

# Mobility of MSUM Students Transit Survey Results – Year 2

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# Mobility of MSUM Students

The student transit use survey for MSUM received responses from 460 students. The survey information provides insight into current transit issues including movement demands of campus students, perceptions of MAT services and campus parking, as well as campus public transportation and transit accommodations.

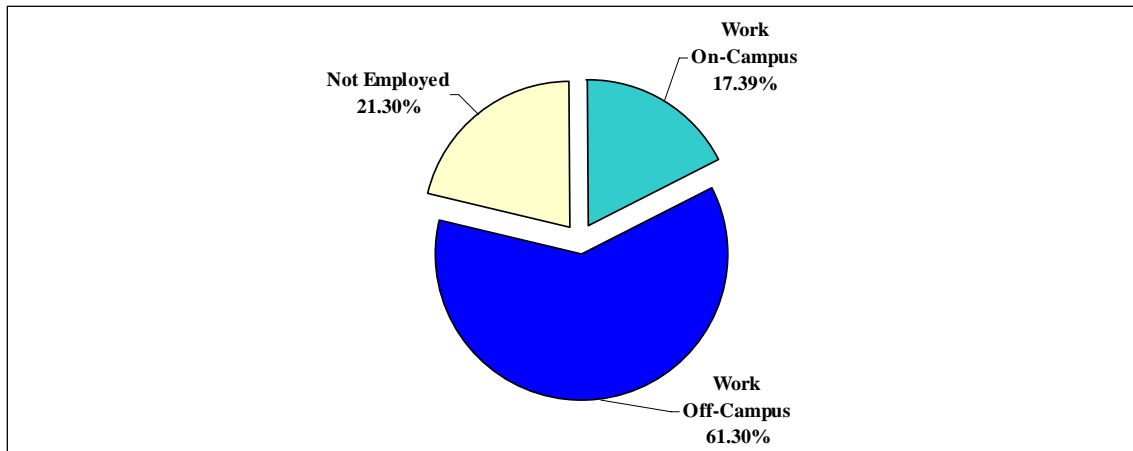
It is not possible with an electronic on-line survey to ensure equal participation from all students. However, there was a proportionate distribution from all undergraduate and graduate classes (Table 1). The junior class had the highest representation where all other categories were within 2.62% of actual class distribution.

**Table 1.** Survey Response Distribution Compared to Actual Class Distribution

| <b>Classification</b> | <b>Actual Class Distribution (Fall '03)</b> | <b>Class Number</b> | <b>Responses Distribution</b> | <b>Survey Number</b> |
|-----------------------|---|---------------------|-------------------------------|----------------------|
| Freshmen              | 19.70%                                      | 1516                | 18.48%                        | 85                   |
| Sophomores            | 18.79%                                      | 1446                | 18.70%                        | 86                   |
| Juniors               | 18.95%                                      | 1458                | 25.87%                        | 119                  |
| Seniors               | 32.08%                                      | 2468                | 30.43%                        | 140                  |
| Graduate              | 7.40%                                       | 569                 | 4.78%                         | 22                   |
| Non-degree            | 3.08%                                       | 237                 | 1.74%                         | 8                    |
| Total                 | 100.00%                                     | 7694                | 100.00%                       | 460                  |

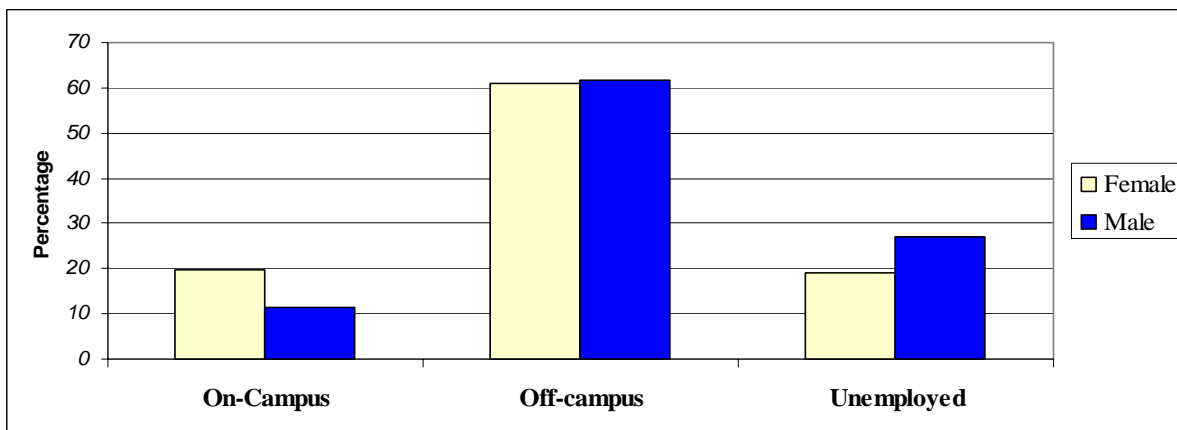
Of the 460 students who responded, 327 or 71.1 percent were female, and 133 or 28.9 percent were male. The actual MSUM fall 2003 enrollment consisted of 4,759 females or 61.9 percent and 2,935 males or 38.1 percent. The percentage of women who responded to this survey is proportionately higher than the percentage of women attending MSUM.

Student's employment status often influences their attitude toward and use of public transportation. About one-fifth of the survey respondents were unemployed (Figure 1). Just over three-fifths of students are employed off campus and just under one-fifth of the survey respondents were employed on campus. Compared with the previous year, these figures show a slight increase in people shifting from on-campus employment to off-campus employment, with unemployment within .08 percent difference.



**Figure 1.** Student Work Status (n=460)

A further breakdown shows a slightly higher percentage of on-campus jobs are held by women (Figure 2). The percentage of female and male respondents who work off-campus are similar. More males identified themselves as unemployed. There is no survey information available to explain the differences.



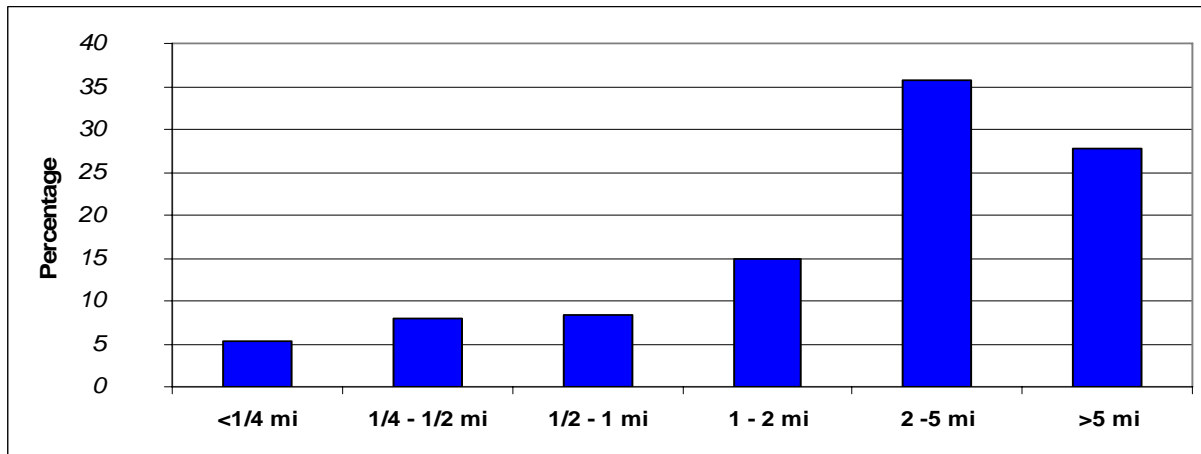
**Figure 2.** Employment by Gender (n=327,133)

Whether students live on or off-campus was also evaluated. Nearly four-fifths of the students surveyed indicated that they live off-campus. The results show that 58% (49) of freshman live on-campus, while only 28% (24) of sophomores, 12% (14) of juniors, and a mere 9% (12) of seniors live on-campus. This indicates that many students must use some form of transportation to get to school.

