

# Mobility of Concordia Students Transit Survey Results – Year 2

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## Mobility of Concordia Students

The student transit use survey for Concordia received responses from 195 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.

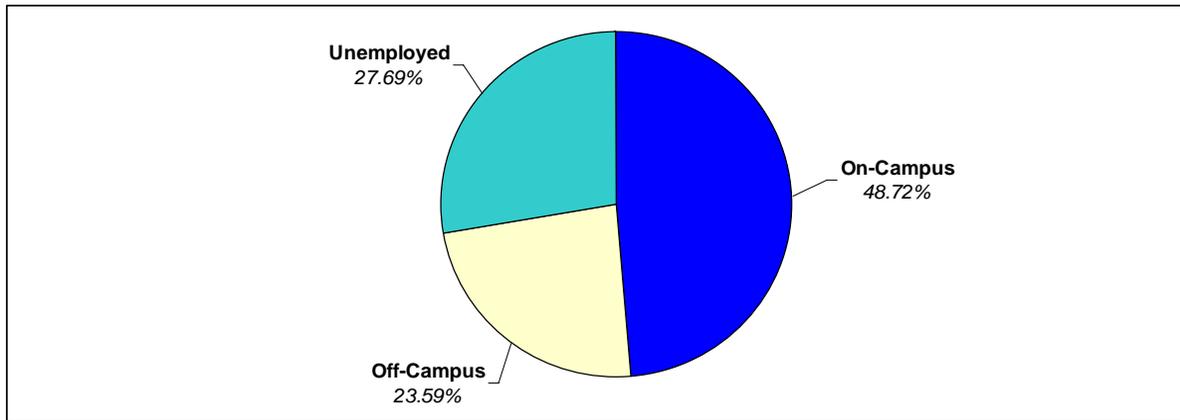
It is not possible with an electronic on-line survey to ensure equal participation from all students. However, there was a proportionate distribution from all undergraduate and graduate classes (Table 1). The junior class had the highest representation where all other categories were within 3 percent 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	29.66%	847	28.21%	55
Sophomores	23.00%	657	20.00%	39
Juniors	21.22%	606	26.67%	52
Seniors	23.81%	680	24.10%	47
Graduate	1.72%	49	0.51%	1
Non-degree	0.60%	17	0.51%	1
Total	100.00%	2856	100.00%	195

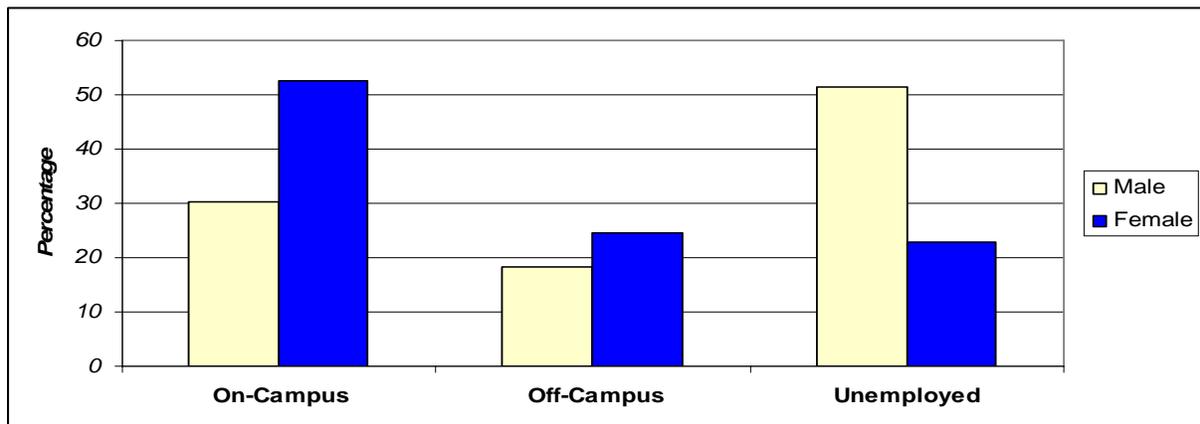
Of the 195 students who responded, 162 or 83 percent were female, and 33 or 17 percent were male. The actual Concordia fall 2003 enrollment consisted of 1,806 females or 63.2 percent and 1,050 males or 36.8 percent. The percentage of women who responded to this survey is notably higher than the percentage of women attending Concordia.

Student's employment status often influences their attitude toward and use of public transportation. About one-fourth of the survey respondents were unemployed (Figure 1). Just under one-fourth of students are employed off campus and roughly one-half of the survey respondents were employed on campus.



**Figure 1.** Student Work Status (n=195)

A further breakdown shows a high percentage of on-campus jobs are held by women (Figure 2). The proportion of females who held off-campus jobs was slightly higher than males. More males identified themselves as unemployed. There is no survey information available to explain the differences.



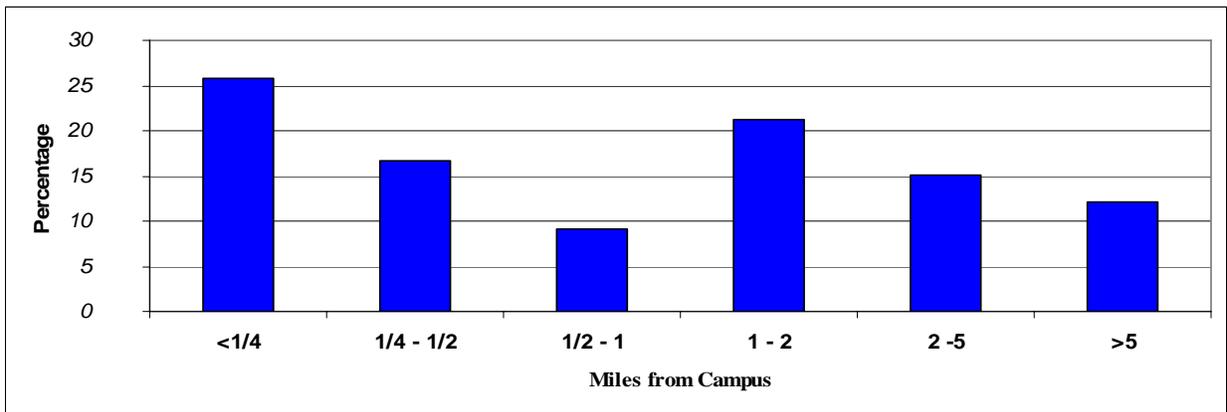
**Figure 2.** Employment by Gender (n=162, 33)

Whether students live on or off-campus was also evaluated. Approximately two-thirds of the students surveyed indicated they live on-campus. The results show that 95% (52) of freshmen and 92% (36) of sophomores live on campus, with the percentage of juniors living on campus only dropping to 50% (26), and seniors dropping to 30% (14) living on-campus.

