				No Approach				Canal Road			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
AM PEAK HOUR	0.73	0.00	0.00	N/A	0.78	0.88	0.00	N/A	0.00	0.00	0.00	N/A	0.00	0.92	0.00	N/A
PM PEAK HOUR	0.00	0.00	0.00	N/A	0.00	0.00	0.00	N/A	0.00	0.00	0.00	N/A	0.00	0.00	0.00	N/A

Overall AM PEAK HOUR FACTOR = 0.92

Overall PM PEAK HOUR FACTOR = #DIV/0!

Total AM Intersection Volume: 1852

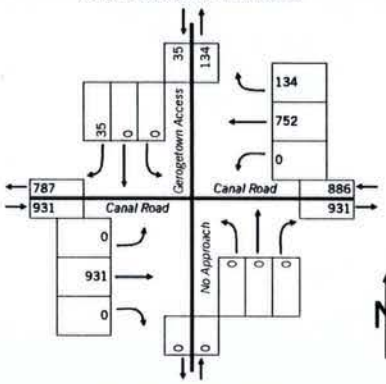
Total PM Intersection Volume: 0

Date of Counts: Saturday, October 22, 2005

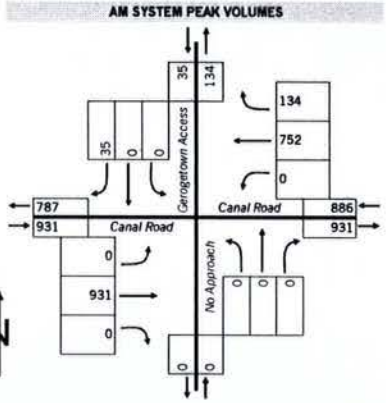
AM Weather Conditions: Cloudy

PM Weather Conditions: Cloudy

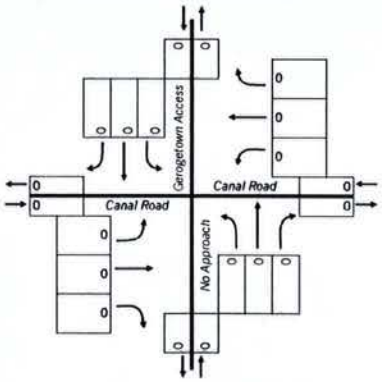
AM INTERSECTION PEAK VOLUMES



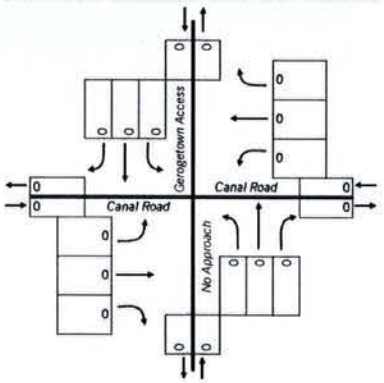
AM SYSTEM PEAK VOLUMES



PM INTERSECTION PEAK VOLUMES



PM SYSTEM PEAK VOLUMES



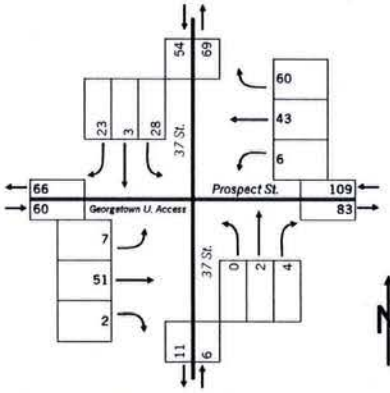
Gorove/Slade Associates

Project Name :	Georgetown University
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Location :	Georgetown, Washington DC
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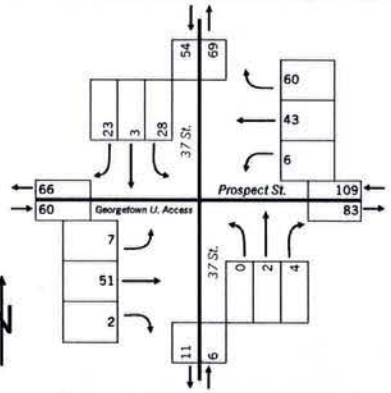
Intersection:	Georgetown University Access at Prospect Street and 37 Street Northwest															
AM PEAK																
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	37 St.				Prospect St.				37 St.				Georgetown U. Access			
Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
10:00 AM to 10:15 AM	6	1	4	2	11	7	5	3	0	0	0	4	0	5	3	5
10:15 AM to 10:30 AM	2	0	8	8	14	14	0	1	1	1	0	28	0	11	2	1
10:30 AM to 10:45 AM	4	2	9	10	15	13	1	1	2	1	0	16	1	18	0	2
10:45 AM to 11:00 AM	11	0	7	7	20	9	0	1	1	0	0	10	1	17	2	0
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
11:30 AM to 11:45 AM																
11:45 AM to 12:00 PM																
12:00 PM to 12:15 PM																
12:15 PM to 12:30 PM																
12:30 PM to 12:45 PM																
12:45 PM to 1:00 PM																
PM PEAK																
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	37 St.				Prospect St.				37 St.				Georgetown U. Access			
Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
4:00 PM to 4:15 PM																
4:15 PM to 4:30 PM																
4:30 PM to 4:45 PM																
4:45 PM to 5:00 PM																
5:00 PM to 5:15 PM																
5:15 PM to 5:30 PM																
5:30 PM to 5:45 PM																
5:45 PM to 6:00 PM																
6:00 PM to 6:15 PM																
6:15 PM to 6:30 PM																
6:30 PM to 6:45 PM																
6:45 PM to 7:00 PM																
PEAK HOURS																
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	37 St.				Prospect St.				37 St.				Georgetown U. Access			
Movement:	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
AM INTERSECTION PEAK HOUR																
10:00 AM to 11:00 AM	23	3	28	27	60	43	6	6	4	2	0	58	2	51	7	8
PM INTERSECTION PEAK HOUR																
4:00 PM to 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM SYSTEM PEAK HOUR																
10:00 AM to 11:00 AM	23	3	28	27	60	43	6	6	4	2	0	58	2	51	7	8
PM SYSTEM PEAK HOUR																
4:00 PM to 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HOUR	Southbound				Westbound				Northbound				Eastbound			
FACTORS	37 St.				Prospect St.				37 St.				Georgetown U. Access			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
AM PEAK HOUR	0,52	0,38	0,78	N/A	0,75	0,77	0,30	N/A	0,50	0,50	0,00	N/A	0,50	0,71	0,58	N/A
PM PEAK HOUR	0,00	0,00	0,00	N/A	0,00	0,00	0,00	N/A	0,00	0,00	0,00	N/A	0,00	0,00	0,00	N/A
Overall AM PEAK HOUR FACTOR = 0,84									Overall PM PEAK HOUR FACTOR = ####							
Total AM Intersection Volume: 328									Total PM Intersection Volume: 0							

Date of Counts:	Saturday, October 22, 2005		
AM Weather Conditions:	Cloudy	**PM Weather Conditions:**	Cloudy

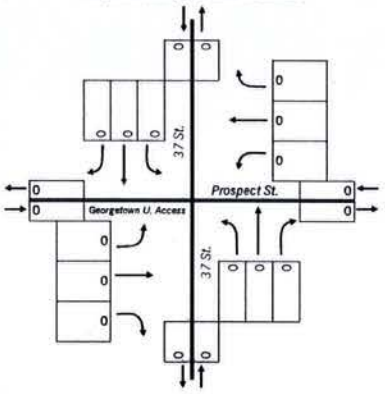
AM INTERSECTION PEAK VOLUMES



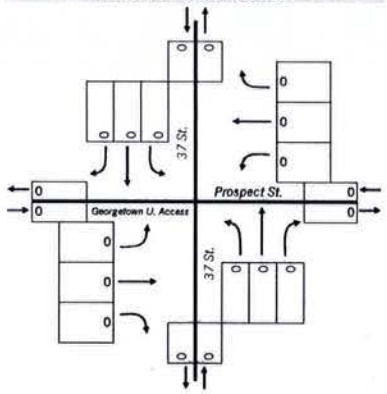
AM SYSTEM PEAK VOLUMES



PM INTERSECTION PEAK VOLUMES



PM SYSTEM PEAK VOLUMES



Combined
Start Date 10/21/2005
Location 1 Canal Road Entrance
Location 2 Prospect Street Entrance
Georgetown University

