

# Mobility of Concordia Students

## Transit Survey Results

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October 2003

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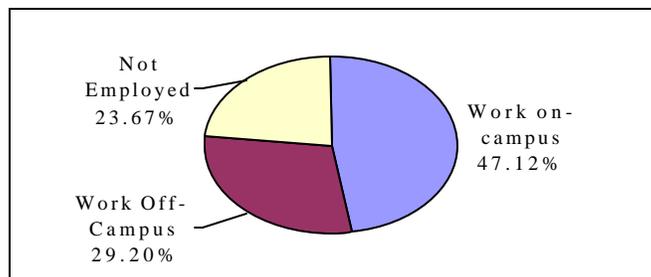
# Mobility of Concordia Students

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 class levels (Table 1). The sophomore class had the highest representation with the senior class being the lowest class level represented.

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

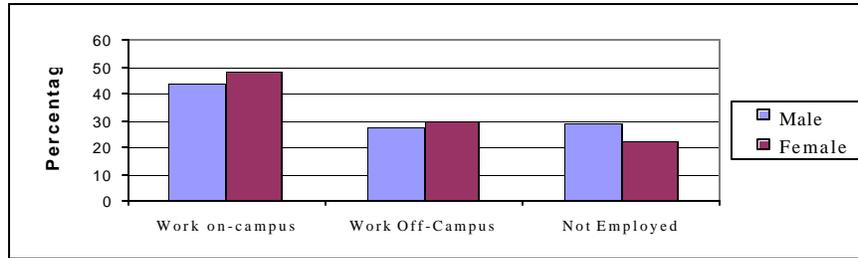
Classification	Actual Class Distribution (99) (%)	Class Number	Response from Class (%)	Survey Number
Freshmen	27.8	829	24.6	111
Sophomores	24.7	735	31.6	143
Juniors	21.6	644	22.1	100
Seniors	23.0	684	20.1	91
Non classified	2.9	87	1.6	7
Total	100	2979	100	452

Student employment status has a vital impact on student responses regarding public transportation. Almost one-fourth of the students were unemployed (Figure 1). Nearly half of respondents work on-campus, while less than 30 percent work off-campus. There are noticeable differences in the behaviors of employed and unemployed students that will be discussed throughout this report.



**Figure 1.** Student Work Status (n=452)

A further breakdown shows that on campus there are more women employed as compared to men (Figure 2). This is also true of off campus student employment. However, more males are unemployed as compared to females. There is no survey information available to explain this difference.



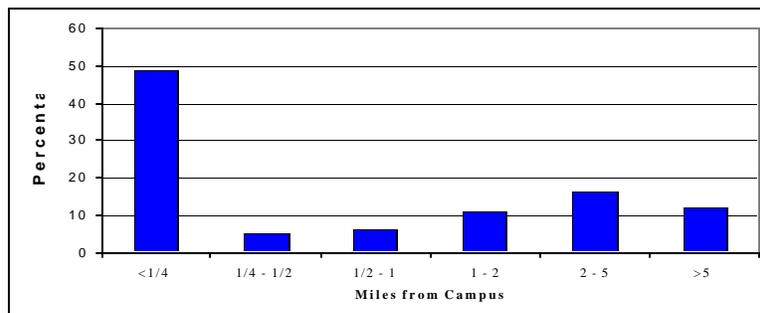
**Figure 2.** Employment by Gender (n=452)

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

## Movement Demands of Campus Students

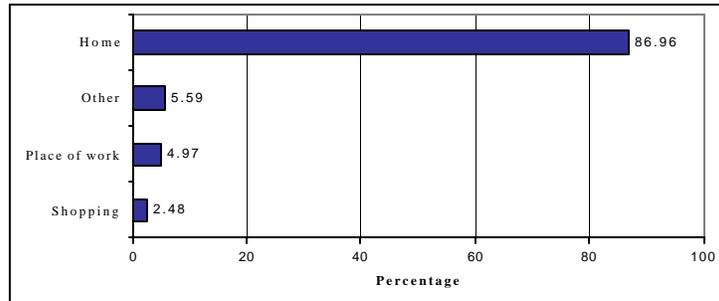
This section will show movement patterns of Concordia students, to, from and around campus. Survey results in this section tell how far students live from campus, where they are coming from, what time period they spend on campus, how they most often travel to campus, how many have access to motor vehicles, what determines their mode of travel and whether their mode of preference changes in the winter. 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 3). Nearly half of student respondents live within one-fourth mile from campus. This illustrates the tight knit Concordia College community. However, almost 30 percent of respondents indicated they live greater than two miles from campus showing an untapped market sector for public transportation.



