

# COMMUTER OPTIONS PLAN

Macalester College

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ST. PAUL Smart Trips

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# CONTENTS

|                                       |    |
|---------------------------------------|----|
| Executive summary.....                | 2  |
| Background .....                      | 3  |
| Goals.....                            | 4  |
| Key survey findings .....             | 5  |
| Implementation.....                   | 8  |
| Recommendations.....                  | 10 |
| Parking .....                         | 10 |
| Transit.....                          | 11 |
| Ridesharing.....                      | 13 |
| Biking / walking .....                | 16 |
| Flex schedule / telework .....        | 19 |
| Car sharing .....                     | 22 |
| Guaranteed Ride Home program .....    | 24 |
| Increasing awareness .....            | 25 |
| Tax breaks .....                      | 27 |
| Commuting concerns.....               | 28 |
| Benefits.....                         | 30 |
| Employee benefits .....               | 30 |
| Employer benefits .....               | 34 |
| Resources .....                       | 37 |
| Appendices .....                      | 38 |
| Appendix A: Survey results.....       | 38 |
| Adjunct Faculty.....                  | 54 |
| US mail or camous mail or phone ..... | 55 |

# EXECUTIVE SUMMARY

Macalester College is a private college in St. Paul, MN. This study was undertaken by the college's Office of Sustainability to assist with calculating greenhouse gas emissions produced by the commutes of staff and faculty, and to help formulate marketing strategies to meet the college's goal of a 50% reduction in drive alone transportation from 2008 levels by 2025<sup>1</sup>.

Macalester College worked in partnership with St. Paul Smart Trips, a non-profit organization working to improve access and mobility for those who travel in and around St. Paul, in preparing and distributing a Commuter Options Survey in an effort to gauge employee interest in various commuting options and to set a baseline vehicle miles traveled (VMT) figure to use for future comparisons.

The survey was distributed to roughly 450 employees at the St. Paul campus and achieved a response rate of 76%. Macalester employees who selected Drive Alone as their primary commute mode on the Commuter Options Survey averaged over 955,000 VMT per year.

Based on the survey findings, St. Paul Smart Trips has developed a set of recommendations that can easily be promoted and implemented with the college's workforce. These include several enhancements to their existing programs as well as new and innovative solutions. These recommendations include:

- Charge for parking

- Continue to promote and discount transit passes, offer deeper discounts on transit passes for students and employees and implement Metropass for employees.

- Raise awareness around ride sharing and offer greater incentives to employees who share a ride.

- Continue to promote bike/walk commuting and provide ample amenities and information for bicycle and pedestrian commuters.

- Actively market teleworking and flexible scheduling to employees and formalize a compressed work week schedule year-round.

- Continue to promote HOURCAR to students, staff and faculty and educate departments on the organizational use of the HOURCAR program and fleet vehicle use.

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<sup>1</sup> <http://www.macalester.edu/sustainability/MacalesterSustainabilityPlanSept2009.pdf>

# BACKGROUND

St. Paul Smart Trips improves access and mobility for those who travel in and around St. Paul by:

Promoting the use of transit, bicycling, walking, ridesharing and car-sharing for both commute and non-commute trips, with a focus on changing the behavior of area residents and employees.

Educating the public and public officials about the need for investment in transportation choices, such as improved transit service and facilities, new bicycle routes and trails, and improved conditions for pedestrians.

Working toward development and zoning that promotes more transit use, bicycling, and walking, and less use of single occupant vehicles.

Macalester College is a private college whose mission is to be a preeminent liberal arts college with an educational program known for its high standards for scholarship and its special emphasis on internationalism, multiculturalism, and service to society. Macalester employs nearly 450 staff and faculty to serve its 2000 students.

This study was undertaken by the college's Office of Sustainability to assist with calculating greenhouse gas emissions produced through the commutes of staff and faculty and to help formulate marketing strategies to meet the college's goal of a 50% reduction in drive alone transportation from 2008 levels by 2025<sup>2</sup>.

## The Commuter Survey

An electronic survey was distributed to 450 Macalester employees and 343 responses were recorded, reflecting a response rate of 76.2%. The survey respondents were asked to identify as staff or faculty for demographic purposes.

## Transit Service/Parking

Macalester College provides ample free parking for staff and faculty. There are parking lots located throughout campus, the largest of which are located south of Grand Ave. on the western edge of campus and north of the school's athletic facilities on the western edge of campus. The college also offers several smaller parking lots scattered throughout campus and street parking near several of the buildings. In several of the lots, Macalester offers preferred parking for carpools and low emitting vehicles.

Macalester College is located along three local transit routes: 63, 84 and 70. It is also within walking and biking distance of the 21 and 53 bus routes. These routes connect easily to downtown St. Paul, University Ave, Interstate 94, Uptown in Minneapolis, downtown Minneapolis and the Hiawatha Light Rail Transit line.

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<sup>2</sup> <http://www.macalester.edu/sustainability/MacalesterSustainabilityPlanSept2009.pdf>

There is abundant bicycle parking provided on campus. All classroom buildings have nearby bike parking and there are several large scale bicycle parking facilities near residence halls and athletic facilities. During the school year, many of the racks are typically overflowing with bike parking because of student use.

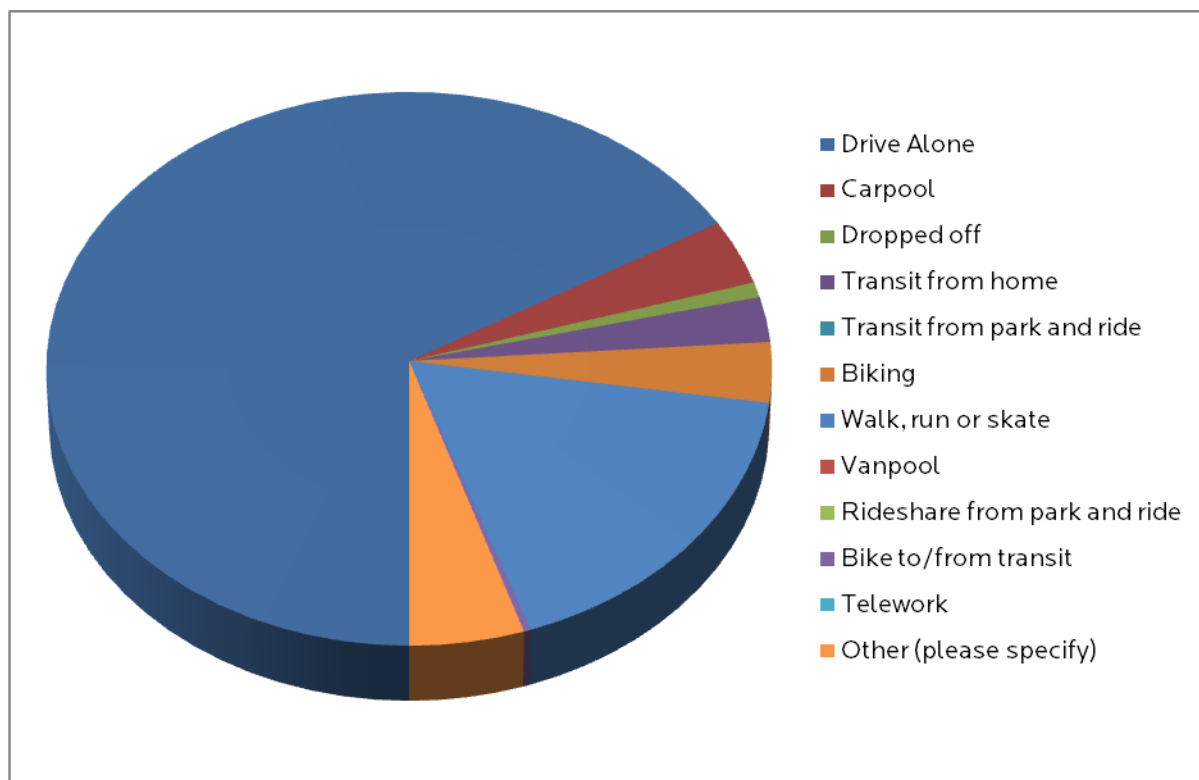
## GOALS

Macalester College distributed this survey to its 450 employees to collect information on their commuting habits. The results will be used to inform the university's greenhouse gas emission inventory that is completed yearly as part of the American College and University President's Climate Commitment, a program designed to reduce the carbon emissions of colleges and universities across the nation. The results will also help to inform future marketing to employees in an effort to reach the college's internal goals of a 50% reduction of single occupant vehicle travel from 2008 levels by 2025 and carbon neutrality.

# KEY SURVEY FINDINGS

The table below shows the primary commute modes of Macalester College employees.

Figure 1. Commute Mode



As depicted in Figure 1, the majority of the Macalester's employees primarily selected "drive alone", followed by "Walk, Run or Skate". The survey shows more people drive alone to work (66.7%) than all other modes combined.

The drive alone rate among faculty is significantly less than that of staff. 55.4% of faculty selected drive alone as their primary commute mode whereas 72.4% of staff drive alone. Faculty also bike, walk and use transit at higher rates than staff. Staff selected carpool at a higher rate than faculty.

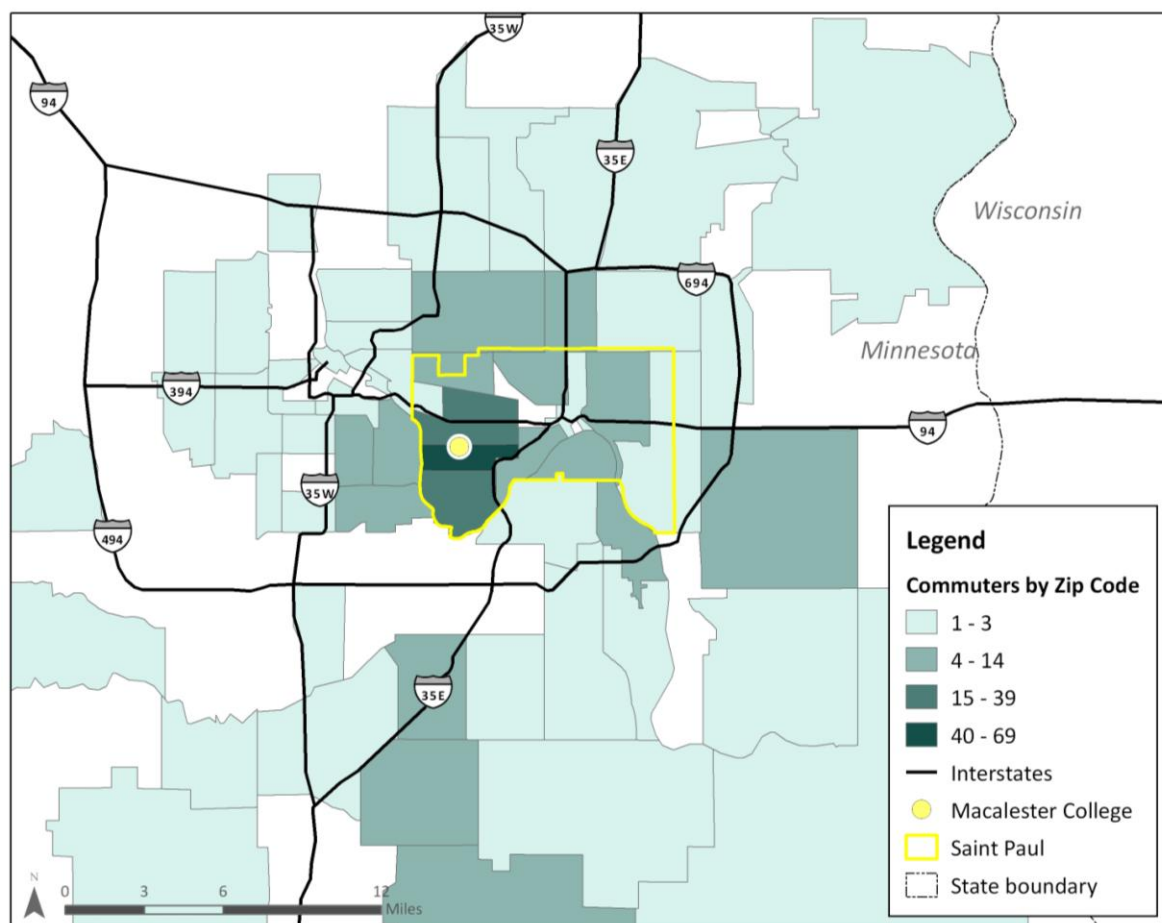
Of employees who selected "drive alone" as their primary mode, 68.9% said that they were either satisfied or very satisfied with their commute, compared with an 85.7% satisfaction rating among all other modes. Of those who selected "drive alone" as their primary mode, 14% had no opinion of their commute, while only 2.7% of those using other modes had no opinion. Employees using an option other than driving alone had slightly less dissatisfaction in their commute, with 11.6% reporting to being either unsatisfied or very unsatisfied compared to 16.7% of drive alones.