		Canal Road Entrance		Prospect Street Entrance	
Date	Time	Exits	Entries	Exits	Entries
10/21/2005	12 45 PM	-	-	14	30
10/21/2005	01 00 PM	24	25	27	28
10/21/2005	01 15 PM	25	34	14	28
10/21/2005	01 30 PM	26	22	13	23
10/21/2005	01 45 PM	21	30	13	22
10/21/2005	02.00 PM	18	20	25	21
10/21/2005	02 15 PM	31	16	8	37
10/21/2005	02 30 PM	17	13	19	42
10/21/2005	02 45 PM	17	31	28	35
10/21/2005	03 00 PM	15	28	12	30
10/21/2005	03 15 PM	17	27	13	51
10/21/2005	03 30 PM	27	33	23	46
10/21/2005	03 45 PM	19	20	10	40
10/21/2005	04 00 PM	22	21	14	47
10/21/2005	04 15 PM	28	21	9	50
10/21/2005	04 30 PM	20	15	13	41
10/21/2005	04 45 PM	47	15	10	47
10/21/2005	05 00 PM	45	16	28	40
10/21/2005	05 15 PM	41	25	20	65
10/21/2005	05 30 PM	32	15	17	65
10/21/2005	05 45 PM	30	23	22	47
10/21/2005	06 00 PM	24	27	14	44
10/21/2005	06 15 PM	22	23	16	53
10/21/2005	06 30 PM	25	23	11	31
10/21/2005	06 45 PM	19	30	21	45
10/21/2005	07 00 PM	20	16	33	28
10/21/2005	07 15 PM	13	18	17	36
10/21/2005	07 30 PM	19	22	18	32
10/21/2005	07 45 PM	16	15	23	51
10/21/2005	08 00 PM	18	13	14	49
10/21/2005	08 15 PM	7	30	11	35
10/21/2005	08 30 PM	17	16	8	32
10/21/2005	08 45 PM	14	15	19	40
10/21/2005	09 00 PM	12	20	10	30
10/21/2005	09 15 PM	11	25	12	20
10/21/2005	09 30 PM	9	24	14	28
10/21/2005	09 45 PM	13	13	15	35
10/21/2005	10 00 PM	6	11	14	38
10/21/2005	10 15 PM	8	16	3	19
10/21/2005	10 30 PM	7	26	12	27
10/21/2005	10 45 PM	8	11	8	30
10/21/2005	11 00 PM	3	6	13	24
10/21/2005	11 15 PM	5	8	13	17
10/21/2005	11 30 PM	3	9	6	22