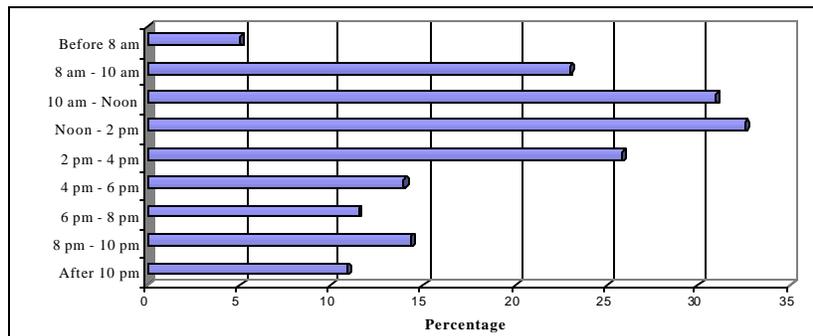
**Figure 3.** Distance Students Live from Campus (n=176)

Almost 87 percent of respondents indicated they normally travel to campus from home (Figure 4). About 5 percent travel to school from work and the remaining 8 percent arrive from other places. This shows that most Concordia College students follow a traditional college schedule with classes in the morning and early afternoon and work in the evening as nearly 30 percent indicated they work off-campus, but very few come from work to school.



**Figure 4.** Where Students Depart From to Arrive on Campus (n=161)

The majority of student respondents indicated they are on campus between 8am and 4pm, following the

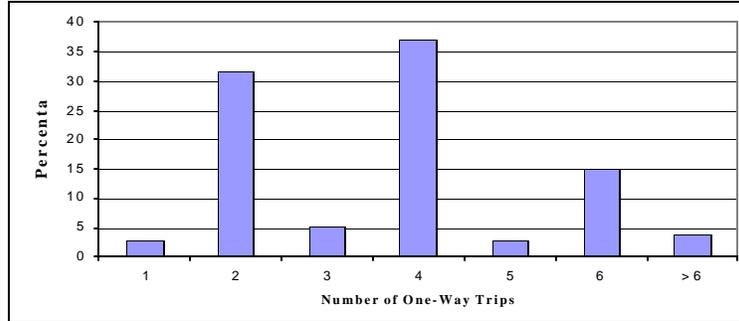


**Figure 5.** Times When Students are on Campus (n=452)

normal semester class schedule (Figure 5). Between 10am and noon represents the highest concentration of students on campus. One-third of students indicated they are on campus between noon and 2pm.

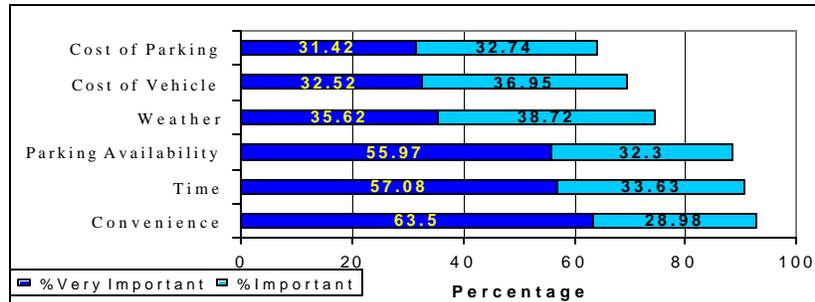
Almost 82 percent of respondents indicated they have access to motor vehicles. Concordia College is well above the national average according to Independent Insurance Agents of America and College Parents of America who have indicated that nearly 70 percent of college students have either their own or use of their parents' car at school.

The majority of respondents travel to school twice (four one-way trips) a day (Figure 6). A large number of students also go to school once a day (two one-way trips). 15 percent of respondent indicated they make three trips (six one-way trips) to school each day. The proximity of many students to campus allows for the movement from campus to home often for classes or on-campus jobs.