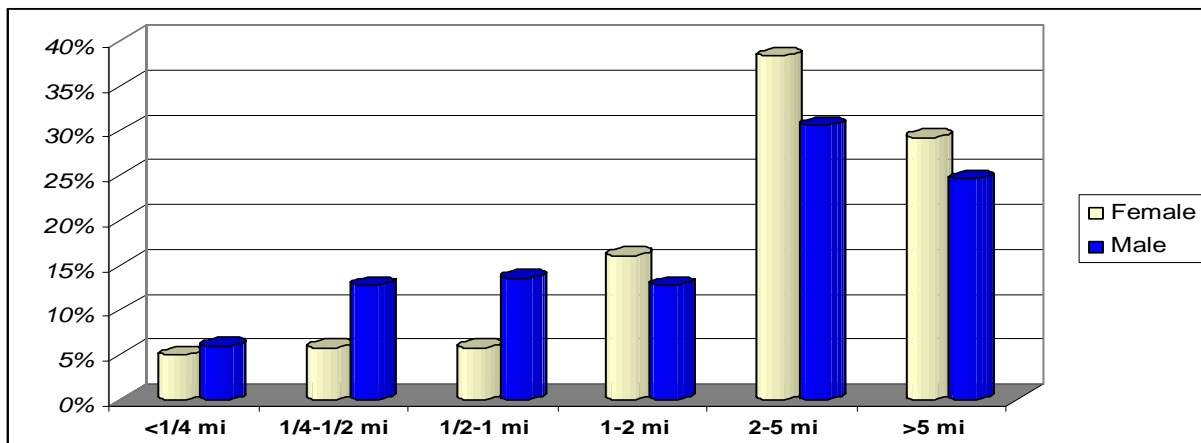
## Movement Demands of Students

There are many factors that influence the movement patterns of students. This section details some of the influences and habits that drive some of these patterns. Survey results in this section detail how far students live from campus, the origin of campus bound trips, the times that students are on campus, modes of travel, what influences mode of travel, why on-campus students leave, as well as information related to weather changes and transportation. The information that is gathered from these results is helpful in determining what services can be offered that will coincide with normal travel activity of the student body.

Students live at various distances from campus (Figure 3). Approximately 64% of the off-campus students who responded to the survey live at least 2 miles from campus. A more in depth look shows, that a higher percentage of male students live closer to campus compared to female students (Figure 4).

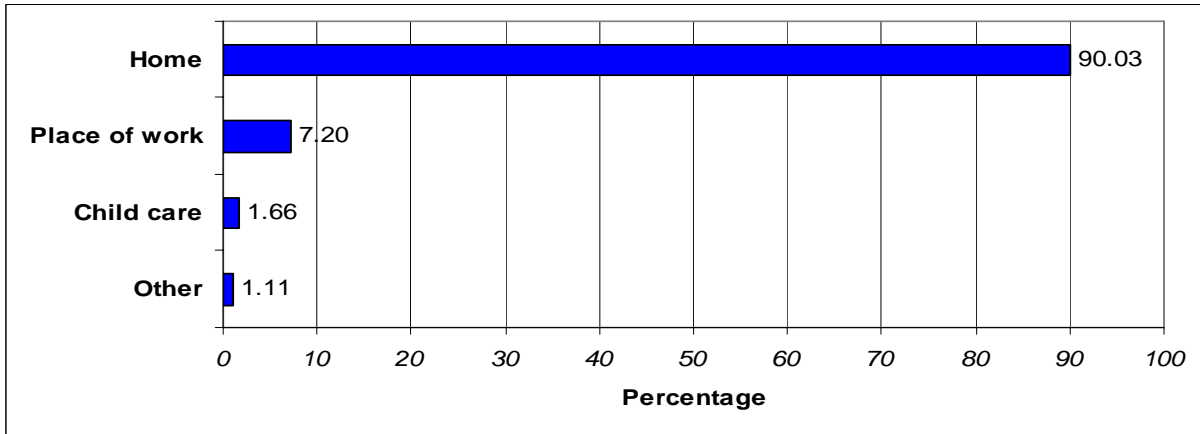


**Figure 3.** Distance Students Live from Campus (n=361)



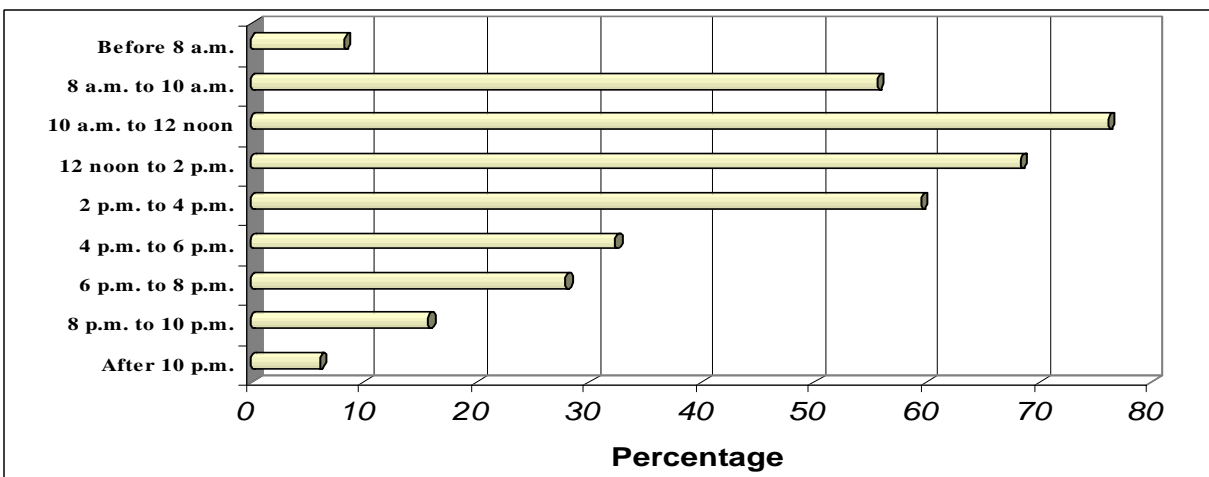
**Figure 4.** Student Distance from Campus by Gender (n=361)

Approximately 90 percent of respondents indicated they travel to campus from home (Figure 5). Seven percent indicated that they travel to campus from their place of work and the remaining 3 percent travel to campus from child care and other locations.



