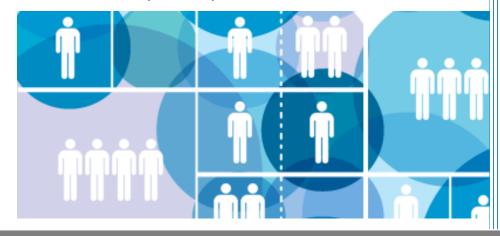


Yasamin Miller Group Data Analytics & Survey Solutions



# 2020 Ithaca Bicycle Use & Attitude Survey Summary Report

June 2020

Submitted by: Yasamin Miller Managing Director Yasamin Miller Group, LLC 44 Autumn Ridge Circle Ithaca, NY 14850 Phone: 607.592.1067 www.YasaminMillerGroup.com

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# Introduction

The Yasamin Miller Group (YMG) was contracted to conduct the 2020 Ithaca Bicycle Use and Attitudes Survey of residents and students living within a five-mile radius of Ithaca, New York. The final survey that was administered to both target populations (residents and students) can be found in Appendix A.

#### How the Sample Was Selected

The 2020 Ithaca Bicycle Use and Attitudes Survey was a mixed mode, telephone and web survey of adults living in the Ithaca, New York area. A random sample of landlines and cell phone numbers was purchased from Marketing Systems Group (MSG) in Horsham, PA, targeting this geographic area. Each of these selected telephone numbers was called by an interviewer from a centrally supervised facility. If the number called was found not to be a residential one, it is flagged accordingly and not called again. If the number was a residential number, the interviewer then randomly selected a member of the household by asking to speak with the adult currently living in the household who has had the most recent birthday. This selection process ensures that every adult (18 years of age or older) in the household has an equally likely chance of being included in the survey. No substitutions were allowed. If, for example, the randomly selected adult is not at home when the household is first contacted, the interviewer could not substitute by selecting someone else who just happened to be there at the time. Instead, he or she must make an appointment to call back when the randomly selected adult is at home. In this way, respondent selection bias is minimized.

The web portion of the survey was distributed through Cornell University-affiliated Facebook groups in order to target the student population. The Facebook groups were based on individual class years, instead of groups related to a particular club or activity, to minimize respondent bias.

#### When the Interviewing Was Done

Household residents were interviewed between May 13 and 24, 2020. Telephone calls during the field period were made between 9:00 AM and 9:00 PM. Web responses were collected using Qualtrics on May 14 – June 9, 2020.

# **Response Rates**

Telephone interviews were completed with 250 adult residents in the Ithaca area from a sample of 8477 telephone numbers. For those numbers called and a confident outcome could be determined, the **response rate (RR) for the telephone portion** of the Ithaca Bicycle Use and Attitudes Survey was:

RR= 250/(250+64+47) = 69%

Call Outcome-Household Survey	Ν
Complete	250
Refused, eligible household	64
Pending	47
Physically unable	0
Household language problem	13
No Answer – unable to determine if resident	1337
Called less than 3 times, undetermined eligibility	4646
Bad number, fax machine, business	213
No adult (18+) in household	0
Not in geographic target area	317
Not available during data collection period	1214
Refused at intro – unknown if eligible	370
Total	8507

Since the web survey was administered anonymously, it is unknown how many people were asked to participate in the survey. Those who participated via the web were then given a \$5 e-gift card to Amazon. In total 130 surveys were completed via the web. Residents were offered a \$5 gift card to Wegmans (the local grocery store). In total, 380 people responded to the survey.

#### **Data Analysis**

When found statistically significantly different, the survey results are reported by student versus nonstudent as self-defined by the primary occupation question. In addition, the results were also compared with the results from the 2018 survey<sup>1</sup> and statistically significant differences are also reported. The survey questionnaire is found in Appendix A, the frequency distribution of the survey results overall are found in Appendix B, and the crosstabulation of survey results by student versus nonstudent are found in Appendix C. Results of valid unweighted responses are reported only.

<sup>&</sup>lt;sup>1</sup> 2018 Ithaca Bicycle Use and Attitude Survey Summary Report

# Results

## 1) Demographics

For the purposes of this report, those who identified themselves as a student as their primary occupation will be referred to as the "Student" group, and those who did not identify themselves as a student as their primary occupation will be referred to as the "Non-Student" group. Since targeting students was intentional, the student group was younger than the non-student group, as expected.

Age (Years)	Overall		ars) Overall Student		Non-Student	
	Ν	%	Ν	%	N	%
18-21	102	27	97	72	5	2
22-24	24	6	18	13	6	2
25-29	21	6	15	11	6	2
30-34	13	3	4	3	9	4
35-39	14	4	0	0	14	6
40-44	9	2	0	0	9	4
45-49	16	4	0	0	16	7
50-54	31	8	0	0	31	13
55-59	25	7	0	0	25	10
60-64	27	7	0	0	27	11
65-69	30	8	0	0	30	12
70 or older	67	18	1	1	66	27
Did not answer	1	0	1	0	0	0
Total	380	100	136	100	244	100

#### Table 1- Age

Although there are slightly more female study participants than male, the overall age distribution of men versus women (Table 2) is not significantly different. Comparing the age distribution of the non-student respondents in 2018, 23% of the non-student study participants were 70 years or older and now two years later they represent 27% (although an increase, it is not statistically significantly different). In general, the age distribution of the non-student study participants in 2020 is not statistically significantly differently different than the age distribution of the non-student study participants in 2018.

#### Table 2 - Age by Sex

Age (Years)	Ma	le	Fem	ale
	N %		Z	%

18-21	29	19	72	32
22-24	8	5	16	7
25-29	6	4	15	7
30-34	7	5	6	3
35-39	5	3	9	4
40-44	1	1	8	4
45-49	4	3	12	5
50-54	14	9	17	7
55-59	15	10	10	4
60-64	11	7	16	7
65-69	14	9	16	7
70 or older	36	24	31	14
Total	150	100	228	100

According to the Bureau of Labor Statistics, the employment rate in Ithaca, NY is approximately 48% as of December 2019<sup>2</sup>. Study participants were asked to select their primary occupation status that best described them (allowing the selection of only one status), hence students who may also be working would not be counted in the "employed" category. Since students were purposefully targeted, the employment rate among study participants (36%) may under-represent the actual employment rate in Ithaca given the limitation of allowing only the selection of the primary occupation. See Table 3.

Table 3 – Primary Occupation Status

Primary Occupation Status	Overall	
	N	%
Employed (any type)	137	36
Student (undergrad/grad)	136	36
Stay-at-home	7	1
Retired	80	21
Unemployed/Furloughed	16	4
Other **	4	1
Total	380	99

\*Note - percent totals may not add to 100 due to rounding

\*\* Respondents reported more than one type of working status

<sup>&</sup>lt;sup>2</sup> https://www.bls.gov/eag/eag.ny ithaca msa.htm

The student population is significantly more racially/ethnically diverse than the non-student population, with the majority (84%) of non-students self-identifying as white or Caucasian compared to only 45% of students (see Table 4).

Race/Ethnicity	Overall		Student		Non-Student	
	N	%	N	%	N	%
American Indian/Native Alaskan	1	0	0	0	1	0
Asian or Asian American	71	19	67	49	4	2
Black or African American	9	2	4	3	5	2
Hispanic or Latino	19	5	12	9	7	3
Mixed Race	18	5	7	5	11	5
Other	10	3	1	0	9	4
White or Caucasian	250	66	45	33	205	84
Total	379	100	131	99	235	100

#### Table 4 - Race/Ethnicity

\*Note – percent totals may not add to 100 due to rounding

# 2) Transportation Modes

Two out of three students (67%) reported that they also work. Slightly more than half of the nonstudents (55%) drive alone to work (down from 65% in 2018, a statistically significant decrease). More non-students reported carpooling (7% in 2020 vs 3% in 2018) and taking the TCAT (12% in 2020 vs 9% in 2018), noting a shift away from single car mode of transportation. The plurality of students (46%) walk, although down from 2018 with 54% reporting they walk to work, there is also a decrease in driving alone (from 19% in 2018 down to 10% in 2020). One out of three (33%) students also take the TCAT bus (an increase from 22% in 2018) and only 12% of non-students take the bus (which represents no significant change in TCAT ridership among non-students). A significant change is the percentage of students who reported riding a bike, which went from none in 2018 to 5% now. The percentage of nonstudents riding a bike did not change, remaining steady at 5%. (See Figure 1.)

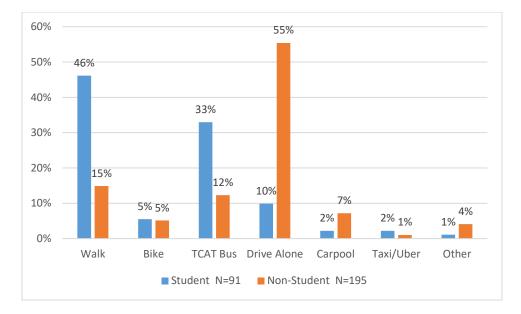


Figure 1 – Transportation Most Likely to use to get to Work

For those participants who go to school, they were asked what mode of transportation they are most likely to use to get to school. Again, there were non-students who also reported that they attended school (43%). The majority of non-students (51%) drive alone to school, but that has seen a 10% decline since 2018. This year, non-students who reported bicycling to school has increased from 3% in 2018 to 7% now, and carpooling has doubled (from 5% in 2018 to 10% in 2020). Students are also driving less than in 2018, opting instead to walk (63% up from 41% who reported they walk to school in 2018), take the TCAT bus (25% up from 16% in 2018), and ride a bike (4% up from 2% in 2018) (see Figure 2).