10/21/2005	11 45 PM	2	7	8	15
10/22/2005	12 00 AM	4	9	7	18
10/22/2005	12 15 AM	1	1	15	15
10/22/2005	12 30 AM	1	3	7	11
10/22/2005	12 45 AM	0	6	5	8
10/22/2005	01 00 AM	4	5	13	9
10/22/2005	01 15 AM	0	5	4	8
10/22/2005	01 30 AM	2	6	7	9
10/22/2005	01 45 AM	1	3	5	3
10/22/2005	02 00 AM	0	4	8	6
10/22/2005	02 15 AM	0	4	7	15
10/22/2005	02 30 AM	1	3	3	6
10/22/2005	02 45 AM	0	2	6	8
10/22/2005	03 00 AM	1	6	4	4
10/22/2005	03 15 AM	0	5	8	6
10/22/2005	03 30 AM	1	3	7	13
10/22/2005	03 45 AM	0	5	3	8
10/22/2005	04 00 AM	0	0	5	2
10/22/2005	04 15 AM	1	1	3	4
10/22/2005	04 30 AM	2	7	1	7
10/22/2005	04 45 AM	0	3	3	3
10/22/2005	05 00 AM	3	3	1	2
10/22/2005	05 15 AM	3	5	0	4
10/22/2005	05 30 AM	2	7	1	0
10/22/2005	05 45 AM	3	9	2	3
10/22/2005	06 00 AM	0	12	1	5
10/22/2005	06 15 AM	1	15	1	2
10/22/2005	06 30 AM	0	11	6	2
10/22/2005	06 45 AM	1	8	9	5
10/22/2005	07 00 AM	0	9	7	5
10/22/2005	07 15 AM	1	31	2	7
10/22/2005	07 30 AM	1	16	2	5
10/22/2005	07 45 AM	0	30	10	6
10/22/2005	08 00 AM	2	44	7	6
10/22/2005	08 15 AM	1	35	3	10
10/22/2005	08 30 AM	3	47	12	15
10/22/2005	08 45 AM	2	38	9	12
10/22/2005	09 00 AM	2	19	13	15
10/22/2005	09 15 AM	10	21	17	18
10/22/2005	09 30 AM	6	37	11	10
10/22/2005	09 45 AM	5	63	7	19
10/22/2005	10 00 AM	17	44	8	19
10/22/2005	10 15 AM	1	29	11	8
10/22/2005	10 30 AM	14	47	8	22
10/22/2005	10 45 AM	16	27	11	33
10/22/2005	11 00 AM	11	37	23	34
10/22/2005	11 15 AM	14	39	17	33
10/22/2005	11 30 AM	19	51	4	25
10/22/2005	11 45 AM	19	51	9	24
10/22/2005	12 00 PM	14	51	9	14
10/22/2005	12 15 PM	30	59	1	25

10/22/2005	12 30 PM	18	49	3	22
10/22/2005	12 45 PM	19	58	18	18
10/22/2005	01 00 PM	17	53	10	20
10/22/2005	01 15 PM	29	51	3	15
10/22/2005	01 30 PM	9	52	2	26
10/22/2005	01 45 PM	9	34	9	25
10/22/2005	02 00 PM	14	45	22	6
10/22/2005	02 15 PM	27	38	28	2
10/22/2005	02 30 PM	26	39	11	22
10/22/2005	02 45 PM	26	37	14	32
10/22/2005	03 00 PM	26	17	19	39
10/22/2005	03 15 PM	24	14	5	38
10/22/2005	03 30 PM	21	19	13	32
10/22/2005	03 45 PM	6	22	4	33
10/22/2005	04 00 PM	30	15	2	30
10/22/2005	04 15 PM	18	26	6	27
10/22/2005	04 30 PM	14	21	4	25
10/22/2005	04 45 PM	26	20	14	25
10/22/2005	05 00 PM	51	19	10	30
10/22/2005	05 15 PM	56	25	24	33
10/22/2005	05 30 PM	45	19	14	65
10/22/2005	05 45 PM	17	12	36	78
10/22/2005	06 00 PM	30	25	16	36
10/22/2005	06 15 PM	10	33	21	39
10/22/2005	06 30 PM	16	34	19	40
10/22/2005	06 45 PM	17	41	14	34
10/22/2005	07 00 PM	13	22	17	33
10/22/2005	07 15 PM	18	25	18	29
10/22/2005	07 30 PM	4	19	13	39
10/22/2005	07 45 PM	5	14	22	22
10/22/2005	08 00 PM	10	10	9	28
10/22/2005	08 15 PM	4	16	12	26
10/22/2005	08 30 PM	7	12	12	31
10/22/2005	08 45 PM	4	15	17	22
10/22/2005	09 00 PM	9	18	13	19
10/22/2005	09 15 PM	12	18	18	21
10/22/2005	09 30 PM	4	15	20	20
10/22/2005	09 45 PM	10	20	14	42
10/22/2005	10 00 PM	8	10	7	30
10/22/2005	10 15 PM	17	14	14	27
10/22/2005	10 30 PM	15	10	12	36
10/22/2005	10 45 PM	7	9	14	24
10/22/2005	11 00 PM	0	8	11	29
10/22/2005	11 15 PM	5	7	10	10
10/22/2005	11 30 PM	8	17	8	14
10/22/2005	11 45 PM	1	7	6	14
10/23/2005	12 00 AM	0	3	10	20
10/23/2005	12 15 AM	1	3	10	16
10/23/2005	12 30 AM	4	6	10	17
10/23/2005	12 45 AM	2	4	6	15
10/23/2005	01 00 AM	2	6	7	6

