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### Results of the 2013 Good To Go Commuter Challenge Impact Survey

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## **Results of the 2013**

### **Good To Go Commuter**

### **Challenge Impact Survey**

**May 2013**

# 2013 Good To Go Commuter

## Challenge Impact Survey



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May 2013

Good To Go Commuter Challenge

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Good To Go  
Commuter Challenge



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## EXECUTIVE SUMMARY

This report contains results of an impact study of previous participants of the Good To Go Commuter Challenge in McLean County, IL. The survey was designed to gauge the impact of the 2011 and 2012 Good To Go Commuter Challenges in promoting year-round sustainable commuting among Challenge participants.

221 surveys were completed out of possible 1077 user registrations on the Good To Go online registration tool, a response rate of 20.5%. Results revealed that the Challenge appears to be successful in at least modest travel behavior change by participants.

Overall, 40.4% of respondents increased the frequency in which they chose sustainable transportation modes after having participated in the Challenge. Moreover, 15% of respondents eliminated drive alone commuting following Challenge participation. Bicycling saw the greatest increase of any particular mode, with 19% of respondents who had not bike commuted previously choosing to do so after participating in the Challenge.

The survey results indicate that the program positively impacted year-round commuting behavior among Bloomington-Normal residents who participated in the Commuter Challenge and underscore the importance of continued promotion of the program in the community.



## OVERVIEW OF FINDINGS

- **40.4% of respondents increased the frequency in which they used sustainable modes of transportation following their participation in a Good To Go Commuter Challenge.**
- **15% of respondents eliminated their use of driving alone in a personal automobile commuting following Challenge participation.**
- **Biking, busing, carpooling, walking/running, telecommuting, and riding the train all increased following participation in the Challenge.**
- **The largest increase in mode usage following Challenge participation was biking; with 19% of respondents who had not commuted by bicycle before the Challenge doing so after the Challenge.**
- **“Stay fit” and “It sounded fun” were the two most heavily cited reasons for participating in a Good To Go Commuter Challenge.**
- **“Lack of time” and “Weather conditions” were the two most heavily cited barriers to sustainable commuting, with 59% and 70% of respondents citing these barriers, respectively.**
- **The most prevalent one-way work commute length of respondents was 1 to 3 miles (43%).**
- **60% of respondents were female, and 29% were between 50 and 59 years of age.**



# INTRODUCTION

## **American Commuting and Its Impacts- The Numbers**

The number of motorized vehicles on the earth today exceeds one billion, with the US leading all nations in the total number of vehicles (Sperling and Gordon 2008:3). Researchers project that that the number of vehicles will continue to grow by an annual rate of about 3% worldwide, leading to significant negative environmental, economic, social, and public health consequences (3,4).

The continued rapid growth of automobile usage is especially problematic in the United States. Although US automobile emissions have begun to somewhat stabilize, the transportation sector still accounts for fully one-third of total domestic CO2 emissions (Sperling and Gordon 2008:4). Although decisions made by policymakers have constrained commuters by significantly limiting their commuting options, personal commuting choices have also fueled the American car-centric culture.

However, initiatives have been launched nationwide to try to curb our nation's automobile dependency and incentivize commuters' to choose more sustainable modes of transportation. One such initiative is the commuter challenge.

Research studies repeatedly indicate that congestion will progressively become worse, leading to longer commutes, higher gas costs, and more frustrated commuters. The figures associated with the impacts of American commuting are staggering:

- **According to the 2012 Urban Mobility report, urban Americans lost 5.5 billion hours in travel congestion; leading to additional expenditures of 2.9 billion gallons of gasoline (Schrank et. al 2012:1).**
- **Americans drive about 55 minutes on average per day, and much of the total driving time is spent driving alone in a personal automobile (USDOT 2003).**
- **Commuters in high-congestion urban areas must plan to leave up to 3 hours in advance for trips that would normally take 30 minutes without traffic (Texas A&M 2013).**

- **Greenhouse gas emissions from automobiles account for 15% of total CO2 emissions, with over 900 million metric tons of CO2 expelled into the atmosphere each year (World Resources Institute 1999).**
- **22% of all global CO2 emissions come from the transportation sector, second behind only electricity generation. Emissions from personal automobiles account for a large share of that 22% (Amin 2009:13) (Schrank et. al 2012).**

## **Commuter Challenges**

In order to curb some of these impacts it is imperative that we make every effort to decrease the number of drive-alone commuters on our roadways. One of the ways that communities are encouraging commuters to use more sustainable modes of transportation is through Commuter Challenge events. Challenges range from day-long to month-long events involving individuals, teams, organizations, or companies that compete against one another to log the most commutes sustainable transportation modes, or any mode besides driving alone in a personal automobile, were utilized.

Travel Feedback Programs (TFP), or programs where travel behavior modification is encouraged through projects where participants log commutes and receive information such as CO2 emissions and calories burned during the commute, along with tips and suggestions on reducing automobile usage, have produced promising results worldwide (Taniguchi et. al 2003:2). One Japanese study of 10 TFP programs found that the programs were successful in decreasing automobile usage by 18%, decreasing CO2 emissions by 19%, and increasing public transportation usage by 50% (Taniguchi and Fuji 2005:2320).