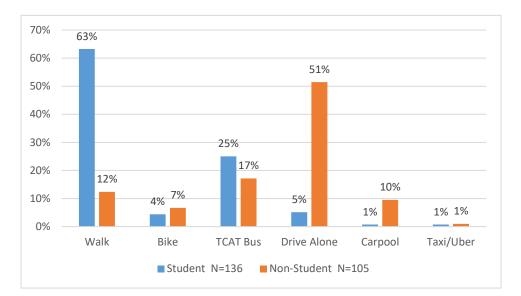


Figure 2 – Transportation Most Likely to use to get to School

When asked what transportation they are most likely to use for personal or family errands, two out of three (63%) of non-students reported driving alone (which is a significant decrease from 2018 with 81% reported driving alone). See Figure 3. Almost one out of five (19%) are now carpooling (compared to only 7% in 2018), and 8% are taking the TCAT bus compared to only 3% in 2018. The students although have no one overriding mode, their pattern of use of transportation has also shifted from 2018, moving away from driving alone (23% in 2020 compared to 35% in 2018), and carpooling (18% in 2020 compared to 28% in 2018) and more use of TCAT (38% in 2020 compared to 25% in 2018). Across the three trip types surveyed, the use of bikes as a mode of transportation has seen an increase as well as an increase in TCAT use.

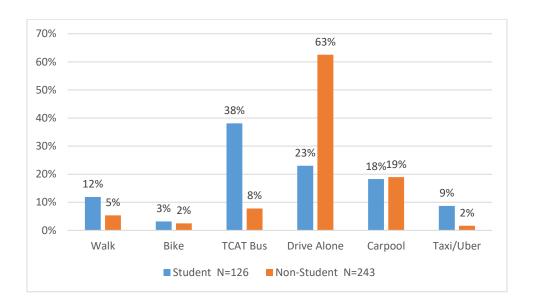


Figure 3 – Transportation Most Likely to use for Personal and Family Errands

# 3) Cycling Behavior

#### Access to Bicycles

One out of two (48%) of the non-students have regular access to a working bicycle (down from 60% in 2018), and only one out of five (21%) of the students have such access (which is up from 13% in 2018) (see Figure 4).

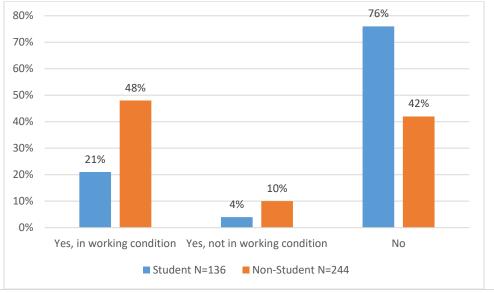
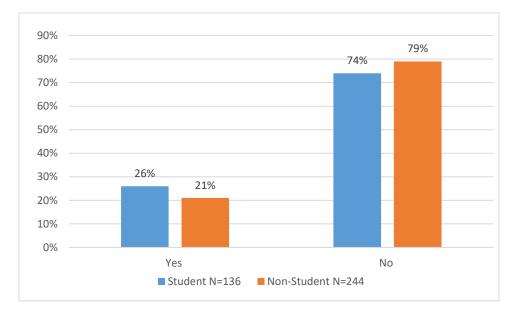


Figure 4 – Regular Access to a Bicycle

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In 2018 the bikeshare system that existed at Cornell was Zagster/Big Red Bikes, with only 8% of students reporting they used it and only 2% of non-students. This year respondents were asked if they ever used LimeBike in Ithaca. Compared to the previous bikeshare usage, the usage of LimeBike by students went up three-fold to 26% and for non-students this bikeshare usage went up ten-fold to 21% (see Figure 5).





# Cycling in Warmer Months

Study participants were asked how often they ride a bicycle during warmer months in and around Ithaca to get to work, get to school, for personal or family errands, and for recreation or exercise (leisure). They were offered options of reporting that they ride their bicycles at least once a day, at least once a week, at least once a month, at least once a year or never. Figure 6 summarizes the frequency of riding a bicycle during warmer months by type of trip for students and non-students. Non-students are more likely to ride a bicycle at any time compared to the students. This is not surprising since many of the students typically do not remain in Ithaca during the warmer months and also have lower rates of access to a working bicycle. One out of four (25%) of non-students ride bicycles weekly or daily during warmer months for leisure (down from 34% in 2018), 20% ride weekly or daily for errands (the same as in 2018), and 19% ride weekly or daily to work (compared to 17% in 2018, which does not represent a significant change). The marked difference in usage was reported by students, with their weekly and daily

reporting of riding a bike during the warmer months having gone up from 2018. Sixteen percent reported they ride bicycles weekly or daily to school (compared to only 6% in 2018). Similar upward trends were seen in 2020 for riding the bike for work: 14% compared to only 3% in 2018; riding the bike for leisure 14% vs 8% in 2018; and for riding the bike errands 9% vs 4% in 2018.

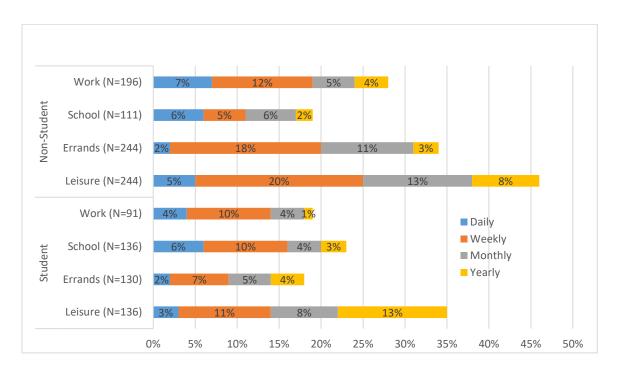


Figure 6- Students vs Non-Students: Frequency of Riding Bikes During Warmer Months

Because of the shelter at home orders enacted in March 2020 due to the response to the Covid-19 pandemic and Cornell closing its campus to students, requiring students to return to their home it is difficult to accurately interpret the last time the respondent rode a bicycle in and around Ithaca. Looking at the past year, it is clear that slightly fewer non-students (48%) reporting riding their bikes compared to 54% in 2018. Conversely, there is an increase in bike riding over the past year reported by students with 38% riding their bike in 2020 compared to 22% in 2018 (see Figure 7).

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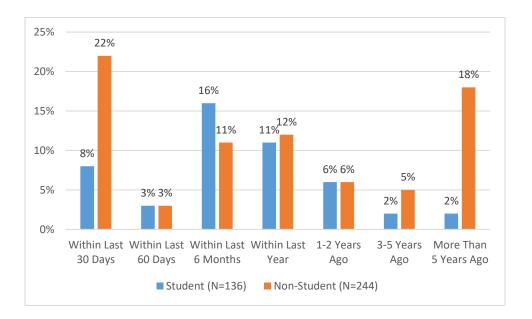


Figure 7 – Last Time Rode a Bicycle in and Around Ithaca

# 4) Bike Safety, Promotional Impact, Education

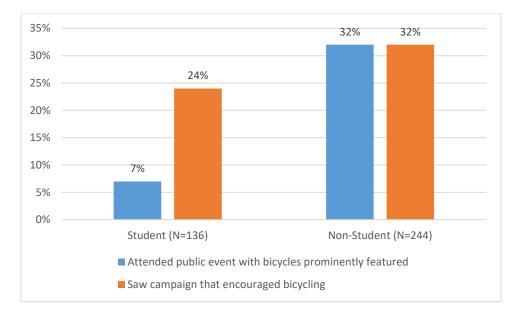
# Involved in a crash or close call

There has been a rise in the percentage who have reported that they were either in a crash or close call between a bicycle and a moving vehicle in and around Ithaca from 2018. Significantly more students now have reported being in a crash or close call compared to 2018 (14% vs 5% respectively). This could be explained by the fact that many more students are now riding a bicycle compared to 2018. Similarly, there has been a slight rise in non-students reporting being in a crash or close call compared to 2018 (13% vs 10% respectively). Of the non-students, one out of five (22%) reported the crash or close call to law enforcement, with only 11% of the students doing so.

# **Promotional Impact**

To understand the impact of promotional events, study participants were asked if they attended any public events in and around Ithaca where bicycles were prominently featured (regardless of whether or not they actually were riding a bike at the event) and then if they saw a campaign that encouraged bicycling at their school, workplace or community center. Both of these promotional events have been

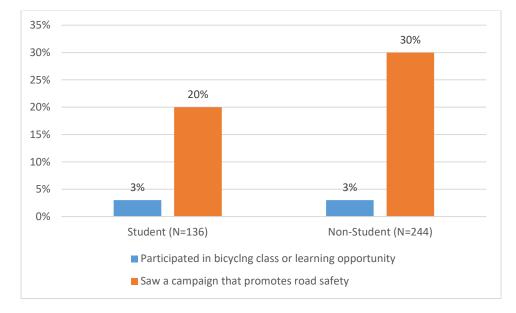
successful reaching non-students, with one out of three (32%) having attended a public event with bicycles prominently featured as well as seeing a campaign that encouraged bicycling. The students were less likely to have attended a public event that prominently featured bicycles with only 7% having done so, but almost one out of four (24%) have seen a promotional campaign. These campaign efforts are reaching a good proportion of the targeted audience. See Figure 8.





## **Bicycle Education**

Study participants were asked if they participated in a bicycling class or learning opportunity in 2019 as well as if they saw a campaign that promotes road safety in and around Ithaca. Very few (only 3%) of students and non-students participated in any bicycle learning classes. But one out of five (20%) of the students and almost one out of three (30%) of the non-students reported that they did see a campaign that promotes road safety (see Figure 9).