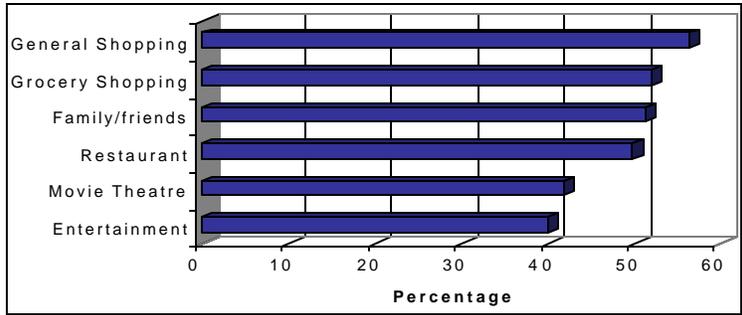
**Figure 6.** Number of One-Way Trips (n=154)

Convenience, time, and parking availability are the three top influences on student modes of travel (Figure 7). Convenience as an influence on travel mode received the highest rating as 63.5 percent of respondents consider convenience very important when choosing their mode of transportation. Over 50 percent of



**Figure 7.** What Influences Mode of Travel (n=452)

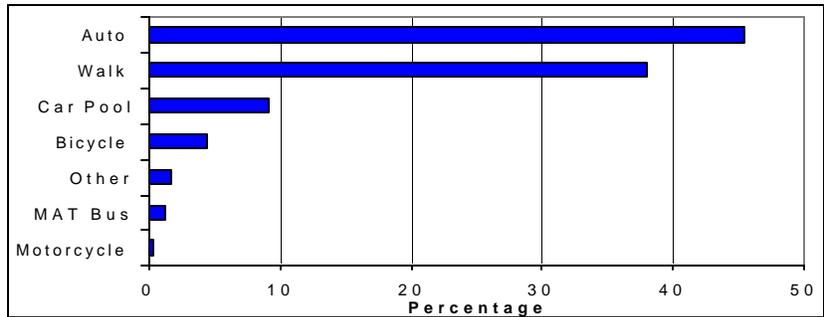
respondents indicated that time and parking availability were very important in choosing their mode of transportation.



**Figure 8.** Why On-Campus Students Leave Campus (n=452)

Students who live on-campus were asked why they most often leave campus. General shopping, grocery shopping, visiting family and friends, and eating out at restaurants were the main reasons students indicated they leave campus (Figure 8).

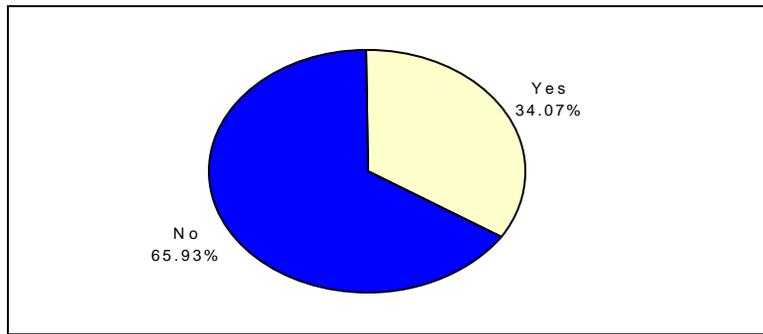
The majorities of student respondents either walk or drive to campus, 83 percent (Figure 9). Almost 10 percent of students carpool, which leaves only a select few riding bike, taking public transit or getting to school



**Figure 9.** Students mode of Travel to Campus (n=452)

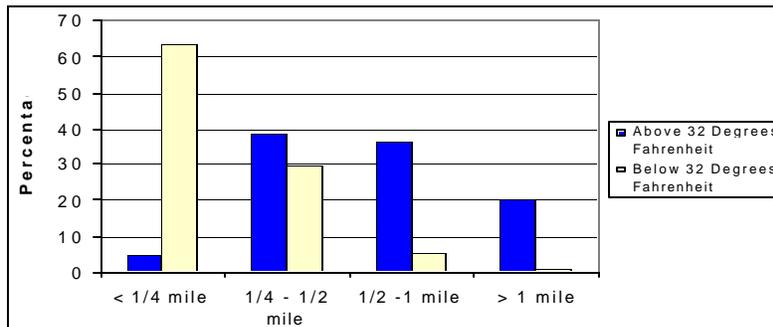
by some other means. Students previously indicated that convenience, time and parking availability were main factors in choosing their means of getting to and from campus. Therefore, a relationship exists between respondents indicated walking, driving, and carpooling as transportation modes, all which provide convenience, short travel times, or a relief from parking congestion.