10/23/2005	01 15 AM	2	3	8	10
10/23/2005	01 30 AM	3	3	5	10
10/23/2005	01 45 AM	2	3	7	17
10/23/2005	02 00 AM	4	3	7	11
10/23/2005	02 15 AM	1	5	9	20
10/23/2005	02.30 AM	3	4	9	17
10/23/2005	02.45 AM	1	6	5	9
10/23/2005	03 00 AM	2	3	6	8
10/23/2005	03 15 AM	0	2	8	5
10/23/2005	03 30 AM	2	2	9	6
10/23/2005	03 45 AM	0	2	3	9
10/23/2005	04 00 AM	0	2	6	6
10/23/2005	04 15 AM	1	1	6	8
10/23/2005	04 30 AM	0	0	1	5
10/23/2005	04 45 AM	0	3	5	4
10/23/2005	05 00 AM	2	2	1	4
10/23/2005	05 15 AM	2	4	3	3
10/23/2005	05 30 AM	3	5	4	4
10/23/2005	05 45 AM	0	8	2	5
10/23/2005	06 00 AM	2	1	2	1
10/23/2005	06 15 AM	1	8	1	1
10/23/2005	06 30 AM	0	7	2	0
10/23/2005	06 45 AM	2	8	2	4
10/23/2005	07 00 AM	0	6	4	8
10/23/2005	07 15 AM	4	15	4	7
10/23/2005	07 30 AM	1	2	2	7
10/23/2005	07 45 AM	1	9	3	3
10/23/2005	08 00 AM	0	12	1	2
10/23/2005	08 15 AM	1	8	3	9
10/23/2005	08 30 AM	5	16	6	5
10/23/2005	08 45 AM	3	21	11	11
10/23/2005	09 00 AM	3	14	11	13
10/23/2005	09 15 AM	1	11	4	7
10/23/2005	09 30 AM	3	20	13	9
10/23/2005	09 45 AM	1	13	9	10
10/23/2005	10 00 AM	3	22	10	21
10/23/2005	10 15 AM	8	21	11	25
10/23/2005	10 30 AM	8	17	9	22
10/23/2005	10 45 AM	10	31	11	24
10/23/2005	11 00 AM	5	38	27	24
10/23/2005	11 15 AM	15	32	18	31
10/23/2005	11 30 AM	19	15	13	19
10/23/2005	11 45 AM	11	28	9	22
10/23/2005	12 00 PM	11	25	11	27
10/23/2005	12 15 PM	18	38	29	29
10/23/2005	12 30 PM	5	15	16	30
10/23/2005	12 45 PM	15	28	21	24
10/23/2005	01 00 PM	15	32	14	29
10/23/2005	01 15 PM	13	24	12	35
10/23/2005	01 30 PM	16	20	17	27
10/23/2005	01 45 PM	11	23	13	24