Commuter Challenges are one of the key TFPs, and research has shown some success in Challenges' ability to lead individuals to commute sustainably. In a study of participants of an Ann Arbor, Michigan Commuter Challenge, 64% of all participants in the Challenge who had previously driven alone for most of their commutes increased their sustainable commuting (getDowntown 2010:2). In a study of the InMotion program in Washington state, 20% of those who make a pledge to reduce drive-alone travel were able to reduce that travel "significantly" while 48% reduced it "somewhat" (Cooper 2006:11).

However, generally the research on the long-term impacts of Commuter Challenges is sparse (Monash University 2003:10). This study seeks to address those literature gaps through a survey of commuting practices of previous participants of the Good To Go Commuter Challenge in McLean County, Illinois.

### **Good To Go Commuter Challenge**

The Good To Go Commuter Challenge is a week-long event designed and implemented by WGLT public radio station at Illinois State University in Normal, IL to encourage healthy living and promote the use of alternative transportation instead of driving alone. The Challenge is a friendly competition between area workplaces, organizations, teams, and individuals to tally the most sustainable commuting miles. The tracking of miles is done online using Good To Go's online tool where participants can see the number of commutes, number of miles, CO2 emissions avoided, and calories burned from their commutes. The Challenge is typically held during the third week of May, and begins with a large Kick-Off event in Downtown Bloomington. Through the Good To Go program, WGLT partners with several area organizations on various initiatives throughout the year to encourage the public to commute sustainably and engage with policymakers to promote and improve sustainable transportation infrastructure. More information about the program can be found at the WGLT webpage: <http://wgl.org/goodtogo/>.

## **SURVEY OVERVIEW**

In order to track the year-round impact of the Good To Go Commuter Challenge, a survey was sent to all participants registered on the Good To Go online tool. The respondents were, therefore, participants from the 2011 and 2012 Commuter Challenges. Respondents were contacted via email on February 20, 2013 and all surveys were completed on March 7, 2013. Two reminder emails were sent in consecutive weeks following the initial distribution and Facebook and Twitter messages were also posted on relevant pages to boost response rates. To incentivize participation, respondents who provided their name and email address were eligible to win a \$100 gift card from Coffee Hound coffee shop. To protect anonymity, respondents' names and emails for the drawing were kept separate from their responses.

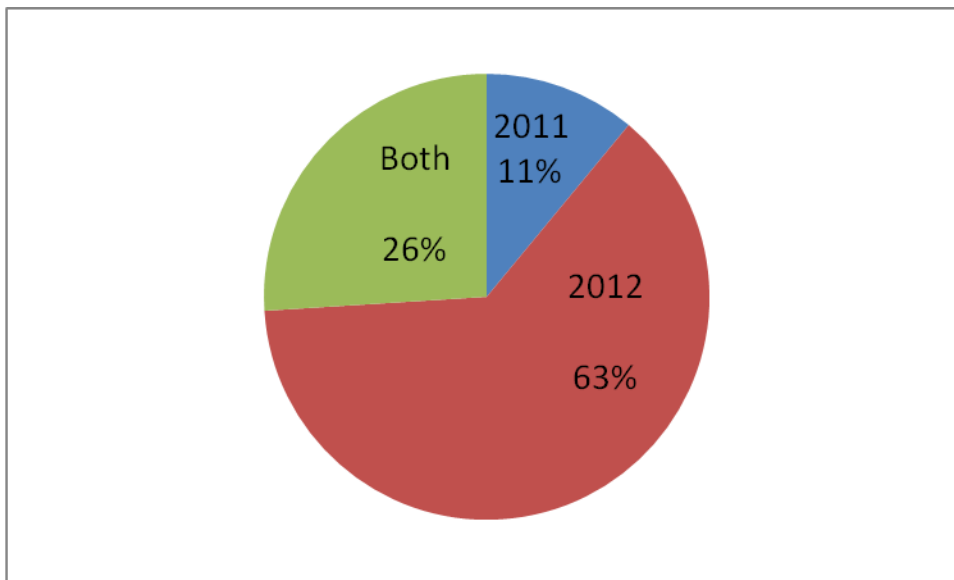
The survey was 20 questions long and the response rate was 20.5%. The survey's primary goal was to discover the extent to which the Commuter Challenge influenced participants to commute sustainably year-round (following the Challenge). Other variables were explored as well, including commute length, motivation for participation, modes of transportation used, barriers to sustainable commuting, ride-sharing availability and motivation for use, recommendations for the Challenge and Bloomington-Normal public transportation, and various demographic information. A full list of survey questions can be found in Appendix A.

# RESULTS OF THE 2013 GOOD TO GO COMMUTER CHALLENGE IMPACT SURVEY

## Challenge Participation

Among survey respondents, 11% participated in only the 2011 Challenge, 63% only in the 2012 Challenge, and 26% in both Challenges. This distribution reflects the significant growth in Challenge participation from 2011 to 2012, when the number of participants rose from 313 to 743 participants from 2011 to 2012, a growth of 137%.

**Chart 1. Year of Commuter Challenge participation.**



## Demographic Data

Female respondents constituted 60% of total respondents. Respondents were primarily White (91%), with very little representation of other racial/ethnic groups. 38% of respondents were in the \$50,000-99,999 income bracket. However, the incomes of respondents were more or less normally distributed, with 35% of respondents above the \$50,000-99,999 bracket and 27% of respondents below \$50,000-99,999.