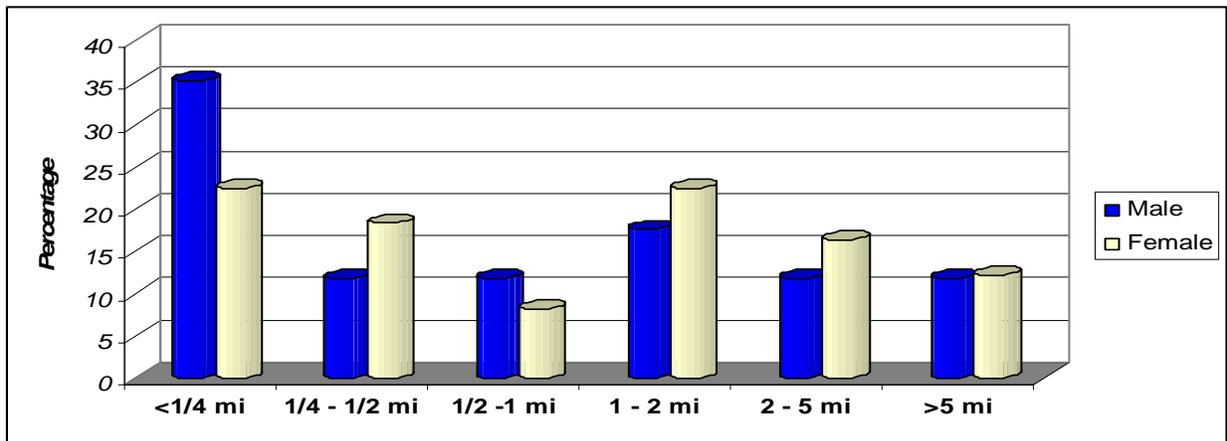
# Movement Demands of Students

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 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 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 half of the off-campus students who responded to the survey live at least a mile from campus. A more in depth look shows that a higher percentage of male students live within a quarter of a mile from campus compared to female students (Figure 4).

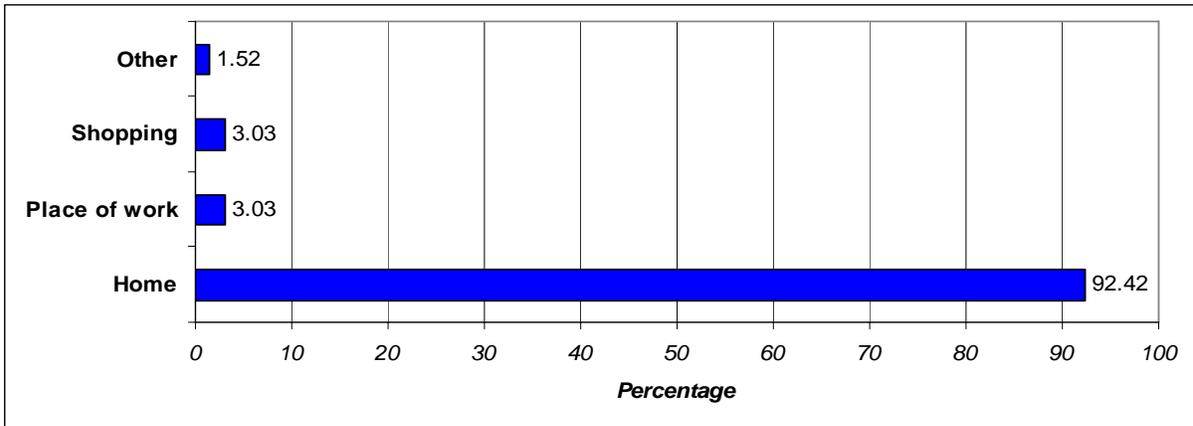


**Figure 3.** Distance Students Live from Campus (n=66)



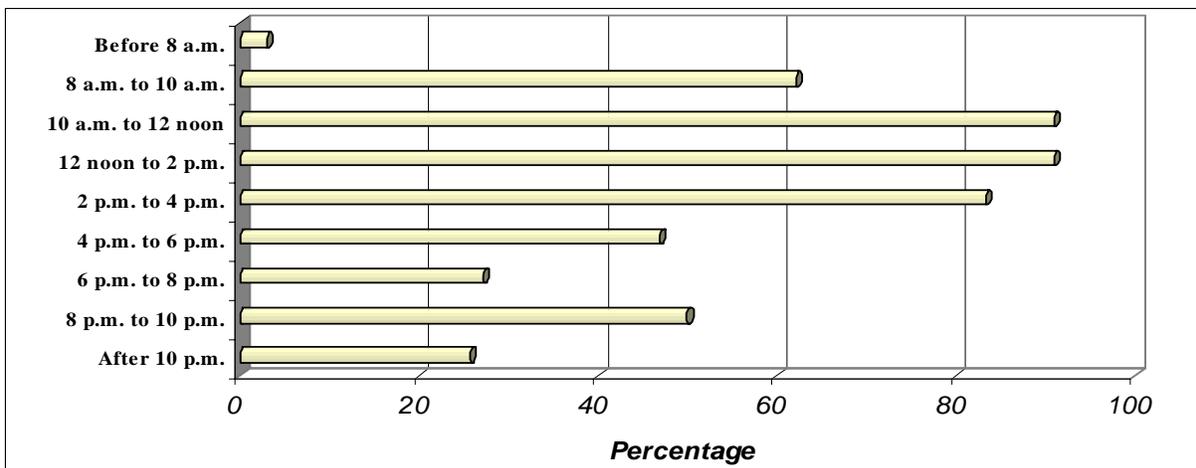
**Figure 4.** Student Distance from Campus by Gender (n=66)

Above 90 percent of respondents indicated they travel to campus from home (Figure 5). Three percent indicated that they travel to campus from their place of work as well as shopping, and the remaining 1.5 percent travel to campus from other locations.



**Figure 5.** Where Students Depart From to Arrive on Campus (n=66)

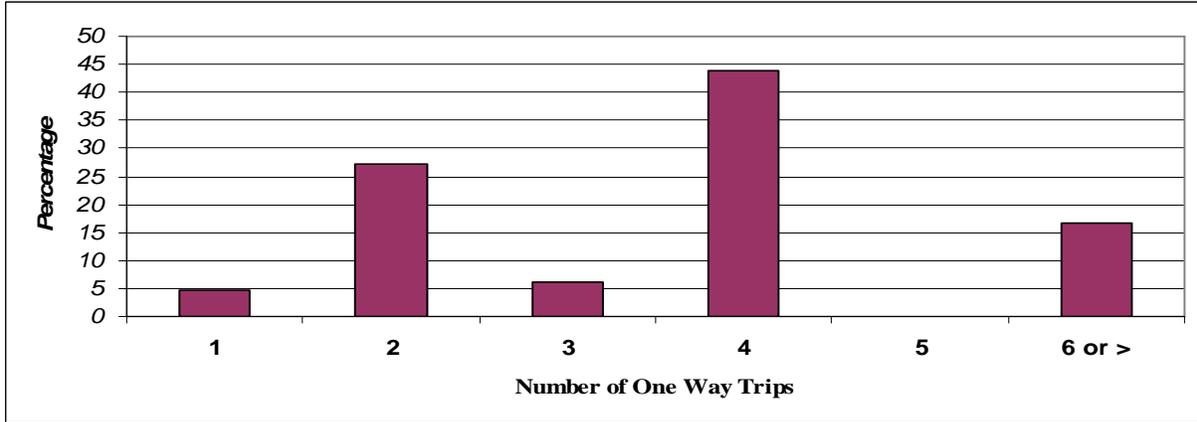
The majority of student respondents indicated they are on campus from 8 a.m. to 4 p.m. following the normal semester class schedule (Figure 6). The results indicated that most students are on campus from 10 a.m. to 2 p.m., with approximately 91 percent indicating they were on campus during this time period. A large number of students indicated being on campus, nearly 84 percent, from 2 p.m. to 4 p.m.