**Figure 5.** Where Students Depart From to Arrive on Campus (n=361)

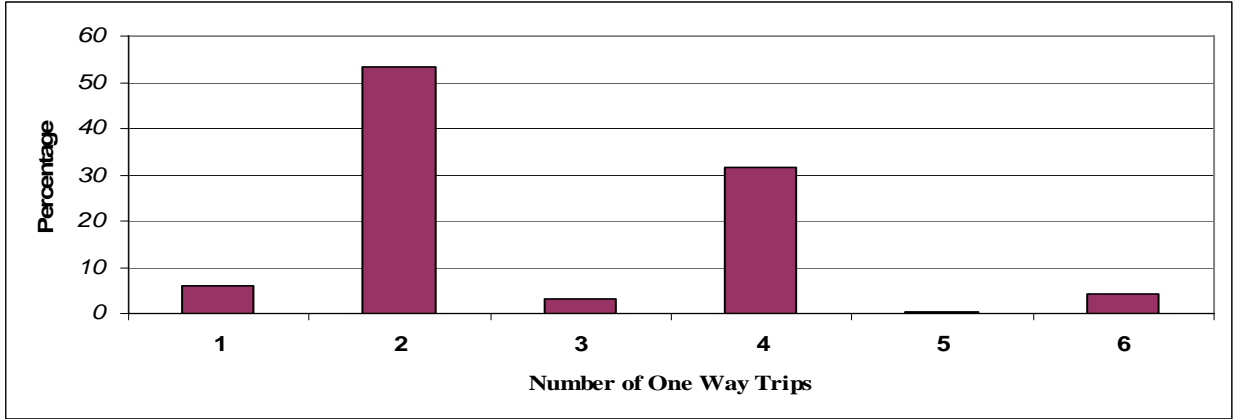
The majority of student respondents indicated they are on campus from 8 a.m. to 4 p.m. following the normal semester class schedule (Figure 6). The results indicated that most students are on campus from 10 a.m. to 12 noon, with approximately 76 percent indicating they were on campus during this time period. A large number of students indicated being on campus, nearly 69 percent, from twelve o'clock noon to 2 p.m.



**Figure 6.** Times When Students are on Campus (n=361)

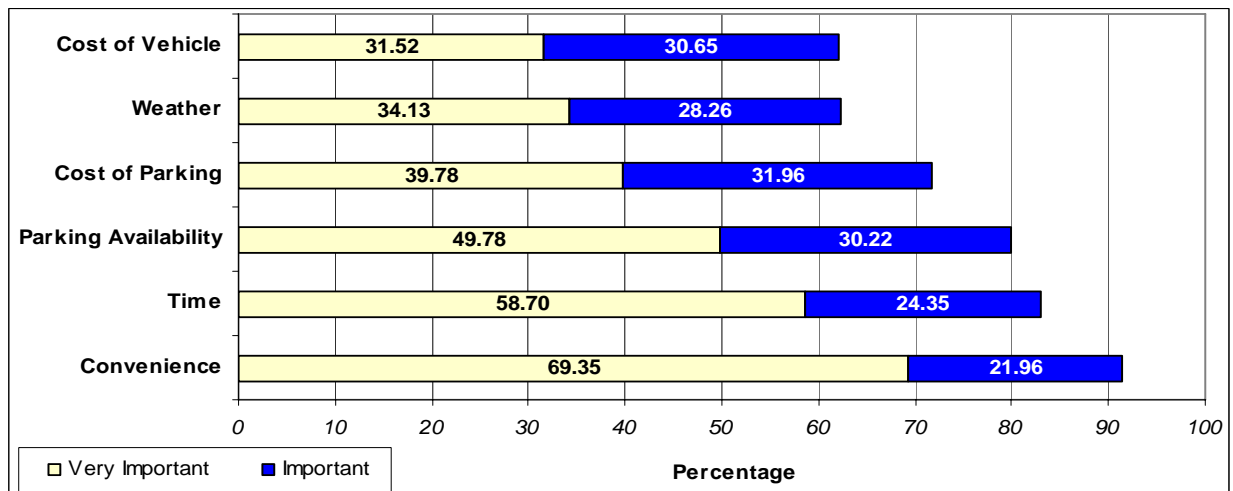
Nearly 88 percent of respondents indicated they have access to motor vehicles. A study done by Independent Insurance Agents of America and College Parents of America showed that nearly 70 percent of college students have either their own or use of their parents' car at school; this places MSUM above the national average by an 18 percent margin.

The majority of MSUM respondents make one trip to school and back equaling two one-way trips (Figure 7). Approximately 53 percent of students indicated that they make 2 one-way trips per day and nearly 32 percent of the respondents indicated they made 4 one-way trips per day. Almost 6 percent, twenty-one, of the students had responses indicating they made more than 4 one-way trips per day.



**Figure 7.** Number of One-Way Trips (n=361)

Students were asked to rate the importance of various factors when deciding on a mode of transportation. The factors included convenience, vehicle expense, parking expense, weather, parking availability, and time. Convenience, time, and parking availability were the top three factors in deciding a mode of transportation (Figure 8). Approximately 91% of respondents felt that convenience was either an important or very important influence on transportation mode choice. Time and parking availability also had a high percentage of respondents indicating important or very important with 83% and 80% respectively.