Regarding secondary commute options, defined as any other commute mode used including variations for weather; of the individuals who reported driving alone as their primary commute mode, 56% reported “drive alone” as their secondary commute option or having no secondary commute option. Of those who selected drive alone as their primary commute mode, 13.5% selected biking and 12.6% selected walking as their secondary mode. 40.7% of individuals who chose an option other than drive alone listed “drive alone” as their secondary commute option.

20.5% of employees reported changing their commute mode in the past three years. Of those, 54% changed to driving alone as their primary mode. Of those who reported changing their primary commute mode in the past three years, 15% cited a daycare or children needs, 9% said work schedule and 7% said saving money were the reasons behind the change in their travel behavior.

58% of employees said their work schedules changed during the summer months. While the majority of those whose schedules change during the summer still travel to campus 5 days per week (35%)

Figure 2. Zip Code Analysis



Source: State of Minnesota, The Lawrence Group

Figure 2 represents the concentration of Macalester employees based on home ZIP codes provided in their survey responses. As represented in the key, lighter colors signify lower concentration of employees while the darkest colors represent greater concentrations. Not surprisingly, major concentrations of employees center on the communities directly surrounding campus.

Individuals who reported drive alone as their primary mode of transportation average 9.4 miles per one way commute. Average daily drive alone one way commute mileage equated to 2064 miles. Average days worked per week among drive alones who work year round schedules equals 4.78. Average days worked per week among drive alones who change schedules in the summer months equals 4.12. These two figures average to 4.45 work days per week. This equates to 52 average one way miles commuted to work per week by single occupant vehicles and 9185 one way miles per week driven by single occupant commuters to campus. Based on 52 weeks, the average one way vehicle miles traveled per year by Macalester College employees whose primary commute mode is driving alone and who participated in the Commuter Options Survey is 477,620 miles, or 955,240 round trip miles per year.

# IMPLEMENTATION

A number of factors enable employees to consider alternatives to driving alone as a commute method. It is easiest to promote alternatives to employees who exhibit the following characteristics:

- Schedules rarely or never vary  
Current percentage: 26%
- Can change their start or finish times at work  
Current percentage: 63%
- Rarely or never need their cars for work purposes  
Current percentage: 76%
- Live within 10 miles of work  
Current percentages: 72%
- Commute less than 30 minutes to work  
Current percentages: 87%

Based on these assumptions and the results of the Commuter Options Survey, Macalester College's workforce is well positioned to change their commuting behavior. Programs should be implemented with these characteristics in mind.

## Targeting

When implementing programs, target employees based on the area that they are commuting from. Employees commuting from suburban areas with high concentrations of employees, are excellent candidates for rideshare messaging. Employees who live in Saint Paul or Minneapolis would be good candidates to receive messaging on biking, walking and transit based on their proximity to transit service, bike trails, and campus.

One technique for implementing programs is targeting individuals who are interested in changing their behavior and rewarding those who are already participating in a program. This focuses efforts on employees who want to receive the information rather than spending time and energy on those who do not.

## Using Existing Promotions

Focus the rollout of new commuter programs and promotions around existing ones. This is a good way to become engaged in a transportation topic with minimal effort on the part of the employer. Regional and national promotions such as the Commuter Challenge, Rideshare Month and Bike Walk Week help keep messaging focused and employees interested in a specific mode. These programs are in place, in part, to help employers better position themselves when promoting commuting options to their employees. They are also helpful tools in gauging interest in future promotions or programs.

## Small Changes

When promoting commuting options it is important to stress to employees that they are not being asked to make a lifestyle change. The key is to get them to just try riding the bus, biking, walking or carpooling once or twice, it's NOT to convince them to give up their cars entirely. Using an alternative to driving alone even one or two days a week makes a big difference. Since personal errands sometimes require people to drive to work, encourage employees to combine their trips once a week, freeing up the other days for alternative commuting.

For example, if all Macalester employees who cited drive alone as their primary mode removed one drive alone trip from their schedule per week, it would reduce VMT by over 214,650 miles per year.

## Working with St. Paul Smart Trips

If the Macalester College chooses to implement any of the above recommendations, St. Paul Smart Trips is available to provide assistance as a free resource. St. Paul Smart Trips can provide guidance on future initiatives, customized marketing material and individualized assistance to help employees with their commuting questions.

Each recommendation made throughout this report lists some of the many ways that St. Paul Smart Trips can assist the college with support, implementation, and promotion of commuting options. Some of these services include:

- Providing customized marketing materials.

- On site presentations, fairs and promotions tailored to an event.

- Individual assistance for Macalester employees in areas such as bike route mapping, ride share matching, and Guaranteed Ride Home registration.

- Facilitating contact with other vendors to aid in implementing new programs and amenities.

# RECOMMENDATIONS

## Parking

### By the Numbers...

67% of survey respondents cited drive alone as their primary commute mode

51% of respondents cited drive alone as their secondary commute mode

Recommendation: Charge for parking

Parking charges have become the norm at most colleges and universities in the Twin Cities. The University of St. Thomas charges students between \$250 and \$1080 per semester and faculty between \$250 and \$750 per year for parking. Visitors and students, staff and faculty without parking passes can also pay on an hourly basis starting at \$1.50 per hour or a daily rate of \$16 at the St. Paul campus<sup>3</sup> Hamline University charges \$150 per year for students, staff and faculty. All staff and faculty are eligible for parking, but first-year students cannot receive parking passes and all other student passes are subject to a lottery.<sup>4</sup> St. Kate's has an annual parking fee of \$85 for students, staff and faculty.<sup>5</sup> Lastly, the University of Minnesota charges between \$65.50 and \$127.25 per month for all students, staff and faculty parking contracts.<sup>6</sup>

Macalester College offers parking at several sites around campus and does not charge for parking. Parking is necessary for organizations with visitors or customers. It also takes up valuable real estate and is expensive to build and maintain, costing on average \$13,000 per surface parking space and between \$20,000 - \$25,000 on average per space in a parking structure in urban areas.<sup>7</sup>

Macalester College should begin to charge for parking. Parking revenue can help to offset costs associated with the construction and maintenance of the existing lots and facilities and to help fund new facilities as the college continues to grow.

Charging for parking is also an incentive for mode shift away from single occupant vehicles. Commuters are significantly less likely to drive alone if they are required to pay for parking than if it is free and abundant. Parking revenue can in turn be used to provide incentives away from

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<sup>3</sup> <http://web1.stthomas.edu/psps/Parking/St%20%20Paul%20Parking%20Guide.pdf>

<sup>4</sup> [http://www.hamline.edu/shared/policies/university\\_all/parking\\_policy.html#permits](http://www.hamline.edu/shared/policies/university_all/parking_policy.html#permits)

<sup>5</sup> <http://www.stkate.edu/~mlisweb/files/handbook.pdf>

<sup>6</sup> <http://www1.umn.edu/pts/parking/contracts.html#cs>

<sup>7</sup> TDM Encyclopedia <http://www.vtpi.org/tdm/>

driving alone, such as greater subsidies for transit passes, additional funding for the bike sharing program or monetary incentives for walking, biking or sharing a ride.

## Transit

### By the Numbers...

Based on the survey findings 33% of employees showed willingness to try taking transit, with 24% of employees listing “drive alone” as their primary mode expressing interest in trying transit.

2.9% reported transit as their primary mode to work, either from home or mixing it with another mode.

18% of respondents cited a greater discount on transit passes as an incentive that may persuade them to change their primary mode.

A transit pass priced between \$0 and \$15 may persuade 18% of survey respondents to change their primary commuting mode, while a transit pass priced between \$15 and \$30 may persuade 15% and a transit pass priced between \$30 and \$45 may persuade 12% to change.

**Recommendation: Continue to promote and discount transit passes, offer deeper discounts on transit passes for students and employees and implement Metropass for employees.**

Based on survey results, 9.6% of respondents reported to already using transit when asked “What is the most you would be willing to pay for a monthly transit pass that would persuade you to change your primary commute mode?” and 14.2% advised that they currently take advantage of discounted transit passes offered for sale through the student center front desk. However, only 2.9% indicated that transit was their primary mode to work however, and 5.1% use transit as their secondary option.

Macalester already offers transit passes at subsidized rates for students, staff and faculty, ranging from 50%-20% depending on the type of pass. The college also recently added a pre-tax deduction option for employees to purchase transit passes through payroll deduction. These options make transit affordable for employees, rivaling the cost of driving alone. Macalester should continue offering these programs to all employees in an effort to reduce drive alone travel.

In addition, Macalester should consider offering the Metropass transit pass program for employees. Metropass is an unlimited ride pass program that is only offered through participating employers. The program allows employees to purchase deeply discounted unlimited ride transit passes. Metropass is often offered through employers on a pre-tax basis, resulting in even deeper discounts for employees and cost savings for employers.

The Metropass program is billed monthly based on actual ridership, so there should be zero cost to an employer to offer the program. Administrative costs associated are often offset by the payroll tax savings recouped by offering the program pre-tax. Metropass does have a minimum requirement of 10 riders in any given month, and this could be a challenge given the nature of work at a school. We would recommend an audit of transit pass sales after the pre-tax payroll deduction goes into effect to measure transit pass sales in the summer.

#### St. Paul Smart Trips can:

Provide printed material for display, such as transit system maps, park and ride maps, bus schedules and more.

Provide content for organizational newsletters or access to our own newsletter for distribution to employees

Provide broader information on Metropass and help employees get the best transit options available.

Provide individualized trip planning assistance for employees

#### Case Study:

The Minnesota Department of Administration approached St. Paul Smart Trips in August 2008 for permission to link the St. Paul Smart Trips monthly newsletter to their intranet homepage, allowing the 1,300 Department of Administration employees to view the content that is produced promoting commuting options. They have since increased their Metropass participation 12.8% between April 2008 and July 2009.

#### Employee Benefits [\(details on p.30\)](#)

Tax Savings

Cost of car ownership

Parking expenses

Stress reduction

Increased physical activity  
/ health benefits

Air quality

Supporting the environment

Guaranteed Ride Home program

Ability to make productive use  
of commute

Increased safety

#### Employer Benefits [\(details on p.34\)](#)

Tax savings

Enhanced benefit package

Productivity

Improved morale and  
employee retention

Employee recruitment

Land and facility costs

Quality of life / community character  
Supporting the environment  
Air quality  
Infrastructure costs and construction  
Impacts

Economic development  
The impact of traffic congestion  
and ozone pollution  
Reduced need for parking  
Effective traffic management

## Ridesharing

### By the Numbers...

Based on the survey data, 16 individuals listed “carpool or” “dropped off” as their primary commute mode and 22 individuals listed “carpool/dropped off” or “vanpool/dropped off” as their secondary commute mode.

18% of employees currently driving alone reported a willingness to try sharing a ride.

20% of all respondents said they would be willing to try sharing a ride.

10% of respondents cited help finding a ride match as an incentive that may persuade them to change their primary mode of travel.

Of drive alone survey responses, 11% said that help finding a rideshare partner would incent them to change their primary commute mode.

**Recommendation: Raise more awareness around ride sharing and offer greater incentives to employees who share a ride.**

Macalester College has relatively few employees who share a ride to campus. This can be attributed to several factors and is an area that participation could see significant increases.

Sharing can be a very effective way to reduce VMT and offer some serious financial benefits for employees. Employees from areas that are dense in Macalester employees such as Roseville, Woodbury and South Minneapolis would be excellent targets for rideshare messaging. Employees who live in areas that are served by transit, but would be reluctant to use transit because of inconvenient service or the length of the commute would also be good candidates for this messaging.

Employees in areas that are not served by transit, or areas that do not offer any direct transit service, also have the ability to participate in the VanGo! commuter vanpool program. In general, vanpool riders see significant savings in the cost of their commute, both immediately in the how much gas they purchase and more long term in the amount of wear and tear on their vehicle. On average, a vanpool rider pays a \$150.00 per month fair to the primary driver of the van. Vans leased through the Metropolitan Council are eligible for a 55% subsidy of the lease price.

One of the primary concerns of starting a carpool or a vanpool is that they are often times paired with strangers through regional ride match promotions. Macalester College should continue to help employees facilitate internal ride matches and use the regional system to supplement their internal efforts. The college should also find new and innovative ways to market their internal ride match system, Zipride, to maximize the number of employees listed in the service interested in finding ride matches. This can remove some of the apprehension around potentially commuting with a stranger. Electronic message boards, a rideshare display, emails, newsletter items, and rideshare specific events are all ways that other employers have helped facilitate internal ride match promotions.

As mentioned above, the college should encourage employees to try Metro Transit's free online<sup>8</sup> ride matching service to supplement any internal ride matching services. The database has over 8,000 people interested in sharing their commute to and from work in a car or vanpool, with over 3,500 coming to Saint Paul alone. Supplementing an internal system with the online ride match service keeps both systems viable for the long term and is important for the success of both options for employees.