## Figure 9 – Exposure to Bicycle Safety Learning Opportunities

The plurality of non-students (39%) compared to the minority of students (18%) know where to go to learn more about bicycling in and around Ithaca.

# 5) Bicycling Attitude

When asked if they would be interested in traveling by bicycle more often in and around Ithaca, this time it was the students who were most enthusiastic (whereas in 2018 it was the non-students). One out of two students (49% compared to only 23% in 2018) and only about one out of three non-students (30%) compared to 39% in 2018 said they *are* interested in traveling more often by bicycle. Only one in ten (11%) of the student noted that they want to travel less or not at all by bicycle in 2020, a significant drop from 2018 with one in five (20%) not wanting to travel by bicycle. Conversely, the non-students are less willing to travel by bicycle now compared to 2018 (33% vs 24% respectively). Another third (29%) of the students might be interested (see Figure 10).

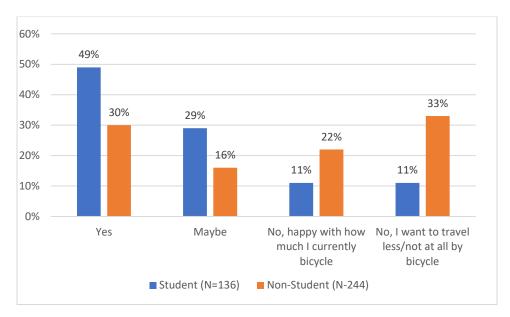


Figure 10 – Interested in traveling by bicycle more often in and around Ithaca?

Study participants were offered a list of reasons that might *encourage* someone to bicycle. They were asked to rate each on how much that reason encourages them to ride a bike, using a scale of 1 to 4, where 1 is not at all to 4 very much. Response options of 3 and 4, representing a compelling reason to bicycle, were collapsed, and reported in Figure 11. The order of reasons that would encourage bicycling was essentially the same between students and non-students, with improving health and wellbeing as the most compelling reason (reported by 58% of the non-students and 70% of the students). Students were more likely to say that reducing carbon emissions (61%) and lowering their transportation costs (46%) as reasons to use a bicycle compared to non-students (53% and 32% respectively). Also, more women (61%) reported that reducing carbon emissions is a reason to encourage them to bike compared to men (48%) (almost identical findings as in 2018). The overall order of reasons that encourage someone to bicycle is the same as was reported in 2018 (although the actual percentages in 2020 were lower overall for each reason provided). The least compelling reasons to bicycle included spending time with family and friends and bicycling being more convenient than driving.

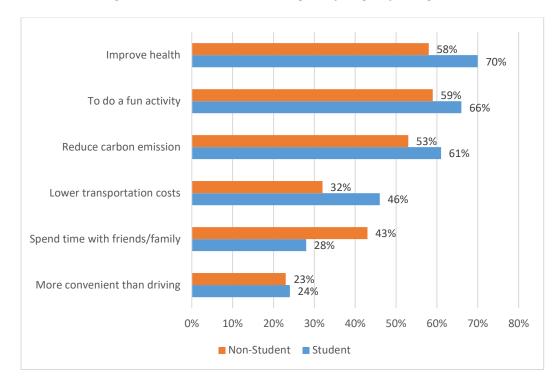
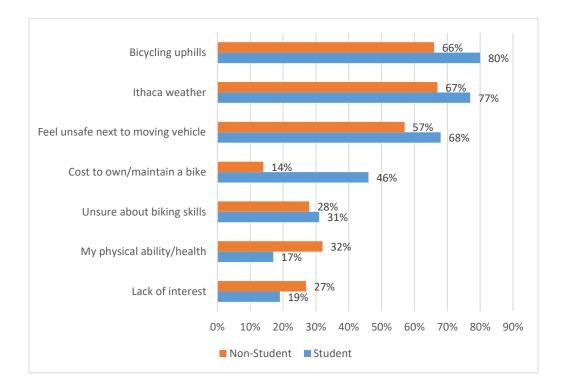
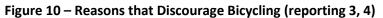


Figure 9 – Reasons that Encourage Bicycling (reporting 3, 4)

A similar type of list of reasons that would *discourage* someone from bicycling was offered to study participants. They were then asked how much each scenario discouraged them (on a scale of 1 to 4, with 1 being not at all and 4 very much) from bicycling. Response options of 3 and 4, representing a compelling reason to discourage bicycling, were collapsed and reported in Figure 12. The top three reasons both students and non-students reported as discouraging were factors that are specific to Ithaca hills and weather and feeling unsafe riding next to a moving vehicle, with non-students being less discouraged by these reasons than students. Students reported the hills (80%), the weather (77%) and feeling unsafe (68%) as discouraging factors to bicycling compared to non-students (with 66%, 67%, and 57% respectively). There was a 10% increase in the number of students feeling unsafe now compared to 2018. These were the same top reasons that discouraged bicycling that was reported in 2018. Cost of owning and maintaining a bike was the next major factor that discourages bike riding for almost one out of two (46%) students. One out of three (32%) of the non-students have concerns about their physical ability and health that hampers their riding a bike, whereas with students, it's the uncertainty of their own skill level with almost one out of three (31%) noting this as a discouraging factor.

Women are more likely to report that they are unsure about their bicycling skills (34%) compared to men (22%). Approximately one out of three non-white respondents also noted that their bicycling skills discourages them from bicycling compared to only one out of four (27%) of the white respondents. More women continue to feel unsafe next to a moving vehicle (66%) compared to men (53%). Women were also disproportionately discouraged by features specific to Ithaca such as the hills and weather (76% women vs. 63% men for the hills and 76% women vs 62% men for the weather). These trends were also seen in 2018.





Study participants were asked how much the situation with Covid-19 has encouraged or discouraged them to ride a bike. Response options offered were on a scale of 1 to 4, where 1 is strongly discouraged and 4 is strongly encouraged. Responses of 3 or 4 were combined to report those who were encouraged to ride a bike. Half of the respondents (54% of the students and 50% of the non-students) were encouraged to ride a bike as a result of the situation created by the Covid-19 pandemic.

Study participants were asked to agree or disagree to two statements about bicycling. Response options offered were on a scale of 1 to 4, where 1 is strongly disagree and 4 is strongly agree. Responses of 3 or 4 were combined to report those who agreed with each statement. The statements are listed below. The majority (more than eight out of ten) agreed with both statements regardless if they were students or non-students. The students also were much more likely to agree with the statement that bicycling is a part of the transportation mix in and around Ithaca compared to 2018 (83% vs 69% respectively).

#### Percent Agree

	Students (N=134)	Non- Students (N=244)
Bicycling is a part of the transportation mix in and around Ithaca:	69% 83%	89% 91%
There should be more bike infrastructure on the streets in and around Ithaca:	80% 87%	75% 80%

When asked what mode of transportation they would use *less often* if they rode a bicycle more often, the students split their response between walking less (38%) and taking TCAT less (36%), compared to 2018 where the plurality (45%) stated they would walk less often. The majority (54%) of the non-students would drive alone less often (a significant decrease from 2018 with 65% saying they would do that, with the difference that 16% reported that they would walk less often (compared to only 6% in 2018).

# 5) Summary

Although bicycling for non-recreational purposes among adults has seen a 60% increase over the past decade according to a news report released by the Census Bureau<sup>3</sup> the level of bicycling in the United States still hovers around 1%.

The goal of this study is to determine if there have been any changes in bicycling patterns and behaviors since the 2018 survey. Access to a bicycle is obviously critical, more students now have access to a working bicycle (21%) compared to 2018 (13%), although still the minority of students. Interestingly, fewer non-students now have access to a working bicycle (48% compared to 60% in 2018).

The bikeshare system LimeBike has seen a three-fold increase of usage by students (26%) and a ten-fold increase in usage by non-students compared to the previous system (Zagster/Big Red Bikes) that was available in 2018.

There is a trend away from the use of single car mode of transportation to travel either for work, school, or run errands now compared to 2018. The trend is in favor of carpooling, TCAT bus, and riding a bike.

#### Transportation Mode Used to Get to Work:

Non-students:	Driving alone <i>down</i> from 65% to 55% Carpooling <i>up</i> from 3% to 7% TCAT bus <i>up</i> from 8% to 12%
Students:	Walking <i>down</i> from 54% to 46% Driving alone <i>down</i> from 19% to 10% TCAT bus <i>up</i> from 22% to 33% Riding a bike <i>up</i> from 0% to 5%

#### Transportation Mode Used to Get to School:

Non-students:	Driving alone <i>down</i> from 61% to 51%
	Riding a bike <i>up</i> from 3% to 7%
	Carpooling <i>up</i> from 5% to 10%

Students: Walking *up* from 41% to 63% TCAT bus *up* from 16% to 25% Riding a bike *up* from 2% to 4%

#### Transportation Mode Used for Personal/Family Errands:

Non-students: Driving alone *down* from 81% to 63% Carpooling *up* from 7% to 19%

<sup>&</sup>lt;sup>3</sup> https://www.census.gov/newsroom/press-releases/2014/cb14-86.html

TCAT bus up from 3% to 8%

Students: Driving alone *down* 35% to 23% Carpooling *up* from 18% to 28% TCAT bus *up* from 25% to 38%

**Bicycling during warmer months** for non-students has not changed since 2018 with not more than one out of four riding their bike weekly or daily for any purpose. The students reported an increase in riding their bikes weekly or daily compared to 2018. Although still a minority with fewer than one out of six reported that they ride weekly or daily for any purpose (riding to work, to school, for errands or leisure), it does represent a minimum of a 5% increase since 2018.

