# Mobility of MSUM Students Transit Survey Results

Del Peterson Jill Hough Gary Hegland

Small Urban & Rural Transit Center Upper Great Plains Transportation Institute North Dakota State University

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## Mobility of MSUM Students

It is not possible with an electronic on-line survey to ensure equal participation from all students. However, there was proportionate representation from all undergraduate and graduate class levels (Table 1). The senior class had the highest representation while the sophomore and graduate student classes had the lowest representation.

Table 1.	Survey Res	ponse Distribution	Compared to A	Actual Class Distribution
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Classification	Actual Class Distribution (Fall 00')	Class Number	Response from Class	Survey Number
Freshmen	19.88%	1475	19.33%	92
Sophomores	18.05%	1339	18.07%	86
Juniors	17.83%	1323	25.21%	120
Seniors	28.55%	2118	33.19%	158
Graduate	3.07%	228	3.57%	17
Non-degree	12.60%	935	0.63%	3
Total	100.00%	7418	100.00%	476

Student employment status has a vital impact on student responses regarding public transportation. Nearly 22 percent of the student respondents indicated they were unemployed (Figure 1). Almost 60% of the students who do work, work off-campus. Transit preferences are evident in the differing behaviors among employed and unemployed students.

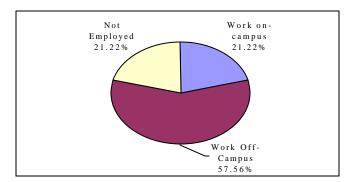


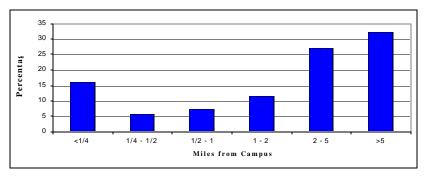
Figure 1. Student Work Status (n=476)

Whether students live on or off-campus was also evaluated. Nearly three-fourths of students surveyed indicated they live off-campus. A good distribution was received across these categories as both the class and students living on and off-campus distributions were within seven percentage points. We were unable to get off-campus employment numbers for that comparison.

#### Movement Demands of Campus Students

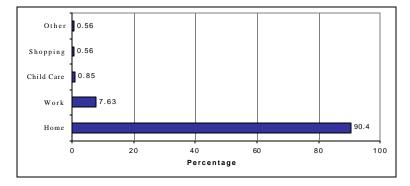
This section will show movement patterns of MSUM students, to, from, and around campus. This information is helpful in determining what services can be offered that will fit into the normal travel activity of the student body.

Students live at various distances from campus (Figure 2). Less than 30 percent of students live within one mile of campus, and almost one-third of MSUM respondents live five miles or further from campus. This shows a diverse student body location wise, demanding different transportation modes at various times. With nearly 60 percent of students living more than two miles from campus, public transportation can play a prominent role in transporting students from their residence to campus.



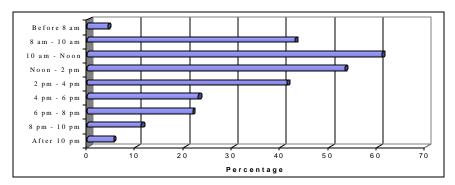
**Figure 2**. Distance Students Live from Campus (n=476)

Greater than 90 percent of respondents indicated they travel to campus from home (Figure 3). Less than 8 percent travel to school from work and the remaining 2 percent travel to campus from other various locations. This shows that most MSUM students follow a traditional college schedule with classes in the morning and early afternoon and work in the evening as almost 60 percent of respondents indicated they work off-campus, but very few come from work to school.



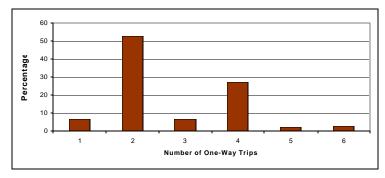
**Figure 3**. Students Depart From to Arrive on Campus (n=354)

The majority of student respondents indicated they are on campus between 8am and 4pm, following the normal semester class schedule (Figure 4). Between 10am and noon represents the highest concentration of students on campus. Sixty percent of respondents indicated they are on campus between 10am and noon.