Respondent ages were diverse, with nearly even distribution of respondents in the 20-29, 30-39, and 40-49 ranges. The highest level of participation in the survey came in the 50-59 range with 29% of respondents in this range. Moreover, notably, there was significant representation from those in the 60-69 age bracket, who made up 9% of survey respondents. Youth respondents (younger than 20-29 years of age) were meager, comprising only 2% of all survey respondents. Table 1 provides a full demographic profile of respondents.

**Table 1. A socio-demographic profile of respondents<sup>1</sup>.**

	<u>n</u>	<u>%</u>	<u>Non-responses</u>
<b><u>Gender</u></b>			
Male	81	40%	
Female	122	60%	
<u>Total</u>	<u>203</u>	<u>100%</u>	<u>18</u>
<b><u>Age</u></b>			
0-14	2	1%	
15-19	1	1%	
20-29	35	18%	
30-39	44	22%	
40-49	40	20%	
50-59	57	29%	
60-69	17	9%	

<sup>1</sup> “N” represents the number of respondents and “%” represents the percentage of total survey respondents.

<b><u>Age (continued)</u></b>			
70-79	1	1%	
Over 80	0	0%	
<b>Total</b>	<b><u>197</u></b>	<b><u>100%</u></b>	<b><u>24</u></b>
<b><u>Income</u></b>			
Less than \$10,000	6	3%	
\$10,000-14,999	7	4%	
\$15,000-24,999	9	5%	
\$25,000-49,999	29	15%	
\$50,000-99,999	72	38%	
\$100,000-149,999	42	22%	
\$150,000-199,999	16	9%	
\$200,000 or more	7	4%	
<b>Total</b>	<b><u>188</u></b>	<b><u>100%</u></b>	<b><u>33</u></b>
<b><u>Race/Ethnicity<sup>2</sup></u></b>			
White/Caucasian	184	91%	
Hispanic	6	3%	
Black/African American	6	3%	
Native Hawaiian or other Pacific Islander	0	0%	
Asian	3	1%	
American Indian or Alaskan Native	0	0%	
<b>Total</b>	<b><u>203</u></b>	<b>-</b>	<b><u>18</u></b>

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<sup>2</sup> Participants were instructed to “please check all that apply.”

## Commute Length

Table 2 presents the number and percentage of respondents for each of the commute length category, and Chart 2 further visually depicts the overall distribution of commute lengths.

The most frequent commute length indicated by respondents was 1 to 3 miles (43%). The vast majority of respondents (91%) had commutes of 10 miles or less. The overall mean commute was 4.9 miles. Therefore, the majority of the respondents indicated that they have relatively short work commutes. What remains to be explored is how the sample of survey respondents compares to the overall population of Commuter Challenge participants and the general population of Bloomington-Normal as a whole. Moreover, the link between commute length and participation in the Good To Go Commuter Challenge also should to be investigated.

**Table 2. Length of respondent commutes.**

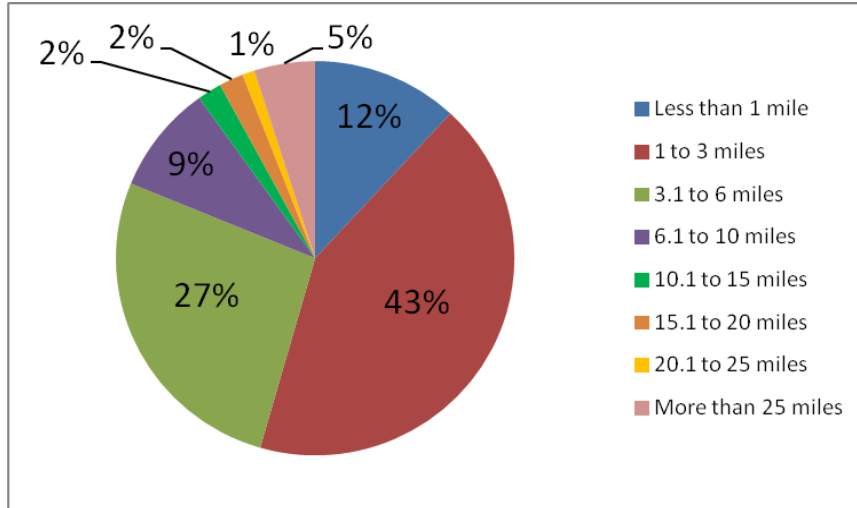
<u>Commute Length</u>	<u>n</u>	<u>%</u>
Less than 1 mile	25	12%
1 to 3 miles	90	43%
3.1 to 6 miles	56	27%
6.1 to 10 miles	18	9%
10.1 to 15 miles	4	2%
15.1 to 20 miles	4	2%
20.1 to 25 miles	3	1%
More than 25 miles	10	5%
<u>Total</u>	<u>210</u>	<u>≈100%</u>
<u>Non-responses</u> <sup>3</sup>	<u>11</u>	

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<sup>3</sup> Non-responses are respondents who began the survey but did not complete it.