"I have been carpooling to Macalester for 23 years. I work a 4 day week carpool with 2 other employees. I think this is a win win situation." – open ended survey response.

A new feature of the online system has been added that could be marketed to employees for single use trips. This dynamic system allows individuals to seek ride matches on an ad hoc basis based on their needs without tying them into a long term commitment to a carpool. This system could be used for employees who may only have a need to find a ride match occasionally. Macalester could also use this system to help reduce drive alone trips for business purposes, asking employees to see if there is someone that they could share a ride with to meetings or site visits. Cutting down on individual travel not only reduces VMT by staff, but could also produce cost savings for travel reimbursements. Macalester College should also encourage employees who are sharing a ride to register their rideshare<sup>9</sup> with Metro Transit. Registering allows them to receive preferred parking privileges and makes them eligible for the Guaranteed Ride Home Program.

#### Case Study:

Because of parking shortages and concerns over pollution and traffic congestion around their facilities, Gillette Children's Hospitals and Clinics began offering commuter incentives. Employees who opt out of their individual parking program and into their carpool program are assigned a preferred parking space and are eligible for a \$50 gas card per month for the carpool to help offset the cost of gas.

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<sup>8</sup> [www.smart-trips.org/rideshare](http://www.smart-trips.org/rideshare)

<sup>9</sup> [https://www.metrotransit.org/rideshare/forms/commute\\_1.asp](https://www.metrotransit.org/rideshare/forms/commute_1.asp)

## St. Paul Smart Trips can:

Provide a comprehensive interactive ride matching advertising packet to assist in the promotion of this service, and individualized service to help employees find a ride match.

Provide personalized assistance to employees, either helping them to register online or performing the registration on their behalf.

Conduct presentations, seminars or commuter fairs to help employees learn how to register. Promotional material can also be provided to employees to increase awareness and educate employees about rideshare registration.

Organize a ride share event to help place employees interested in sharing a ride with others who live near them.

## Employee Benefits (details on p. 30)

Cost of car ownership

Parking expenses

Stress reduction

Air quality

Supporting the environment

Guaranteed Ride Home program

Ability to make productive use of commute

## Employer Benefits (details on p. 34)

Productivity

Land and facility costs

Quality of life / community character

Supporting the environment

Air quality

Infrastructure costs and construction impacts

Economic development

The impact of traffic congestion and ozone pollution

Reduced need for parking

Effective traffic management

## Biking / walking

### By the Numbers...

- 38% of employees cited a willingness to try biking and 26% stated that they would be willing to try walking, running, or skating to and from work.
- Of respondents who primarily drive alone, 32% cited a willingness to try biking and 15% said they would be willing to try walking, running or skating to work.
- 14% of employees cited a place to clean up after biking or walking, 14% a place to store and change into work clothes, 13% said secure bicycle storage, 6% said more information on bike routes and 3% said access to shared bicycles at work for personal use could be possible incentives to change their mode of travel.
- 87.2% of individuals who cited biking or “walk, run or skate” as their primary commute mode were either satisfied or very satisfied with their commute.
- 14% said being uncomfortable biking in traffic, 8% cited a lack of showers/lockers, 8% said lack of bike parking and 3% cited uncertainty of bike routes as issues that concern them regarding their commute.

**Recommendation: Continue to promote bike/walk commuting and provide ample amenities and information for bicycle and pedestrian commuters.**

Biking to work can be a low cost / high reward mode for many Macalester employees. Employees can save money and time, improve air quality and benefit the environment while reducing parking needs and traffic congestion. There are also many health benefits to biking or walking to work, which are good for both the employee and employer. Employer benefits may include increased productivity, as employees who bike and walk are often less stressed and use less sick time.

Macalester should ensure that employees who want to bike to work have the opportunity to do so by providing amenities and access to information about bike commuting.

Macalester already does a superb job of promoting biking and walking to work by hosting several bike themed events for students, staff and faculty throughout the year, participating in Bike to Work Day, providing amenities for storing clothes and cleaning up after commuting and

providing incentives such as the Highwinds Walk to Work program and the bike commuter coffee days. However there are some areas for improvement in the existing bicycle amenities available.

Macalester provides a great deal of bike parking at various places around campus. During the warmer months when school is in session however, there is often a lack of bicycle parking for all users. Macalester should consider upgrading these facilities to accommodate bicycle commuters. A general rule of thumb is to provide one bicycle parking stall per 3,000 square feet of office space or 5-10% of the total number of auto parking spaces, with 50% allocated for short term parking and 50% for long term parking for bike commuters<sup>10</sup>.

“A cultural shift on campus is needed so that its not just students riding bikes to campus which starts to make it feel like the norm.” – open ended survey response

The incentive that was cited most frequently that would change behavior, as well as a large concern regarding bicycling or walking to work, is the perceived lack of shower and locker facilities offered by the college. Macalester already offers showers and lockers for employees, but many seem to not know this is a benefit available to them. Raising awareness about the availability of showers and lockers could be an incentive to convert several employees to change their travel behavior.

Another incentive and concern cited frequently is the lack of secure bike parking available. Macalester should consider installing bike lockers or allocating space within a building for secure bicycle parking. Bicycle lockers can potentially be another income source for the college once they are installed; most organizations who provide lockers charge a seasonal or yearly fee for their use. Indoor parking can be equally secure as bicycle lockers, but allow for the storage of more bikes at a more reasonable cost.

Adding bike parking can be an expensive proposition. Luckily in St. Paul there are two bike parking cost share programs available. The City of St. Paul offers a cost share program for the purchase and installation of parking in the public right of way. For bike parking on public property, St. Paul Smart Trips also has funding available for bicycle rack purchase and installation. Please contact St. Paul Smart Trips for more information on both programs.

Not knowing a route to work can also be a major hurdle for many bikers. There are many resources available for route finding. Macalester should consider having a bike map, like the Twin Cities Bike Map, available at its facilities for employee use. The college should also make employees aware of online route finding tools such as Cyclopath ([www.cyclopath.org](http://www.cyclopath.org)). Cyclopath is a user wiki maintained by the University of Minnesota. Its interface is similar to mapping sites like Google Maps. It contains the majority of the on and off road bike routes, as well as several user recommended routes where bike paths and lanes aren't available.

Case Study:

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<sup>10</sup> TDM Encyclopedia - <http://www.vtpi.org/tdm/tdm85.htm>

In 2007, Ramsey County started a Bicycle Commuter Club. Bicycle Commuters who work in the county's downtown locations were encouraged to join to be a resource for each other and new bicycle commuters. The members belong to a list serve and can ask questions of one another about topics such as repairs, maintenance and routes. The Bicycle Commuter Club was also instrumental in having indoor bike parking installed at two of Ramsey County's facilities as well as introducing the county's new bike sharing program, "Bikes Belong," which allows downtown employees to use county owned bikes for personal and business trips throughout the day.

### St. Paul Smart Trips can:

Work with Metro Transit regarding the possibility of having additional bicycle lockers installed for more secured bike storage for employees on campus.

Facilitate an upgrade of, or addition to, existing bike parking at the Macalester's facilities. Options can include something as simple as a two-bike hitch to a complex interior bike storage room.

Help with individualized route planning for bicycle commuters as well as offer bike commuting clinics for individuals interested in starting bike commuting.

Provide display materials including maps, posters and informational brochures to help encourage bicycling.



Source: Metro Transit

Bike lockers are a safe and affordable option for commuters



Source: Ramsey County,

Secured indoor parking is highly desirable for bicycle commuters

### Employee Benefits (details on p.30)

Cost of car ownership

Parking expenses

Stress reduction

Increased physical activity  
/ health benefits

Air quality

Supporting the environment  
Guaranteed Ride Home program  
Savings on gym membership

Ability to make productive use of  
commute

#### Employer Benefits (details on p.34)

Tax Savings  
Enhanced benefit package  
Productivity  
Improved morale and employee  
retention  
Employee recruitment  
Land and facility costs  
Quality of life / community character

Supporting the environment  
Air quality  
Infrastructure costs and  
construction Impacts  
The impact of traffic congestion  
and ozone pollution  
Reduced need for parking  
Effective traffic management

## Flex schedule / telework

### By the Numbers...

75% of respondents to the survey reported commuting to work five or more days per week.

No respondents reported that telework is their primary commute mode and four indicated that they teleworked as their secondary commute mode.

18.5% said that they were not able to vary their work hours to better fit their commuting schedule.

18% said the most important reason for choosing their primary mode is their work schedule

24% of those who selected drive alone as their primary mode said their most important reason for doing so was their work schedule.

The average number of days that employees commute to Macalester is 4.6 per week. This was remarkably consistent between staff and faculty.

37% reported that they would be willing to try teleworking, 38% said they would be willing to work a compressed work week and 33% reported that they would be willing to try working a flexible schedule.

30% indicated flex-scheduling or a compressed work week, 28.3% indicated telework and 19% indicated schedule flexibility to accommodate commuting would be incentives to change their commuting behavior.

Only 9% said they currently work a flexible schedule and 4% said they currently telework.

**Recommendation: Actively market teleworking and flexible scheduling to employees and formalize a compressed work week schedule year-round.**

Offering flexible schedules, compressed work week and telework are proven methods to increase productivity, attract talent and retain employees; all major benefits to the bottom line of any organization. Other benefits to the college could include reduced need for parking and office space and savings on energy costs.

Employees also benefit from telework and flexible scheduling policies. They save on commuting costs like fuel and wear and tear on their vehicles. They can also save on expenses such as eating out and clothing. Most importantly, they feel that they have more control over their lives if they are offered a telework or flex schedule program, which makes them more loyal to their employer.

Telework and flexible schedule programs also offer major reductions in VMT and air pollution. Recent research has shown that people who telework commute farther than the average person. On telework days, employees average a net 55% decrease in VMT. Reductions in peak period VMT have profound effects on traffic congestion as well. In 2008 VMT numbers fell, for the first time in years, by 3% nationwide. This reduction in VMT resulted in a reduction in traffic congestion by 30%, allowing for freer movement for those who did have to drive on the nation's roads.<sup>11</sup>

Macalester currently has policies in place for telework. This program is not well known by staff and faculty, only 19% of survey respondents said they were aware of a telework program.

The college has already made the commitment to study telework with a select group of staff on a pilot basis. This pilot will be part of the eWorkPlace program, which is designed to study the effects of telework on traffic congestion in the Twin Cities metro area. This is a good first step in determining the effectiveness of telework for Macalester employees and specific departments.

The eWorkPlace program is providing funding to assist Macalester with developing evaluation criteria and training for their telework pilot. The college will also receive information on the commuting habits of the program participants, including tangible data on carbon and pollution reductions, fuel and money saved and vehicle miles reduced.

In addition to telework, there are various flexible schedule options that can be included in any policy. Some of these include a four-ten schedule (working four ten hour days), a nine-eighty schedule (working eighty hours over a two-week span in nine days), or working from home during peak commuting times and coming to the office during peak business hours.

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<sup>11</sup> The Environmental Benefits of eWork, William Schroeer

Macalester currently offers some of these programs during the summer for staff, but should consider formalizing policies that would incorporate these options on a year-round basis. Compressed work weeks and flexible schedules can be beneficial to employee morale and engagement can reduce parking and office space needs and greatly reduce vehicle miles traveled.

#### St. Paul Smart Trips can:

Help implement and refine telework policies specific to Macalester College.

Connect the college with grant funds available to help implement a telework program through the eWorkPlace initiative.

#### Case Study:

Evergreen State University has instituted a robust compressed work week schedule for a significant number of employees, with approximately 70 of nearly 400 full-time staff work compressed weeks, including 9/80s, 4/10s and 3/12s. They have found increases in operational productivity for all job classes, but especially those requiring 24-hour coverage: police, maintenance, grounds and their central utility plant. Employees are happier because they can spend more time with their families, as much as six days off consecutively during the month. The college pays less overtime because shifts are scheduled more efficiently and they have even reduced the emissions from campus vehicles by making the grounds crews more efficient.

Source: <http://www.commuterchallenge.org/cc/csevergreen.html>

#### Employee Benefits (details on p. 30)

Cost of car ownership

Parking expenses

Stress reduction

Air quality

Supporting the environment

Increased safety

#### Employer Benefits (details on p. 34)

Enhanced benefit package

Productivity

Improved morale and employee retention

Employee recruitment

Land and facility costs

Quality of life / community character

Supporting the environment

Air quality

Infrastructure costs and construction Impacts

The impact of traffic congestion  
and ozone pollution

Reduced need for parking  
Effective traffic management

## Car sharing

### By the Numbers...

76 % of employees reported that they need their cars for business purposes either not at all or only occasionally (i.e. once every two months).

49% need their cars for personal reasons 2 or less days a week.

31% responded that they were aware of Departmental HOURCAR memberships are available, but only 2.2% reported to participating in the program.

28% reported to not knowing departmental HOURCAR memberships were available and 14% said their department does not have a membership.

Of those who selected Drive Alone as their secondary commute mode, 30% stated that running personal errands before/during/after work as their most important reason for their response.