Last time they rode a bicycle around Ithaca is difficult to interpret because of the shelter at home orders enacted in March 2020 due to the response to the Covid-19 pandemic. Fewer non-students (48%) reporting riding their bikes compared to 54% in 2018 in the past year. Conversely, more students (38%) reported that they rode their bikes in the past year compared to 22% in 2018.

**Encouraged to bike to:** improve health, do a fun activity and reduce carbon emissions are reasons noted by both groups that encourage them to bicycle in and around Ithaca, which the same reasons provided in 2018. The situation created by the Covid-19 pandemic resulted in half the study participants being encourage to ride a bike.

**Bike safety** continues to be a concern for all, with a 10% increase of students who noted that they feel unsafe riding next to a moving vehicle compared to 2018 (68% vs 58%), but not a significant change in reporting over time for the non-students (57% feel unsafe in 2020 compared to 62% in 2018). Almost three times as many students (14%) reported being a crash or close call compared 2018 (5%), which may explain the rise in concern for safety by students. Even with the increase in these encounters, only one out of ten (11%) of the students reported the crash or close call to law enforcement. Women also continue to feel unsafe next to a moving vehicle compared to men. Non-white respondents also feel that a deterrent to bicycling is their lack of skills. As found in 2018, Ithaca-specific features, such as hills and weather continue to pose barriers to bicycling. Despite these barriers, there are opportunities to engage even more students to ride bicycles as there is an increased interest expressed in traveling by bicycle more often in and around Ithaca compared to two years ago. The interest level of non-students remains unchanged. There is strong agreement across all study participants that bicycling is a part of the transportation mix and that there should be more bike infrastructure on the streets.

**Promotional events** such as public events with bicycles prominently featured, or campaigns that encouraged bicycle reached non-students more than students, reaching one out of three non-students.

**Bicycle education** involving campaigns that promotes road safety were viewed by at least one out of five study participants, whereas very few (3%) participated in bicycling class or learning opportunities. The plurality of non-students (39%) compared to the minority of students (18%) know where to go to learn more about bicycling in and around Ithaca.

**Transportation mode that would be used less** if they could ride a bicycle more often would be walking or taking the TCAT bus for students, whereas non-students would drive alone less often.

Appendix A: Questionnaire

## Ithaca Bicycle Use and Attitude Survey

Question: qptype - 1 (Single)

Text:

QPTYPE

(qptype:1) Landline (qptype:2) Cell

\_\_\_\_\_

Question: qintro - 1 (Single)

Text:

Good evening / afternoon. My name is \_\_\_\_\_\_ and I'm calling on behalf of The Center for Community Transportation of Tompkins County. We are conducting a short study to understand the transportation habits of people in and around Ithaca, New York and how they may have changed over time. We'd really appreciate your help and cooperation and to thank you, you will get a \$5 Wegmans gift card for completing the survey.

(qintro:1) Continue (qintro:2) Not Available/Schedule Callback (qintro:3) Refused

-----

Question: qfivemiles - 2 (Single)

Text:

Do you live within 5 miles of the Commons in downtown Ithaca for at least part of the year?

(qfivemiles:01)Yes, (qfivemiles:02)No (qfivemiles:99)REFUSED

-----

Question: qover18 - 2 (Single)

Text:

Are you age 18 or over?

(qover18:01)Yes, (qover18:02)No (qover18:99)REFUSAL

-----

Question: qbir1 - 2 (Single)

Text:

In order to determine who to interview, could you tell me, of the adults aged 18 or older who currently live in your household -- including yourself -- who had the most recent birthday? I don't mean who is the youngest, but rather, who had the most recent birthday?

(qbir1:01)INFORMANT (qbir1:02)SOMEONE ELSE : (qbir1:03)DON'T KNOW ALL BIRTHDAYS, ONLY SOME (qbir1:04)DON'T KNOW ANY BIRTHDAYS OTHER THAN OWN (qbir1:99)REFUSED ENTER NON-RESPONSE INFORMATION

\_\_\_\_\_

Question: qbir1oth1 - 50 (Open-end)

Text:

In order to determine who to interview, could you tell me, of the adults aged 18 or older who currently live in your household -- including yourself -- who had the most recent birthday? I don't mean who is the youngest, but rather, who had the most recent birthday? - SOMEONE ELSE :

\_\_\_\_\_

Question: qbir2 - 2 (Single)

Text:

Of the ones that you do know, who had the most recent birthday?

(qbir2:01)INFORMANT (qbir2:02)SOMEONE ELSE (SPECIFY): (qbir2:03)PERSON NOT AVAILABLE MAKE APPOINTMENT (qbir2:99)REFUSED

\_\_\_\_\_

Question: qbir2oth1 - 50 (Open-end)

Text:

Of the ones that you do know, who had the most recent birthday? - SOMEONE ELSE (SPECIFY):

\_\_\_\_\_

Question: qint2 - 2 (Single)

Text:

ASK TO SPEAK TO THAT PERSON Hello, this is calling on behalf of The Center for Community Transportation of Tompkins County. We are conducting a short study to understand the transportation habits of people in and around Ithaca, New York. You have been identified as the adult in your household who had the most recent birthday. Is this correct?

(qint2:01)YES (qint2:02)APPOINTMENT (qint2:99)REFUSAL

-----

Question: qsex - 1 (Single)

Text:

Thank you very much for helping us with this important study. Your telephone number was randomly selected from all households in and around Ithaca. This call may be monitored for quality assurance. If you live in and around Ithaca for only a part of the year, think of your situation in and around Ithaca only. IF ASKED: This survey will take 10 minutes to complete. RECORD SEX [ask only if cannot determine sex - ask First, what gender do you identify as?]

(qsex:1)MALE (qsex:2)FEMALE (qsex:3)NON-BINARY (qsex:4)OTHER (Specify) (qsex:9)REFUSES TO DO SURVEY

-----

Question: qsexoth1 - 50 (Open-end)

Text:

Thank you very much for helping us with this important study. Your telephone number was randomly selected from all households in and around Ithaca. This call may be monitored for quality assurance. If

you live in and around Ithaca for only a part of the year, think of your situation in and around Ithaca only. IF ASKED: This survey will take 10 minutes to complete. RECORD SEX [ask only if cannot determine sex - ask First, what gender do you identify as?] - OTHER (Specify)

\_\_\_\_\_

Question: qage - 2 (Numeric)

Text:

What is your current age? - years old

\_\_\_\_\_

Question: qagex - 1 (Multiple)

Text:

Exclusive Options: What is your current age?

(qagex:1)Prefer Not to Answer

\_\_\_\_\_

Question: qagegrp - 2 (Single)

Text:

Dummy question for AGE GROUP: Shown for testing purposes only. (Don't change the answer)

(qagegrp:01)18-21 (qagegrp:02)22-24 (qagegrp:03)25-29 (qagegrp:04)30-34 (qagegrp:05)35-39 (qagegrp:06)40-44 (qagegrp:07)45-49 (qagegrp:09)55-59 (qagegrp:10)60-64 (qagegrp:11)65-69 (qagegrp:12)70 or older

-----

Question: q1 - 2 (Single)

Text:

In 2019 on a typical weekday, what type of transportation would you most likely use to get to work? IF NEEDED: Pick the type of transportation you use most frequently. IF SOMEONE SAYS CAR OR DRIVE - Do you typically drive alone or carpool? DO NOT READ, SELECT ONE

(q1:01)WALK (q1:02)BIKE (q1:03)TCAT BUS (q1:04)DRIVE ALONE (q1:05)CARPOOL (q1:06)TAXI/UBER (q1:96)DO NOT GO TO WORK (q1:97)OTHER (q1:98)DON'T KNOW/NOT SURE (q1:99)REFUSED

\_\_\_\_\_

Question: q2 - 2 (Single)

Text:

In 2019 on a typical weekday, what type of transportation would you most likely use to get to school or college? IF SOMEONE SAYS CAR OR DRIVE - Do you typically drive alone or carpool? DO NOT READ, SELECT ONE

(q2:01)WALK (q2:02)BIKE (q2:03)TCAT BUS (q2:04)DRIVE ALONE (q2:05)CARPOOL (q2:06)TAXI/UBER (q2:96)DO NOT GO TO SCHOOL (q2:97)OTHER (q2:98)DON'T KNOW/NOT SURE (q2:99)REFUSED

\_\_\_\_\_

Question: q3 - 2 (Single)

Text:

In 2019 on a typical weekday, what type of transportation would you most likely use for family and personal errands? IF SOMEONE SAYS CAR OR DRIVE - Do you typically drive alone or carpool?

(q3:01)WALK (q3:02)BIKE (q3:03)TCAT BUS (q3:04)DRIVE ALONE (q3:05)CARPOOL (q3:06)TAXI/UBER (q3:96)DO NOT DO FAMILY OR PERSONAL ERRANDS (q3:97)OTHER (q3:98)DON'T KNOW/NOT SURE (q3:99)REFUSED

-----

Question: q4 - 2 (Single)

Text:

In 2019, during warmer months, how often did you use a bicycle in and around Ithaca to get to work? Select one. READ RESPONSES

(q4:01)At least once a day, (q4:02)At least once a week, (q4:03)At least once a month, (q4:04)At least once a year, (q4:05)Never? (q4:98)DON'T KNOW/NOT SURE (q4:99)NA/REFUSED

Question: q5 - 2 (Single)

Text:

In 2019, during warmer months, how often did you use a bicycle in and around Ithaca to get to school or college? READ RESPONSES, SELECT ONE

(q5:01)At least once a day, (q5:02)At least once a week, (q5:03)At least once a month, (q5:04)At least once a year, (q5:05)Never? (q5:98)DON'T KNOW/NOT SURE (q5:99)NA/REFUSED

-----

\_\_\_\_\_

Question: q6 - 2 (Single)

Text:

In 2019, during warmer months, how often do you use a bicycle in and around Ithaca for family and personal errands... READ RESPONSES, SELECT ONE

(q6:01)At least once a day,
(q6:02)At least once a week,
(q6:03)At least once a month,
(q6:04)At least once a year,
(q6:05)Never?
(q6:98)DON'T KNOW/NOT SURE
(q6:99)NA/REFUSED

\_\_\_\_\_

Question: q7 - 2 (Single)

Text:

In 2019, during warmer months, how often do you use a bicycle in and around Ithaca for recreation or exercise? READ RESPONSES, SELECT ONE

(q7:01)At least once a day, (q7:02)At least once a week, (q7:03)At least once a month, (q7:04)At least once a year, (q7:05)Never? (q7:98)DON'T KNOW/NOT SURE (q7:99)NA/REFUSED

-----

Question: q8 - 1 (Single)

Text:

Do you have regular access to a personal bicycle in Ithaca? Do not include stationary bicycles, rentals, or LimeBike.