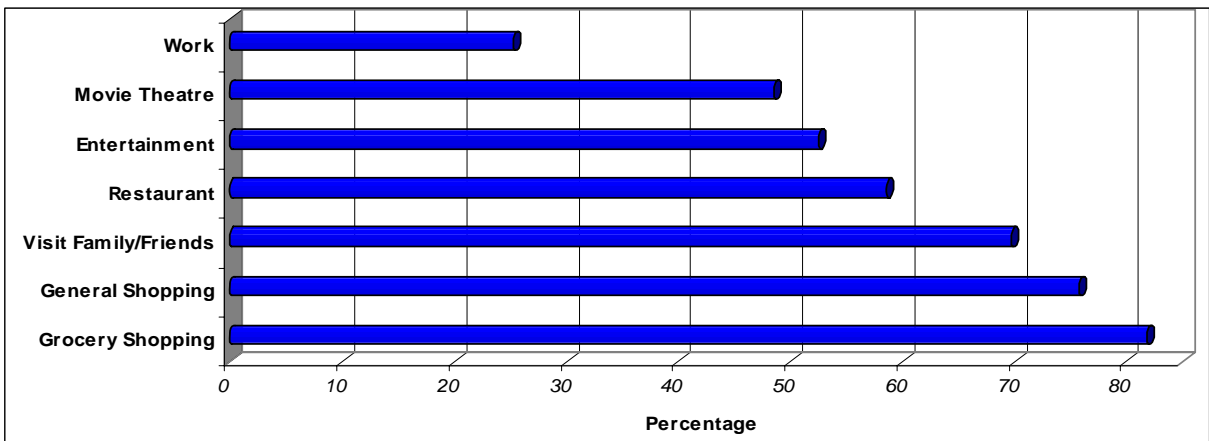


**Figure 8.** Factors Influencing Mode of Travel (n=460)



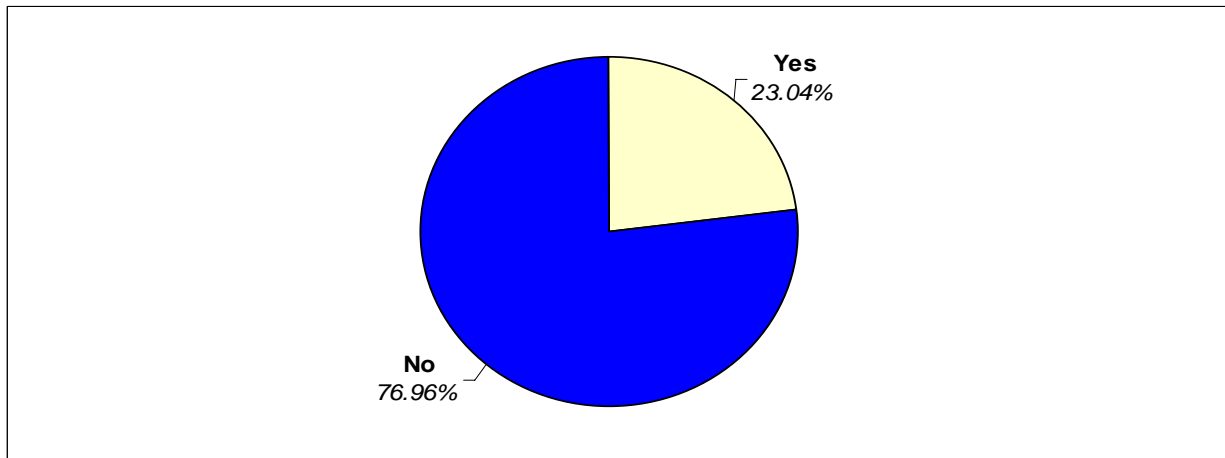
Students were asked how they most frequently travel to campus. Nearly 72% of the respondents indicated that they traveled to campus via auto. The next most popular form of transportation to campus was walking with 31%, followed by MAT bus with 10%, and bicycling with 9%. MAT bus travel to campus has more than tripled when compared with 2003 survey results, while the use of an auto as the form of travel has slightly decreased.

On-campus students were asked why they most often leave campus (Figure 9). Eighty-two percent responded that they most frequently leave campus to go grocery shopping, 76% indicated that they leave to do general shopping, 70% leave to visit family and/or friends, and 59% of respondents most frequently leave campus to go to restaurants. Other choices the students were given included going to the movie theatre, entertainment (other than movies), and work.



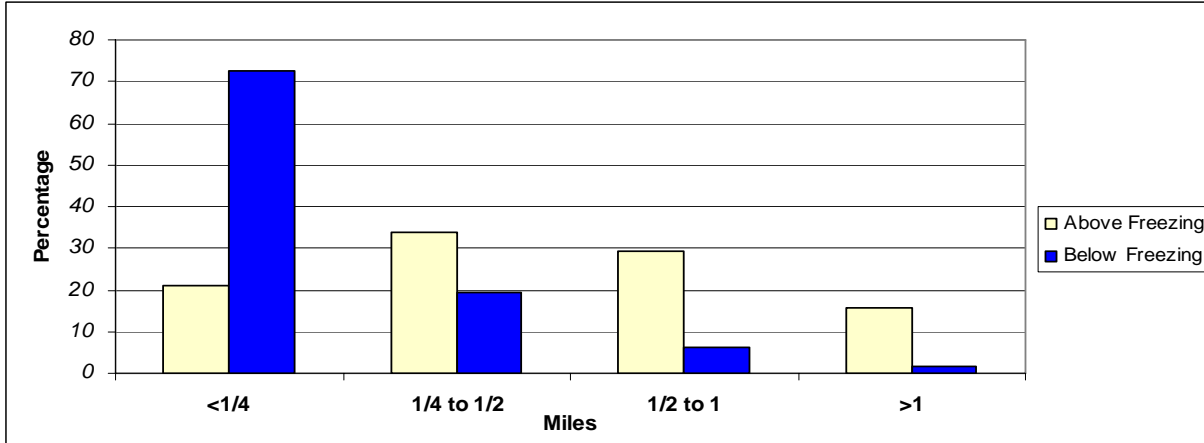
**Figure 9.** Why On-Campus Students Leave Campus (n=99)

If a student has a car, he/she can travel any time of the year regardless of the outdoor temperature. Results show that more than 23 percent of students choose their mode of travel based on the weather (Figure 10).



**Figure 10.** Weather Influences Mode of Travel in Winter (n=460)

Students were asked what distance is too far to walk to campus at different temperatures. Weather had a large influence on walking distance (Figure 11). As the figure shows, over 70 percent believe that walking less than ¼ mile when temperatures are below freezing is too far.

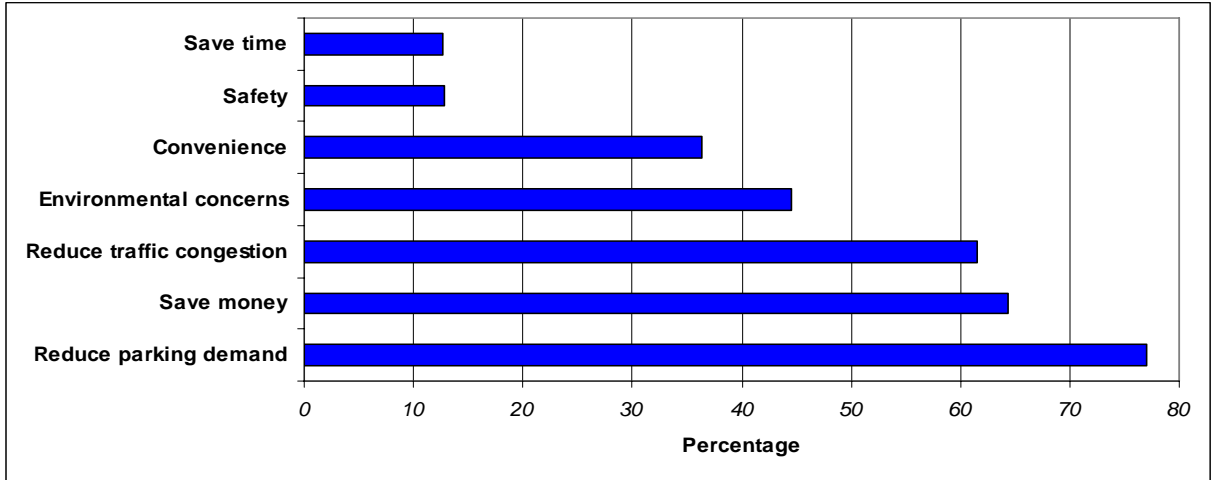


**Figure 11.** Reasonable Walking Distance by Temperature (n=460)

# Student Perceptions of MAT Services

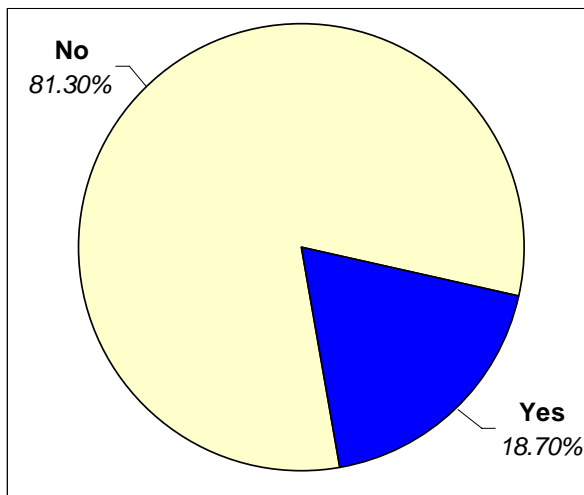
This section of the report focuses on student respondent's perception of the quality of MAT transit system service.

There are many benefits to public transportation. These benefits range from reducing parking demand and saving money, to safety and saving time (Figure 12). The majority of respondents felt that public transit helps to reduce parking demand and reduce traffic congestion, along with the added bonus of saving money.