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 34 percent of students choose their mode of travel because of weather (Figure 10).



**Figure 10.** Weather Influences Mode of Travel in Winter (n=452)

Students were asked how far is too far to walk to campus in differing temperatures. Weather had a large influence on walking distance (Figure 11). Almost 40 percent of respondents indicated one-half to one mile



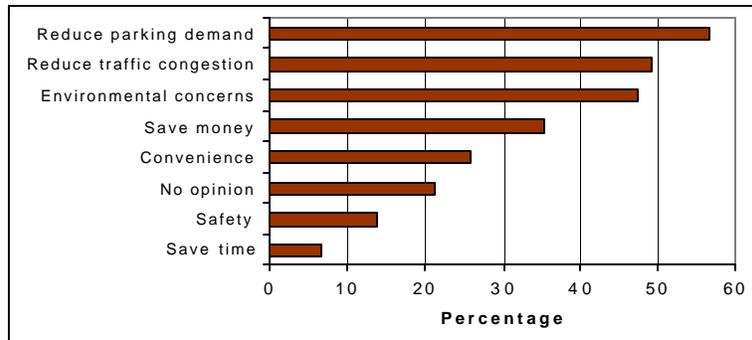
**Figure 11.** Reasonable Walking Distance by Temperature (n=452)

was reasonable walking distance in above freezing temperatures, whereas less than 7 percent of respondents considered the same distance walkable in below freezing temperatures.

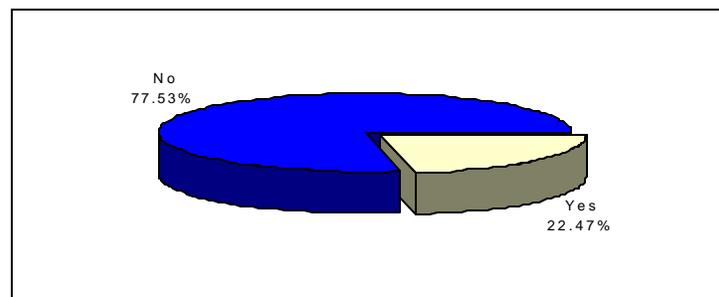
# Student Perceptions of MAT Services

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 public transportation. The following (Figure 12) is a list of benefits the students identified as most important to them which included reducing parking demand and reducing traffic congestion as the two greatest benefits.



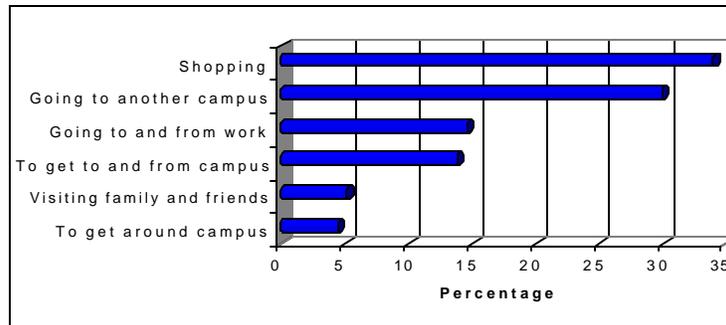
**Figure 12.** Benefits to riding Public Transit (n=445)



**Figure 13.** Students Using MAT (n=445)

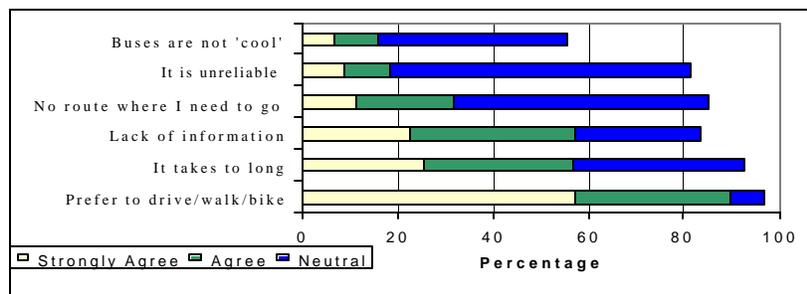
The following (Figure 13) are the student respondents who use MAT services with less than 25 percent indicating they use MAT to travel in the community.

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 14). Shopping and going to another campus were the main reasons Concordia students use MAT.