**Figure 6.** Times When Students are on Campus (n=66)

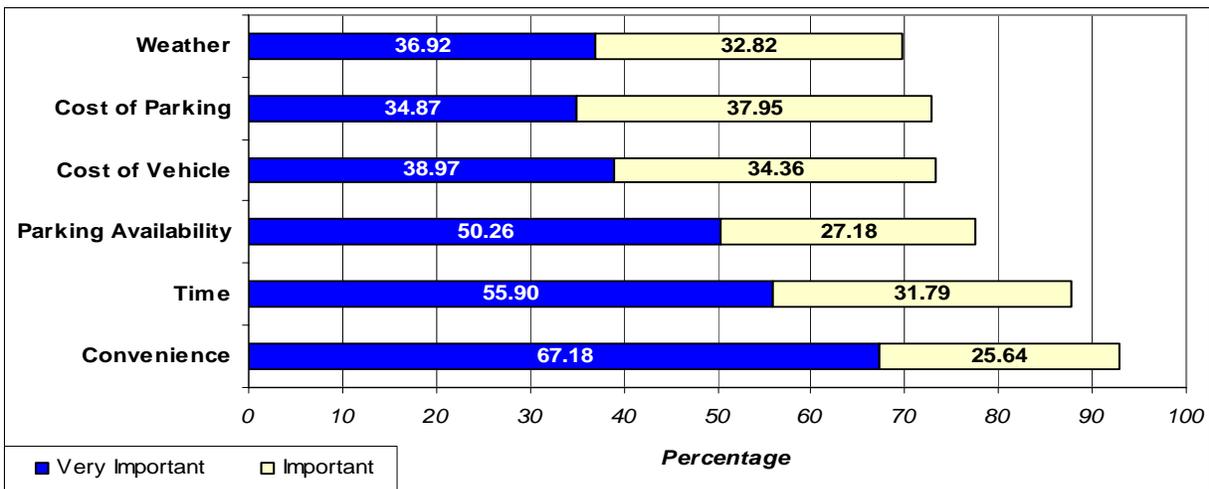
Nearly 71 percent of respondents indicated they have access to motor vehicles. A study done by Independent Insurance Agents of America and College Parents of America showed that nearly 70 percent of college students have either their own or use of their parents' car at school; this places Concordia nearly even with the national average.

The majority of Concordia respondents make two trips to school and back equaling four one-way trips (Figure 7). Approximately 44 percent of students indicated that they make 4 one-way trips per day and approximately 27 percent of the respondents indicated they made 2 one-way trips per day. Almost 17 percent (12) of the students had responses indicating they made more than 4 one-way trips per day.



**Figure 7.** Number of One-Way Trips (n=66)

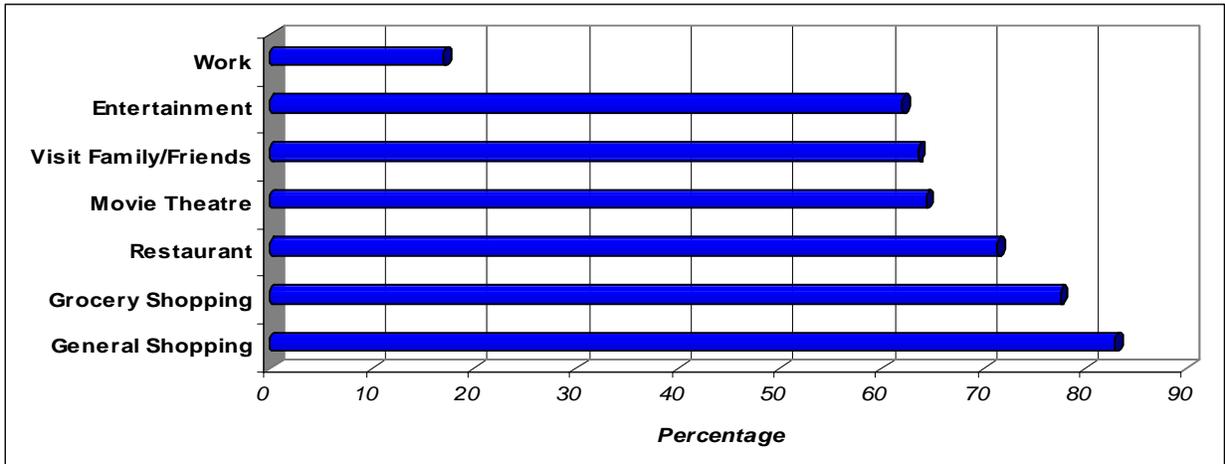
Students were asked to rate the importance of various factors when deciding on a mode of transportation. The factors included convenience, vehicle expense, parking expense, weather, parking availability, and time. Convenience, time, and parking availability were the top three factors in deciding a mode of transportation (Figure 8). Approximately 93% 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 88% and 78% respectively.



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

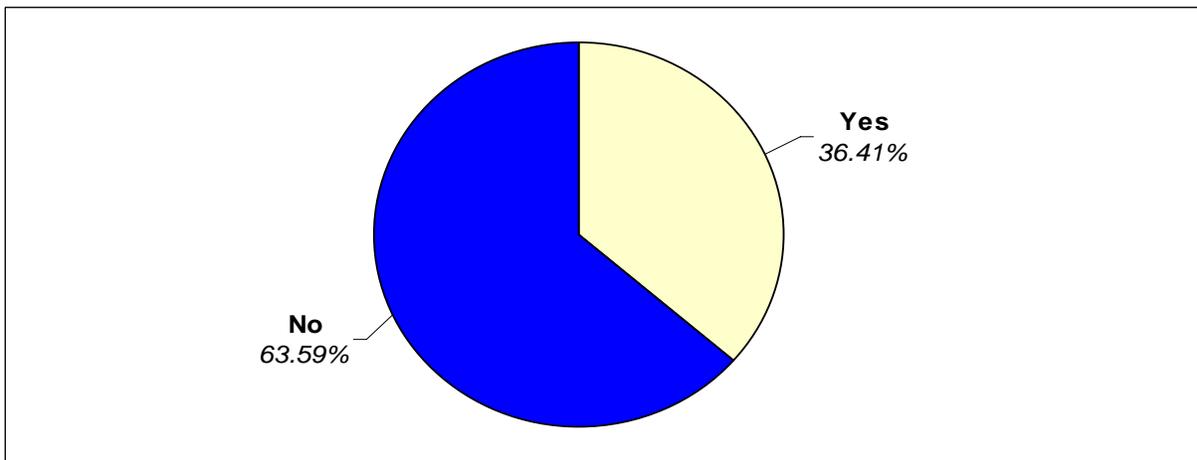
Students were asked how they most frequently travel to campus. Approximately 64% of the respondents indicated they walk to campus. The next most popular form of transportation to campus was via auto with nearly 39%, followed by carpooling with 12%, bicycling with 7%, and 4% indicating they use MAT bus to travel to campus.