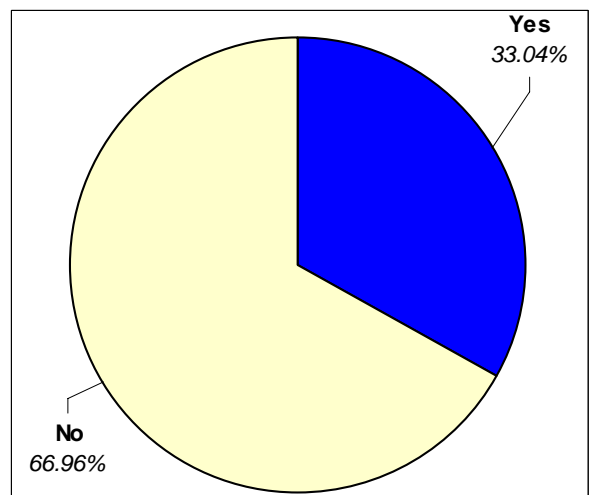


**Figure 12.** Benefits to riding Public Transit (n=460)

MSUM showed a marked increase in MAT usage compared to survey results from the 2003-2004 school year. In the 2003 survey, 18.7 percent of respondents indicated using MAT services whereas in 2004, 33 percent of respondents indicated using MAT services (Figure 13, 14).

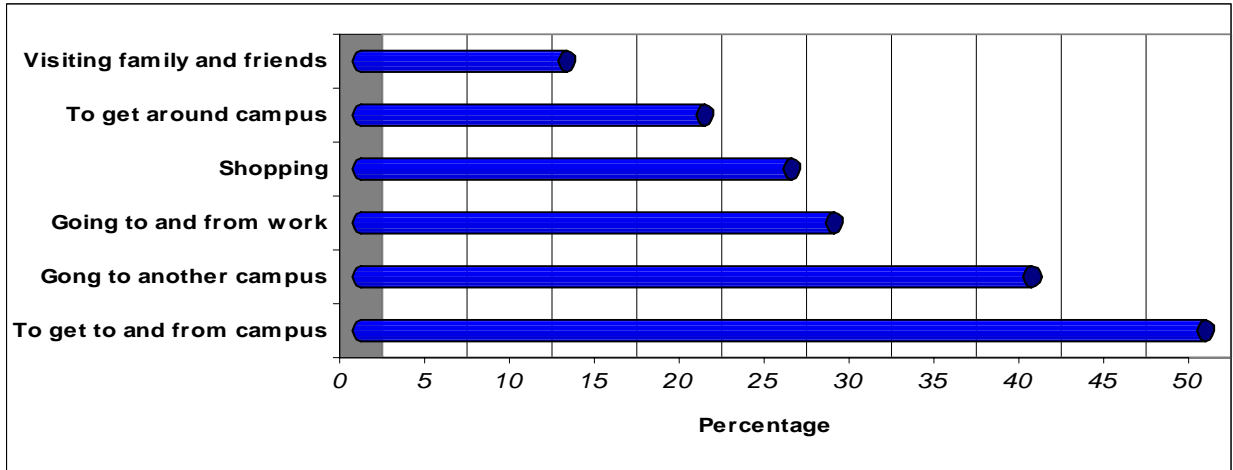


**Figure 13.** 2003 Students Using MAT (n=476)



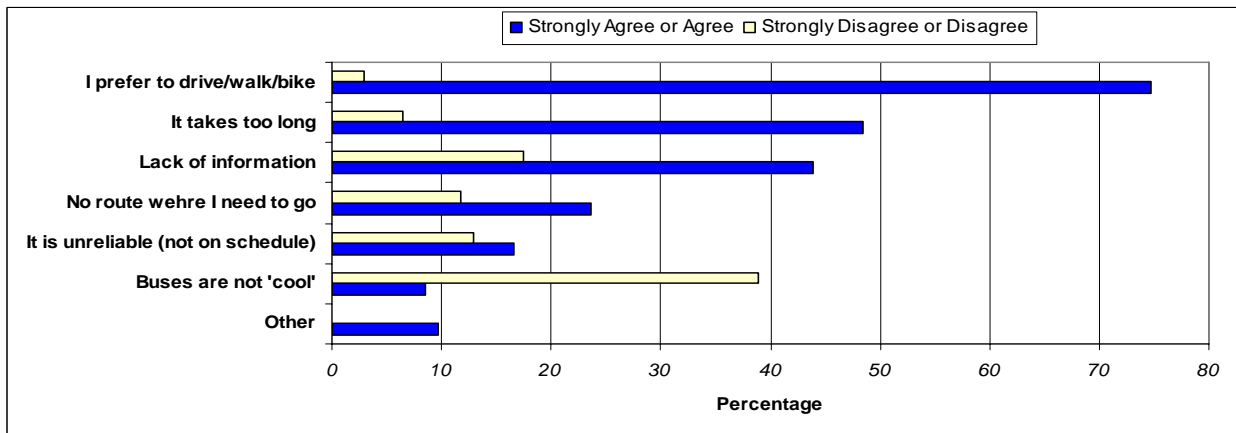
**Figure 14.** 2004 Students Using MAT (n=460)

An important issue is what motivates students to use MAT. Survey respondents were asked to state their most important reasons for using MAT from among the following choices (Figure 15). Two percent of respondents also indicated they would use MAT services for other reasons.



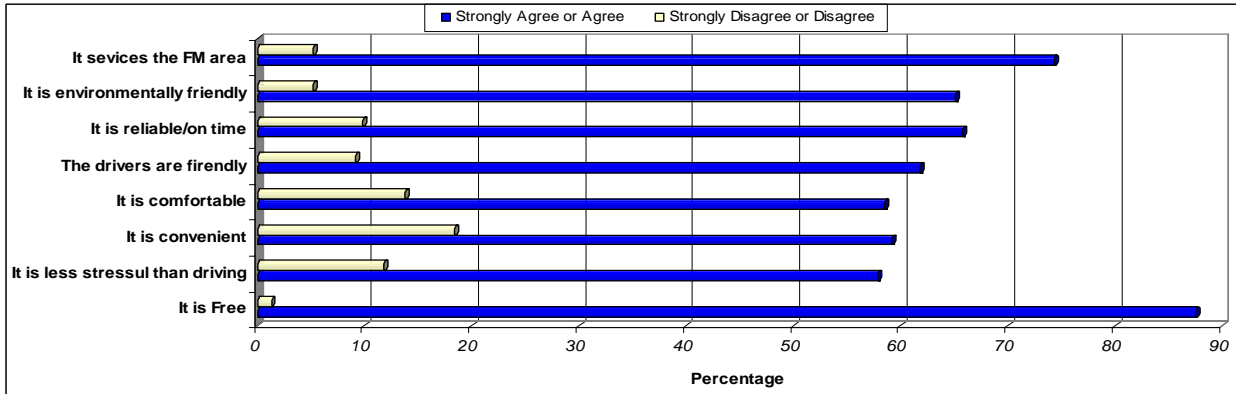
**Figure 15.** Reasons Students Use MAT (n=460)

Understanding why people use MAT services is very important. Realizing why people do not use MAT services is also important as it helps to determine what needs to be improved upon. SURTC asked students to identify the reasons that keep them from riding MAT. The students were given a set of possible reasons for not using MAT services and asked to respond with a level of agreement with the reason (Figure 16). Preferring to drive/walk/bike, it takes too long, as well as lack of information, were the main reasons that keep students from riding.