**Figure 4**. Times When Students are on Campus (n=354)

Greater than 94 percent of respondents indicated they have access to motor vehicles. MSUM is well above the national average according to Independent Insurance Agents of American and College Parents of America who have indicated that nearly 70 percent of college students have either their own or use of their parents' car at school.

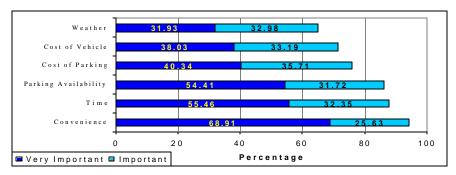


**Figure 5**. Number of One-Way Trips (n=354)

The majority of student respondents travel to campus once (two one-way trips) a day (Figure 5). Many students also travel to campus twice a day (four one-way trips). The distance that many students live from campus does not allow them to make frequent trips on average.

Convenience, time, and parking availability are the three top influences on student modes of travel (Figure 6). Convenience as an influence on travel mode received the highest rating as 68.91 percent of respondents consider convenience very important when choosing their mode of transportation. Fifty five percent of

respondents indicated that time and parking availability were very important in choosing their mode of transportation. In order to make public transportation a viable option at MSUM, all influences on student modes of travel must be taken into consideration.



**Figure 6**. What Influences Mode of Travel (n=476)

Students who live on-campus were asked why they most often leave campus. To get to and from campus, going to another campus, and shopping were the main reasons students indicated they leave campus (Figure 7).

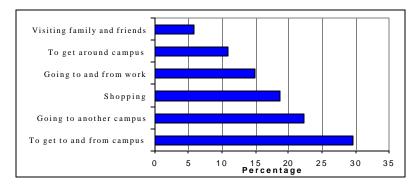


Figure 7. Why On-Campus Students Leave Campus (n=476)

The majority of student respondents either walk or drive to campus (Figure 8). Less than 7 percent of students carpool and roughly 5 percent ride bicycle. Students previously indicated that convenience, time and parking availability were main factors in choosing their means of getting to and from campus. Therefore, a relationship exists between respondents who indicated walking, driving, and carpooling as transportation modes, all which provide convenience, short travel times, or a relief from parking congestion.

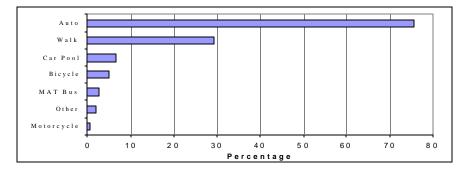
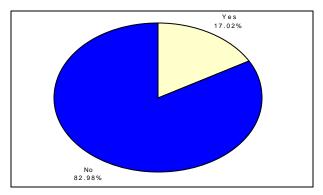


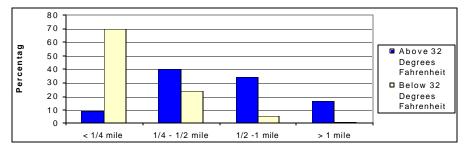
Figure 8. Student Mode of Travel to Campus (n=476)

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 17 percent of students choose their mode of travel because of weather (Figure 9).



**Figure 9**. Weather Influence Mode of Travel in Winter (n=476)

Students were asked how far is too far to walk to campus in differing temperatures. Weather had a large



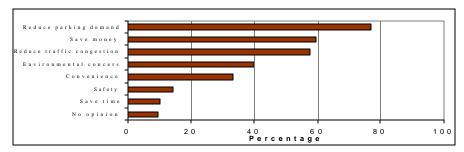
**Figure 10**. Reasonable Walking Distance by Temperature (n=476)

influence on walking distance (Figure 10).

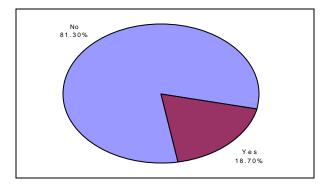
## Student Perceptions of MAT Services

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

There are many benefits to using public transportation. The following (Figure 11) is a list of benefits the students identified as most important to them including reduced parking demand, save money, reduce traffic congestion, environmental concerns convenience, safety, save time, and no opinion.