10/23/2005	02 00 PM	13	24	11	26
10/23/2005	02 15 PM	12	28	19	26
10/23/2005	02 30 PM	11	22	15	29
10/23/2005	02 45 PM	13	31	7	33
10/23/2005	03 00 PM	17	21	11	42
10/23/2005	03 15 PM	9	20	15	37
10/23/2005	03 30 PM	12	26	13	19
10/23/2005	03 45 PM	8	24	17	29
10/23/2005	04 00 PM	5	29	18	45
10/23/2005	04 15 PM	15	25	14	22
10/23/2005	04 30 PM	5	20	15	17
10/23/2005	04 45 PM	4	20	25	19
10/23/2005	05 00 PM	8	18	26	22
10/23/2005	05 15 PM	6	22	13	30
10/23/2005	05 30 PM	7	16	23	32
10/23/2005	05 45 PM	17	16	11	31
10/23/2005	06 00 PM	3	19	18	31
10/23/2005	06 15 PM	10	28	22	23
10/23/2005	06 30 PM	4	18	24	36
10/23/2005	06 45 PM	7	17	20	21
10/23/2005	07 00 PM	8	15	20	17
10/23/2005	07 15 PM	9	18	17	23
10/23/2005	07 30 PM	4	11	9	22
10/23/2005	07 45 PM	5	19	16	17
10/23/2005	08 00 PM	4	18	12	30
10/23/2005	08 15 PM	3	14	20	10
10/23/2005	08 30 PM	2	13	9	31
10/23/2005	08 45 PM	5	17	22	24
10/23/2005	09 00 PM	9	12	13	27
10/23/2005	09 15 PM	20	14	9	23
10/23/2005	09 30 PM	9	12	11	42
10/23/2005	09 45 PM	7	13	10	25
10/23/2005	10 00 PM	11	13	8	23
10/23/2005	10 15 PM	12	8	17	26
10/23/2005	10 30 PM	2	17	11	26
10/23/2005	10 45 PM	6	11	12	15
10/23/2005	11 00 PM	3	5	11	32
10/23/2005	11 15 PM	1	4	10	31
10/23/2005	11 30 PM	2	6	11	14
10/23/2005	11 45 PM	2	11	7	23
10/24/2005	12 00 AM	1	3	9	16
10/24/2005	12 15 AM	1	4	4	9
10/24/2005	12 30 AM	5	5	1	8
10/24/2005	12 45 AM	0	3	6	4
10/24/2005	01 00 AM	0	1	2	5
10/24/2005	01 15 AM	1	1	5	2
10/24/2005	01 30 AM	2	3	1	8
10/24/2005	01 45 AM	0	3	4	4
10/24/2005	02 00 AM	0	1	2	8
10/24/2005	02 15 AM	0	1	1	4
10/24/2005	02 30 AM	0	1	3	5

10/24/2005	02 45 AM	1	3	2	3
10/24/2005	03 00 AM	1	6	1	0
10/24/2005	03 15 AM	0	1	3	2
10/24/2005	03 30 AM	0	3	0	2
10/24/2005	03 45 AM	0	1	0	0
10/24/2005	04 00 AM	0	0	0	2
10/24/2005	04 15 AM	0	4	1	3
10/24/2005	04 30 AM	0	4	0	1
10/24/2005	04 45 AM	2	11	1	2
10/24/2005	05 00 AM	0	10	2	2
10/24/2005	05 15 AM	0	15	3	6
10/24/2005	05 30 AM	3	27	4	6
10/24/2005	05 45 AM	2	38	4	12
10/24/2005	06 00 AM	0	22	4	10
10/24/2005	06 15 AM	0	34	3	4
10/24/2005	06 30 AM	2	40	16	12
10/24/2005	06 45 AM	2	37	10	14
10/24/2005	07 00 AM	2	40	7	18
10/24/2005	07 15 AM	9	42	10	9
10/24/2005	07 30 AM	6	32	10	12
10/24/2005	07 45 AM	7	42	13	12
10/24/2005	08 00 AM	4	40	24	21
10/24/2005	08 15 AM	4	59	21	25
10/24/2005	08 30 PM	-	-	15	18
10/24/2005	08 45 PM	-	-	21	28

TRANSPORTATION SURVEY FOR GEORGETOWN UNIVERSITY — OCTOBER 22, 2005

(1) What is your affiliation with the University?

☐ Student ☐ Alumnus ☐ Parent ☐ Faculty/Staff ☐ Guest

(2) Did you drive to campus today? (Please circle) Yes No
(or were a passenger) If no, skip to question (6)

(3) Arrival time? _____ a m p m

(4) Number of people in the car? _____

(5) Where did you park? _____

(6) What alternative mode did you use?

☐ GUTS Shuttle ☐ Metrobus ☐ Georgetown Blue Shuttle ☐ Walk ☐ Bicycle ☐ Other _____