On-campus students were asked why they most often leave campus (Figure 9). Eighty-three percent responded that they most frequently leave campus to do general shopping, 78% indicated they leave to go grocery shopping, 71% leave to go to restaurants, and 64% of respondents most frequently leave campus to go to movie theatres. Other choices the students were given included going to visit family and friends, entertainment (other than movies), and work.



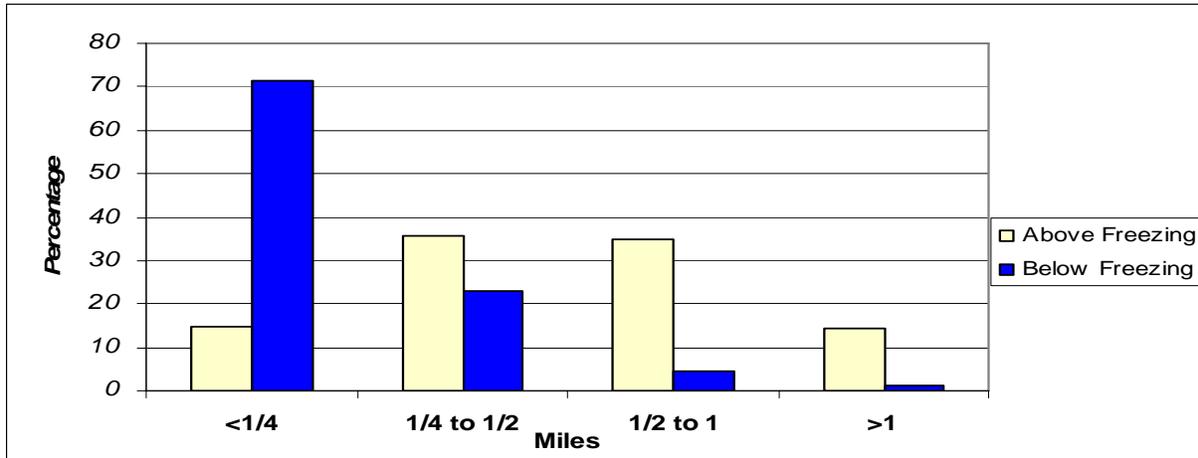
**Figure 9.** Why On-Campus Students Leave Campus (n=129)

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 36 percent of students choose their mode of travel based on the weather (Figure 10).



**Figure 10.** Weather Influences Mode of Travel in Winter (n=195)

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). It is easy to see the difference in reasonable walking distance when related to temperatures. As the figure shows, over 70 percent believe that walking less than ¼ mile when temperatures are below freezing is too far.

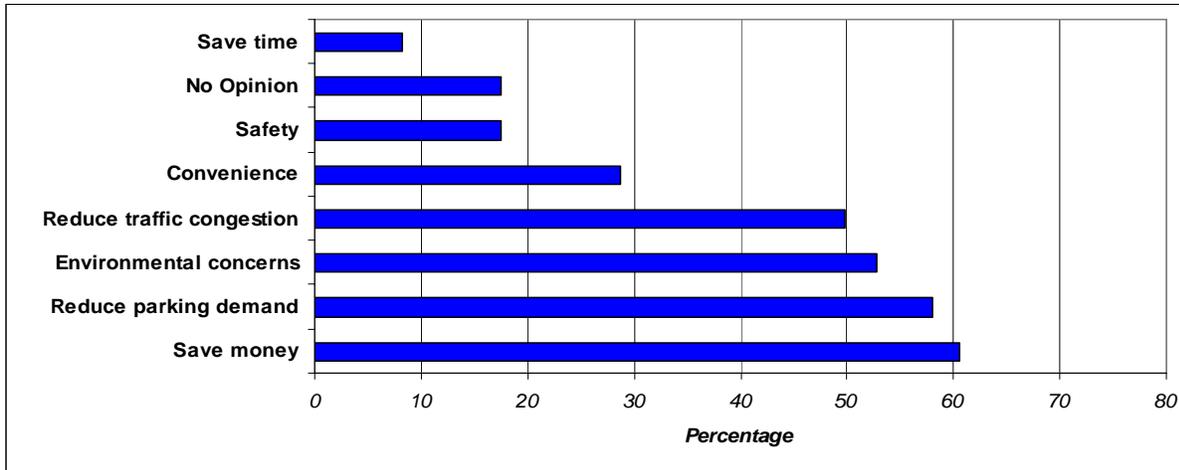


**Figure 11.** Reasonable Walking Distance by Temperature (n=195)

## Student Perceptions of MAT Services

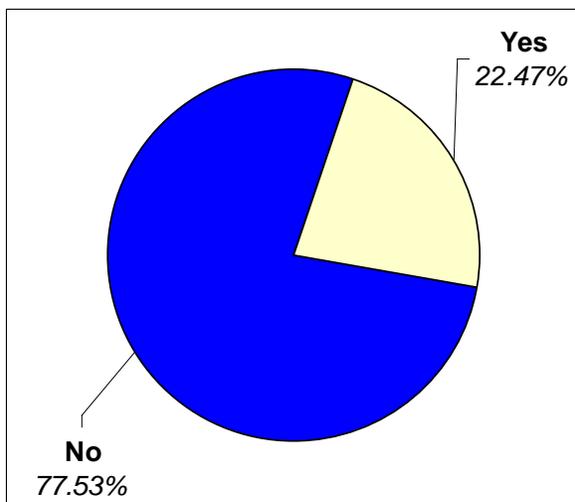
This section of the report focuses on student respondent's perception of the quality of MAT transit system service.

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 helps address environmental concerns, along with the added bonus of saving money.