(q8:1)Yes, and it is in working condition (q8:2)Yes, but it is not in working condition (q8:3)No

-----

Question: q9 - 1 (Single)

Text:

Have you ever used a LimeBike in Ithaca?

(q9:1)Yes (q9:2)No

\_\_\_\_\_

Question: q10 - 1 (Single)

Text:

When was the last time you rode a bicycle in and around Ithaca? Select one.

(q10:1)Within the last 30 days (q10:2)Within the last 60 days (q10:3)Within the last 6 months (q10:4)Within the past year (q10:5)1-2 years ago (q10:6)3-5 years ago (q10:7)More than 5 years ago (q10:8)Never

\_\_\_\_\_

Question: q11 - 1 (Single)

Text:

Are you interested in travelling by bicycle more often in and around Ithaca? Select one.

(q11:1)Yes (q11:2)Maybe (q11:3)No, I am happy with how much I currently bicycle (q11:4)No, I want to travel less or not at all by bicycle

\_\_\_\_\_

Question: q12a - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - To improve my health and wellbeing

(q12a:1)Not at all (q12a:2) (q12a:3) (q12a:4)Very much

\_\_\_\_\_

Question: q12b - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - To reduce my carbon emissions

(q12b:1)Not at all (q12b:2) (q12b:3) (q12b:4)Very much

-----

Question: q12c - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - To do a fun outdoor activity

(q12c:1)Not at all (q12c:2) (q12c:3) (q12c:4)Very much

\_\_\_\_\_

Question: q12d - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - To spend time with family and friends

(q12d:1)Not at all (q12d:2) (q12d:3) (q12d:4)Very much

-----

Question: q12e - 1 (Single)

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Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - To lower my transportation costs

(q12e:1)Not at all (q12e:2) (q12e:3) (q12e:4)Very much

-----

Question: q12f - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - It's more convenient than driving

(q12f:1)Not at all (q12f:2) (q12f:3) (q12f:4)Very much

-----

Question: q12g - 1 (Single)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Other (please specify)

(q12g:1)Not at all (q12g:2) (q12g:3) (q12g:4)Very much

-----

Question: q12goth1 - 50 (Open-end)

Text:

How much do the following reasons encourage you to bike in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Other (please specify)

-----

Question: q13\_1a - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - My physical ability or health

(q13\_1a:1)not at all (q13\_1a:2) (q13\_1a:3) (q13\_1a:4)very much

\_\_\_\_\_

Question: q13\_1b - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Cost to own and maintain a bike

(q13\_1b:1)not at all (q13\_1b:2) (q13\_1b:3) (q13\_1b:4)very much

-----

Question: q13\_1c - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Unsure about my bicycling skills and experience

(q13\_1c:1)not at all (q13\_1c:2) (q13\_1c:3) (q13\_1c:4)very much

\_\_\_\_\_

Question: q13\_1d - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Feel unsafe bicycling next to moving vehicles

(q13\_1d:1)not at all (q13\_1d:2) (q13\_1d:3) (q13\_1d:4)very much

-----

Question: q13\_1e - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Difficulty bicycling uphill in and around Ithaca

(q13\_1e:1)not at all (q13\_1e:2) (q13\_1e:3) (q13\_1e:4)very much

\_\_\_\_\_

Question: q13\_1f - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Bad or adverse weather

(q13\_1f:1)not at all (q13\_1f:2) (q13\_1f:3) (q13\_1f:4)very much

-----

Question: q13\_1g - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Lack of interest in bicycling

(q13\_1g:1)not at all (q13\_1g:2) (q13\_1g:3) (q13\_1g:4)very much

\_\_\_\_\_

Question: q13\_1h - 1 (Single)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Other (please specify)

(q13\_1h:1)not at all (q13\_1h:2) (q13\_1h:3) (q13\_1h:4)very much

-----

Question: q13\_1hoth1 - 50 (Open-end)

Text:

How much do the following reasons discourage you from biking in and around Ithaca? On a scale of 1 to 4, where 1 = not at all, and 4 = very much - Other (please specify)

\_\_\_\_\_

Question: q14 - 1 (Single)

Text:

How much has the situation created by Covid-19 encouraged or discouraged you to ride a bike?

(q14:1)Strongly discouraged (q14:2)Discouraged (q14:3)Encouraged (q14:4)Strongly encouraged

-----

Question: q15 - 1 (Single)

Text:

In 2019, did you attend a public event in and around Ithaca where bicycles were prominently featured? (You did not have to be riding a bicycle at the event)

(q15:1)Yes (q15:2)No (q15:3)Don't know

\_\_\_\_\_

Question: q16 - 1 (Single)

Text:

In 2019, did you see a campaign that encouraged bicycling at your workplace, school, or community center?

(q16:1)Yes (q16:2)No (q16:3)Don't know

-----

Question: q17 - 1 (Single)

Text:

In 2019, did you participate in a bicycling class or learning opportunity in and around Ithaca? (Do not include stationary bikes or spinning)

(q17:1)Yes (q17:2)No (q17:3)Don't know

-----

Question: q18 - 1 (Single)

Text:

In 2019, did you see a campaign that promotes road safety in and around Ithaca?

(q18:1)Yes (q18:2)No (q18:3)Don't know

-----

Question: q19 - 1 (Single)

Text:

In 2019, were you involved in a crash or a close call between a person walking or biking AND a moving vehicle in and around Ithaca? Select one.

(q19:1)A crash (q19:2)A close call (q19:3)Both (q19:4)Neither

-----

Question: q20 - 1 (Single)

Text:

Was the crash or close call reported to law enforcement? If multiple, think of the most severe encounter in 2019.

(q20:1)Yes (q20:2)No (q20:3)Don't know

-----

Question: q21 - 1 (Single)

Text:

Do you know where to go to learn more about bicycling in and around Ithaca?

(q21:1)Yes (q21:2)No (q21:3)Don't know

-----

Question: q22\_1 - 1 (Single)

Text:

How much do you agree with the following statements? - Bicycling is a part of the transportation mix in and around Ithaca

(q22\_1:1)Strongly disagree (q22\_1:2)Disagree (q22\_1:3)Agree (q22\_1:4)Strongly agree \_\_\_\_\_

Question: q22\_2 - 1 (Single)

Text:

How much do you agree with the following statements? - There should be more bike infrastructure on the streets in and around Ithaca

(q22\_2:1)Strongly disagree (q22\_2:2)Disagree (q22\_2:3)Agree (q22\_2:4)Strongly agree

\_\_\_\_\_

Question: q23 - 2 (Single)

Text:

What type of transportation, if any, would you use less often if you rode a bicycle more often?

(q23:01)WALK (q23:02)TCAT BUS (q23:03)DRIVE ALONE (q23:04)CARPOOL (q23:05)TAXI/UBER (q23:05)OTHER (q23:07)NONE (q23:98)DON'T KNOW/NOT SURE (q23:99)REFUSED

\_\_\_\_\_

Question: q24 - 1 (Single)

Text:

Which of the following best describes your current status... are you currently...

(q24:1)Employed (q24:2)Undergraduate Student (q24:3)Graduate/Professional Student (q24:4)Self-Employed (q24:5)Stay-at-home (q24:6)Retired (q24:7)Furloughed (q24:8)Unemployed (q24:9)Other (please specify)

\_\_\_\_\_

Question: q24oth1 - 50 (Open-end)

Text:

Which of the following best describes your current status... are you currently... - Other (please specify)

-----

Question: q25 - 1 (Single)

Text:

Which of the following do you primarily identify with?