**Chart 2. Length of respondent commutes.**



### **Motivations for and Barriers to Challenge Participation**

The primary motivations for participation were health and fitness (“Stay fit”) and personal enjoyment (“It sounded fun”), with 63% and 60% of respondents citing these reasons, respectively. Other notable motivations were “Sense of community spirit” (56%), “To save gas money” (52%), and “Reduce greenhouse gas emissions/environmental concerns” (52%). These motivations were relatively the same across the demographic variables of age, income, and sex. These results suggest that the Good To Go Commuter Challenge should emphasize the benefits of health, environmental protection, and entertainment when promoting the Challenge.

#### *“Other” Motivations*

An area that was not explicitly listed in potential reasons for not commuting sustainably, yet was nevertheless noted by several respondents under the open-ended option of “Other,” was the lack of infrastructure, amenities, and convenience of sustainable commute options in the area. Responses included: “existing bus schedules don’t align with my destinations,” “inconsistent transfer availability [for the buses],” “unsafe commute around US 150 and Towanda Barnes,” “necessity to travel where public transportation doesn’t exist,” “there is no sustainable transportation option for me now due to where I work (rural),” etc.

Feelings of being unsafe, not having access to the bus system due to location of residence, and concerns about bus schedules were cited by numerous respondents, and were often repeated in response to the question: “Do you have any comments on public transportation in Bloomington-Normal or recommendations for improvement?” Therefore, concerns about the public transportation system and the state of the area’s roads and highway systems appear to be considerable barriers to sustainable commuting.

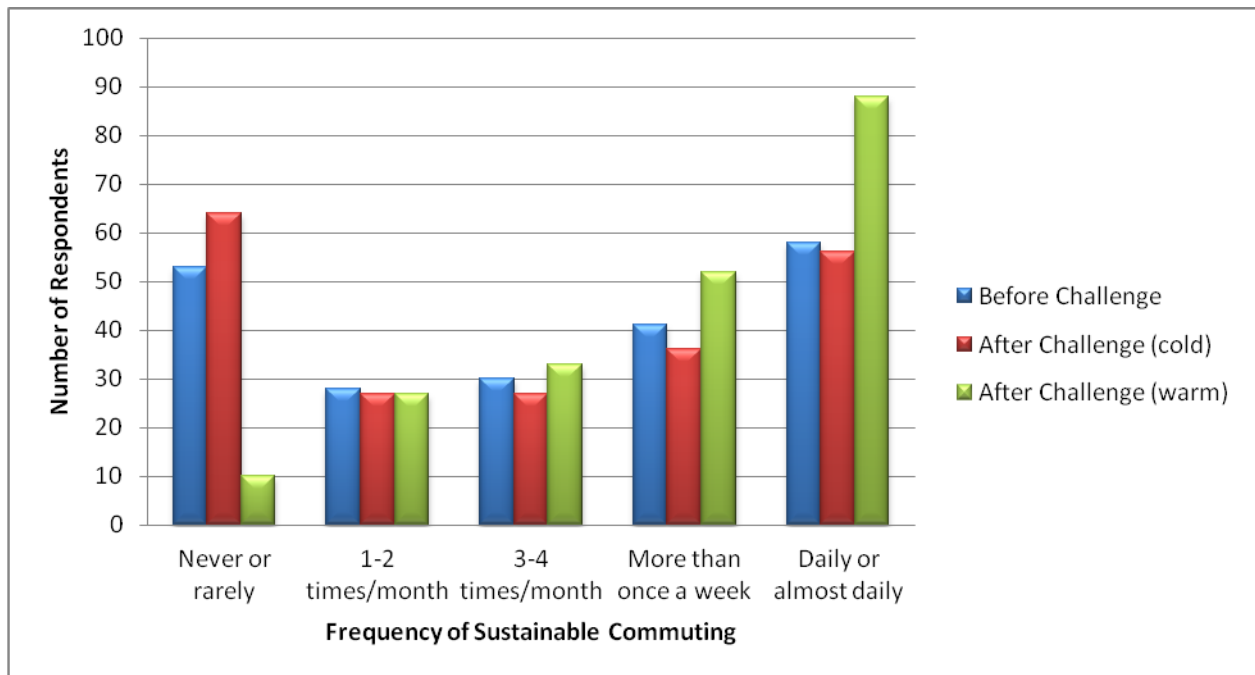
These concerns highlight the need to continue current efforts to explore improve mass transit and the overall transportation infrastructure of the area. What is unclear is whether the more common open-ended responses would have been more frequently cited had they been included as actual response options. For future studies on commuting behavior in the region, options such as: “lack of infrastructure for sustainable commuting,” “bus system inefficient/inconvenient,” and “lack of options for sustainable commuting” should be given as closed response options.

## Commuting Behavior Before and After Challenge

### *Frequency of Sustainable Commuting Before and After Challenge Participation*

Perhaps the most important measure for our study was the frequency to which respondents commuted sustainably before and after their participation in the Commuter Challenge. Chart 3 depicts the change in how often respondents used sustainable transportation modes before and after participation in the Challenge in both cold and warm weather months, represented by the total number of respondents.

**Chart 3. Frequency of sustainable commuting before and after participation in the Challenge in cold and warm weather months.**



There was substantial variation in how often respondents noted they commuted sustainably before their participation in the Commuter Challenge. 25% of respondents noted that they “Never or rarely” commuted sustainably and 28% that they commuted sustainably “Daily or almost daily” before Challenge participation. Therefore, 53% of total respondents were at the two outlying ends of sustainable commuting frequency.