**Recommendation: Continue to promote HOURCAR to students, staff and faculty and educate departments on the organizational use of the HOURCAR program and fleet vehicle use.**

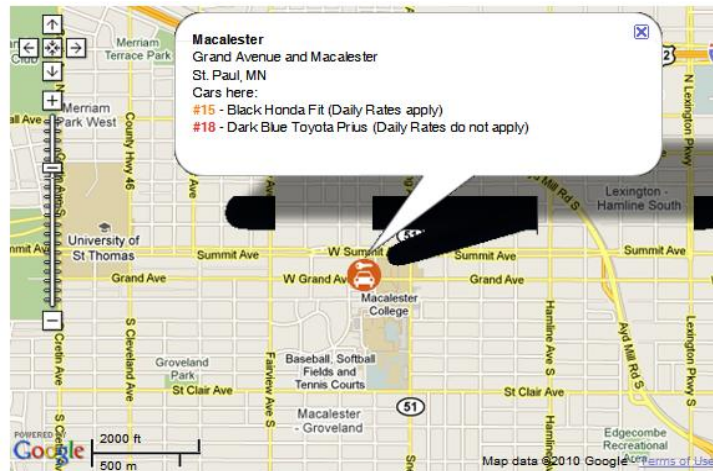
Macalester has an excellent existing network of car sharing vehicles. Currently, staff, faculty and student groups can reserve fleet vehicles for official use through the college.

The college also has two HOURCAR's on site for easy access. HOURCAR is a car sharing services that allows members to reserve a vehicle and pay only for the time and miles driven. These vehicles are available to anyone who becomes an HOURCAR member, either personally or through the college for official business.



Source: HOURCAR

One of the fuel efficient, low emission cars HOURCAR offers



Source: HOURCAR

HOURCAR supplements the existing network of fleet vehicles by offering two fuel-efficient vehicles for personal errands or for official College business when a fleet vehicle may not be available.

Macalester should continue to promote the program to students at orientation, informational meetings and environmentally themed events. Anyone 18 years and older is eligible to become a member of the program. HOURCAR can be especially beneficial to first-year students who are not allowed to have a car on campus.

Macalester should also promote the program to faculty and staff as an alternative to daytime errands that might otherwise be too far to bike or walk or that they may otherwise use their personal vehicle for.

Lastly, Macalester should continue to encourage departments to become members of the HOURCAR program to either supplement or replace their fleet vehicle usage and employee use of personal vehicles for business purposes. Organizational membership can reduce maintenance and fuel costs, as well as the need for capital investment in new vehicles and potentially reduce costs for mileage reimbursement.

#### Employee Benefits [\(details on p. 30\)](#)

- Cost of car ownership
- Parking expenses
- Stress reduction

- Air quality
- Supporting the environment

#### Employer Benefits [\(details on p. 34\)](#)

- Enhanced benefit package
- Productivity

- Improved morale and employee retention

Employee recruitment  
Land and facility costs  
Quality of life / community character  
Supporting the environment  
Air quality  
Infrastructure costs and construction impacts

Economic development  
The impact of traffic congestion and ozone pollution  
Reduced need for parking  
Effective traffic management

## Guaranteed Ride Home program

### By the Numbers...

114 individuals responded that their primary mode of commuting was something other than driving alone.

Based on data from Metro Transit, 11 individuals are registered for the Guaranteed Ride Home Program, of which six are students.

7.5% of employees cited the Guaranteed Ride Home program as an incentive to change their travel mode.

**Recommendation: Encourage commuters to take advantage of the Guaranteed Ride Home (GRH) program**

GRH is regional program that provides registered commuters four vouchers per year (two vouchers every six months) to be used toward taxi or bus fare, at a value of up to \$25 each. The vouchers can be used separately or together. This program ensures that employees who bus, bike, car or vanpool, or walk at least three days a week have a ride home in the case of emergency or unexpected event. St. Paul Smart Trips can provide brochures that outline the program and include a registration form as well as be available to employees at commuter fairs or presentations, via phone, email, or in our offices to assist with questions on the program. Employees can also register for GRH online at [www.metrotransit.org](http://www.metrotransit.org).

### Employee Benefits [\(details on p. 30\)](#)

Guaranteed Ride Home program

### Employer Benefits [\(details on p. 34\)](#)

Enhanced benefit package

Improved morale and employee retention

Employee recruitment

## Increasing awareness

### By the Numbers...

28% of respondents who use their personal car for business purposes were not aware that fleet vehicles were available.

11.5% of employees were not aware of any of the commuter incentives Macalester offers.

Of the commuting incentives that Macalester currently offers, 81%% are unaware of that telework is an available option, 83% are unaware of the bike sharing program, 78% did not know that fleet vehicles are available for business purposes and 70% are unaware that Macalester offers Zipride software for finding rideshare matches .

24% of staff is not aware if they are allowed to change their work hours to better fit their commuting schedule.

The most any employee would be willing to pay for a monthly transit pass is less than the current cost of Metropass and most 31-day stored value cards through Metro Transit..

**Recommendation: Provide more in-depth information on transportation modes and host more “hands on” events.**

Overall, Macalester staff and faculty are very aware of the commuter programs available to them. 88.5% of survey respondents said they were aware of at least one program, with both reduced price transit passes (65%) and reserved parking for carpools and low emitting vehicles (63%) being the most recognizable. Employees are also keenly aware of where transit stops are located near their home (88%) and near campus (86%).

This awareness does not translate into participation however, with 65% of respondents saying they do not participate in any of the transportation programming.

Each year for Earth Week, Macalester hosts a series of popular events for bicycling-as-transportation. These events include a bike sale, organized rides and “lunch and learn” style events designed to get students, staff and faculty to try biking for utility purposes.

This model could be further used to help promote other modes of transportation as well. This can increase awareness beyond an employee knowing that a program exists and increase their confidence in actually trying a new mode of transportation.

Consider offering similar events seasonally with modes that would be appropriate for the time of year. For example, host a how to use transit event in the fall, a rideshare event in the winter and a bike event in the spring, with events for other modes as needed. These trainings can help to raise awareness in how the modes work and reduce apprehension in trying something new.

#### Case Study:

The Minnesota Pollution Control Agency (MPCA) constructed a Commuter Station for their lunch room. The center piece of the station is a rideshare board, designed to reduce fear over sharing a ride with strangers. The station also features a rotating feature with information on commute modes that change seasonally. Some of the rotating exhibits have included profiles of carpoolers at the agency, bicycle information and routes to the building and stories from transit riders.

As the Commuter Station is updated each season, MPCA hosts a kickoff featuring speakers and help from other employees in the building for those who are interesting in trying a new commuting mode. They have also hosted organized bike rides to the facility, walks and volunteer bus buddies to assist other employees with taking transit for the first time.

<http://www.pca.state.mn.us/index.php/living-green/living-green-government/state-agency-sustainability-action-plans/transportation-mpca-sustainability-action-plan.html>

#### St. Paul Smart Trips can:

Schedule a commuter fair which can include: brochures that cover commuting options, promotional items, bus bike rack demonstration, bike maintenance demonstrations and representatives from one or several transportation related organizations to help employees make informed decisions about their commute options.

Provide information and materials on the many region-wide promotions throughout the course of the year that help employers promote specific commuting options.

Give presentations on general commuting options or a specific topic. Topics of interest may include ride sharing, safe biking techniques, how to ride transit, or any number of other commuting topics. Hold a presentation in conjunction with a commuter fair to provide employees access to a plethora of information and allow those who may not be able to attend the presentation a way to get involved.

Present at new employee orientations on a monthly basis or as needed. St. Paul Smart Trips can guide new employees through commuting options including biking and walking, transit, car and vanpooling, and parking options. We can also provide printed materials for new hire packets.

Help new and existing employees with individualized route transit planning, bike route planning, or ride matching.

## Employer Benefits (details on p.34)

Quality of life / community character  
Supporting the environment  
Air quality  
Infrastructure costs and construction impacts

Economic development  
The impact of traffic congestion and ozone pollution  
Reduced need for parking  
Effective traffic management

## Tax breaks

### By the Numbers...

Employees save 30-40% of commuting costs on federal, state, FICA and Medicare taxes by having them deducted via pre-tax payroll deduction.

Employers save on FICA-Medicare taxes per employee participating in a pre-tax transportation deduction.

**Recommendation: Take advantage of federal and state transit tax breaks**

Employers who subsidize the cost of employee bus passes or vanpool expenses and who currently pay state corporate income taxes can claim a credit of up to 30% of the subsidies on their tax return. Employers can also provide transit as a tax-free employee benefit, or allow employees to pay for qualified transportation expenses, including bus passes and commuter van pool costs, using pre-tax income up to \$230 per month.

Employers are also able to provide employees an additional benefit for bicycle commuting. Employers can contribute \$20 per month toward the bike commuting expenses of an employee. Some typical costs include maintenance, helmets, lights, tires, and clothing. Employees could draw from their bicycle commuting account tax free to pay for these expenses. Please contact St. Paul Smart Trips for further information on this benefit.

### St. Paul Smart Trips can:

Provide more information on pre-tax transportation benefits including;  
plan options, cost analysis, planning and implementation.

Cost of car ownership  
Parking expenses

## Employee Benefits (details on p.30)

Tax Savings

## Employer Benefits (details on p.34)

Tax Savings

Enhanced benefit package

Improved morale and  
employee retention

Employee recruitment

## Commuting concerns

### By the Numbers...

43% of respondents cited “inconvenient transit service”, 42% said “commuting time is too high”, 40% cited “schedule independence” and 34% listed “time waiting for transit is too long” as top commuting concerns.

Of those who selected drive alone as their primary commute mode, 17% listed “bus service too inconvenient” as the most important reason for their choice.

31% of employees said more convenient bus service and 14% said more bike trails/lanes would encourage them to change their current travel behavior

**Recommendation: Communicate employees’ commute-related concerns and suggestions to St. Paul Smart Trips**

St. Paul Smart Trips, in a continuing effort to fulfill its mission, maintains constant communication with metropolitan area transit providers and policy makers—sharing the insights of their customers and the business community. Our advocacy efforts include input on transit issues, biking/walking infrastructure and amenities, and rideshare amenities. Our involvement and interaction with the City of St. Paul, Metro Transit, Mn/DOT and other state agencies, Ramsey County, as well as a host of likeminded organizations and stakeholders gives employees a voice when it comes to concerns regarding commute options.

St. Paul Smart Trips can:

Share employees’ commute-related concerns with relevant agencies and service providers.

## Employer Benefits (details on p.34)

Quality of life / community character

Supporting the environment

Air quality

Infrastructure costs and  
construction impacts

Economic development

The impact of traffic congestion  
and ozone pollution

Reduced need for parking

Effective traffic management

# BENEFITS

## Employee benefits

### Tax savings

- Employees who have transit or vanpool related expenses paid via pre-tax deduction can save 30-40% of the costs per pay period on federal, state, FICA and Medicare taxes.

### Cost of car ownership

- The average composite cost of car ownership for 2007 was \$8115 per year based on an average of 15,000 miles driven. This includes the cost of gas, maintenance, tires, insurance, license, registration, taxes, depreciation and financing.<sup>12</sup>
- The median household income for 2007 was \$50,233.<sup>13</sup>
- Based on these figures, the average household spends 16% of their income per vehicle owned.
- Decreasing average yearly miles traveled by 1/3 will decrease the average composite cost of car ownership to under \$7100 per year.
- The average cost of gasoline so far for 2009 is \$2.34/gallon<sup>14</sup>, and is projected to remain static for 2009.
- The average drive alone commuter will spend nearly \$1360 for a passenger vehicle and nearly \$1902 for light trucks per year in gasoline based on current projections. Just under 3% for passenger vehicles and just under 4% for light trucks of the median household income.

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<sup>12</sup> <http://www.aaanewsroom.net/Assets/Files/200844921220.DrivingCosts2008.pdf>

<sup>13</sup> U.S. Census Bureau, Income, Poverty, and Health Insurance Coverage in the United States: 2007, August 2008

<sup>14</sup> <http://www.eia.doe.gov/emeu/steo/pub/>

## Parking expenses

- Using transit, biking or walking to work can eliminate the need to pay for parking and reduce an employee's monthly expenses.
- Carpooling or vanpooling can cut the cost of parking at least in half, depending on the number of riders in the pool.
- Free street parking is a perk that carpools and vanpools can be eligible for through the registered rideshare program.

## Stress reduction

- Studies have indicated that traffic congestion while driving alone can be a major stress factor. Increased stress levels have been linked to high blood pressure and heart disease as well as a loss of work productivity.
- Studies have also shown that commuter's who use transit, share a ride, bike or walk feel significantly less stressed about their commute. By leaving the driving to someone else, or increasing physical activity, stress levels can be reduced making for a happier, healthier employee.<sup>15</sup>

## Increased physical activity / health benefits

- Walking to the bus stop, walking and biking to work have the additional benefit of positively affecting health. According to the US Department of Health and Human Services,<sup>16</sup> adults should follow these guidelines for physical activity:

All adults should avoid inactivity. Some physical activity is better than none, and adults who participate in any amount of physical activity gain some health benefits.