(q25:1)White or Caucasian (q25:2)Black or African American (q25:3)Hispanic or Latino/a (q25:4)American Indian or Alaska Native (q25:5)Asian or Asian American (q25:6)Native Hawaiian or Pacific Islander (q25:7)More than one (q25:8)Other (specify)

Question: q25oth1 - 50 (Open-end)

Text:

Which of the following do you primarily identify with? - Other (specify)

-----

\_\_\_\_\_

Question: q26 - 50 (Open-end)

Text:

What is your email address? Solely to provide instructions to claim your \$5 Wegmans gift card. [check email - enter twice] - The email I have is:

-----

Question: q26x - 1 (Multiple)

Text:

Exclusive Options: What is your email address? Solely to provide instructions to claim your \$5 Wegmans gift card. [check email - enter twice]

(q26x:1)Respondent do not wish to receive the gift card

-----

### Appendix B: Overall Frequency Distribution of Survey Responses

	obulce (mode of data conection)								
					Cumulative				
		Frequency	Percent	Valid Percent	Percent				
Valid	1 Phone	250	65.8	65.8	65.8				
	2 Web	130	34.2	34.2	100.0				
	Total	380	100.0	100.0					

### Source (mode of data collection)

SEX	Sex

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Male	151	39.7	39.7	39.7
	2 Female	228	60.0	60.0	99.7
	5 Prefer Not to Say	1	.3	.3	100.0
	Total	380	100.0	100.0	

### AGE What is your current age?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	18	7	1.8	1.8	1.8
	19	26	6.8	6.9	8.7
	20	43	11.3	11.3	20.1
	21	26	6.8	6.9	26.9
	22	17	4.5	4.5	31.4
	23	3	.8	.8	32.2

2	24	4	1.1	1.1	33.2
2	25	3	.8	.8	34.0
2	26	6	1.6	1.6	35.6
2	27	5	1.3	1.3	36.9
2	28	7	1.8	1.8	38.8
3	30	5	1.3	1.3	40.1
3	32	4	1.1	1.1	41.2
3	33	2	.5	.5	41.7
3	34	2	.5	.5	42.2
	35	1	.3	.3	42.5
	36	3	.8	.8	43.3
	37	2	.5	.5	43.8
3	38	3	.8	.8	44.6
	39	5	1.3	1.3	45.9
2	40	4	1.1	1.1	47.0
	43	3	.8	.8	47.8
2	44	2	.5	.5	48.3
2	45	2	.5	.5	48.8
	46	5	1.3	1.3	50.1
2	47	2	.5	.5	50.7
2	48	4	1.1	1.1	51.7
	49	3	.8	.8	52.5
Ę	50	10	2.6	2.6	55.1
Ę	51	6	1.6	1.6	56.7
Ę	52	5	1.3	1.3	58.0
Ę	53	5	1.3	1.3	59.4
	54	5	1.3	1.3	60.7
	55	8	2.1	2.1	62.8
	56	3	.8	.8	63.6
	57	5	1.3	1.3	64.9
	58	6	1.6	1.6	66.5
	59	3	.8	.8	67.3
	60	5	1.3	1.3	68.6
	61	1	.3	.3	68.9
	62	6	1.6	1.6	70.4
	63	7	1.8	1.8	72.3
	64	8	2.1	2.1	74.4
				2.1	76.5

	66	7	1.8	1.8	78.4
	67	3	.8	.8	79.2
	68	6	1.6	1.6	80.7
	69	6	1.6	1.6	82.3
	70	3	.8	.8	83.1
	71	4	1.1	1.1	84.2
	72	7	1.8	1.8	86.0
	73	3	.8	.8	86.8
	74	5	1.3	1.3	88.1
	75	6	1.6	1.6	89.7
	76	2	.5	.5	90.2
	77	11	2.9	2.9	93.1
	79	3	.8	.8	93.9
	80	1	.3	.3	94.2
	81	2	.5	.5	94.7
	82	4	1.1	1.1	95.8
	83	2	.5	.5	96.3
	84	5	1.3	1.3	97.6
	85	1	.3	.3	97.9
	86	1	.3	.3	98.2
	87	2	.5	.5	98.7
	89	2	.5	.5	99.2
	90	1	.3	.3	99.5
	91	1	.3	.3	99.7
	93	1	.3	.3	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

## Q1 In 2019 on a typical weekday, what type of transportation would you most likely use to get to work? - Selected Choice

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Walk	71	18.7	18.7	18.7
	2 Bike	15	3.9	3.9	22.6
	3 TCAT Bus	54	14.2	14.2	36.8
	4 Drive Alone	117	30.8	30.8	67.6

5 Carpool	16	4.2	4.2	71.8
6 Taxi/Uber	4	1.1	1.1	72.9
96 Do Not Go To Work	92	24.2	24.2	97.1
97 Other	9	2.4	2.4	99.5
98 Don't Know/Not Sure	2	.5	.5	100.0
Total	380	100.0	100.0	

### Q2 In 2019 on a typical weekday, what type of transportation would you most likely use to get to school or college? - Selected Choice

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Walk	99	26.1	26.2	26.2
	2 Bike	13	3.4	3.4	29.6
	3 TCAT Bus	52	13.7	13.8	43.4
	4 Drive Alone	61	16.1	16.1	59.5
	5 Carpool	11	2.9	2.9	62.4
	6 Taxi/Uber	2	.5	.5	63.0
	96 Do Not Go To School or	132	34.7	34.9	97.9
	College				
	97 Other	3	.8	.8	98.7
	98 Don't Know/Not Sure	5	1.3	1.3	100.0
	Total	378	99.5	100.0	
Missing	99 Refused	2	.5		
Total		380	100.0		

## Q3 In 2019 on a typical weekday, what type of transportation would you most likely use for family and personal errands? - Selected Choice

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Walk	28	7.4	7.4	7.4
	2 Bike	10	2.6	2.6	10.0
	3 TCAT Bus	67	17.6	17.6	27.6
	4 Drive Alone	181	47.6	47.6	75.3
	5 Carpool	69	18.2	18.2	93.4
	6 Taxi/Uber	15	3.9	3.9	97.4
	96 Do Not Do Family Or	5	1.3	1.3	98.7
	Personal Errands				
	97 Other	4	1.1	1.1	99.7
	98 Don't Know/Not Sure	1	.3	.3	100.0
	Total	380	100.0	100.0	

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 At Least Once A Day	17	4.5	5.9	5.9
	2 At Least Once A Week	32	8.4	11.1	17.1
	3 A Least Once A Month	13	3.4	4.5	21.6
	4 At Least Once A Year	8	2.1	2.8	24.4
	5 Never	215	56.6	74.9	99.3
	98 Don't Know/Not Sure	2	.5	.7	100.0
	Total	287	75.5	100.0	
Missing	99 Refused	1	.3		
	System	92	24.2		
	Total	93	24.5		
Total		380	100.0		

## Q4 In 2019, during warmer months, how often do you use a bicycle in and around Ithaca to get to... - Work

## Q5 In 2019, during warmer months, how often do you use a bicycle in and around Ithaca to get to... - School or College

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 At Least Once A Day	15	3.9	6.1	6.1
	2 At Least Once A Week	19	5.0	7.7	13.8
	3 A Least Once A Month	13	3.4	5.3	19.0
	4 At Least Once A Year	6	1.6	2.4	21.5
	5 Never	192	50.5	77.7	99.2
	98 Don't Know/Not Sure	2	.5	.8	100.0
	Total	247	65.0	100.0	
Missing	99 Refused	1	.3		
	System	132	34.7		
	Total	133	35.0		
Total		380	100.0		

## Q6 In 2019, during warmer months, how often do you use a bicycle in and around Ithaca to get to... - Family or Personal Errands

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 At Least Once A Day	8	2.1	2.1	2.1
	2 At Least Once A Week	53	13.9	14.2	16.3
	3 A Least Once A Month	33	8.7	8.8	25.1
	4 At Least Once A Year	13	3.4	3.5	28.6
	5 Never	266	70.0	71.1	99.7
	98 Don't Know/Not Sure	1	.3	.3	100.0
	Total	374	98.4	100.0	
Missing	System	6	1.6		
Total		380	100.0		

## Q7 In 2019, during warmer months, how often do you use a bicycle in and around Ithaca to get to... - Recreation or Exercise

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 At Least Once A Day	16	4.2	4.2	4.2
	2 At Least Once A Week	64	16.8	16.8	21.1
	3 A Least Once A Month	42	11.1	11.1	32.1
	4 At Least Once A Year	37	9.7	9.7	41.8
	5 Never	219	57.6	57.6	99.5
	98 Don't Know/Not Sure	2	.5	.5	100.0
	Total	380	100.0	100.0	

## Q8 Do you have regular access to a personal bicycle in Ithaca? (Do not include stationary bicycles, rentals, or LimeBike)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes, and it is in working condition	145	38.2	38.2	38.2
	2 Yes, but it is not in working condition	29	7.6	7.6	45.8
	3 No	206	54.2	54.2	100.0
	Total	380	100.0	100.0	

### Q9 Have you ever used a LimeBike in Ithaca?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	87	22.9	22.9	22.9
	2 No	293	77.1	77.1	100.0
	Total	380	100.0	100.0	

### Q10 When was the last time you rode a bicycle in and around Ithaca?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Within the last 30 days	65	17.1	17.1	17.1
	2 Within the last 60 days	11	2.9	2.9	20.0
	3 Within the last 6 months	48	12.6	12.6	32.6
	4 Within the last year	45	11.8	11.8	44.5
	5 1-2 years ago	23	6.1	6.1	50.5
	6 3-5 years ago	15	3.9	3.9	54.5
	7 More than 5 years ago	45	11.8	11.8	66.3
	8 Never	128	33.7	33.7	100.0
	Total	380	100.0	100.0	

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_		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	140	36.8	36.8	36.8
	2 Maybe	77	20.3	20.3	57.1
	3 No - I am happy with how	68	17.9	17.9	75.0
	much I currently bicycle				
	4 No - I want to travel less or	95	25.0	25.0	100.0
	not at all by bicycle				
	Total	380	100.0	100.0	

## Q11 Are you interested in traveling by bicycle more often in and around Ithaca?

## Q12a How much do the following reasons encourage you to bike in and around Ithaca? - To improve my health and well-being

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	96	25.3	25.3	25.3
	22	48	12.6	12.6	37.9
	3 3	99	26.1	26.1	63.9
	4 Very Much (4)	137	36.1	36.1	100.0
	Total	380	100.0	100.0	