Moreover, there is considerable variation in the frequency of sustainable commuting during the cold weather (November to March) and warm weather (April to October) months following

Challenge participation. 30% of respondents noted that they “Never or rarely” commuted in the cold weather months after the Challenge; while 27% of respondents commuted sustainably “Daily or almost daily.” Therefore, the difference between sustainable commuting in cold weather after Challenge participation, and sustainable commuting before Challenge participation was relatively modest. However, the difference between cold and warm weather sustainable commuting after participation in the Commuter Challenge was substantial.

Only 5% of respondents cited that they “Never or rarely” commuted sustainably following the Challenge during warm weather months. However, 42% cited that they commuted sustainably “Daily or almost daily” following participation in the Commuter Challenge. Therefore, the weather appears to be a considerable barrier to respondents choosing whether or not to use sustainable transportation modes. As Table 4 below shows, these results are corroborated by responses to Question 10: “Whenever you choose NOT to commute sustainably what factors influence your decision?”, where 70% of respondents marked “Weather conditions” as one of the primary reasons for commuting sustainably.

**Table 4. Barriers to sustainable commuting.**

<b><u>Barrier to Sustainable Commuting</u></b>	<b><u>n</u></b>	<b><u>%</u></b>
Lack of time	120	59%
<b><i>Weather conditions</i></b>	<b><i>142</i></b>	<b><i>70%</i></b>
I live too far from a bus route or train station	17	8%
I don't know the bus/train schedule	13	6%
I'm not in shape to walk/bike	3	1%
I don't own a bike	8	4%
I don't have someone to commute with	23	11%
Lack of motivation; too tired	25	12%
My commute is too long	18	9%
I need to drive my child(ren)	45	22%
I need to drive to run errands before/after work	90	44%
My job requires that I commute during work hours	26	13%
None. I always commute sustainably	8	4%
Other, please specify (open-ended question)	38	19%
<b><u>Total</u></b>	<b><u>203</u></b>	
<b><u>Non-responses</u></b>	<b><u>18</u></b>	

One limitation of our study was that we only asked respondents about the frequency of their sustainable commuting in cold and warm weather months *following* their participation in the Commuter Challenge. The frequency to which they commuted sustainably before Challenge participation was not divided according to cold and warm weather. Therefore, the difference between frequencies of sustainable commuting before and after the Challenge was somewhat imprecise.

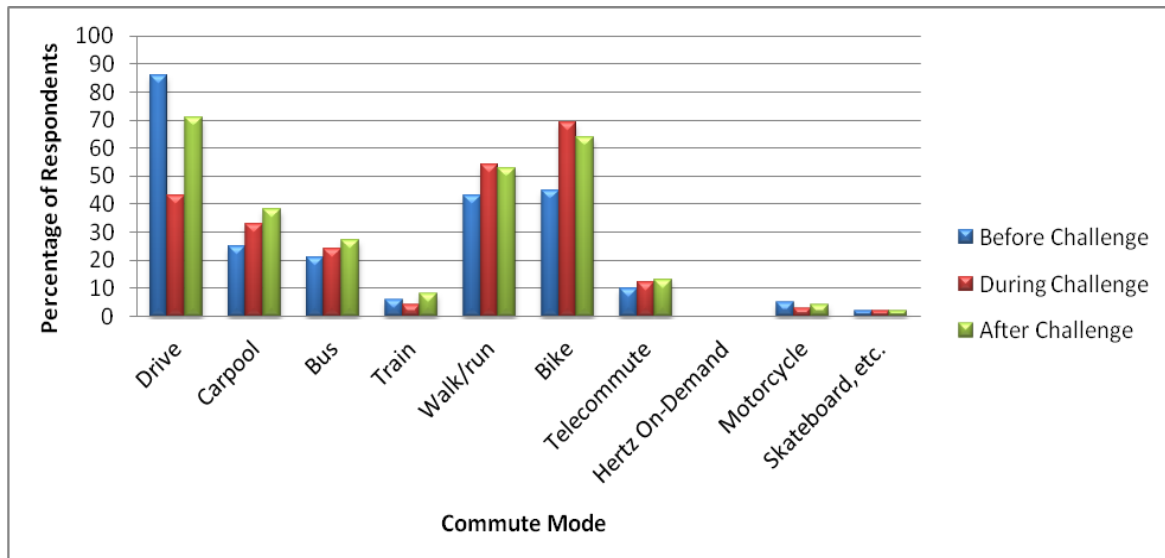
However, it should be noted that many of the changes in sustainable commute frequency among *individual respondents* were not drastic. 36.2% of respondents did not change their sustainable commute frequency from before to after Challenge participation, and 26.7% of respondents only increased their sustainable commute frequency by one category (ex. “1-2 times a month” to “3-4 times a month”). Nevertheless, it appears that participation in the Good To Go Commuter Challenge had a positive impact on the sustainable commuting behavior of respondents.