For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity.
- There is strong evidence that many health benefits are a direct result of following the above recommendations for physical activity.

Some of these benefits include: Lowered risk of early death, stroke, high blood pressure, type 2 diabetes, certain cancers, improved cardio-respiratory and muscular fitness, and weight loss.

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<sup>15</sup> [http://www.apta.com/passenger\\_transport/thisweek/documents/driving\\_stress.pdf](http://www.apta.com/passenger_transport/thisweek/documents/driving_stress.pdf)

<sup>16</sup> US Department of Health & Human Services, 2008 Physical Activity Guidelines for Americans, 2008

## Air quality

- Mobile sources, such as cars, trucks and lawnmowers, are a major source of air pollution.<sup>17</sup>
- Air pollution has been linked to health risks such as heart disease and stroke<sup>18</sup>, and can affect respiratory health.<sup>19</sup>
- The average passenger car emits 0.916 lbs. of carbon dioxide, 2.8 grams of hydrocarbons, and uses 0.0465 gallons of gasoline per mile traveled. Based on national averages, that equates to 77.1 lbs. of hydrocarbon, 11,450 lbs. of carbon dioxide and 581 gallons of gas per year.<sup>20</sup>
- Vehicle emissions are directly proportional to fuel consumption. For each 1% increase (decrease) in fuel consumption, there is a corresponding 1% increase (decrease) in vehicle emissions, meaning driving less actually can decrease air pollution.
- Sharing a ride cuts the amount of pollution emitted into the air from vehicles at least in half, using transit by a greater amount, and walking or biking eliminates vehicular emissions for individual commutes.

## Supporting the environment

- Vehicle mile reduction is one of the most significant changes an individual can make to improve air quality and mitigate global climate change.

## Guaranteed Ride Home program

- The Guaranteed ride home program allows individuals who use transit, share a ride, bike or walk to work three or more days per week to receive two \$25 vouchers to be reimbursed for cab fare/bus fare in the event of needing to get home for an emergency.

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<sup>17</sup> <http://www.epa.gov/OMS/inventory/overview/pollutants/index.htm>

<sup>18</sup> <http://www.americanheart.org/presenter.jhtml?identifier=4419>

<sup>19</sup> <http://www.cdc.gov/NCEH/airpollution/>

<sup>20</sup> EPA, Emission Facts, April 2000

### Savings on gym membership

- Biking, walking, running or skating to work can save money by enabling employees to cancel or reduce gym memberships. Using these modes of transportation allow individuals to get their workout in without spending extra money (and time) at the gym every month.

### Ability to make productive use of commute

- Using transit or being the rider in a ride share allows individuals to read, catch up on work, or just relax during their commute rather than dealing with the stresses of driving in traffic.
- Biking, walking, running, or skating lets commuters get their workout in on their way to work, making their commute productive and healthful.
- Teleworking eliminates the commute, allowing employees to be more productive during the time that would normally be spent getting to the office.

### Increased safety

- Riding the bus is estimated to be over 170 times safer than automobile travel.<sup>21</sup>

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<sup>21</sup> National Safety Council, Injury Facts, Washington DC, 2002

# Employer benefits

## Tax savings

- Employers who offer pre-tax transportation expense accounts save on FICA and Medicare taxes per participating employee.
- Employers who subsidize transit expenses may be eligible for federal and state tax credits for a percentage of the subsidy.

## Enhanced benefit package

- Offering transportation expense accounts and subsidies is a low cost addition to benefits packages.
- Current employees gain added benefits and Macalester College is more attractive to potential hires.

## Productivity

- Employees arriving to work late, or stressed from the long commute, negatively impact overall productivity and the quality of the work environment.<sup>22</sup>
- Working from home eliminates many of the non-work related interruptions during the day, resulting in an increase of productivity.

## Improved morale and employee retention

- Eight out of ten employees consider the commute an extension of their workday.
- A stressful commute seriously impacts an employee's sense of job satisfaction and can negatively affect employee retention.<sup>23</sup>

## Employee recruitment

- The transportation network is an organization's lifeline to labor markets. An efficient network plays a role in an employer's ability to attract good employees and access new labor markets.

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<sup>22</sup> Michael Flood, Off to Work, 2005

<sup>23</sup> Luis Aguilar, Long Road Home Can Stress Out Metro Commuters, Detroit News, February 2005

## Land and facility costs

- Parking facilities are expensive to construct and maintain, and parking shortages affect an organization's ability to support continued expansion.
- Telework and flexible work arrangements can decrease the need for additional office space and parking facilities by not having employees come to the office or by providing shared work spaces.

## Quality of life / community character

- The quality of the commute plays a significant role in the overall perception of quality of life in a community.<sup>24</sup>

## Supporting the environment

- Promoting commuting options is one of the easiest ways to introduce environmentally conscious initiatives into a workplace. Vehicle mile reduction is one of the most significant changes an individual can make to improve air quality and mitigate global climate change.<sup>25</sup>

## Air quality

- Increased vehicle travel and worsening traffic congestion are the major factors in deteriorating air quality and have significant health implications.<sup>26</sup>

## Infrastructure costs and construction impacts

- Communities all over the country are struggling to keep pace with the enormous costs of transportation infrastructure. Transportation projects take a long time to plan and execute and construction often creates additional impacts on congestion and community character.

## Economic development

- Traffic congestion and air pollution can negatively impact a community's ability to attract new jobs and maintain overall economic health.<sup>27</sup>

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<sup>24</sup> ACT, Commuter Choice

<sup>25</sup> <http://www.epa.gov/climatechange/fq/emissions.html#5>

<sup>26</sup> MPCA, Background On: Air Pollution from Mobile Sources, April 2005

<sup>27</sup> [http://www.usatoday.com/news/nation/2002-10-17-traffic\\_x.htm](http://www.usatoday.com/news/nation/2002-10-17-traffic_x.htm)

## The impact of traffic congestion and ozone pollution

- Traffic congestion and ozone pollution are not only impacting commuters; they are impacting our businesses and communities. Employers are not only concerned about employee quality of life and work experience, but also their role as a community leader.

## Reduced need for parking

- Less parking means less maintenance costs, more room for future expansion of facilities, and less need to acquire additional land for future development.

## Effective traffic management

- Effectively managing traffic is a benefit to the city, Macalester employees and students, and the community. Less cars on the road reduces congestion, allowing those that need to drive less time on the roads. It also decreases the demand for new infrastructure to accommodate all of the cars on the road. Lastly, it reduces emissions of the vehicles that remain on the road by making their trips more efficient - less time spent idling in congestion benefits air quality.

# RESOURCES

St. Paul Smart Trips  
Transportation management organization for St. Paul  
[www.smart-trips.org](http://www.smart-trips.org)

Metro Transit  
Regional transit provider  
[www.metrotransit.org](http://www.metrotransit.org)

HOURCAR  
Car sharing service for the Twin Cities area  
[www.hourcar.org](http://www.hourcar.org)

eWorkPlace  
Twin Cities telework initiative  
[www.eworkplace-mn.com](http://www.eworkplace-mn.com)

Dero Bike Racks  
Local bicycle parking manufacturer  
[www.dero.com](http://www.dero.com)

# APPENDICES

## Appendix A: Survey results

1. Please indicate you PRIMARY commute mode to and from work (3 or more days per week).

|                          |       |
|--------------------------|-------|
| Drive Alone              | 66.6% |
| Carpool                  | 3.8%  |
| Vanpool                  | 0.4%  |
| Transit from home        | 2.6%  |
| Transit from Park & Ride | 0%    |
| Biking                   | 3.5%  |

|                              |       |
|------------------------------|-------|
| Walk, Run, Skate             | 17.3% |
| Dropped off                  | 0.9%  |
| Rideshare from park and ride | 0.0%  |
| Bike to/from transit         | 0.3%  |
| Telework                     | 0%    |
| Other                        | 5%    |

### Other Responses:

drive alone ONE day a week  
during winter; during fall and spring a different combination, then 3 or more days a week biking and transit  
Dropped off at bus stop in morning; picked up at night  
Dropped off in morning, walk or bus home Drop off kids at school- so not really Carpool or Drive Alone.  
drive in cold weather, bike otherwise  
In the winter months (1/2 bus, 1/2 carpool), 120 mpg scooter in the warmer months  
Drive alone, but transport multiple children both ways

Varies with season, different to/from work  
Motor Scooter (65 mpg) motorcycle in temperate weather  
Car in winter, bike in summer  
Depends on the weather - also bike when nice I'm dropping off 3 kids to their schools also.  
drive with my daughter whom I bring to the daycare drive kids to school near mac, then drive to work 6 mo. walk 75% (drive 25%); 6 mo. drive 100%

2. Please indicate the MOST IMPORTANT REASON for your choice in question 1.

|   |       |
|---|-------|
| Work schedule                                       | 18%   |
| Saves time  | 11.4% |
| Daycare or children needs                           | 15.3% |
| Inconvenient transit service                        | 12%   |
| Second job/school                                   | 0.9%  |
| Personal safety                                     | 0%    |
| Car required for work                               | 0.3%  |
| Run personal errands before/after work/during lunch | 8.7%  |
| Peace and quiet                                     | 1.2%  |

|                               |       |
|-------------------------------|-------|
| Don't like traffic congestion | 0.3%  |
| Environmental concerns        | 2.7%  |
| Don't like driving            | 0.6%  |
| Don't own a car               | 3.3%  |
| Price of gas                  | 0%    |
| Reduces stress                | 0.6%  |
| Socializing                   | 0.6%  |
| Saves money                   | 2.4%  |
| Exercise/fitness              | 5.4%  |
| Other                         | 16.2% |

Other Responses:

Climate

I have a hard time getting myself out of bed to bike

Live about 30 miles away, no carpool option

I drive when its too cold/wet to bike

No significant Transit Benefit from Macalester

I live so close that it isn't worth driving.

More practical given location

Live close to work; limited parking available.

I live close by and like to walk.

We live within 3 blocks of each other, so it just makes sense to carpool

Live very close

60mpg and is very enjoyable

Live only 3 blocks from campus.

live in neighborhood

Don't have to find parking

only choice

Share a car with partner

I've always driven in the winter, but now that I have a two-year old I need to pick up I also drive if there is a threat of rain, or if it is cold (I do still bike and pick up son on bike if weather is warm and nice)

I don't like people early in the morning during my commute, and I work different hours, and I live far from any people who I might not mind in the morning

i like driving my car

Weather

I live within three blocks of campus. It would be silly to drive.

combination of 3-4 of these reasons plus I drop my spouse at a bus stop

Where we live is in the middle of my job location and my wife's job location

very close to work

Live across the street from the campus

like walking

exercise

I live near-

Convenience.

don't need to drive to work. I live here.

I live 3 blocks away

One-car household, husband \*must\* drive to work (no bus available)

don't own a second car; my wife and I carpool

I bike in warm weather, but I can no longer bike in the winter --- too dangerous.

I live 27 miles away, no direct or convenient carpool/bus

Convenience

proximity to work

Only 1 car in family for many needs

do not live far from the office

Elderly parent needs

I live next to campus

live very close to campus

Live close

transportation not available from where I live

Proximity to the workplace

close proximity

Distance only blocks away

meeting off campus

Carrying too many books, etc. to bike

Distance from campus and work schedule.

No transit options - too distant

Convenience

Distance between home and work

3. Please rate your satisfaction with your PRIMARY commuter mode on the scale below.

|                  |       |
|------------------|-------|
| Very unsatisfied | 5.1%  |
| Unsatisfied      | 9.9%  |
| No opinion       | 10.2% |
| Satisfied        | 37.2% |
| Very satisfied   | 37.5% |

4. Please indicate your SECONDARY commute mode to and from work. (i.e. 2 days or less per week, seasonally, etc.)

|                          |       |
|--------------------------|-------|
| Drive Alone              | 22.5% |
| Carpool/dropped off      | 6.3%  |
| Vanpool/dropped off      | 0.3%  |
| Transit from home        | 5.1%  |
| Transit from Park & Ride | 0%    |
| Bike                     | 12%   |

|                             |      |
|-----------------------------|------|
| Walk, Run, Skate            | 12%  |
| Telework                    | 1.2% |
| No secondary commute option | 36%  |
| Other                       | 4.5% |

Other Responses:

bus with many transfers

rarely take the bus

work at home

Bus

bike and transit, fall and spring,  
depending on weather

motorcycle

Work from home.

