## George Mason Students With Parking Permits in the Washington DC Metropolitan rea

Geography 463

George Mason University had 30,714 students enrolled as of fall 2008. According to the Digest of Educational Statistics in the Washington DC metropolitan area, George Mason ranks second largest university-by-population behind the University of Maryland College Park. George Mason is ranked third largest university in the state of Virginia, just hundreds behind both Virginia Tech and Virginia Commonwealth University. Out of all the large universities in Virginia however, George Mason is the only one with a reputation of being a commuter school. Being such a large university, combined with having the label of commuter school, all while being in Northern Virginia, together are characteristics possible of severely straining a community.

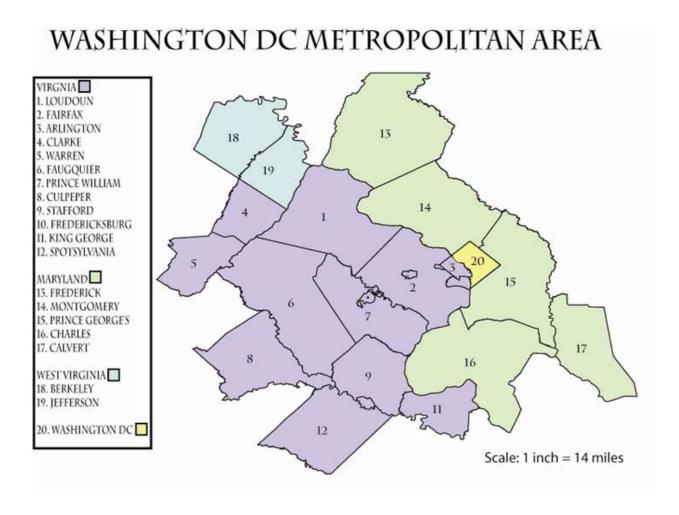
George Mason has the responsibility of dedicating funds, planning, space, etc. to accommodate commuting students. The reasons are obvious. "Washington DC is often cited as having some of the worst traffic congestion in the United States...beyond the city and inner suburbs, transit operations are fairly limited and public transportation accounts for just 3 percent of all trips in the region as a whole." (Nelson, 2007, p. 236). There is no doubt that the 30,000 plus students enrolled contribute to this statistic. Close to 5,000 of these enrolled students live on campus. Out of the 25,000 left a small number carpool, or take public transportation. The state and counties provides access though public transportation such as the Metro Bus, the Cue Bus, ART Bus and the PRTC Bus. Mason is even accessible through different bike paths. Even with these factors taken into account, a large portion of students are still commuting into school every day. "86% of college students say owning a car is crucial. That's up from 77 percent two decades ago." (Naughton, 2005, p. 60). In this day and age cars are a necessity to most college students. George Mason realizes this and has taken action in order to provide parking for students. They have done so in many different ways. They introduced shuttle buses that bring students in from

the field house or the west parking lot. These lots are quite a distance from campus therefore it really is not an option for most students. "In a vicious cycle, dependence on driving and the availability of parking cause campus facilities to be dispersed beyond reasonable walking distances. As a result, the need for more roads and more parking continually escalates... When institutions run out of room for surface parking, they build garages." (Kenney, 2004, p. B22). West Lot is only really used by freshmen who live on campus because they are forced to park out there. Other than that the lot is pretty much deserted. Students rather not be bothered having to take a shuttle into campus. The reason being because it takes at least 20 minutes to get to campus using the shuttle and the fact that one has to get to school that much earlier in order to make it to class on time. Students are willing to pay more in order to park closer to campus. George Mason offers two parking decks as well as a bunch of general lots all which are within walking distance to the center of campus.

We wanted to look into the question of where the majority of George Mason students that park on campus are coming from. We began our research by heading over to George Mason's Parking Services. Although not really confident that we were going to be able to get data from them being that they work under contracted management we headed over anyways and talked to the Director, Josh Cantor. He was initially hesitant being that it was still the first week of class meaning it's when they're busiest. We were fortunately able to get data regarding every parking permit sold this semester. We eliminated the on-campus resident lots and any permit that was purchased from an address outside the DC metropolitan area.