#### *Modes Used Before, During, and Following Challenge Participation*

Modes used before, during, and following participation in the Good To Go Commuter Challenge are represented in Chart 4 according to the percentage of respondents who cited having used the mode *at least one time*. As the chart shows, there was a substantial decrease in the percentage of respondents who cited having used driving alone in an automobile before Challenge participation and after Challenge participation. While the decrease in driving alone before and during Challenge participation is somewhat expected, the 15% decrease following Challenge participation was certainly significant. This indicates that after having participated in the Challenge, 15% of respondents *completely eliminated* their drive-alone commuting, as respondents were asked to mark *every mode* of transportation they used, even if they used that mode *only one time*.

Results also show that the usage of nearly every sustainable commute mode increased from before to after Challenge participation. The percentage of respondents having biked, bused, carpooled, walked/ran, telecommuted, and rode the train at least once increased from before to after participation in the Commuter Challenge, with the most substantial increase in biking at 19%.

**Chart 4. Transportation modes used before, during, and after Challenge participation<sup>4</sup>.**



## Feedback

### *Plan to participate in 2013 Commuter Challenge*

79% of respondents indicated that they plan to participate in the 2013 Commuter Challenge, while only 3% do not plan to participate. 18% indicated that they are unsure whether or not they will participate in 2013. Moreover, participants were mostly satisfied with their experience participating in the Good To Go Commuter Challenge. Although this does not speak to one of the primary goals of Good To Go- encouraging year-round sustainable commuting, it is significant that participants had an overwhelmingly positive experience. However, it should be noted that these results may be in part due to response bias; that participants who had a positive experience and were/are committed to sustainable commuting were more likely to complete the survey. This potential bias should be further explored in the future.

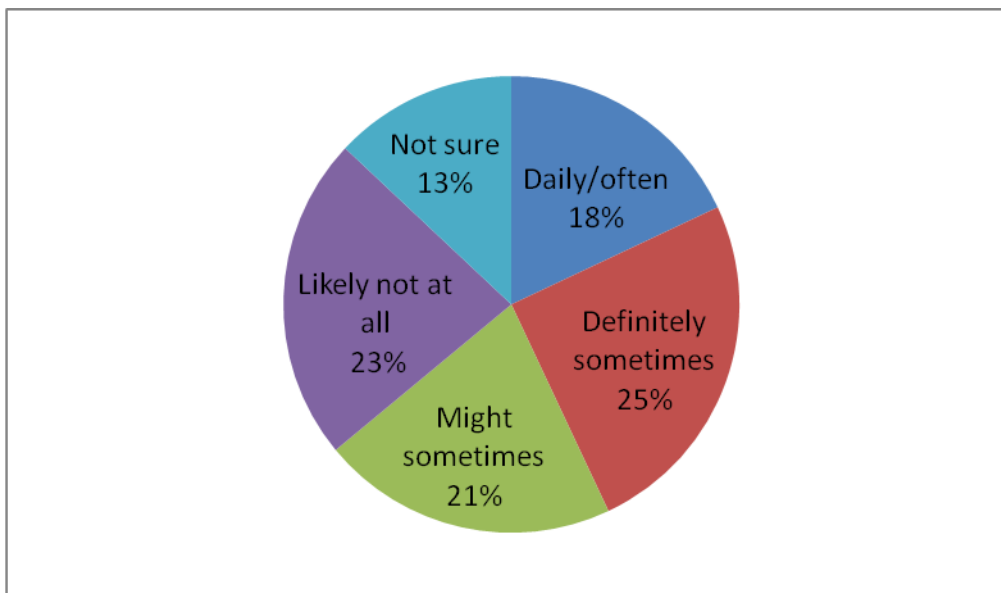
<sup>4</sup> It should be noted that percentages *do not* add up to 100%. Respondents were asked to mark *each* of the modes they used, even if they used that mode only one time. Therefore, the percentages represent the percentage of respondents who noted that they used that particular mode at least once. The chart does not indicate the respondents' primary modes of transport or the frequency that the modes were used.

## Ride-Sharing

One final measure that we looked at was ride-sharing programs at respondents' workplaces. We asked respondents whether or not their workplace offered a ride-sharing (carpooling) program.

For those who indicated that their workplace does not offer this option, we asked respondents if their workplace did offer ride-sharing, how often they would use this service. Only 30% of respondents indicated that their workplace offers ride-sharing. Of the 70% who responded that their workplace does not offer ride-sharing, the following chart illustrates the distribution of responses to how often they would use the service, should it be made available.

**Chart 5. Frequency that respondents would use a ride-sharing service if it was available at their workplace.**



## LIMITATIONS AND RECOMMENDATIONS

There are several limitations to study results. For one, due to the method of survey distribution, we were not able to survey those who participated in the 2010 Commuter Challenge.

Respondents' emails were gathered using the Good To Go online tool which was implemented in 2011. Prior to 2011 another tool was used, and the user accounts from 2010 were therefore lost. Participant emails from 2010 were not available using the current system, unless those users registered again for the 2011 and/or the 2012 Commuter Challenges using the new registration tool.

Also, in order to ensure survey brevity, we were not able to explore the effectiveness of survey marketing, promotion, and logistics. The survey was focused uniquely on long-term impacts of Challenge participation in changing year-round commuting practices, not on how effective the Challenge programming was on reaching community members. Although not burdensome in its length, feedback from the survey was that it was quite comprehensive, and to place additional questions in the survey addressing issues of program implementation would have made the survey too long and would likely have reduced the response rate.