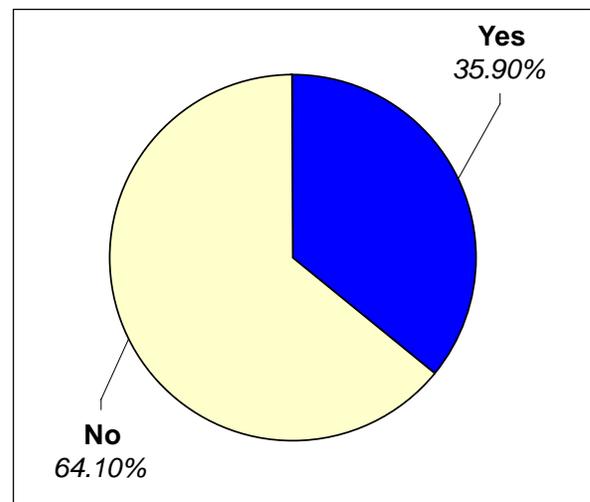


**Figure 12.** Benefits to riding Public Transit (n=195)

Concordia showed a marked increase in MAT usage compared to survey results from the 2002-03 school year. In the 2002-03 survey, 22.47 percent (100) respondents indicated using MAT services where as in the 2003-04 survey, 35.9 percent (70) of respondents indicated using them (Figure 13, 14).

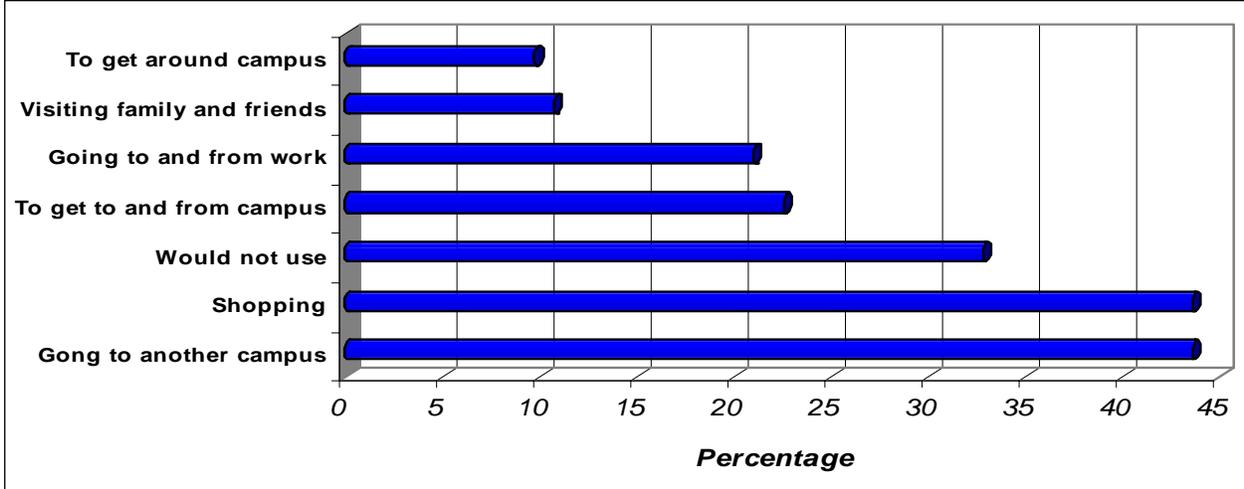


**Figure 13.** 2002-03 Students Using MAT (n=445)



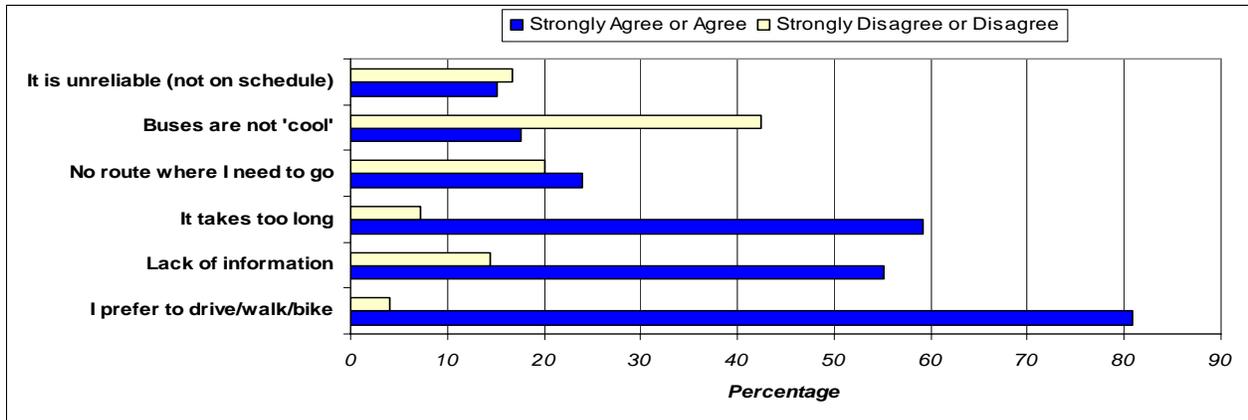
**Figure 14.** 2003-04 Students Using MAT (n=195)

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). Three percent of respondents also indicated they would use MAT services for other reasons.



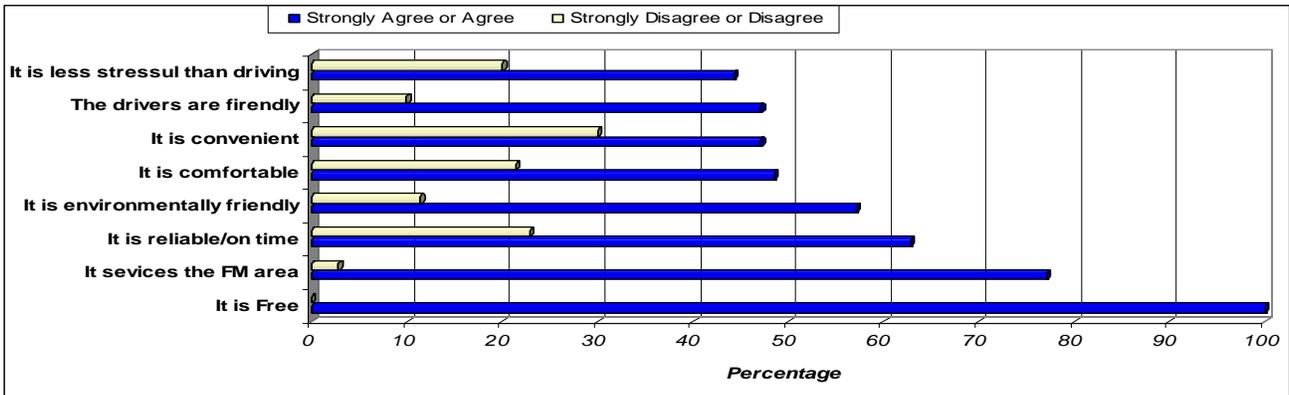
**Figure 15.** Reasons Students Use MAT (n=195)

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 areas require improvement. 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 (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. Twelve percent of students also indicated there were other reasons.