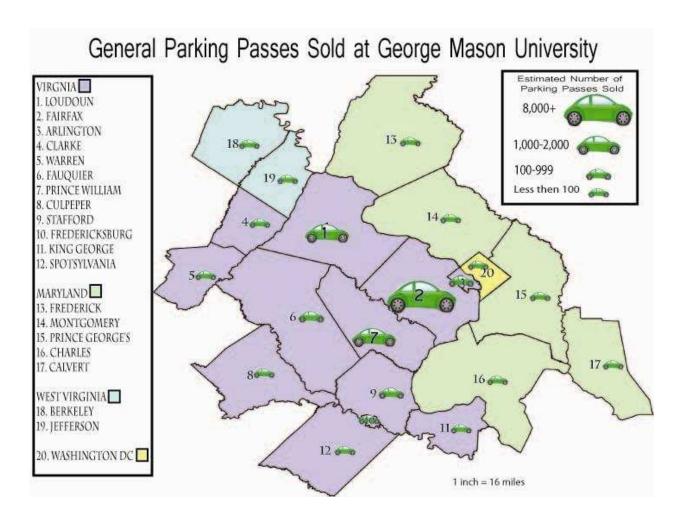
For the definition of what the Washington metropolitan statistical area we used the United States Office of Management and Budget (OMB) website and determined that the following counties are part of the Washington metropolitan statistical area: In Maryland the

counties included, Calvert, Charles, Frederick, Montgomery, and Prince George's. In Virginia, Arlington, Clarke, Fairfax, Fauquier, Loudoun, Prince William, Spotsylvania, Stafford, Warren. West Virginia included both Jefferson, Berkeley. And naturally Washington DC was included itself. For the sake of making the maps easier to understand we put the independent cities of Virginia into the counties that surrounded them. Below is the map we created to show exactly this. Counties in Virginia are displayed in purple, West Virginia counties in Blue, the ones in Maryland in Green and the District in yellow. Each county on the map has a number. The legend tells the name of the county according to that number.



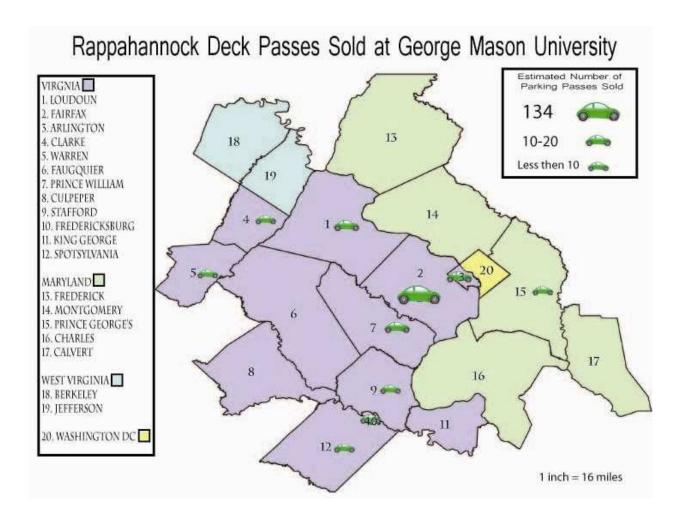
The data that we acquired from Parking Services was in spreadsheet form. It had information on each student who purchased a permit broken down by those who purchased the

Sandy Creek, Rappahannock decks as well as general lot passes. A total of 15,889 students purchased a permit from one of these parking zones. The spreadsheet contained a cell with the zip code of each individual. We then went through and sorted zip codes into their respective counties. We were going to map the number of permits sold to each county in each of the three major parking places on campus, the Rappahannock deck, Sandy Creek deck, as well as the general lots.