**Figure 14.** Reason Students use MAT (n=445)

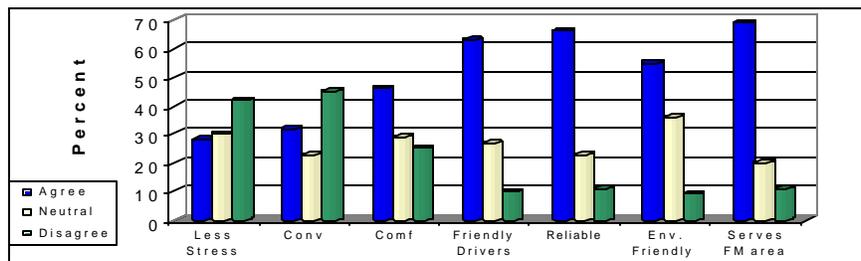
We asked students to identify the reasons that keep them from riding MAT. We provided potential reasons



**Figure 15.** Reasons Students Do Not Ride MAT (n=345)

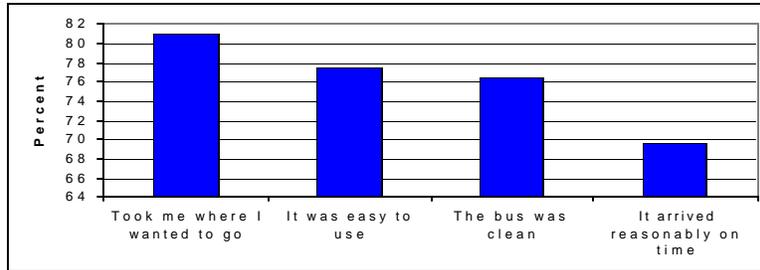
and asked students to indicate how strongly they agreed, were neutral or disagreed. The primary reason students do not ride transit is their desire to drive, walk or ride bicycle (Figure 15).

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 less stress, convenience, friendly drivers, and environmentally friendly characteristics. Serves the FM area and reliability were the greatest agreed upon values among respondents (Figure 16).



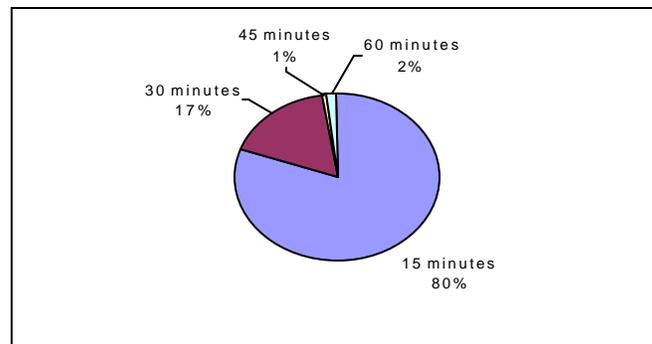
**Figure 16.** Important Characteristic Values of Public Transportation (n=100)

It is helpful to be aware of how customers perceive their previous MAT service experiences. This response shows if MAT services are living up to expectations (Figure 17). Eighty-one percent of respondents indicated that MAT bus service took them to their desired destination indicating current route locations are well positioned.



**Figure 17.** Explanation of Experiences (n=100)

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



**Figure 18.** How Long People are Willing to Wait (n=445)

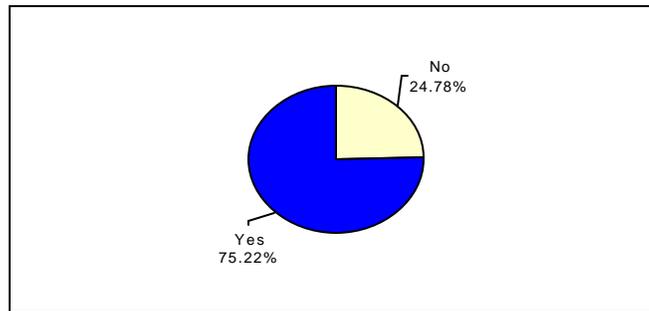
time longer than 15 minutes will have a negative influence on ridership (Figure 18).

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. More than 70 percent of respondents indicated they are willing to pay \$10 or more for MAT services (Figure 19). This shows high appreciation for the service.

