



**Marymount University  
Traffic Impact Analysis Executive Summary  
Arlington County, Virginia**

The Traffic Impact Analysis (TIA) for Marymount University presents detailed analysis of traffic and transportation operations in the vicinity of Marymount University.

Marymount University is bounded by North Glebe Road, Old Dominion Drive, and 26<sup>th</sup> Street North, in Arlington County, Virginia. The specific site for (re)development is bounded by Old Dominion Drive, 26<sup>th</sup> Street North, and Yorktown Boulevard.

In 2003, enrollment was approximately 2,250 undergraduate students and 1,600 graduate students. Currently, Marymount University accommodates 670 students on campus and 100 students in apartments and local hotel rooms. Other students commute to classes. Currently Marymount University employs 403 full-time employees, 208 part-time faculty, and 53 part-time staff.

Marymount University proposes to replace the 170-space surface parking lot with a four-level, 450-space parking garage. One hundred fifty (150) dormitory rooms with 300 beds, 35,000 S.F. of classroom and laboratory space, and a 300- to 350-seat auditorium would be built above the garage.

All vehicular access to the proposed garage would be provided by a single driveway on Yorktown Boulevard, across from the driveway to the University's existing parking garage. The driveway to the existing parking lot on 26<sup>th</sup> Street North would be closed.

Tasks undertaken in this study included the following:

1. Review the proposed use permit amendment and development program.
2. A field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasings/timings, speed limits, pedestrian facilities, and transit services and facilities.
3. Discussions with Arlington County staff regarding the scope of this TIA.
4. Review of existing bus routes and schedules.
5. Existing vehicular and pedestrian traffic were counted at nine on- and off-site intersections.
6. Occupancy counts were conducted in each on-campus parking facility.

450  
-170  
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280

7. Existing levels of service were calculated at each key intersection based on existing traffic volumes and existing lane use and traffic controls.
8. Background future traffic volumes were forecasted based on existing traffic counts plus a growth rate to account for increased traffic in the surrounding area.
9. Background future levels of service were calculated at each key intersection based on background future traffic forecasts, existing traffic controls, and existing intersection geometrics.
10. The numbers of AM and PM peak hour vehicle-trips that would be generated by the proposed uses were estimated based on existing conditions observed at Marymount University.
11. Site trips were distributed to the road network based on existing travel patterns to and from Marymount University.
12. Total future traffic forecasts were estimated based on background future traffic forecasts plus site traffic assignments.
13. Total future levels of service were calculated at each key intersection based on total future traffic forecasts, existing traffic controls, and existing intersection geometrics


14. Traffic operation improvements required to mitigate existing and potential future capacity challenges were identified.

Sources of data for this analysis included vehicular and pedestrian traffic counts, parking occupancy counts, and shuttle bus vehicle and passenger counts conducted by Wells & Associates; the Institute of Transportation Engineers (ITE); Arlington County; Davis Carter Scott; and Marymount University.

**The conclusions of the TIA are as follows:**

1. **Marymount University currently is served by 691 on-site parking spaces.**
2. **Marymount University's peak hours are off-set by 60 to 75 minutes from the peak hours of adjacent street traffic. The University's peak hours occur from 8:45 to 9:45 AM and 5:45 to 6:45 PM. The peak hours at the Glebe Road/Old Dominion Drive intersection occurs from 8:00 to 9:00 AM and 5:15 to 6:15 PM.**
3. **Marymount University currently generates a peak of 343 vehicle-trips from 8:45 to 9:45 AM, and 412 vehicle-trips from 5:45 to 6:45 PM. The University generates 229 AM peak hour and 313 PM peak hour trips during the peak hours of the adjacent street.**
4. **All study intersections currently operate at an acceptable level of service (LOS) "D" or better during peak hours, except for the stop-sign-controlled movements at the intersections of 26<sup>th</sup> Street with Glebe Road and Old Dominion Drive. Side street traffic operates at capacity at LOS "F" during peak hours.**
5. **The County's plans to install new traffic signals would allow these intersections to operate at acceptable levels of service.**

overlap 15 mins  
in morning +  
30 mins in p.m.

6. **All intersections would continue to operate at acceptable levels of service in the future, without the proposed new Marymount University parking garage, with the new traffic signals on 26<sup>th</sup> Street at Glebe Road and Old Dominion Drive.**
7. **The proposed new parking garage would generate 91 net additional AM peak hour and 124 net additional PM peak hour vehicle-trips during the peak hours of the adjacent street. The proposed new parking garage would generate 143 net additional AM peak hour and 161 net additional PM peak hour vehicle-trips during the Marymount University peak hours.**
8. **All intersections would continue to operate at acceptable levels of service in the future with the new parking garage and signals on 26<sup>th</sup> Street at Old Dominion Drive and Glebe Road, except for the stop-sign-controlled 26<sup>th</sup> Street/Yorktown Boulevard intersection. Traffic turning left from Yorktown Boulevard onto 26<sup>th</sup> Street theoretically would operate near or at capacity at LOS "E" or "F" during the PM peak hours.**
9. ** The 26<sup>th</sup> Street/Yorktown Boulevard intersection would operate at acceptable levels of service at all times of day under future signal control.**
10. **The new traffic signals on 26<sup>th</sup> Street at Glebe Road and Old Dominion Drive would provide gaps in the stream of through traffic on 26<sup>th</sup> Street. These gaps would permit motorists to more easily turn left from Yorktown Boulevard onto 26<sup>th</sup> Street. Accordingly, a new signal at the 26th Street/Yorktown Boulevard intersection is not recommended at this time. It is recommended that this intersection be monitored over time to determine whether or not a new signal will be warranted in the future based on actual field measurements.**