**Figure 11**. Benefits to Riding Public Transportation (n=89)



**Figure 12**. Students Using MAT (n=476)

The following (Figure 12) are the student respondents who use MAT services. Less than 20 percent of respondents indicated that they use MAT services.

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 13).

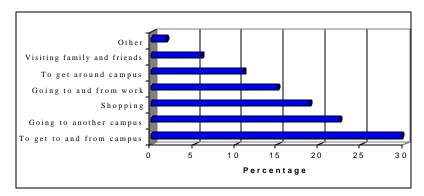
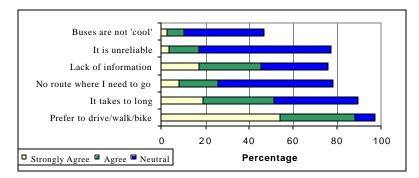


Figure 13. Reasons Students Use MAT (n=387)

SURTC asked students to identify the reasons that keep them from riding MAT. We provided potential reasons and asked students to indicate how strongly they agreed, were neutral or disagreed. The primary reason students do not ride transit is their desire to drive, walk, or ride bicycle (Figure 14).



**Figure 14**. What Influences the Mode of Travel (n=387)

The characteristics of transit services that are important to customers are analyzed next. To accomplish this we looked at a number of value characteristics such as free service, convenience, friendly drivers, and environmentally friendly characteristics. Friendly drivers, reliable, free and serves the Fargo/Moorhead area were the greatest agreed upon characteristics among respondents (Figure 15).

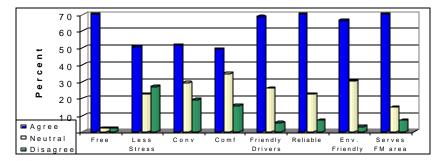
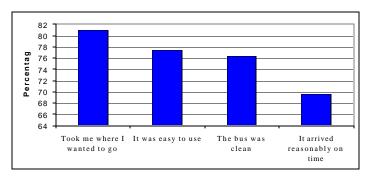


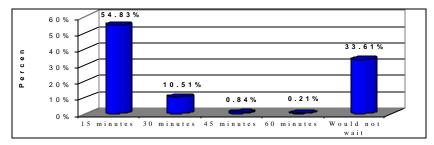
Figure 15. Characteristic Values of Public Transportation (n=89)

It is helpful to be aware of how customers perceive their previous MAT service experiences. Arriving reasonably on-time was the worst experience indicated by respondents as less than 70 percent felt MAT buses were reasonably on-time (Figure 16).



**Figure 16**. Explanation of Experiences (n=89)

In the transit industry, wait times for customers are of utmost importance. According to respondents, a wait



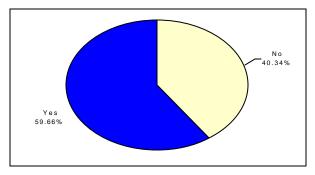
**Figure 17**. Willful Wait Time for MAT bus (n=387)

time longer than 15 minutes will have a negative influence on ridership (Figure 17).

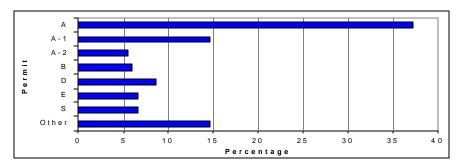
## Student Perceptions of Parking

Parking is generally a major issue on most college campuses. We addressed parking in this survey to identify how many students own parking permits, the cost and the convenience of parking on the MSUM campus.

Just under 60 percent of student respondents indicated they own parking permits (Figure 18).