Another area where the survey was lacking was on exacting time frames of commuting behavior. Using a survey it is difficult to track when commuters began and ended certain commuting behaviors and the motivations behind those decisions. We tried our best to approximate commuting behavior timeframes by asking respondents to identify their commuting behavior *before, during, and after* Challenge participation; along with questions regarding frequency of sustainable commuting usage. However, still it was impossible to track individual commuting practices like we would have liked.

One methodological shortcoming of the survey was in questions 3 through 5 regarding sustainable commuting before and after the Challenge. Question 3 asks respondents how often they commuted sustainably before the Challenge. However, Question 4 asks respondents how often they commuted sustainably in the *warm weather months* (April to October) and Question 5 asks respondents how often they commuted sustainably in the *cold weather months* (November to March). In order for the questions to get a more accurate picture of the before and after Commuter Challenge participation commuting practices, Question 3 should have been divided



into two questions, one for sustainable commuting *before* the Challenge, and another for sustainable commuting *after* the Challenge.

The compiling of emails using the Good To Go online tool was another challenge. Because of the creation of false accounts, many of these accounts were tests by the administrator to ensure system health, but there were false accounts created by unknown parties. A survey administrator went through and deleted those user accounts email addresses that appeared not to be valid along with duplicate email addresses. According to analytics run on bounce back email messages for inactive email addresses and the total delivery rate (1002 delivered of 1077 emails sent) this cleaning up of the potential respondent list appeared to be effective. However, it is still not entirely clear if all 2010 and 2011 Challenge participants were included in the sample, and of the total number of user accounts, how many of those were false.

For future research, we recommend that researchers explore how the demographics of respondents compare to the demographics of all Challenge participants overall. However, unfortunately, this was not possible for our study, considering that respondents are not required to disclose demographic information when registering for the Challenge.

## APPENDIX A

### List of Good To Go Commuter Challenge Online Impact Survey Questions

1. Which Good To Go Challenges did you participate in?

-2011 Good To Go Challenge

-Both 2011 and 2012 Good To Go Challenge

-2012 Good To Go Challenge

2. How far is your daily work commute one-way?

-Less than 1 mile

-10.1 to 15 miles

-1 to 3 miles

-15.1 to 20 miles

-3.1 to 6 miles

-20.1 to 25 miles

-6.1 to 10 miles

-More than 25 miles

3. Before participating in the Commuter Challenge(s), how often did you commute sustainably? A qualifying “sustainable commute” is any trip you would have otherwise driven in a car by yourself. In addition to work and school trips, examples include: shopping, running errands, dentist visit, going to a place of worship, etc. Fitness miles or recreational walking or biking do not qualify as sustainable commutes.

-Never or rarely

-1 to 2 times a month

-3 to 4 times a month

-More than once a week

-Daily or almost daily

4. Following your participation in the Commuter Challenge(s), how often have you commuted sustainably during the cold weather months (November to March)?

-Never or rarely

-1 to 2 times a month

-3 to 4 times a month

-More than once a week

-Daily or almost daily

5. Following your participation in the Commuter Challenge(s), how often have you commuted sustainably during the warm weather months (April to October)?

-Never or rarely

-1 to 2 times a month

-3 to 4 times a month

-More than once a week

-Daily or almost daily

6. Why did you decide to participate in the Commuter Challenge(s)? Please check all that apply.

- To save gas money
- The competition of the Challenge
- Reduce greenhouse gas emissions/environmental concerns
- Stay fit
- Traffic congestion
- Reduce oil dependency
- Sense of community spirit
- My organization was participating
- To reduce parking costs
- It sounded fun
- Other (please specify)

7. Which modes of transportation did you use BEFORE participating in the Commuter Challenge(s)? Please check every mode that you used, even if you used that mode only one time.

- Driving alone
- Carpool/vanpool
- Bus
- Train
- Walk/run
- Bike
- Telecommute
- Hertz On-Demand
- Motorcycle/Moped
- Skateboard, Longboard, Rollerskate, etc.
- Other, please specify

8. Which modes of transportation did you use DURING the Commuter Challenge(s)? Please check every mode that you used, even if you only used that mode one time.

- Driving alone
- Carpool/vanpool
- Bus
- Train
- Walk/run
- Bike
- Telecommute
- Hertz On-Demand
- Motorcycle/Moped
- Skateboard, Longboard, Rollerskate, etc.
- Other, please specify

9. Which modes of transportation did you use FOLLOWING the Commuter Challenge(s)? Please check every mode that you used, even if you only used that mode one time.

-Driving alone

-Telecommute

-Carpool/vanpool

-Hertz On-Demand

-Bus

-Motorcycle/Moped

-Train

-Skateboard, Longboard, Rollerskate, etc.