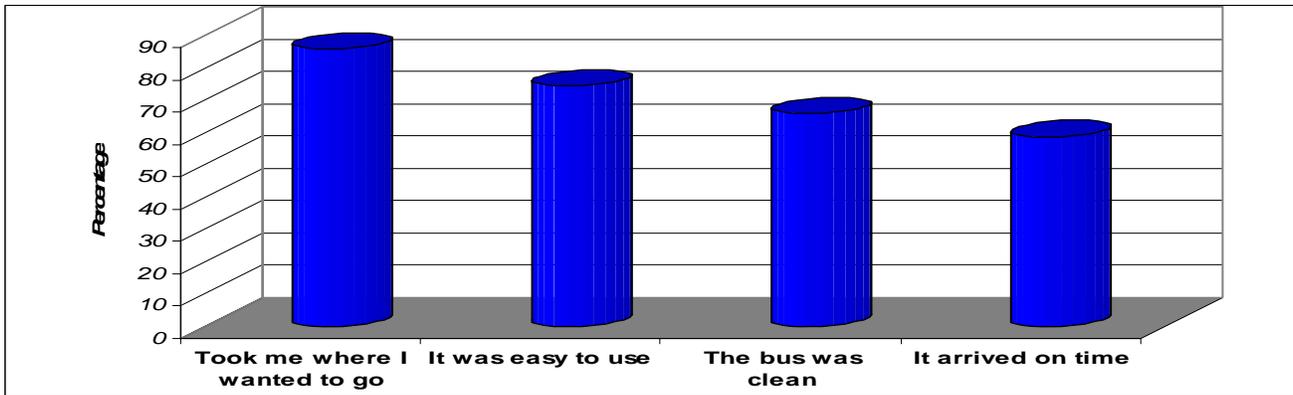
**Figure 16.** Factors Keeping Users from Using MAT Services (n=125)

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 11 percent 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.

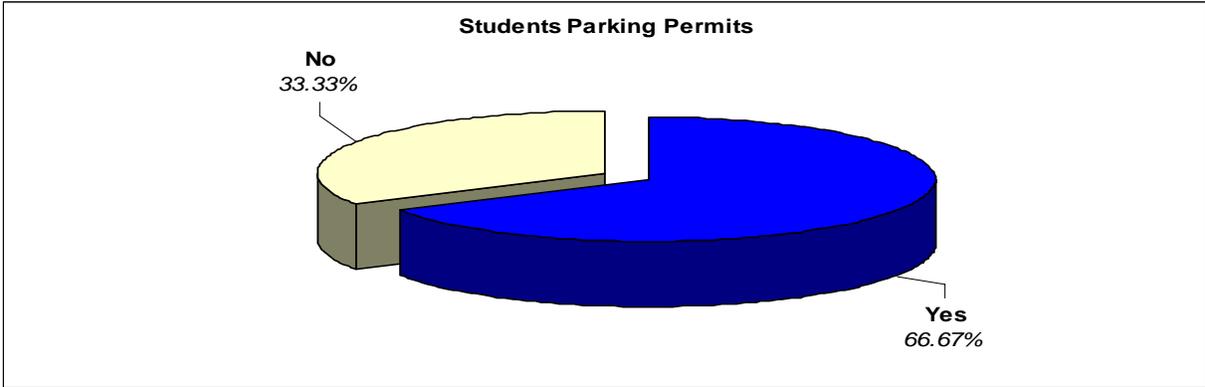


**Figure 18.** MAT User Experience (n=70)

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. Roughly 64 percent (124) of respondents indicated they would wait 15 minutes, and only 11 percent (21) would wait 30 minutes, and 0 respondents would wait longer than 30 minutes to use transit services, while 25 percent (50) would not wait. Wait times of 45 minutes and 60 minutes had very minimal responses, together equaling less than 1 percent.

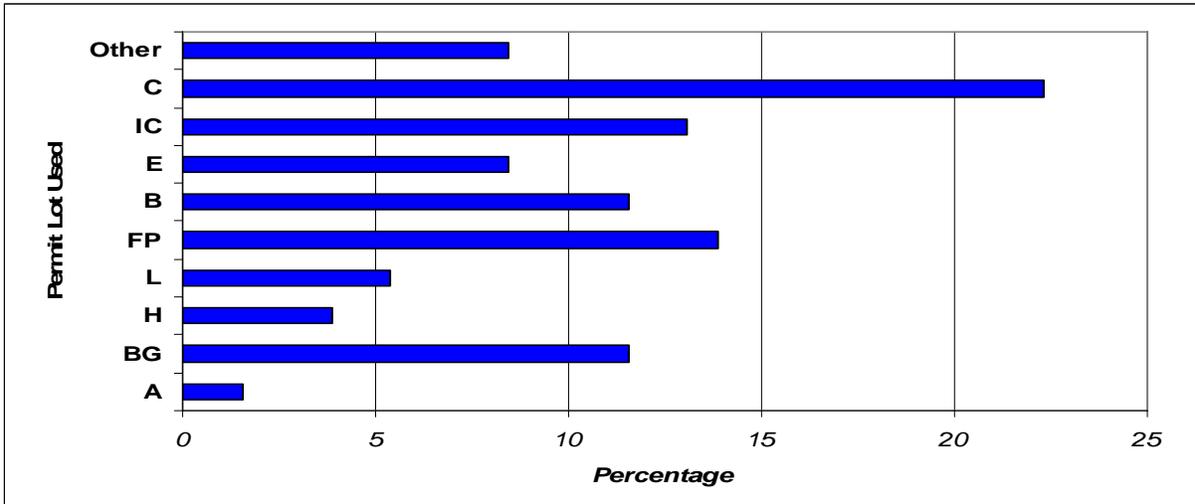
# Student Perceptions of Parking

Parking is a major concern on college campuses. With two-thirds 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 Concordia as well as the possibility of using MAT to resolve parking problems.



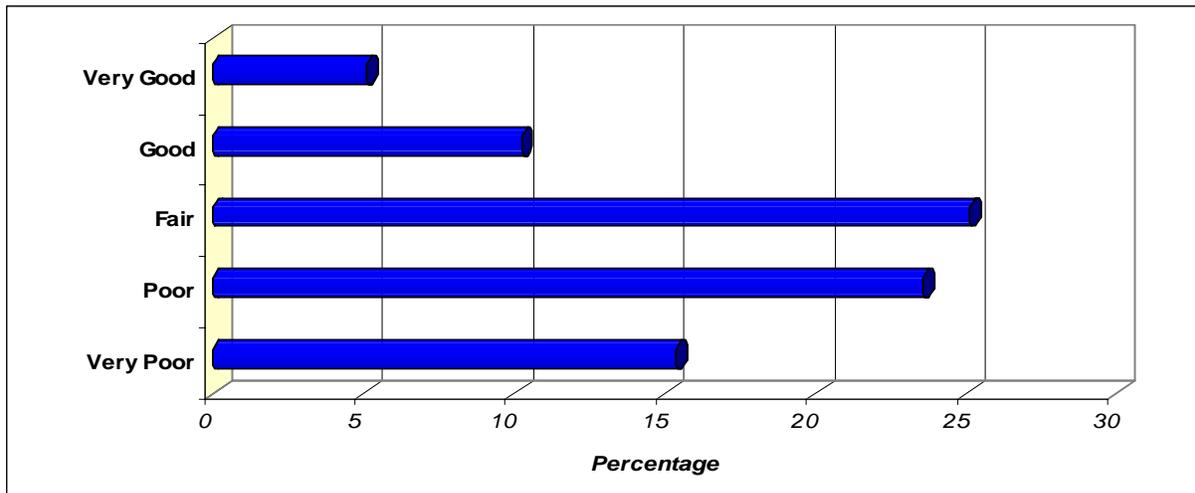
**Figure 19.** Students with Parking Permits (n=195)

The highest number of parking permits issued on the Concordia campus was for the C, FP, IC, BG, and B lots (Figure 20).