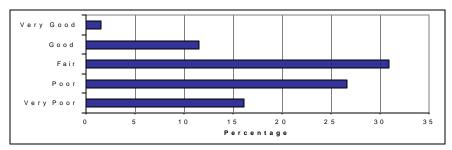
**Figure 18**. Students with Parking Permits (n=476)



**Figure 19**. Parking Lots Used by Survey Respondents (n=354)

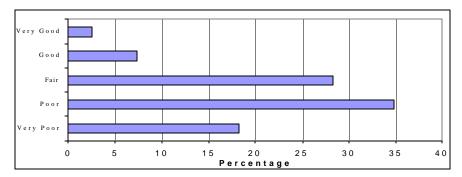
The highest number of parking permits issued on the MSUM campus was in the A and A-1 lots respectively (Figure 19).

MSUM students are not happy with on-campus parking spaces (Figure 20). Nearly 45 percent of student respondents rate MSUM's parking convenience as either poor or very poor, whereas less than 3 percent of respondents rate the MSUM parking convenience as very good.



**Figure 20**. Parking Convenience (n=354)

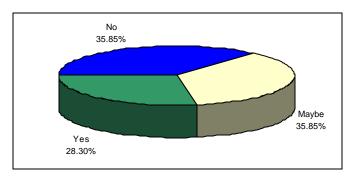
MSUM students are not happy with parking permit prices as well. Nearly 54 percent of respondents rate parking affordability at MSUM either poor or very poor, whereas, less than 15 percent of respondents rated parking affordability as either good or very good (Figure 21).



**Figure 21**. Parking Affordability (n=354)

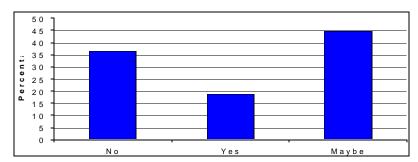
#### **Campus Public Transportation**

Three questions were asked to help identify the current demand for MSUM public transportation and where services could be added. First, students were asked if they planned to take Tri-College classes with 431 out of 476, greater than 90 percent, respondents indicated they do not plan to take Tri-College classes. Second, those who answered yes to taking Tri-College classes were asked if they would consider using the MAT bus system to get to and from Tri-College classes. Less than 30 percent of respondents indicated they would consider taking MAT buses to Tri-College classes with greater than 35 percent indicating they would not consider taking MAT buses (Figure 22).



**Figure 22**. Tri-College Students Who Would Consider Taking the MAT Bus (n=476)

Finally, students were asked if they would use a MAT Circulator serving the MSUM and Concordia campuses that runs with approximately 15 minute intervals (Figure 23). Less than 19 percent of student respondents indicated they would use the circulator, and 37 percent specified that they would not use a campus circulator.



**Figure 23**. Students Who Would Use a MAT Circulator Bus Around MSUM and Concordia if Available (n=162)

#### **Campus Transit Accommodation**

The final two questions of the survey pertained to the desire for more heated shelters on campus and the willingness of the respondents to pay an activity fee for additional transit services. Thirty-eight percent of respondents indicated they would like to see more bus shelters on campus, and 43 percent said they would like heated shelters (Figure 24).

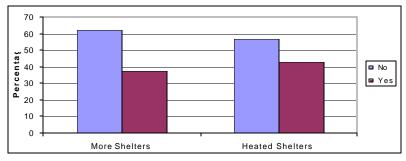
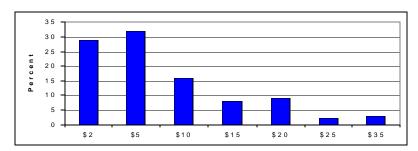


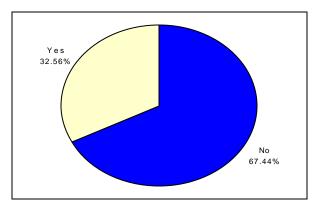
Figure 24. Desire for More and Heated Shelters (n=476)



**Figure 25**. How Much Students are Willing to Pay for MAT Service (n=476)

One of the main factors that determine the value of service is if the customer is willing to pay and how much is he/she willing to pay for the service. Slightly more than 22 percent of respondents indicated they were willing to pay \$15 or more for MAT transit service (Figure 25).

Finally, 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. Less than 70 percent of respondents indicated they not be willing to pay additional activity fee for unlimited MAT transportation (Figure 26).



**Figure 26**. Students Willing to Pay Activity Fee (n=476)