Scooter

Combination

Motorcycle

Bus

I wish you had specified seasonally on Q1!

dropped off in morning, walk home

get a ride from a coworker if my car  
isn't available

bus

5. Please indicate the MOST IMPORTANT REASON for your choice in question 3.

|  |       |
|--|-------|
| Bad/cold weather alternative                             | 5.4%  |
| Work schedule  | 10.3% |
| Saves time   | 7.9%  |
| Daycare or children needs                                | 7.3%  |
| inconvenient transit service                             | 10.6% |
| Second job/school  | 1.2%  |
| Personal safety  | 0%    |
| Car required for work                                    | 0.9%  |
| Run personal errands before/after work/during lunch hour | 9.7%  |

|                               |       |
|-------------------------------|-------|
| Saves money                   | 1.2%  |
| Don't like traffic congestion | 0%    |
| Environmental concerns        | 6.3%  |
| Don't like driving            | 1.8%  |
| Don't own a car               | 2.1%  |
| Price of gas                  | 0.6%  |
| Reduces stress                | 1.2%  |
| Socializing                   | 0.3%  |
| Exercise/fitness              | 15.4% |
| Peace and quiet               | 0.9%  |
| Other                         | 12.0% |

#### Other responses

car out of service  
 If someone else needs my car  
 Live far from work, no carpool option  
 my car is not available for some reason  
 sharing car with others  
 Multi-tasking my exercise and commute  
 Just because  
 Only 3 blocks from campus.  
 no response live in neighborhood no 2nd choice  
 need to carry studio supplies, transport students on field trips,  
 i like driving  
 no secondary commute  
 only other option available to me  
 share a car with my spouse

No secondary mode.  
 N/A  
 NA  
 When the other members of the carpool aren't coming in.  
 None  
 what was question 3 again?  
 Fun and Efficient  
 No alternative - i'm 87 years old  
 Na  
 Car not functioning or not needed (for errands, children)  
 try to support public transportation when I can  
 Help to have more parking spaces at job  
 Kind of fun  
 enjoy it

don't have a second option  
 Live across the street  
 my "secondary" mode is used  
 seldomly  
 Not applicable  
 car unavailable  
 enjoyment  
 if car is being repaired etc  
 no option to say non-applicable  
 I live 3 blocks away  
 doesn't apply  
 Don't need a secondary mode of  
 transport.  
 I live near  
 no alternatives within reason  
 proximity to work

Chance to share ride with spouse  
 live very close to campus  
 Live close  
 Only in snow emergency do I look for  
 an alternative  
 volunteering at a location too far to  
 walk  
 no other commute option  
 no secondary mode  
 I like the convenience of driving  
 myself  
 n/a  
 no secondary mode  
 Elderly parent needs  
 No secondary mode

6. Has your primary commute mode changed in the past three years?

|     |       |
|-----|-------|
| Yes | 20.5% |
| No  | 79.5% |

7. Please indicate the MOST IMPORTANT REASON for the change.

|  |       |
|--|-------|
| Work schedule  | 8.8%  |
| Saves time   | 2.9%  |
| Daycare or children needs                                | 14.7% |
| Inconvenient transit service                             | 5.9%  |
| Second job/school  | 2.9%  |
| Personal safety  | 1.5%  |
| Car required for work                                    | 0%    |
| Run personal errands before/after work/during lunch hour | 1.5%  |
| Saves money  | 7.4%  |
| Parking is too expensive                                 | 7.6%  |

|                               |       |
|-------------------------------|-------|
| Don't like traffic congestion | 0%    |
| Environmental concerns        | 5.9%  |
| Don't like driving            | 0%    |
| Don't own a car               | 4.4%  |
| Price of gas                  | 0%    |
| Reduces stress                | 0%    |
| Socializing                   | 1.5%  |
| Exercise/fitness              | 7.4%  |
| Peace and quiet               | 0%    |
| Other                         | 35.3% |

Other responses

sold our second car now only have one

Changed jobs

do not live on bus line anymore

moved farther from the college

moved

change of home location

used to live closer to old job

wife got job that allows carpool

Second car broke down and too expensive to fix

started to carpool

My mother now lives with us, and she has provided a second car for us in winter since she doesn't drive in winter

moved farther from work

moved-used to be walking distance

Last year I walked, but I purchased a home in Oakdale

knee trouble has forced me to drive more often

moved

moved cities

Moved closer to work.

moved to neighborhood

convenience

Moved closer to work.

My husband and I used to carpool but his work schedule/ place of employment changed and it is no longer possible.

I moved closer to work.

I moved from a rental in Mac-Groveland to own a home in an affordable neighborhood.

8. How many days to you commute to work per week?

|            |      |
|------------|------|
| Not at all | 3.3% |
| 1 day      | 0.9% |
| 2 days     | 0.9% |
| 3 days     | 5.5% |

|        |       |
|--------|-------|
| 4 days | 12.5% |
| 5 days | 68.1% |
| Other  | 8.8%  |

Other responses

6 days

4 days in april-sept, 0 in nov-feb

6

by commute do you mean driving? if  
so 2, otherwise I'm here all 5 days

depends on term; 4 days in fall  
(maybe 5) 3 days (maybe four) in  
spring

6

5-6

Six

7

5 or more days

6

6

6-7

7 days

almost 7 days/week

6-7 days

6-7

A couple times a month

6

often 6 or 7

If you mean commute by car, then I  
never do. If you mean commute by  
walk/bike, I do that 5 days a week.

six days to work

6 days/week, plus sometimes coming  
back in the evening for extra work

five days a week + some weekends

Fluctuates due to post work stuff and  
weather.

There are a lot of weeks where I am  
on campus 6 or 7 days a week

9. Does your schedule change in the during the summer?

|     |       |
|-----|-------|
| Yes | 57.8% |
| No  | 42.2% |

10. Do you work a year-round schedule, or do you work only during spring / fall class sessions?

|                        |       |
|------------------------|-------|
| Year round             | 77.5% |
| Spring / fall          | 22.5% |
| Other (please specify) | 6%    |

Other responses

Spring Adjunct

FT during Spring/Fall; PT during Summer

June/July off

Year round, but part time in the Summer

what does this question mean? i'm faculty but i use my office during summer

full time fall and spring part time summer

10 1/2 months

I work Fall/sp but I come in during the summer too to use my on campus studio/lab

11 months of the year

work spring/fall teaching ans year round preparing/ researching

I teach fall/spring; research (at home) in summer

Changing this year - up until now, only academic year

But I come in to campus frequently during the summer

Fall only: I do not work Spring&Fall which is what choice 2 indicates, but I was forced to check a box.

10 month contract

and 1-2 days in summer

Work elsewhere in summer

Fall only

I work year round, but my schedule changes dramatically.

10.5 months

6 days

11. How many days do you commute to work in the summer?

|   |       |
|---|-------|
| 0 | 18.2% |
| 1 | 11.4% |
| 2 | 10.8% |
| 3 | 11.9% |

|       |       |
|-------|-------|
| 4     | 12.5% |
| 5     | 35.2% |
| Other | 10.2% |

Other responses

at least once one week

-ish, irregular

On average - rain prevents  
except for July  
if in the Twin Cities.  
on very rare occasions  
it varies  
total or weekly? 2 day/wk  
biking except for 6 weeks  
Do you mean per week?

occasionally as needed  
maybe once a week during the summer  
august daily  
occasional  
Varies between 1 and 5  
5 days/wk on the weeks I come in  
6  
A couple days a month

12. How far is your commute to work using your primary commute mode (ONE WAY)?

|             |       |
|-------------|-------|
| 0-2 miles   | 32.4% |
| 2-5 miles   | 21.1% |
| 5-10 miles  | 18.3% |
| 10-15 miles | 13.5% |

|               |      |
|---------------|------|
| 15-20 miles   | 7.3% |
| 20-30 miles   | 3.7% |
| 30-40 miles   | 2.1% |
| Over 40 miles | 1.5% |

13. How long does it normally take you to commute to work using your primary commute mode (ONE WAY)?

|                     |       |
|---------------------|-------|
| Less than 5 minutes | 12.5% |
| 5-10 minutes        | 21.7% |
| 10-20 minutes       | 37.0% |
| 21-30 minutes       | 15.3% |

|                  |      |
|------------------|------|
| 31-45 minutes    | 9.8% |
| 46-60 minutes    | 2.4% |
| More than 1 hour | 1.2% |

14. How many days per week do you need to use your car for reasons before, during or after work?

|   |       |
|---|-------|
| Not at all                                  | 4.6%  |
| Occasionally (i.e. once or twice per month) | 15.0% |
| 1 day                                       | 10.4% |
| 2 days                                      | 19.3% |

|                        |       |
|------------------------|-------|
| 3 days                 | 20.5% |
| 4 days                 | 12.5% |
| 5 days                 | 14.7% |
| Other (please specify) | 3.1%  |

## Other responses

Significant other owns car and I never drive it. He drops me off at school and we run errands probably 2 days/wk.

varies from week to week

Don't own a car.

every day

it varies, but generally at least 1 day a week

hour car

every day

drop off / pick up kids from school 3-4 days/week

06/07/2010

6

15. How many days per week do you need to use your personal vehicle for business purposes??

|   |       |
|---|-------|
| Not at all                                  | 33.9% |
| Occasionally (i.e. once or twice per month) | 42.2% |
| 1 day                                       | 6.4%  |
| 2 days                                      | 4.3%  |

|                        |      |
|------------------------|------|
| 3 days                 | 4.6% |
| 4 days                 | 3.7% |
| 5 days                 | 1.5% |
| Other (please specify) | 3.4% |

## Other responses

I don't own a car

A few times a year

Rarely, say once every other month

6

probably less than once a month

a couple of times per year

6 days (how is this question different from previous one?)

whenever

06/07/2010

hour car

06/07/2010

13. Fleet vehicles and departmental HOURCARs are available for employee use on official college business. For what reasons would you use your personal vehicle rather than a college owned fleet vehicle or HOURCAR for official business? (select all that apply)

|  |       |
|--|-------|
| No fleet vehicle / HOURCAR available               | 6.5%  |
| Vehicle use required outside normal business hours | 19.8% |
| Reimbursement to use personal vehicle              | 0.9%  |
| More convenient to use personal vehicle            | 65.9% |

|  |       |
|--|-------|
| Not aware that fleet vehicles / HOURCARs are available | 28.1% |
| Department does not have HOURCAR membership            | 13.8% |
| Other (please specify)                                 | 11.1% |

Other responses

very part-time employee--my car gets great mileage

cost to department

it is easiest to run the errand on the way into work

N.A.

cost

time needed to secure hour car

I do not charge for these trips

Fees are too high on fleet vehicles and hour cars are too small

My car holds all my tools

work three days at the U of MN

Always use rental cars when needed for work

Distance travelled can be long

Did not know we have that option

Unsure if picking up office supplies constitutes "official college business."

Unsure of procedure for using, most often need to use to go greater distance (e.g., to northfield)

Occasionally we need to pick up and drop off shipments at Central Stores our supervisors have never indicated that fleet or hourcars were available to us for this purpose.

Drop off equipment for service shop on my way home.

It seems silly to drive 3 miles to the mailhouse and go get a van that's less efficient than my car.

Rarely do I have to do business during work day

no car seats in the hour cars

Combine work and personal errands.

drive only own car

I don't own a car

dont currently have car

16. Are you familiar with the transit stops near campus?

|     |       |
|-----|-------|
| Yes | 85.9% |
| No  | 14.1% |

16. Are you aware of the transit access near your home?

|     |       |
|-----|-------|
| Yes | 88.4% |
| No  | 11.6% |

17. How far are the transit stops from your home?

|  |       |
|--|-------|
| The transit stop is outside of my home | 6.3%  |
| 1-3 blocks                             | 57.3% |

|                    |       |
|--------------------|-------|
| 4-6 blocks         | 17.0% |
| More than 6 blocks | 19.4% |

18. Are you willing to try any of the following commuting options? (select all that apply)

|                              |       |
|------------------------------|-------|
| Transit                      | 33.4% |
| Ridesharing                  | 20.2% |
| Biking                       | 37.7% |
| Walking, running, or skating | 25.5% |
| Teleworking                  | 36.5% |

|   |       |
|---|-------|
| Flexible scheduling                           | 32.8% |
| Compressed work week                          | 38.3% |
| Park and Ride                                 | 11.0% |
| I am not willing to try any commuting options | 19.9% |

19. Macalester College currently offers incentives for some commuting options. Please indicate which of these incentives you are aware of (select all that apply).

|                                      |       |
|--------------------------------------|-------|
| Discounted transit passes            | 65.0% |
| Teleworking                          | 19.2% |
| Flexible scheduling                  | 35.9% |
| Fleet vehicles for business purposes | 22.3% |
| Departmental HOURCAR memberships     | 30.7% |
| Rideshare matching (Zipride)         | 30.0% |
| Bike Sharing                         | 16.7% |

|   |       |
|---|-------|
| Showers / Lockers                                     | 48.3% |
| Walk to Work program (Highwinds grant)                | 30.3% |
| Reserved parking for carpools / low emitting vehicles | 62.8% |
| I am not aware of any of these incentives             | 11.5% |