## Q12b How much do the following reasons encourage you to bike in and around Ithaca? - To reduce my carbon emissions

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	100	26.3	26.5	26.5
	22	67	17.6	17.7	44.2
	33	99	26.1	26.2	70.4
	4 Very Much (4)	112	29.5	29.6	100.0
	Total	378	99.5	100.0	
Missing	System	2	.5		
Total		380	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	77	20.3	20.3	20.3
	22	69	18.2	18.2	38.4
	3 3	95	25.0	25.0	63.4
	4 Very Much (4)	139	36.6	36.6	100.0
	Total	380	100.0	100.0	

## Q12c How much do the following reasons encourage you to bike in and around Ithaca? - To do a fun outdoor activity

## Q12d How much do the following reasons encourage you to bike in and around Ithaca? - To spend time with family and friends

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	148	38.9	38.9	38.9
	22	88	23.2	23.2	62.1
	3 3	65	17.1	17.1	79.2
	4 Very Much (4)	79	20.8	20.8	100.0
	Total	380	100.0	100.0	

## Q12e How much do the following reasons encourage you to bike in and around Ithaca? - To lower my transportation costs

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	164	43.2	43.2	43.2
	22	76	20.0	20.0	63.2
	3 3	65	17.1	17.1	80.3
	4 Very Much (4)	75	19.7	19.7	100.0
	Total	380	100.0	100.0	

## Q12f How much do the following reasons encourage you to bike in and around Ithaca? - It's more convenient than driving

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	206	54.2	54.2	54.2
	22	85	22.4	22.4	76.6
	3 3	35	9.2	9.2	85.8
	4 Very Much (4)	54	14.2	14.2	100.0
	Total	380	100.0	100.0	

## Q12g How much do the following reasons encourage you to bike in and around Ithaca? - Other (please specify)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	48	12.6	62.3	62.3
	22	4	1.1	5.2	67.5
	33	5	1.3	6.5	74.0
	4 Very Much (4)	20	5.3	26.0	100.0
	Total	77	20.3	100.0	
Missing	System	303	79.7		
Total		380	100.0		

### Q13a How much do the following reasons discourage you from biking in and around Ithaca? - My physical ability or health

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	214	56.3	56.5	56.5
	22	64	16.8	16.9	73.4
	33	47	12.4	12.4	85.8
	4 Very Much (4)	54	14.2	14.2	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

## Q13b How much do the following reasons discourage you from biking in and around Ithaca? - Cost to own and maintain a bike

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	219	57.6	57.6	57.6
	22	65	17.1	17.1	74.7
	33	62	16.3	16.3	91.1
	4 Very Much (4)	34	8.9	8.9	100.0
	Total	380	100.0	100.0	

### Q13c How much do the following reasons discourage you from biking in and around Ithaca? - Unsure about my bicycling skills and experience

	experience							
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
Valid	1 Not At All (1)	210	55.3	55.3	55.3			
	22	59	15.5	15.5	70.8			
	3 3	43	11.3	11.3	82.1			
	4 Very Much (4)	68	17.9	17.9	100.0			
	Total	380	100.0	100.0				

### Q13d How much do the following reasons discourage you from biking in and around Ithaca? - Feel unsafe bicycling next to moving vehicles

	Venieles							
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
Valid	1 Not At All (1)	85	22.4	22.4	22.4			
	22	63	16.6	16.6	38.9			
	3 3	92	24.2	24.2	63.2			
	4 Very Much (4)	140	36.8	36.8	100.0			
	Total	380	100.0	100.0				

	around ithaca							
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
Valid	1 Not At All (1)	55	14.5	14.5	14.5			
	22	56	14.7	14.7	29.2			
	3 3	80	21.1	21.1	50.3			
	4 Very Much (4)	189	49.7	49.7	100.0			
	Total	380	100.0	100.0				

### Q13e How much do the following reasons discourage you from biking in and around Ithaca? - Difficulty bicycling uphill in and around Ithaca

## Q13f How much do the following reasons discourage you from biking in and around Ithaca? - Bad or adverse weather

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	50	13.2	13.2	13.2
	22	62	16.3	16.3	29.5
	3 3	96	25.3	25.3	54.7
	4 Very Much (4)	172	45.3	45.3	100.0
	Total	380	100.0	100.0	

### Q13g How much do the following reasons discourage you from biking in and around Ithaca? - Lack of interest in bicycling

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	186	48.9	49.1	49.1
	22	102	26.8	26.9	76.0
	33	39	10.3	10.3	86.3
	4 Very Much (4)	52	13.7	13.7	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

		_	<b>D</b>		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Not At All (1)	44	11.6	57.9	57.9
	22	4	1.1	5.3	63.2
	33	9	2.4	11.8	75.0
	4 Very Much (4)	19	5.0	25.0	100.0
	Total	76	20.0	100.0	
Missing	System	304	80.0		
Total		380	100.0		

## Q13h How much do the following reasons discourage you from biking in and around Ithaca? - Other (please specify)

## Q14 How much has the situation created by COVID-19 encouraged or discouraged you to ride a bike?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 1 - Strongly Discouraged	60	15.8	15.8	15.8
	2 2 - Discouraged	128	33.7	33.7	49.5
	3 3 - Encouraged	152	40.0	40.0	89.5
	4 4 - Strongly Encouraged	40	10.5	10.5	100.0
	Total	380	100.0	100.0	

# Q15 In 2019, did you attend a public event in and around Ithaca where bicycles were prominently featured? (You did not have to be riding a bicycle at the event)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	87	22.9	22.9	22.9
	2 No	281	73.9	73.9	96.8
	3 Don't Know	12	3.2	3.2	100.0
	Total	380	100.0	100.0	

## Q16 In 2019, did you see a campaign that encouraged bicycling at your workplace, school, or community center?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	114	30.0	30.0	30.0
	2 No	248	65.3	65.3	95.3
	3 Don't Know	18	4.7	4.7	100.0
	Total	380	100.0	100.0	

### Q17 In 2019, did you participate in a bicycling class or learning opportunity in and around Ithaca? (Do not include stationary bikes or spinning?)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	12	3.2	3.2	3.2
	2 No	365	96.1	96.1	99.2
	3 Don't Know	3	.8	.8	100.0
	Total	380	100.0	100.0	

## Q18 In 2019, did you see a campaign that promotes road safety in and around Ithaca?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	101	26.6	26.6	26.6
	2 No	247	65.0	65.0	91.6
	3 Don't Know	32	8.4	8.4	100.0
	Total	380	100.0	100.0	

ре	person walking or biking AND a moving vehicle in and around									
Ithaca?										
Cumulative										
		Frequency	Percent	Valid Percent	Percent					
Valid	1 A Crash	6	1.6	1.6	1.6					
	2 A Close Call	42	11.1	11.1	12.6					
	3 Both	3	.8	.8	13.4					
	4 Neither	329	86.6	86.6	100.0					
	Total	380	100.0	100.0						

## Q19 In 2019, were you involved in a crash or a close call between a person walking or biking AND a moving vehicle in and around

## Q20 Was the crash or close call reported to law enforcement? If multiple, think of the most severe encounter in 2019.

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	9	2.4	18.4	18.4
	2 No	39	10.3	79.6	98.0
	3 Don't Know	1	.3	2.0	100.0
	Total	49	12.9	100.0	
Missing	System	331	87.1		
Total		380	100.0		

## Q21 Do you know where to go to learn more about bicycling in and around Ithaca?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Yes	121	31.8	31.8	31.8
	2 No	235	61.8	61.8	93.7
	3 Don't Know	24	6.3	6.3	100.0
	Total	380	100.0	100.0	

## Q22\_1 How much do you agree with the following statements? - Bicycling is a part of the transportation mix in and around Ithaca

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Strongly Disagree (1)	8	2.1	2.1	2.1
	2 Disagree (2)	37	9.7	9.7	11.8
	3 Agree (3)	192	50.5	50.5	62.4
	4 Strongly Agree (4)	143	37.6	37.6	100.0
	Total	380	100.0	100.0	

## Q22\_2 How much do you agree with the following statements? - There should be more bike infrastructure on the streets in and around Ithaca

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Strongly Disagree (1)	16	4.2	4.2	4.2
	2 Disagree (2)	43	11.3	11.3	15.5
	3 Agree (3)	174	45.8	45.8	61.3
	4 Strongly Agree (4)	147	38.7	38.7	100.0
	Total	380	100.0	100.0	

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Walk	89	23.4	23.7	23.7
	2 TCAT Bus	73	19.2	19.4	43.1
	3 Drive Alone	148	38.9	39.4	82.4
	4 Carpool	12	3.2	3.2	85.6
	5 Taxi/Uber	14	3.7	3.7	89.4
	6 Other	1	.3	.3	89.6
	7 None	34	8.9	9.0	98.7
	98 Don't Know/Not Sure	5	1.3	1.3	100.0
	Total	376	98.9	100.0	
Missing	99 Refused	3	.8		
	System	1	.3		
	Total	4	1.1		
Total		380	100.0		

## Q23 What type of transportation, if any, would you use less often if you rode a bicycle more often? - Selected Choice

## Q24 Which of the following best describes your current status: - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Employed	111	29.2	29.2	29.2
	2 Undergraduate Student	113	29.7	29.7	58.9
	3 Graduate/Professional	23	6.1	6.1	65.0
	Student				
	4 Self-Employed	26	6.8	6.8	71.8
	5 Stay-At-Home	7	1.8	1.8	73.7
	6 Retired	80	21.1	21.1	94.7
	7 Furloughed	3	.8	.8	95.5
	8 Unemployed	13	3.4	3.4	98.9
	9 Other (Please specify)	4	1.1	1.1	100.0
	Total	380	100.0	100.0	