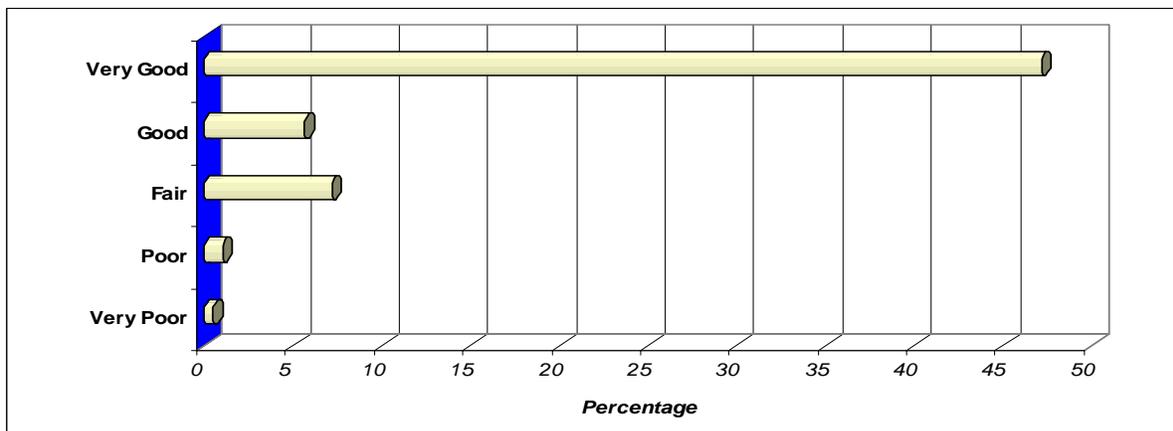
**Figure 20.** Parking Lots Used by Survey Respondents (n=237)

Concordia student respondents indicated they are not pleased with on-campus parking convenience (Figure 21). Nearly 39 percent (76) of student respondents rate Concordia's parking convenience as either poor or very poor, while approximately 5 percent (10) indicated that the parking convenience was very good. The proportion of poor and very poor responses was greater than the proportion of good and very good responses.



**Figure 21.** Student Perception of Parking Convenience (n=195)

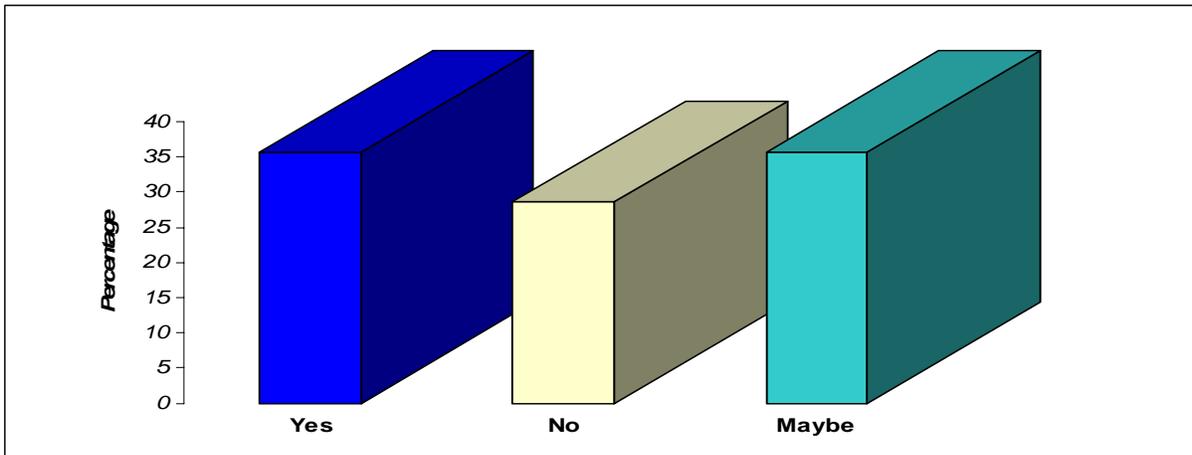
When asked about parking affordability, students indicated they were very pleased (Figure 22). Respondents indicated that approximately 47 percent (92) felt parking affordability was very good. With fewer than 2 percent (3) of respondents indicating parking affordability was either poor or very poor.



**Figure 22.** Student Perception of Parking Affordability (n=195)

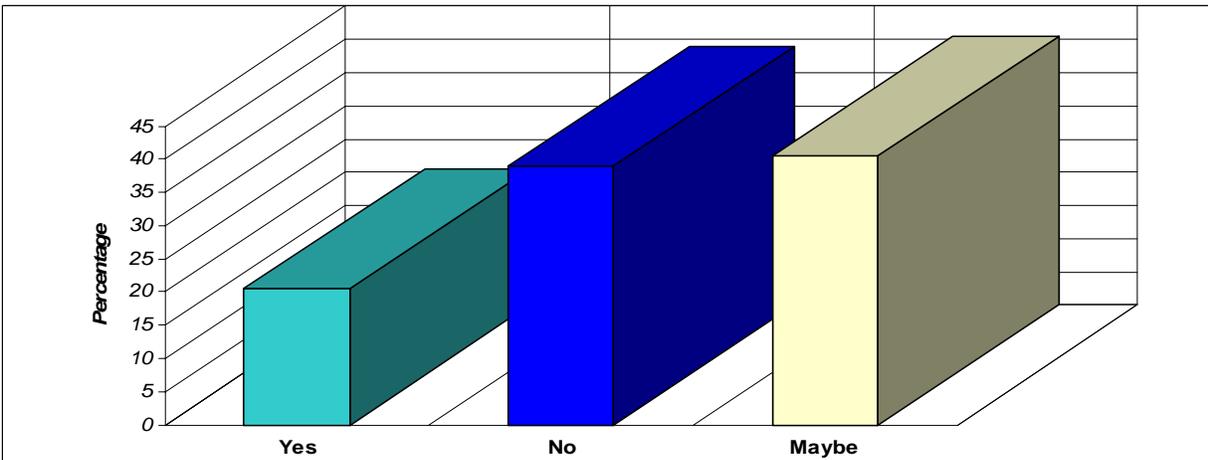
# Campus Public Transportation

Students from Concordia may take classes through the Tri-College system which consists of NDSU, MSUM, and Concordia. This section contains questions to determine whether there is a 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 28 out of 195 indicating they planned on taking classes. Of those 28, 27 responded that they would be taking Tri-College classes during the daytime. Over 35 percent (10) of the students who indicated that they would be taking Tri-College courses state they would consider taking the MAT bus. Only 28 percent (8) of respondents indicated they would not consider taking the MAT bus, and 35 percent (10) said 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=28)