# Students Perceptions of Parking

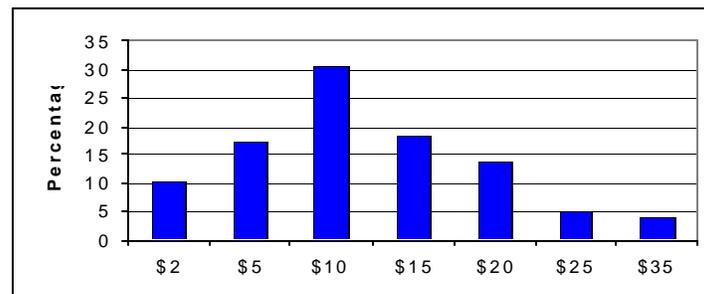
Parking is generally a major issue on most campuses. We addressed parking in this survey to identify how many students own parking permits, the cost of parking and the convenience of parking on the Concordia College Campus.

Just over 75 percent of survey respondents have parking permits (Figure 20).

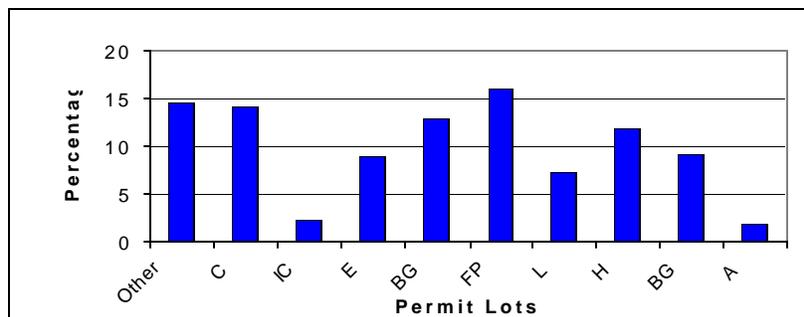


**Figure 20.** Students with Parking Permits (n=452)

The highest concentration of parking permits issued on the Concordia campus were in the FP and C lots, according to respondents (Figure 21)

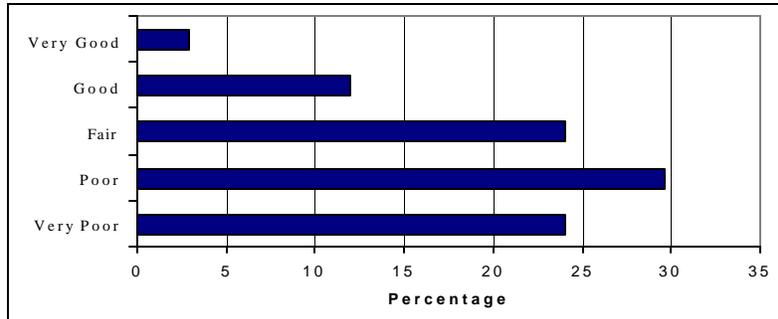


**Figure 19.** How Many are Willing to Pay More (n=201)

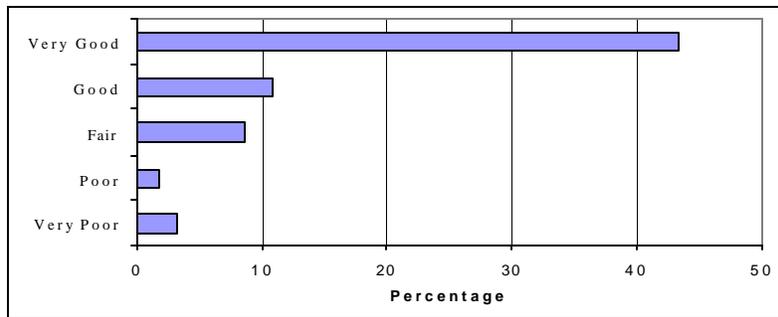


**Figure 21.** Parking Lots Used by Survey Respondents (n=343)

Concordia students are not happy with on-campus parking conditions (Figure 22). Greater than 50 percent of respondents rate Concordia's parking convenience as either poor or very poor, whereas less than 3 percent of respondents rate the parking convenience very good.