20. Do you currently participate in any of the commuting incentives offered? (select all that apply)

|                                      |       |
|--------------------------------------|-------|
| Discounted transit passes            | 14.2% |
| Teleworking                          | 4.0%  |
| Flexible scheduling                  | 9.0%  |
| Fleet vehicles for business purposes | 2.2%  |
| Departmental HOURCAR memberships     | 2.2%  |
| Rideshare matching (Zip Ride)        | 0.6%  |
| Bike Sharing                         | 0.3%  |

|   |       |
|---|-------|
| Showers / Lockers                                     | 5.6%  |
| Walk to Work program (Highwinds grant)                | 5.9%  |
| Reserved parking for carpools / low emitting vehicles | 6.8%  |
| I do not participate in any transportation incentives | 65.3% |

21. Would any of the following incentives persuade you to change your primary commute mode?  
(select all that apply)

|  |       |
|--|-------|
| More convenient transit service  | 31.2% |
| Available transit and/or Park and Ride information   | 7.2%  |
| Greater discount on transit passes   | 18.1% |
| Access to shared vehicles at work for personal use   | 6.2%  |
| Access to shared bicycles at work for personal use   | 3.1%  |
| Guaranteed Ride Home program (two \$25 vouchers every six months for emergency rides home) | 7.5%  |
| Help finding ridesharing partners  | 9.7%  |
| More bike paths/lanes  | 14.0% |
| Secure bicycle storage   | 13.4% |

|   |       |
|---|-------|
| Schedule flexibility to accommodate commuting   | 19.0% |
| Place to store and change into work cloths      | 14.0% |
| Place to clean up after biking/running          | 14.0% |
| Preferred parking for carpools/vanpools         | 2.8%  |
| Preferred parking for alternative fuel vehicles | 1.9%  |
| More information on bike routes                 | 6.2%  |
| Teleworking                                     | 28.3% |
| Flex scheduling / compressed work weeks         | 29.9% |
| No incentives would persuade me to change       | 30.2% |

22. What is the most you would be willing to pay for a monthly transit pass that would persuade you to change your primary commute mode?

|                                       |       |
|---------------------------------------|-------|
| I would not take transit at any price | 39.3% |
| \$0-\$15                              | 18.1% |
| \$16-\$30                             | 15%   |
| \$31-\$45                             | 11.8% |

|                        |      |
|------------------------|------|
| \$46-\$60              | 4.4% |
| \$61-\$75              | 1.9% |
| I already take transit | 9.7% |

23. Are any of the following commuting related issues of great concern to you?  
(select all that apply)

|  |       |
|--|-------|
| Inconvenient transit service             | 43.3% |
| Transit stops are too far away from work | 3.1%  |
| Transit stops are too far away from home | 20.4% |
| Commuting time is too high               | 41.7% |
| Time waiting for transit is too long     | 33.9% |
| Personal safety                          | 12.9% |
| Too much traffic congestion              | 8.2%  |
| Environmental concerns                   | 20.1% |
| Commuting stress too high                | 11.0% |
| Lack of shower / locker facilities       | 7.5%  |
| Lack of bike parking                     | 8.2%  |

|   |       |
|---|-------|
| Flexibility with start / finish times at work | 16.9% |
| Transit requires transferring                 | 27.6% |
| Light rail not yet available in St. Paul      | 18.5% |
| Reliability of transit service                | 14.1% |
| Reliability of carpool / vanpool              | 4.7%  |
| schedule independence                         | 40.4% |
| Not comfortable biking in traffic             | 13.5% |
| Unsure of bike routes to work                 | 2.5%  |
| No serious concerns                           | 25.7% |

24. What is your usual start time at work?

|                   |       |
|-------------------|-------|
| 6:00 am – 6:59 am | 5.3%  |
| 7:00 am – 7:59 am | 22.3% |
| 8:00 am – 8:59 am | 47.3% |
| 9:00 am – 9:59 am | 21.0% |

|                          |      |
|--------------------------|------|
| 10:00 am – 5:59 pm       | 4.1% |
| 6:00 pm – 11:59 pm       | 0.0% |
| 12:00 midnight - 5:59 am | 0.0% |

25. What is your usual finish time at work?

|                      |       |
|----------------------|-------|
| 12:00 noon - 2:59 pm | 4.4%  |
| 3:00 pm – 3:59 pm    | 6.0%  |
| 4:00 pm – 4:59 pm    | 42.3% |
| 5:00 pm – 5:59 pm    | 31.0% |

|                          |      |
|--------------------------|------|
| 6:00 pm – 6:59 pm        | 9.1% |
| 7:00 pm - 11:59 pm       | 7.2% |
| 12:01 midnight - 5:59 am | 0.0% |
| 6:00 am – 11:59 am       | 0.0% |

26. Are you allowed to vary your work hours to fit your commuting schedule?

|     |       |
|-----|-------|
| Yes | 63.0% |
| No  | 18.5% |

|            |       |
|------------|-------|
| Don't know | 18.5% |
|------------|-------|

27. Does your work schedule vary?

|                   |       |
|-------------------|-------|
| No                | 26.3% |
| Yes, day to day   | 42.9% |
| Yes, week to week | 3.1%  |

|  |       |
|--|-------|
| Yes, seasonally (holidays, summertime) | 22.3% |
| Yes, unscheduled overtime              | 5.3%  |

28. Are you faculty or staff?

|         |       |
|---------|-------|
| Faculty | 30.4% |
| Staff   | 67.7% |

|                        |      |
|------------------------|------|
| Other (please specify) | 1.9% |
|------------------------|------|

Other responses

Retired faculty  
collective bargaining unit  
student

faculty on MSFEO, no teaching  
xxx  
Adjunct Faculty

30. What is your gender?

|        |       |
|--------|-------|
| Male   | 38.0% |
| Female | 62.0% |

31. What is your age?

|       |       |
|-------|-------|
| 18-30 | 10.3% |
| 31-40 | 25.8% |
| 41-50 | 29.4% |

|       |       |
|-------|-------|
| 51-60 | 25.2% |
| 60+   | 9.4%  |

28. What are your preferred methods of receiving information? (select all that apply)

|             |       |
|-------------|-------|
| Events      | 7.8%  |
| Newsletters | 19.9% |
| Emails      | 94.1% |
| Posters     | 4.6%  |
| Info Desk   | 1.3%  |

|                        |      |
|------------------------|------|
| Department meetings    | 13%  |
| Informational fairs    | 1.6% |
| Trainings              | 6.5% |
| Other (please specify) | 6.5% |

Other responses

Anything not printed out  
 Daily Piper  
 Daily Piper  
 daily piper  
 Daily Piper  
 Daily Piper  
 Daily Piper  
 Daily Piper  
 Daily Piper is effective to me...  
 faculty meetings  
 Information about what? Commuting options?

learn how to spell recElving!!  
 Macalester web site  
 piper  
 piper  
 piper  
 Piper  
 please note--receiving is spelled wrong above  
 The Piper  
 US mail or camous mail or phone

## Appendix B: Open ended questions

### Transit

Buses are inadequate and the service is too infrequent to depend on. My local bus only runs every half hour during rush hour, and once an hour after that. It is too inconvenient and requires changing my work hours.

More bus routes so fewer transfers would be a godsend.

The overwhelming reason I don't take public transit to work is that my 15-20 minute drive in the car is a minimum of 45 minutes by public transit, and involves both train & bus.

Transit works well for me when I am traveling during rush hours; I prefer to transfer to light rail, but the 84 connections are not that great (particularly outside of rush hours). I tend to use transit during snow storms to avoid having to drive / park

I would love to live closer to work and my husband and I are even considering moving closer to Macalester because I hate my long commute. Right now, transit is too inconvenient and requires a long walk to the bus stop and two or three transfers.

It would be nice if monthly transit passes were a bit cheaper. I know that they are discounted, but a further discount would be an incentive to me.

I would prefer to take public transit but the options are limited and do not work with my daycare schedule and my spouse's work schedule.

I'd probably take a city bus instead of driving on inclement days if it was cheaper.

I would take public transit but have to walk several block - with poor service

and have to transfer as well - It takes forever

I would not take transit because I live very close to campus. It would take me longer to take public transit than to walk.

I will not take public transit until there is a rail system from the suburb in which I live to Macalester.

I use a MTC Go To Card. Go To Cards are not offered to Staff. I take a 2 buses and a train to get to work and the Go To Card is more convenient. I currently pay my own fares and don't have an issue with it but the college only offering Stored Value Cards is really a disservice as there is another option that is very popular.

I like the discounted 31-day passes, but would LOVE to have the opportunity to have it on my GoTo Card and still receive the Macalester subsidy. Also, it's a bummer that the subsidy for the 31-day passes has gone down. I moved with the old price in mind and now it's more expensive. Still, I'm glad we have a subsidy at all, but I think making it even cheaper would get folks not as dedicated as me to consider transit a viable option.

I took the bus to work for many years. However, I live in SW Mpls and thus bus commuting is problematic to Macalester.

I really wish that Metro Transit would put up signs of the bus times at each stop. That would be so helpful.

I live 12 miles north of Anoka and I start work too early to make transit commuting an option. I've looked into it.

I have a direct, convenient bus route, but it's just too slow. It doubles my daily commute time compared to a car, and the express bus fees are high enough that it doesn't save me any money.

I am 4 miles from work. Bus fare, to and from work, is \$4.50. I spend much less than that when driving, and driving is more convenient. Though I like riding the bus--I get uninterrupted reading time when I do--the economics of taking the bus do not make sense for my circumstances.

available they would not be as good. I believe it would take me just as long to walk to the nearest transit stop by my home as it would for me to drive to campus, and I rarely have trouble finding a parking place. Again, time is of the essence to me.

Transit works well for me when I am traveling during rush hours; I prefer to transfer to light rail, but the 84 connections are not that great (particularly outside of rush hours). I tend to use transit during snow storms to avoid having to drive / park

## Work Requirements

i work 70+ hour workweeks during the schoolyear, often with all 70 hours clocked on campus...it's hard to imagine factoring bus-transit in.

My shift starts at 5:30am. Our transit does not start until this time ? and only goes to Mpls.

my schedule is too variable to depend on public transit and I need too much equipment to drag along on public transit

I'm a hall director so I pretty much wake up at work. My answers might skew your results.

I travel out of town every other week for at least 3 days. My schedule requires independence throughout most days to visit alumni in the area.

I work in the athletics department and my work schedule is extremely variable (some game days do not end until 10pm) - which makes commuting a big challenge for me.

## Rideshare

Depending on the day, I share a ride with 1-2 other people.

Living in rural Wisconsin makes anything but carpool pretty much out of the question for me. I would not take a bus, even if I lived in the city though. I like a bit of personal space, and control of the situation I am in. I find carpool acceptable. Currently 3 of us commute into the twin cities every weekday. 50 miles each way. Two go to the U of M, and I come here. Works out nicely, because I have free parking, and they do not.

I have been carpooling to macalester for 23 years. work a 4 day week carpool with 2 other employees. I think this is a win win situation

I would consider some carpooling if alerted to a match in my zipcode

I work one evening shift a week, so that throws everything off. Plus I have commitments at home that mean I can't increase the time of my commute. At the moment, bus service from my home would double my commute time and would require a transfer. Carpooling isn't an option

as, except for my evening, I work 6:30-3:00, and have family commitments that preclude moving that time.

I carpoled for 16 yrs; it was great until my friend moved to Philly. I tried it again, and was stranded several times, and had to ride in a gross car with my chin on the dashboard.

Since I primarily walk, the incentives/transit/carpool are simply

not useful options, because they would all be more complicated and involve more carbon emissions, etc.

Some of the questions don't have an option that fits. I already carpool, walk, and take the bus. I would walk more if there were safer routes. Please address walking, not JUST biking, issues. Reduced price bus passes are fantastic.

## Biking/Walking

A cultural shift on campus is needed so that its not just students riding bikes to campus which starts to make it feel like the norm. Also, traffic calming and bike paths in the city is a factor.

Walking to work is fun, but the demands on the number of hours I am expected to be in my office mean that I can do this only when other options are unavailable. Suggestion: Run a spelling checker on such surveys. There are many typographical errors.

There are not enough bike racks on campus. During peak bike season, the racks are often jammed. Carnegie Hall, for example, needs a bike (or two) as it currently has none and bikers are forced to lock to sign posts and light poles.

Since I primarily walk, the incentives/transit/carpool are simply not useful options, because they would all be more complicated and involve more carbon emissions, etc.

Please....please...more covered bike parking so that our bikes aren't sopping wet at the end of the day!

Please keep in mind those folks who have difficulty walking, so a 4-block walk to the bus stop would be tough.

More bike racks needed on campus near classroom buildings.

More bike racks outside Carnegie would be helpful. They're often full.

MN winters test my commitment to walking. Please adjust the temperatures to be above 30 year round.

It's simply too quick and easy to drive myself. Only other thing I'd do is bike, and dressing for work and biking can be difficult, it's less about showering than bringing clothes, shoes, etc. that don't get wrinkled in pack.