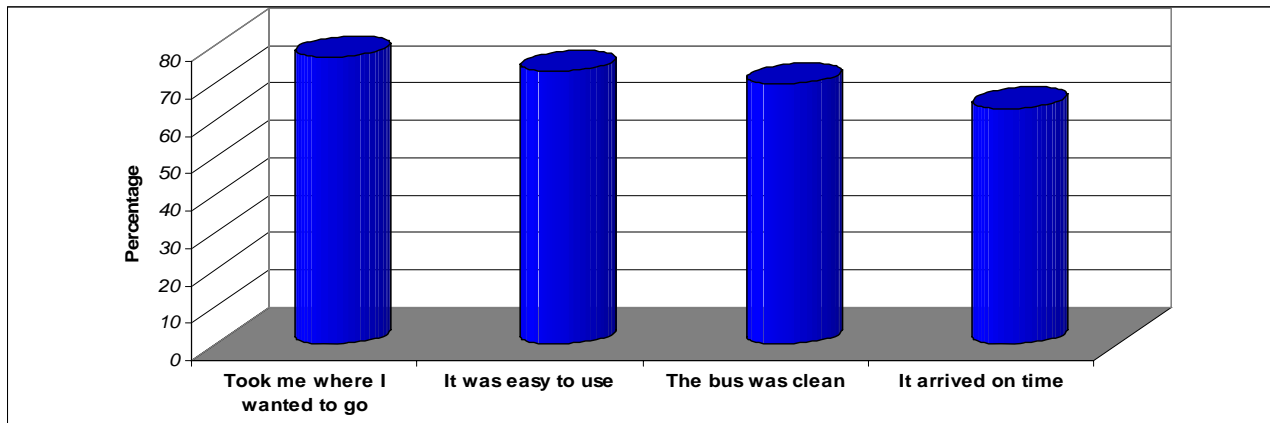
**Figure 16.** Factors Keeping Users from Using MAT Services (n=308)

SURTC probed the respondents to see what characteristics of transit services are important to them. These choices, which were qualitative in nature, included free service, convenience, friendly drivers, and environmentally friendly characteristics (Figure 17). Respondents indicated that free service, service that serves the FM area, and reliable/on time service were the most important characteristics to them.



**Figure 17.** Characteristic Values of Public Transportation (n=152)

It is helpful to be aware of how customers perceive their previous MAT service experiences (Figure 18). Arriving on time was the worst experience indicated by respondents. The percentage of people who felt this was the worst experience increased from the 2003 survey. The following chart displays the percentage of people who strongly agree or agree that they were happy with these aspects of MAT services.

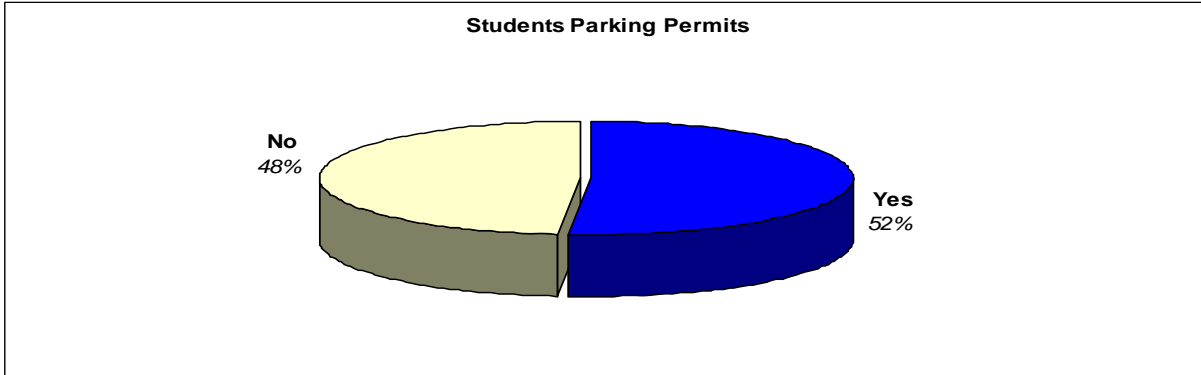


**Figure 18.** MAT User Experience (n=152)

In the transit industry, wait times for customers is very important. It may often mean the difference between satisfied customers and unsatisfied customers. According to the respondents, a wait time longer than 15 minutes will have a negative influence on ridership. Only 60 percent (275) of respondents indicated they would wait 15 minutes, 9 percent (42) would wait 30 minutes, and 30 percent (140) would not wait to use transit services. Wait times of 45 minutes and 60 minutes had very minimal responses, together equaling less than 1 percent (3).

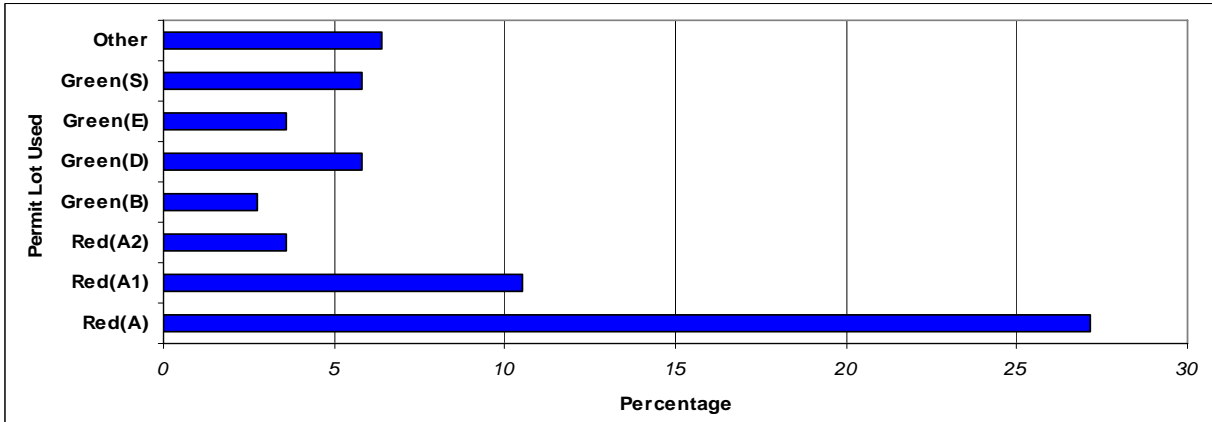
# Student Perceptions of Parking

Parking is a major concern on college campuses. With over half of the students who responded to the survey having parking permits (Figure 19), we asked students questions pertaining to affordability and convenience of parking at MSUM as well as the possibility of using MAT to resolve parking problems.



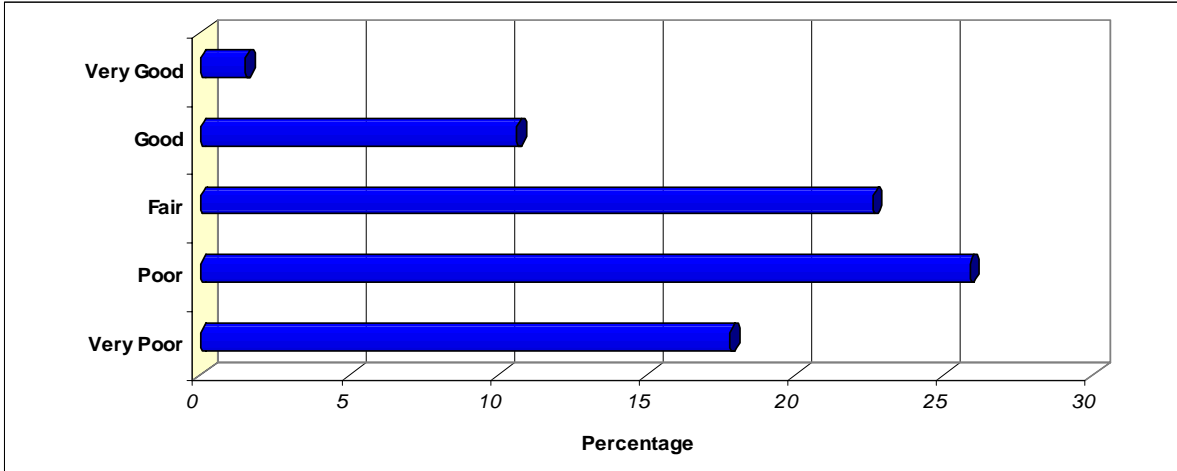
**Figure 19.** Students with Parking Permits (n=460)

The highest number of parking permits issued on the MSUM campus was in the A and A1 sections of the Red lot (Figure 20).