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

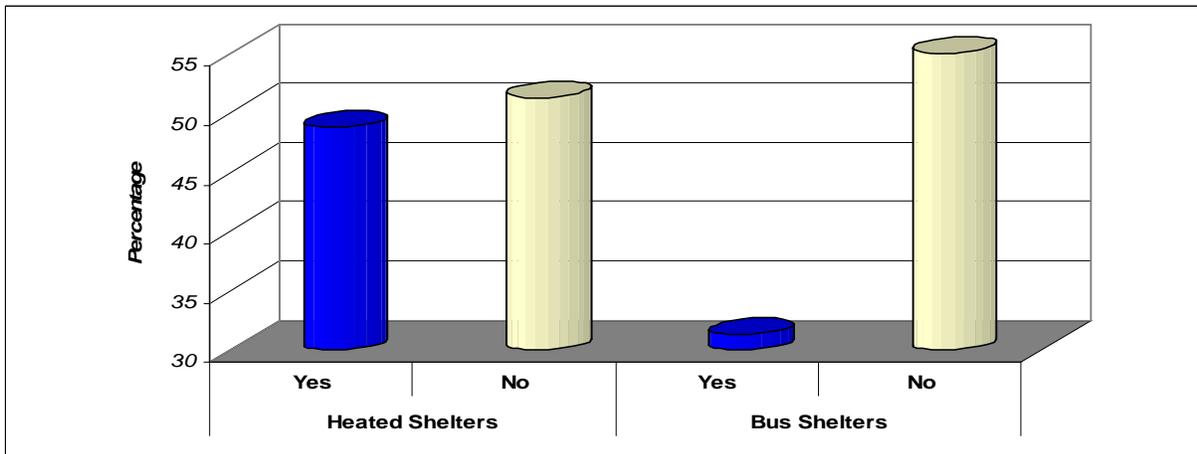


**Figure 24.** MAT Circulator Bus between Campuses (n=195)

# Campus Transit Accommodation

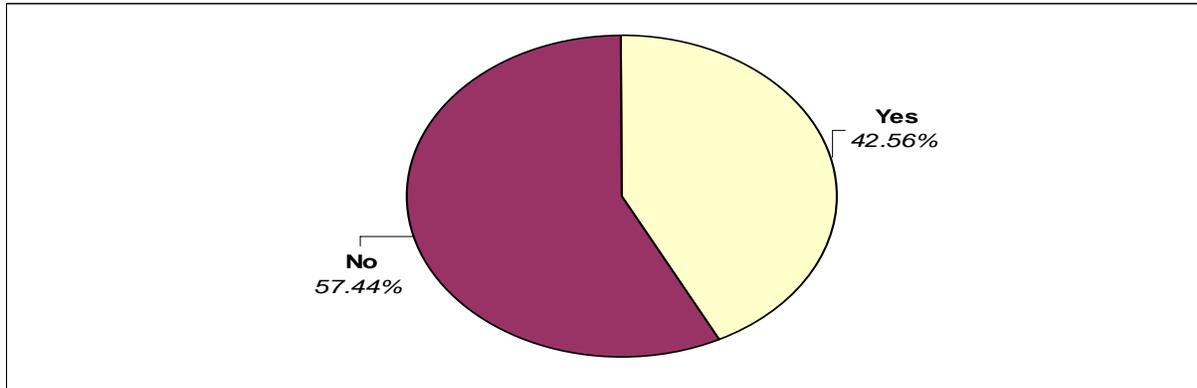
The final section of the survey asked the respondents whether they think more shelters should be placed around campus and whether or not they would be willing to pay a fee per semester to use the MAT services.

The first questions asked respondents on whether there should be more shelters or more heated shelters changed slightly when compared to 2003 survey results. Just below 50 percent (95) indicated they would like to see heated bus shelters and only 14 percent (28) indicated they would like to see more bus shelters all together (Figure 25). In the 2003 survey 25 percent of respondents indicated they would like to see more bus shelters on campus, and 40 percent said they would like heated shelters. Those numbers increased by 10 percent on heated shelters and decreased by 11 percent on bus shelters.



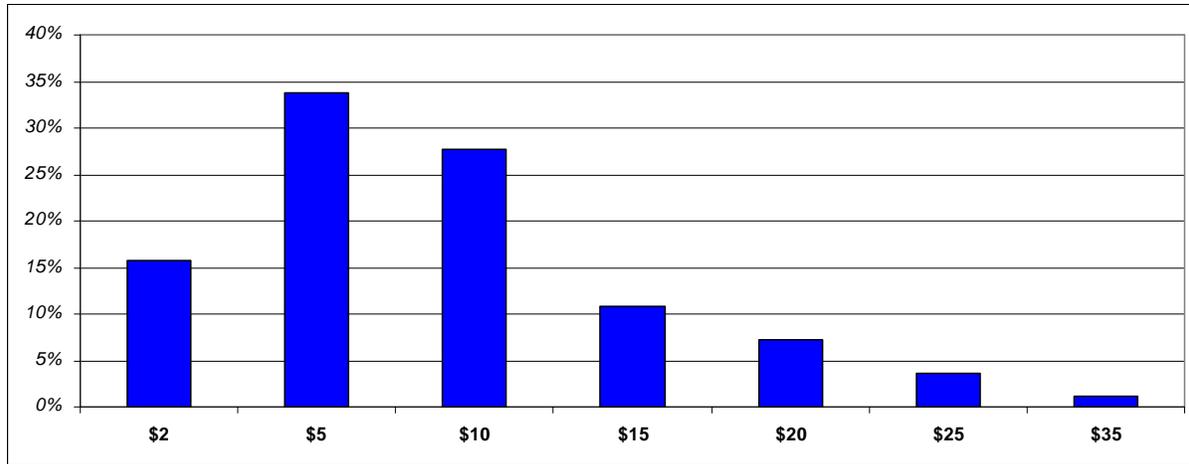
**Figure 25.** Desire for More/Heated Shelters (n=195)

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=195)

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). Just over 50 percent (42) of respondents indicated 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=83)

## Summary

In summary the survey data collected revealed some key points about Concordia College campus transit needs. A comparison of data from Concordia's 2002-03 and 2003-04 school year transit surveys show an increase in MAT ridership of over 13%. The survey respondents indicated that the main reasons they use MAT services is to get to another campus and shopping. 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 the service is free 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 some dissatisfaction with parking convenience but felt that parking was very affordable. Over half of the students surveyed felt that public transportation benefits environmental concerns, aids in traffic congestion, reduces parking demand, and helps to save money. A large percentage of respondents indicated that they lived on campus. The most common reason that students leave campus is to do general shopping as well as grocery shopping. 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.