It's hard to store sweaty clothes in my office. And, I check every semester for a locker. You can't even request one at the beginning of 2nd semester, because they're on a year cycle. I think the very small fac/staff locker room is a major problem because carrying your clothes and shower stuff is too much of a drag every single travel day. This makes walking, additional walking to transit, and biking not a viable option.

It's a 2-block commute, thus my lack of interest in anything but walking

I would bike to work only in the summer & only IF I had a safe place to lock up my road bike.

I walk to work whenever I can.

I try walking at least twice a week but as the weather gets better it is oftentimes 3-4 times a week.

I often bike in the summer--though, there isn't a good safe route to go north beyond Hamline University (Snelling sucks)--but other than summer, my schedule is just too wacky and getting my kids to school then racing to class, etc.... only a car will do during term.

I often drive to work rather than bike because I often carry a large number of books back and forth in addition to my laptop, the combination of which is a bit cumbersome on bike.

I live nearby and walk part of the year. I like to get dropped off in the morning and walk home (about 2 miles). The problem is that it is too icy to walk home in the winter - too many people don't maintain their sidewalks.

I live just over 2 miles from campus and walk at least two days a week. Many of the questions regarding commuting were inappropriate and therefore difficult to answer.

I live close enough that biking could be an alternative but my experience is

that biking in this area is unsafe. There are very few drivers who respect bicyclists. Most car drivers drive too fast, too close, and take too many shortcuts, all at the expense of the safety of the bicyclist. There needs to be lots more dedicated bike lanes to make it a safe experience.

I commute by bicycle from about middle of March to middle of November.

I biked for years, year-round. But it is too dangerous in the winter --- or, rather, I'm more sensitive to the dangers.

Faster to walk than to take bus

Biking is the best option for the summer, but our summer work hours do not support that.

unable to change due to school drop off times for my child's school. Other wise I would walk.

Walking to work is fun, but the demands on the number of hours I am expected to be in my office mean that I can do this only when other options are unavailable.

Suggestion: Run a spelling checker on such surveys. There are many typographical errors.

## Flex schedule/telework

4, 10 hour days would make more sense for summer work hours. Shut the college down on Fridays (1/2 day on Friday is a long commute for such a short period)

Support for telecommuting and flexible start and completion times would help me to reduce my carbon foot print. The latter is the only way to allow me to consider riding my bike daily when the weather is decent. It takes over an hour to get to work and to shower after biking.

Macalester would be well served to fully embrace a telework policy, perhaps even as part of a results oriented work environment focus which allows for even greater schedule flexibility and eliminates "shift mentality" by focusing only on results. This would position the college in better alignment with its sustainability goals, civic and environmental responsibility and in moving further towards becoming a "world class" college.

I wish we had a telecommuting program that was more widely known and promoted / encouraged by the College, vs. department by department.

I was told telecommuting was not an option

I asked once, but Dept is reluctant to let me work 4-10 hr days/week because they think HR will consider my job less important, less than a full time position or open for downgrading to less than full time. Commuting 4 days/week instead of 5 would cut my emissions by 20%. Working half days in the summer doesn't cut my commute time or my emissions at all. I am better off taking a half day vacation or sticking with my regular work hours over the summer. Also, my commute during

snow storms can be up to 2.5 hours one way instead of 45 minutes. The lack of flexibility due to weather is frustrating especially during no-school periods such as Christmas week and during January. I have always driven a fuel efficient VW, but because it is not a hybrid, I do not qualify for the special parking even though I usually get 30mpg. I am not going to trade in my VW for a hybrid that might be more efficient.

Although I was able to secure a flexible working and telecommuting schedule as a member of the staff, others in my office with similar roles tried and were denied. I'm not sure flex scheduling and telecommuting

are really Macalester endorsed policies.

## Multiple modes

After two years of commuting by bus to work and using HourCar for personal weekend errands, my husband and I finally decided to get a car this year. The cost difference is minimal compared to monthly bus passes and HourCar membership fees, and is completely worth the convenience--no longer do I have to spend 20+ minutes at a transit stop at 9:30pm in sub-zero temperatures as I come home from my shift. I am not physically able to run or bike 6 miles each way to the office, so for now we are very happy with our low-emission car.

This semester I start too early and end too late to make regular biking feasible. Also, would like to take buses, but public transport to Macalester from my house is well over an hour if I make all the transfers.

The vans cost too much! If I have a 25 person class we need to rent 4 vans

(limit 7 students per van) and a 15 person class takes 3 vans! That means wasted space in the vans, too. Since I can rent a UHaul van for \$25 why does a Mac van cost so much? Also there should be more motorcycle parking since mcs get 50+ mpg. Also my car gets 30+ mpg (manual transmission saves fuel, duh) but because it's not brand spanking new i can't park in the "special" spots. Those spots are also dumb because you have the MOST gas guzzling cars driving around further looking for parking farther away. Students tell me the transit discounts aren't low enough, FYI.

Some of the questions don't have an option that fits. I already carpool, walk, and take the bus. I would walk more if there were safer routes. Please address walking, not JUST biking, issues. Reduced price bus passes are fantastic.

I would be willing to try rideshare, but I smoke. I also very much value the freedom to take the afternoon off if I am able to, or to go home if I am sick and not inconvenience anyone else. Buses are okay but in Minnesota weather, there are few days that make it pleasurable to be outside waiting for the bus. Also, most people on buses annoy me.

I lived in large cities with subways and trams all my life and would love to take transit if it did not take THREE times as long as taking my car. I have two kids to shlep all over town, and I have no choice.

I want to note that my mode of transportation to and from work varies: my husband often comes to get me in the afternoons if I have walked or ridden the bus. If transit were more affordable then I might be more willing to ride the bus home. I have worked out the cost, and it actually costs my family more for me to ride the bus than for my husband to come and get me, AND it takes a much longer time. I also vary my method by weather: in warmer weather and daylight savings time I often bike to and from work.

I live across both the Mississippi river and Minnesota river in Bloomington. Although I live near the light rail and bus system, there would be far too many transfers to get to work in a reasonable amount of time. My location also makes it difficult for biking to work to be an option seeing

as I need to get past the airport, Fort Snelling and 2 rivers. I am also pregnant and need to bring my son to and from day care everyday.

I live 20 minutes south of Macalester, and it is not really on any bike route, nor do I live near other staff who I could commute to work with. I have a child in daycare in Minneapolis, so taking a bus or carpooling really doesn't work for me. If I worked closer to my home and my child's daycare was also near where I worked, I would walk or bike to work.

I hate the cold here and though I live only 3-4 miles away, I will drive rather than stand and freeze at a busstop or walk.

I enjoy book on CD. Use to live close to campus and always walked or biked, too close to even take a bus, but moved away. I do buy transit passes to use when I will need to move around in the city

Because I have to drive our teenager to high school and or pick her up on alternative days, I have to drive. I have ridden a bike to work, it would be dangerous from where I live. The bike routes would be long and inconvenient. The bus route is a nightmare between work/school/home. 2 hours or more.

## Car Sharing / HOURCAR

I think it would make an incredible difference if the college subsidized personal Hour Car membership-- maybe paying 1/2 the monthly fees or even paying 10% of monthly fees would help a lot.

Would encourage discussion during orientation of college cars available

for work use during day, and reminders about this from time to time via email. I did not know about this.

## Dependent care needs

by far, the largest determining factor for my commute is managing daycare drop off/pick up responsibilities. This is simply impractical without a car as it would add 50 minutes per day to my commute. Secondly, in terms of reducing greenhouse gas emissions, While I have not changed my commuting behavior in 3 years, my wife has. We are now a single car household as her employer provides a monthly bus pass for \$22 a month (wow.).

unable to change due to school drop off times for my child's school. Other wise I would walk.

Next year I will have both kids in the same school and a more regular schedule. Dropping off and picking up kids is an issue for me, as is the location of my home. They are the main reasons why I drive every day. Leaving earlier to catch a bus to then transfer to another bus to get to work is unrealistic for me, because then I don't have a car to pick up my kids or get home in time to meet them after school. I have arranged some once-a-week carpool with one other person in my office, but it's informal and with someone who can easily bus home if she can't leave when I need to leave. I would love to walk to work, but I'm not moving and I like working at Mac.

My kids attend school out of district, so I (or spouse) must transport them each day--so many options are ruled out.

The primary reason I use my car is because I need to pick up and drop off my children to various locations before and after work.

My commute is currently inextricably linked to taking my children to and from school. If I did not have responsibility for transporting them, I'd take transit 75%-80% of the time. Transit is my preferred method but with kids I have little choice.

My biggest challenge is the drop off/pick up of kids.

Macalester should offer daycare services on-campus, including before & after school care for elementary aged children. This way, the public school bus could pick up here. I could walk to work if Macalester had these options.

Lack of on campus child care is a MAJOR problem.

I really could not consider any other modes of commuting while my two children are so young and require daycare dropoffs/pickups.

I need to drop off and pick up my daughter at daycare and be able to

pick her up early if she gets sick, etc. I used to bike to work during the summers but this is not possible while my daughter remains in daycare. I deliberately live relatively close to campus (4 miles) and picked a daycare close to home/campus so that my commute is short. The College should consider/include ways to help faculty live in the neighborhood or closely surrounding communities, and or offer on-sight daycare.

It is hard to organize any commuting options when you have daycare drop-off and pick-up. Taking infants on the bus also doesn't seem safe but mostly it's impossible to bus to the daycare.

I'm mostly constrained to drive because I take my kids to school on the way.

I used to walk in winter until I had kids. Since I only have a part-time nanny, I drive so as to save time.

I bring my children to and from school so commuting is not an option for me.

I absolutely need the flexibility of a personal car. I have an aging parent, and a 12 year old. Plus a hubby, home and me. I work part time and drive during non-rush hours. No changes foreseen.

Childcare/transportation to his school, plus no transit makes it impossible. Already stressed about time so ride sharing is too inconvenient.

Daycare and school drop-off and pick-up duty ultimately controls what I do in terms of time of travel and mode of transit. Because of the time requirements, biking or taking the bus just isn't an option.

## Responses to survey questions

a few of the questions may result in misconstrued answers. I usually walk to school so when asked what incentives would prompt me to change, I said none. This could be the same answer from someone who drives his/her car.

This survey should be split up into winter commutes and warm weather commutes, as the data you get will be different. "Primary" mode of commuting changes with the seasons.

don't say 5-7 minutes if it takes 15 to complete the survey

I'm sorry to say this survey needs a little work - for many questions the options offered make invalid assumptions or don't present the needed option and no "Other"

category. [For example, the primary reasons I don't commute to work are the need to pick my son up from daycare and not have him get cold/wet, and the extra time it takes. The latter is sort of offered as an option, the latter not at all.] Also, I didn't understand the survey's intended approach to seasonality until Q3. Might suggest giving survey to some people face-to-face before public launch, to find problems like this, in the future. Making good surveys is hard! Feel free to contact me for elaboration, [rossi@macalester.edu](mailto:rossi@macalester.edu)

## Misc.

Academic Freedom!!

Many of my answers are influenced by a decision to be a one-car household. My choices of when I ride bus vs. drive are sometimes dependent on the schedule / needs of my partner.

Because of the length of my commute and the work load/time demands of my job and the fact that I have small children I do not feel I have the time available to do anything other than drive myself to work.

None at this time.

Time is of the essence to me in my commute. Right now, it is quick and easy; and while other options may be available they would not be as good. I believe it would take me just as long to walk to the nearest transit stop by my home as it would for me to drive to campus, and I rarely have trouble finding a parking place. Again, time is of the essence to me.

My wife and I have considered moving to St. Paul, but we can afford much more for our money to live in Prior Lake. Plus we really enjoy the area we live in and the relationships we have built in our current home community.

My partner and I both work at Macalester, so our commute is almost always shared.

My primary concern is being able to travel to and from home in a reliable time-frame on a flexible schedule that varies from day-to-day. This makes it nearly impossible to ever use public transit.

I would love to commute, but my varying work schedule and distance from work make it too difficult.

My commute is a long story.

I would like to move farther from campus, but the moderate difficulty of commuting to campus by bus (from Mpls particularly) makes me hesitate.

Can't beat the car for now. Very high for safety and time usage compared to any other form of transit. One way to persuade the men would be free beer tickets every five miles.

Ground transportation of all kinds has major drawbacks, from ecological damage to safety concerns. I am an advocate of Personal Rapid Transit (PRT).

I transferred from the U to Macalester to change the length and time of my daily work commute.

How about some designated motorcycle/scooter parking on campus? M/Cs save gas and space, and it makes no sense to have to park by bike racks, or take up a whole parking space with one motorcycle.

I am happy with it the way it is.

I go to a second job following work here - so not having a car would not work for me

I live so close that I don't consider it commuting.

I love the commute!

Monthly gas costs (ca. \$6-7) for commuting by motor scooter are less than a third of what monthly bus costs would be, and time of commute is less.