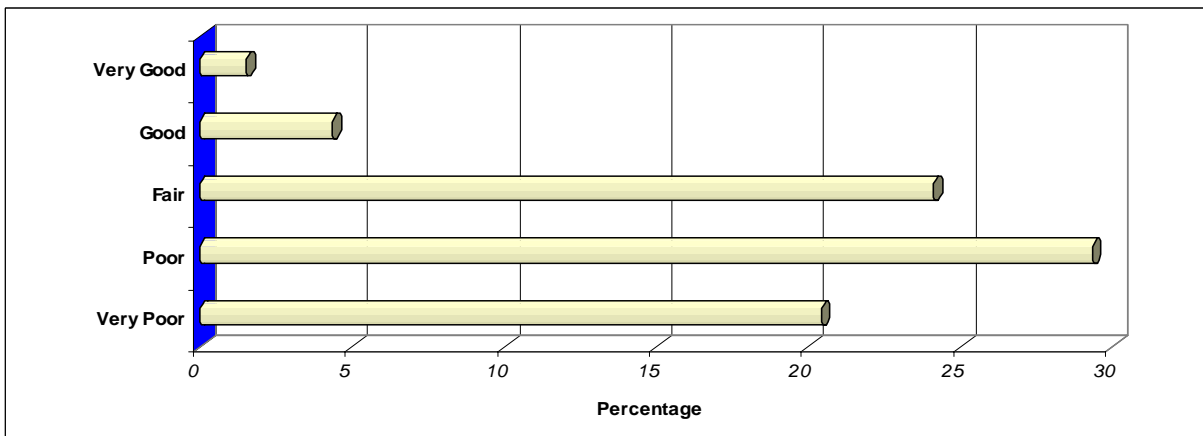
**Figure 20.** Parking Lots Used by Survey Respondents (n=237)

MSUM students are not pleased with on-campus parking convenience (Figure 21). Nearly 44 percent of student respondents rate MSUM's parking convenience as either poor or very poor, while less than 2 percent indicated that the parking convenience was very good.



**Figure 21.** Student Perception of Parking Convenience (n=361)

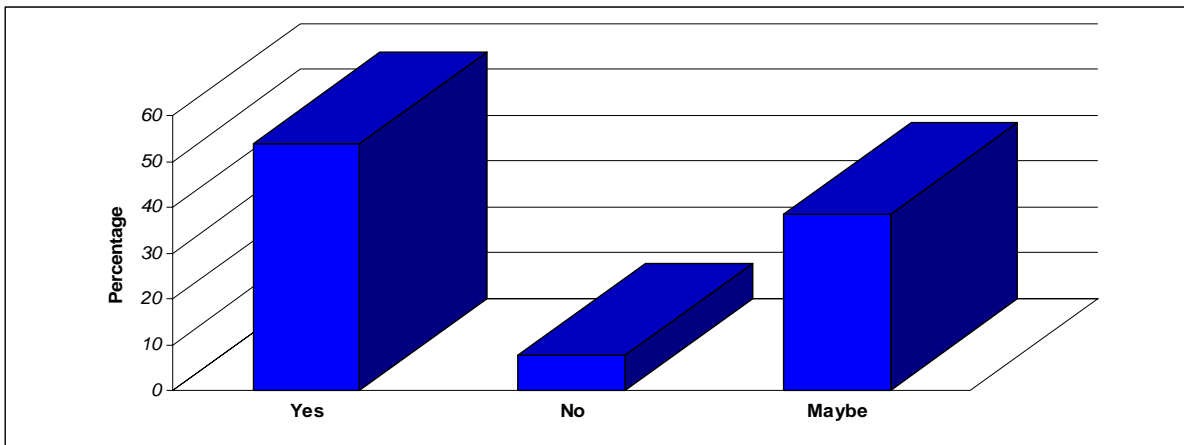
When we asked the students about parking affordability, they rated nearly identical to the convenience (Figure 22). Nearly 50 percent of respondent's rate parking affordability at MSUM as either poor or very poor, while below 6 percent rated the parking affordability as good or very good.



**Figure 22.** Student Perception of Parking Affordability (n=367)

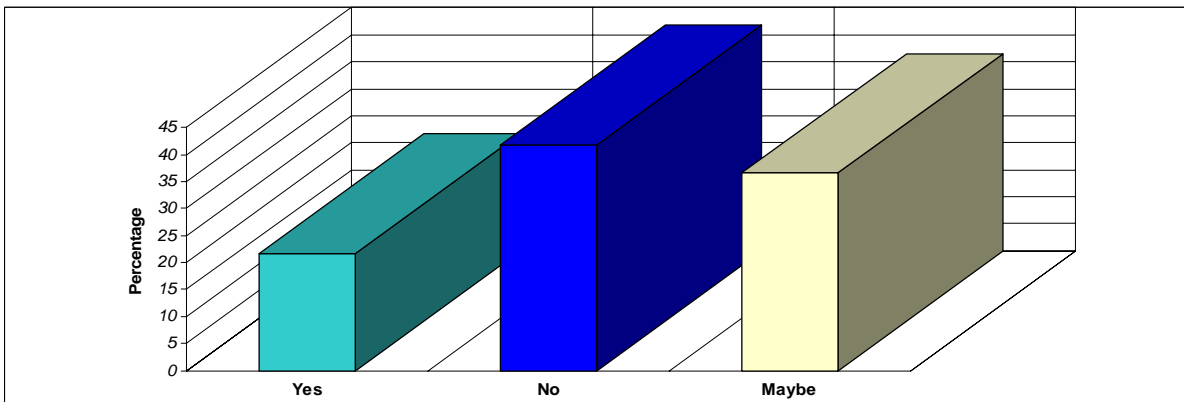
# Campus Public Transportation

Students from MSUM may take classes through the Tri-College system of NDSU, Concordia, and MSUM. This section contains questions to determine whether there is sufficient demand for public transportation to be provided between the three colleges. The first question addresses whether or not students plan on taking Tri-College courses with 52 out of 460 indicating that they planned on taking classes. Of those 52, 46 responded that they would be taking Tri-College classes during the daytime. Nearly 54 percent of students indicating they would be taking Tri-College courses indicated that they would consider taking the MAT bus. Only 8 percent of respondents indicated that they would not consider taking the MAT bus, and 38 percent said that they would maybe consider taking the MAT bus for their Tri-College classes (Figure 23).