**Figure 22.** Parking Convenience (n=452)

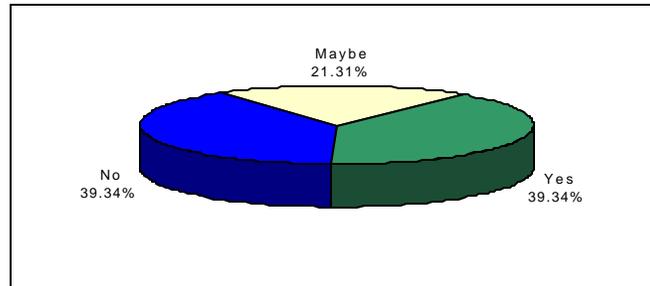


**Figure 23.** Parking Affordability (n=452)

Parking affordability has a different shape. Over 54 percent of respondents rate parking affordability as either very good or good, and less than 5 percent rate affordability either poor or very poor (Figure 23).

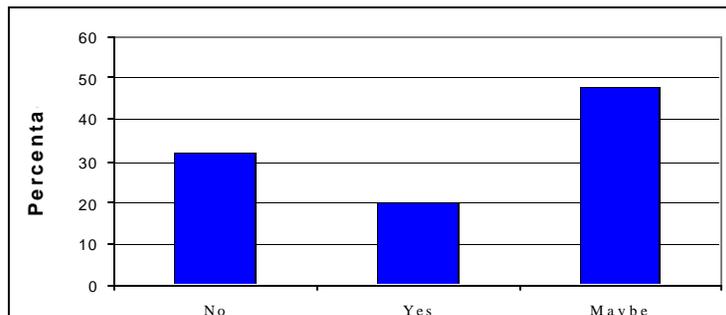
# Campus Public Transportation

Three questions were asked to help identify the current demand for Concordia public transportation and where services could be added. First, students were asked if they planned to take Tri-College classes. Only 50 of the 445 respondents indicated they planned 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 to get to and from Tri-College classes. Just under 40 percent of respondents indicated they would consider taking MAT buses to Tri-College classes with roughly the same percentage indicating they would not consider taking the MAT bus (Figure 24).



**Figure 24.** Tri-College students who would consider taking MAT bus (n=445)

Finally, students were asked if they would use a MAT Circulator route serving the MSUM and Concordia

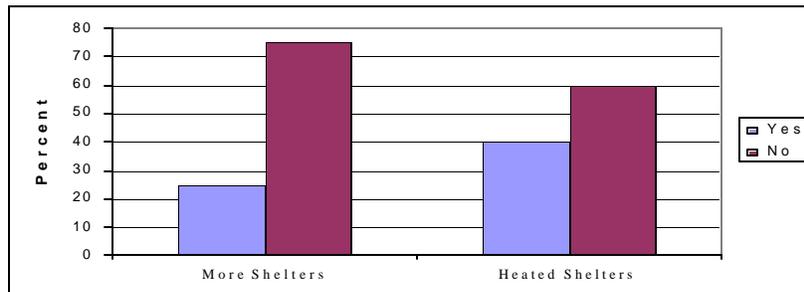


**Figure 25.** Students who would use MAT Circulator bus around MSUM and Concordia if available (n=445)

campuses that runs with approximately 15 minute intervals (Figure 25). Twenty percent of respondents indicated they would use the MAT Circulator and almost 50 percent indicated they may use the circulator.

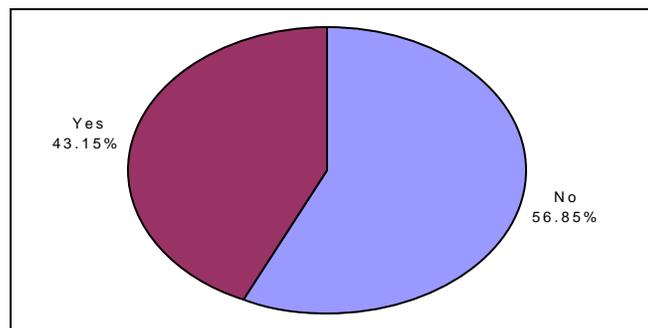
# Campus Transit Accommodation

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. Twenty-five percent of respondents indicated they would like to see more bus shelters on campus, and 40 percent said they would like heated shelters (Figure 26).



**Figure 26.** Desire for More and Heated Shelters (n=445)

Finally, students were asked if they would be willing to pay an activity fee for free unlimited use of the MAT



**Figure 27.** Students Willing to Pay Activity Fee (n=445)

Bus around campus and the Fargo-Moorhead area. Just under 60 percent indicated they would not be willing to pay additional activity fee for unlimited MAT transportation (Figure 27).