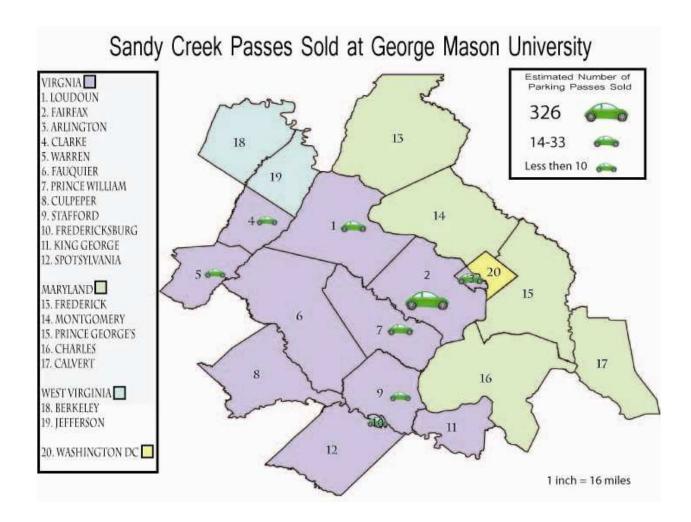
The map from above is a Proportional symbol map that displays a different sized car depending on the number of students who purchased a permit for parking in the general lots of George Mason. Exactly 12,709 of the 15,889 permits purchased were from students who are from Virginia. Furthermore 8,128 of these are students who live in Fairfax. The general trend is

that in Virginia the closer the county is to George Mason the larger the numbers who come from this area are. Only 169 students who purchased this permit lived in Maryland, 95 in DC and 5 in West Virginia. This permit is by far the most popular of all the permits on campus. Being that it is within walking, sometimes really far, distance from the center of campus and moderately priced at \$225 it is no surprise. For twice that amount Mason has parking decks available



The Rappahannock Parking deck is the newest of the parking decks here at Mason. This deck is 5-levels and has space for 2660 cars making it the biggest building structure on campus. The cost to build was \$42 Million. The price for a parking spot in this deck is a whopping \$450/year. It was no surprise when the spreadsheet showed that only a measly 222 permits were

sold. People are willing to pay more for a closer parking spot but not that much more. Over half of these permits (130) were sold to people from Fairfax. Only one was sold to a person out of state (Prince George's, Maryland). The map shows that the most passes were sold to Fairfax and some of the surrounding counties with a few exceptions like Culpeper and Warrenton which are further out and do not border Fairfax.



The Sandy Creek Parking deck was built 4 years ago and was built on what used to be general parking lot B. It has space for a total of 1,200 cars. The data for this parking deck was rather similar than that of the Rappahannock Parking deck. Only 205 permits were sold this semester. A huge chunk of these (150) again were sold to people who reside in Fairfax. A slight

rather insignificant rise in number of out of state purchases is seen. From 1 permit sold in Rappahannock, up to 3 in this deck. The entire out of state purchases were from people in Prince George's county. The map shows that all the Virginia counties that surround Fairfax purchased permits. Again Culpeper and Warrenton also purchased permits to this deck.

The common trend in all of these maps shows that Fairfax consistently has the highest number of students purchasing permits. The general lot sold 63% of its permits to these students, the Rappahannock deck sold 59% and the Sandy Creek Deck sold 73%. If averaged, it can be said that 65% of students who use one of these three parking sources are from Fairfax. Surrounding counties also contribute largely. This statistic leaves us with the conclusion that students commuting into George Mason contribute greatly to the traffic problems that plagues the metropolitan statistical area. George Mason built parking decks on two opposite sides of campus and provides general lots with many different entrances in order to account for the many students that commute into campus. This makes it so that no one place is overly stressed in the surrounding area. George Mason is constantly changing in order to accommodate commuting students whether it is a new road, or a new parking deck. In order to deal with student's lack of interest in the Rappahannock deck, they have set aside a couple of floors in this deck in which people with general lot passes can park. Every parking space counts in a school that is up and coming and that is growing at a very rapid rate. The next step is get rid of that 'commuter school' label and get more students to live on campus. New buildings dedicated to housing students are popping up all over the place. Only the future will tell how successful will be in taking on this task.

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