**Figure 23.** Tri-College Students Who Would Consider Taking the MAT Bus (n=52)

The last question asked the students if they would use a MAT Circulator bus routed around the MSUM and Concordia campus neighborhoods spaced at 15 minute intervals (Figure 24). The higher percentage of students with no responses may be because of the fact that some students have no need to travel between the two campuses.



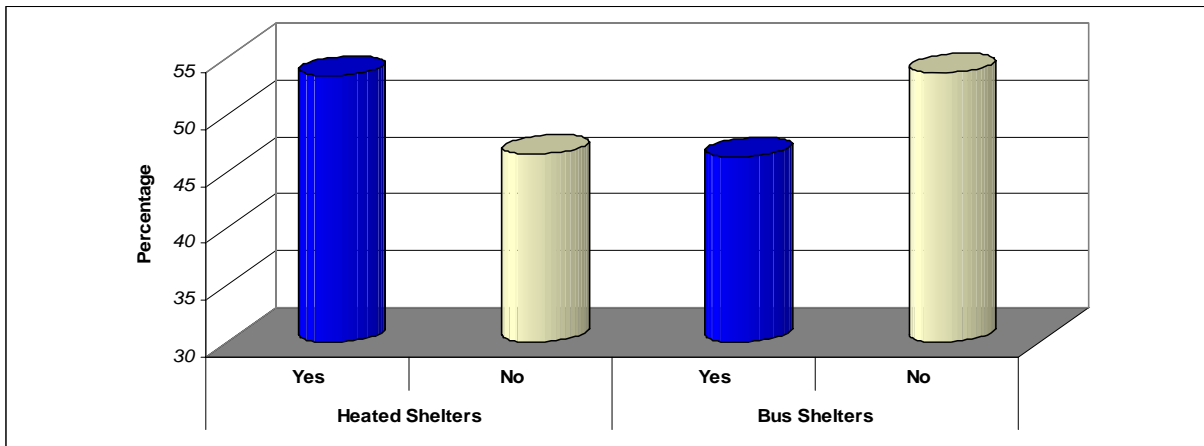
**Figure 24.** MAT Circulator Bus between Campuses (n=460)



# Campus Transit Accommodation

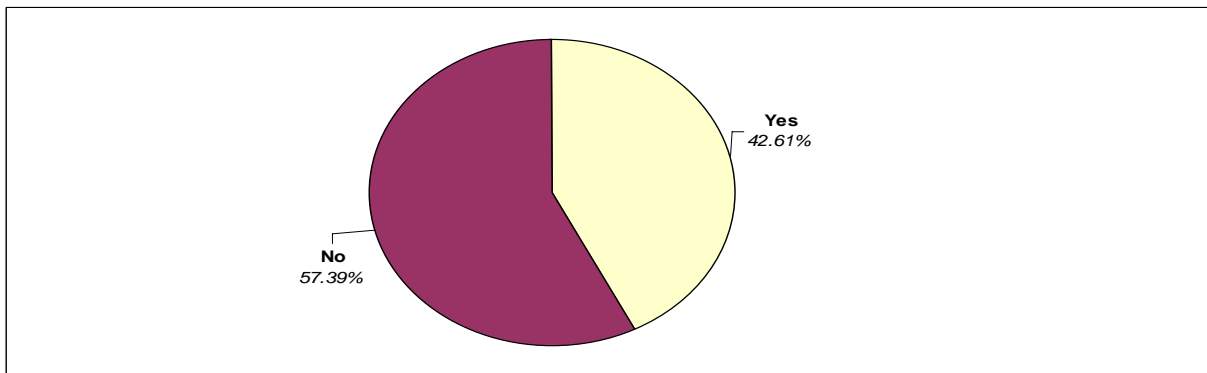
The final section of the survey asked the respondents whether they think more shelters should be placed around campus and whether or not they would be willing to pay a fee per semester to use the MAT services.

The first questions which asked respondents whether there should be more shelters or more heated shelters changed slightly when compared to 2003 survey results. Nearly 54 percent indicated they would like to see more heated bus shelters and roughly 43 percent indicated they would like to see more bus shelters all together (Figure 25). In the 2003 survey 38 percent of respondents indicated they would like to see more bus shelters on campus, and 43 percent said they would like heated shelters. Those numbers increased by 11 percent on heated shelters and 5 percent on bus shelters.



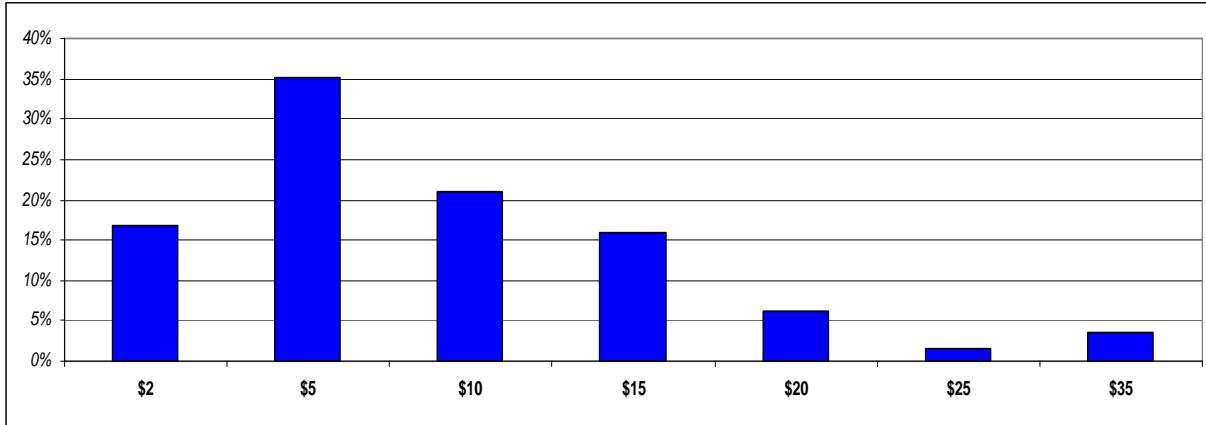
**Figure 25.** Desire for More/Heated Shelters (n=460)

One of the main factors that determine the value of service is whether the customer is willing to pay for that service. Students were asked if they would be willing to pay an activity fee for free, unlimited use of the MAT Bus around campus and the Fargo-Moorhead area (Figure 26).



**Figure 26.** Students Willing to Pay Activity Fee (n=460)

Students were then asked how much they would be willing to pay on a per semester basis for unlimited use of MAT services (Figure 27). Nearly 50 percent of respondents indicated that they would be willing to pay \$10 or more. The majority indicated that they would be willing to pay an activity fee of 5 or 10 dollars.



**Figure 27.** How Much Students are willing to Pay for MAT Service (n=196)

## Summary

In summary the survey data collected revealed some key points about MSUM campus transit needs. A comparison of data from MSUM 2002-03 and 2003-04 school year surveys show an increase in MAT ridership of over 14%. Another question shows that the main reason that students use MAT is to get to and from campus. The main reason some do not use the service is because of a preference to drive/walk/bike. Overall value found in public transportation according to the respondents is free service and MAT services the FM area. MAT users have been satisfied with current aspects such as taking them where they need to go, the ease of use, cleanliness of the bus, and on time arrival. Students indicated dissatisfaction with both parking convenience and affordability and at the same time indicated that reducing parking demand was the biggest benefit to riding public transit. A much greater percentage of students live off campus than on campus leading us to believe there is a large need for public transportation. The information and knowledge that is gained by this data will not only help in making transit decisions for today, but also help build a foundation in planning for tomorrow.