-Walk/run

-Other, please specify

-Bike

10. Whenever you choose NOT to commute sustainably what factors influence your decision? Please check all that apply.

-Lack of time

-Lack of motivation; too tired

-Weather conditions

-My commute is too long

-I live too far from a bus route or train station

-I need to drive my child(ren)

-I don't know the bus/train schedule

-I need to drive to run errands before/after work

-I'm not in shape to walk/bike

-My job requires that I commute during work hours

-I don't own a bike

-None. I always commute sustainably

-I don't have someone to commute with

-Other. Please specify

11. Does your workplace offer ride-sharing, carpool or vanpool or another alternative transportation option?\*

-Yes

-No

12. If your workplace did offer ride-sharing, carpooling, vanpooling, or another alternative transportation option, how often would you use it?\*

-I would use it daily/often

-I might use it sometimes

-I would definitely use it sometimes

-I would likely not use it at all

-I'm not sure if I would use it or not

13. Sex

-Male            -Female

14. Race/Ethnicity. Please check all that apply.

- |                         |                                      |
|-------------------------|--------------------------------------|
| -White/Caucasian        | -Native Hawaiian or Pacific Islander |
| -Hispanic               | -Asian                               |
| -Black/African American | -American Indian or Alaskan Native   |

15. Household Income

- |                     |                       |
|---------------------|-----------------------|
| -Less than \$10,000 | -\$50,000 to 99,999   |
| -\$10,000 to 14,999 | -\$100,000 to 149,999 |
| -\$15,000 to 24,999 | -\$150,000 to 199,999 |
| -\$25,000 to 49,999 | -\$200,000 or more    |

16. Age

- |        |          |
|--------|----------|
| -0-14  | -50-59   |
| -15-19 | -60-69   |
| -20-29 | -70-79   |
| -30-39 | -Over 80 |
| -40-49 |          |

17. Please rate your experience of the Commuter Challenge(s) you participated in.

- |                    |           |                    |
|--------------------|-----------|--------------------|
| -Very negative     | -Negative | -Somewhat negative |
| -Somewhat positive | -Positive | -Very positive     |

18. Do you have any comments about the Commuter Challenge or recommendations on how we can improve?

19. Do you have any comments on public transportation in Bloomington-Normal or recommendations for improvement?

20. Do you plan to participate in the 2013 Good To Go Commuter Challenge, May 11-17, 2013?

- Yes                      -No                      -Not sure

## REFERENCES

- Amin, A.T.M Nurul. "Reducing Emissions from Private Cars: Incentive measures for behavioural change." October 2009. United Nations Environment Programme. <<http://www.unep.ch/etb/publications/Green%20Economy/Reducing%20emissions/UNEP%20Reducing%20emissions%20from%20private%20cars.pdf>>.
- Cooper, Carol. "Successfully Changing Individual Travel Behavior: Applying Commuting-Based Social Marketing to Travel Choice." 2006. King County Metro Transit. Seattle, WA.
- Fujii and Taniguchi. "Travel Feedback Programs: Communicative Mobility Management Measures for Changing Travel Behavior." Proceedings of the Eastern Asia Society for Transportation Studies, Vol. 5, pp. 2320 - 2329, 2005. <[http://www.easts.info/online/proceedings\\_05/2320.pdf](http://www.easts.info/online/proceedings_05/2320.pdf)>.
- Jaffe, Eric. "An Explanation for the Gender Gap in Biking." *The Atlantic Cities*. 19 February 2013. <<http://www.theatlanticcities.com/commute/2013/02/women-will-ride-bikes-when-its-safer-them-do-so/4730/>>.
- Schrank, David; Eisele, Bill and Lomax, Tim. Texas A&M Transportation Institute. <<http://mobility.tamu.edu>>. December 2012. "Urban Mobility Report 2012."
- Sperling, Daniel and Deborah Gordon. "A Worldwide Car Culture: Can It Be Sustainable?" Transportation Research Board of the National Academies. November-December 2008. No. 259. <<http://onlinepubs.trb.org/onlinepubs/trnews/trnews259.pdf>>.
- Taniguchi, Ayako et al. "Psychological and Behavioral Effects of Travel Feedback Program for Travel Behavioral Modification." Department of Urban and Environmental Engineering, Hokkaido University & Hokkaido Development Engineering Center. TRB 2003 Annual Meeting. <[http://www.ltrc.lsu.edu/TRB\\_82/TRB2003-001711.pdf](http://www.ltrc.lsu.edu/TRB_82/TRB2003-001711.pdf)>.
- "As traffic jams worsen, commuters allowing extra time for urgent trips." *Urban Mobility Report Press Release*. <<http://mobility.tamu.edu/ums/media-information/press-release/>>. 2013. Texas A&M University.
- "CO2 emissions from motor vehicles." World Resources Institute. 1998-1999. Washington, DC. <<http://www.wri.org/publication/content/8468>>.
- "Event-Based Behavior Change: A Literature Review Focusing on Transportation Applications. Institute of Transport Studies. The Australian Key Centre in Transport Management: Department of Civil Engineering. Monash University. 16 May 2003. Victoria, Australia.
- "NHTS: Highlights of the 2001 National Household Travel Survey." Research and Innovative Technology Administration (RITA). US Department of Transportation. Bureau of Transportation Statistics. 2003. Washington, DC.

<[https://1bts.rita.dot.gov/publications/highlights\\_of\\_the\\_2001\\_national\\_household\\_travel\\_survey/](https://1bts.rita.dot.gov/publications/highlights_of_the_2001_national_household_travel_survey/)>.

“2010 Commuter Challenge Report.” Ann Arbor, Michigan. *getDowntown.org: Commuting Opportunities in Ann Arbor*.

<<http://getdowntown.org/Portals/7/Documents/Studies%20Reports/2010%20CC%20Report.pdf>>.