### Q25 Which of the following do you primarily identify with? - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 White or Caucasian	250	65.8	66.0	66.0
	2 Black or African American	9	2.4	2.4	68.3
	3 Hispanic or Latino/a	19	5.0	5.0	73.4
	4 American Indian or Alaska Native	1	.3	.3	73.6
	5 Asian or Asian American	71	18.7	18.7	92.3
	6 Native Hawaiian or Pacific Islander	1	.3	.3	92.6
	7 More than one	18	4.7	4.7	97.4
	8 Other (Please specify)	10	2.6	2.6	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

AGE1 Age

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 18 - 21	102	26.8	26.9	26.9
	2 22 - 24	24	6.3	6.3	33.2
	3 25 - 29	21	5.5	5.5	38.8
	4 30 - 34	13	3.4	3.4	42.2
	5 35 - 39	14	3.7	3.7	45.9
	6 40 - 44	9	2.4	2.4	48.3
	7 45 - 49	16	4.2	4.2	52.5
	8 50 - 54	31	8.2	8.2	60.7
	9 55 - 59	25	6.6	6.6	67.3
	10 60 - 64	27	7.1	7.1	74.4
	11 65 - 69	30	7.9	7.9	82.3
	12 70 or older	67	17.6	17.7	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

### **RACE** Race

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 White or Caucasian	250	65.8	66.0	66.0
	2 Black or African American	9	2.4	2.4	68.3
	3 Hispanic or Latino/a	19	5.0	5.0	73.4
	4 American Indian or Alaska	1	.3	.3	73.6
	Native				
	5 Asian or Asian American	71	18.7	18.7	92.3
	6 Native Hawaiian or Pacific	1	.3	.3	92.6
	Islander				
	7 More Then One	18	4.7	4.7	97.4
	8 Other	10	2.6	2.6	100.0
	Total	379	99.7	100.0	
Missing	System	1	.3		
Total		380	100.0		

### **EMPLOY Employment Status**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Employed	111	29.2	29.2	29.2
	2 Undergraduate Student	113	29.7	29.7	58.9
	3 Graduate/Professional	23	6.1	6.1	65.0
	Student				
	4 Self-Employed	26	6.8	6.8	71.8
	5 Stay-At-Home	7	1.8	1.8	73.7
	6 Retired	80	21.1	21.1	94.7
	7 Furloughed	3	.8	.8	95.5
	8 Unemployed	13	3.4	3.4	98.9
	9 Other Employment Status	4	1.1	1.1	100.0
	Total	380	100.0	100.0	

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### **STUDENT Student Status**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Student	136	35.8	35.8	35.8
	2 Non-Student	244	64.2	64.2	100.0
	Total	380	100.0	100.0	

### Appendix C: Frequency Distribution of Responses: Students vs Non-Students

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q1 Transportation most likely	1 Walk	53	31	84
used to get to work		39.6%	12.6%	22.0%
	2 Bike	0	8	8
		0.0%	3.2%	2.1%
	3 TCAT Bus	22	16	38
		16.4%	6.5%	10.0%
	4 Drive Alone	19	115	134
		14.2%	46.6%	35.2%
	5 Carpool	4	6	10
		3.0%	2.4%	2.6%
	96 Do Not Work	35	61	96
		26.1%	24.7%	25.2%
	97 Other	1	9	10
		0.7%	3.6%	2.6%
	98 Don't Know/Not Sure	0	1	1
		0.0%	0.4%	0.3%
Total		134	247	381
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Asymptotic Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	71.064 <sup>a</sup>	7	.000		
Likelihood Ratio 76.494 7 .000					

Linear-by-Linear Association	.335	1	.563
N of Valid Cases	381		

a. 5 cells (31.3%) have expected count less than 5. The minimum

expected count is .35.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q2 Transportation most likely	1 Walk	80	13	93
used to get to school		59.7%	5.3%	24.4%
	2 Bike	2	3	5
		1.5%	1.2%	1.3%
	3 TCAT Bus	21	14	35
		15.7%	5.7%	9.2%
	4 Drive Alone	18	54	72
		13.4%	21.9%	18.9%
	5 Carpool	9	4	13
		6.7%	1.6%	3.4%
	96 Do Not Go To School	0	158	158
		0.0%	64.0%	41.5%
	97 Other	4	0	4
		3.0%	0.0%	1.0%
Total		134	247	381
		100.0%	100.0%	100.0%

Chi-Square Tests						
			Asymptotic			
			Significance (2-			
	Value	df	sided)			
Pearson Chi-Square	218.497ª	7	.000			
Likelihood Ratio	268.038	7	.000			
Linear-by-Linear Association	136.897	1	.000			
N of Valid Cases	381					

a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .35.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q3 Transportation most likely	1 Walk	9	13	22
used for family and personal		6.7%	5.3%	5.8%
errands	2 Bike	1	7	8
		0.7%	2.8%	2.1%
	3 TCAT Bus	32	8	40
		23.9%	3.2%	10.5%
	4 Drive Alone	45	198	243
		33.6%	80.2%	63.8%
	5 Carpool	36	16	52
		26.9%	6.5%	13.6%
	6 Taxi/Uber	6	2	8
		4.5%	0.8%	2.1%
	96 Do Not Do Family or	3	0	3
	Personal Errands	2.2%	0.0%	0.8%
	97 Other	2	2	4
		1.5%	0.8%	1.0%
	98 Don't Know/Not Sure	0	1	1
		0.0%	0.4%	0.3%
Total		134	247	381
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	105.411ª	8	.000		
Likelihood Ratio	106.716	8	.000		
Linear-by-Linear Association	2.760	1	.097		
N of Valid Cases	381				

a. 8 cells (44.4%) have expected count less than 5. The minimum

expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q4 Regular access to working	1 Yes	16	148	164
bicycle in Ithaca		11.9%	59.9%	43.0%
	2 No	112	98	210
		83.6%	39.7%	55.1%
	98 Don't Know/Not Sure	6	0	6
		4.5%	0.0%	1.6%
Total		134	247	381
		100.0%	100.0%	100.0%

Chi-Square Tests						
		Asymptotic				
			Significance (2-			
	Value	df	sided)			
Pearson Chi-Square	88.443 <sup>a</sup>	3	.000			
Likelihood Ratio	99.108	3	.000			
Linear-by-Linear Association	9.891	1	.002			
N of Valid Cases	381					

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .35.

		STUD		
		1.00 Student	Total	
Q5 Used Zagster Big Red	1 Yes	10	5	15
Bikes		7.5%	2.0%	3.9%
	2 No	123	242	365
		92.5%	98.0%	96.1%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic		
			Significance (2-	Exact Sig. (2-	Exact Sig. (1-
	Value	df	sided)	sided)	sided)
Pearson Chi-Square	6.883 <sup>a</sup>	1	.009		
Continuity Correction <sup>b</sup>	5.511	1	.019		
Likelihood Ratio	6.482	1	.011		
Fisher's Exact Test				.012	.011
Linear-by-Linear Association	6.865	1	.009		
N of Valid Cases	380				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.25.

b. Computed only for a 2x2 table

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q6 In warmer months, how	1 At Least Once A Day	1	12	13
often using a bicycle in and		1.0%	6.5%	4.6%
around Ithaca for work	2 At Least Once A Week	2	18	20
		2.0%	9.7%	7.0%
	3 At Least Once A Month	0	9	9
		0.0%	4.8%	3.2%
	4 At Least Once A Year	3	11	14
		3.0%	5.9%	4.9%
	5 Never	91	133	224
		91.9%	71.5%	78.6%
	98 Don't Know/Not Sure	2	2	4
		2.0%	1.1%	1.4%
	99 NA/Refused	0	1	1
		0.0%	0.5%	0.4%
Total		99	186	285
		100.0%	100.0%	100.0%

Chi-Square Tests					
Asymptotic					
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	19.846ª	6	.003		
Likelihood Ratio	25.352	6	.000		
Linear-by-Linear Association	.378	1	.539		
N of Valid Cases	285				

a. 7 cells (50.0%) have expected count less than 5. The minimum expected count is .35.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q7 In warmer months, how	1 At Least Once A Day	4	9	13
often using a bicycle in and		3.0%	10.1%	5.9%
around Ithaca for school	2 At Least Once A Week	4	6	10
		3.0%	6.7%	4.5%
	3 At Least Once A Month	1	3	4
		0.8%	3.4%	1.8%
	4 At Least Once A Year	6	6	12
		4.5%	6.7%	5.4%
	5 Never	116	63	179
		87.2%	70.8%	80.6%
	98 Don't Know/Not Sure	2	2	4
		1.5%	2.2%	1.8%
Total		133	89	222
		100.0%	100.0%	100.0%

			Asymptotic Significance (2-
	Value	df	sided)
Pearson Chi-Square	10.716 <sup>a</sup>	5	.057
Likelihood Ratio	10.574	5	.061
Linear-by-Linear Association	.017	1	.898
N of Valid Cases	222		

a. 6 cells (50.0%) have expected count less than 5. The minimum

expected count is 1.60.

### Crosstab

		STUDE		
		1.00 Student	2.00 Non-Student	Total
Q8 In warmer months, how	1 At Least Once A Day	3	12	15
often using a bicycle in and		2.3%	4.9%	4.0%
around Ithaca for family and	2 At Least Once A Week	3	36	39
ersonal errands		2.3%	14.6%	10.3%
	3 At Least Once A Month	4	24	28
		3.1%	9.7%	7.4%
	4 At Least Once A Year	2	14	16
		1.5%	5.7%	4.2%
	5 Never	117	161	278
		89.3%	65.2%	73.5%
	98 Don't Know/Not Sure	2	0	2
		1.5%	0.0%	0.5%
Total		131	247	378
		100.0%	100.0%	100.0%

### **Chi-Square Tests**

			Asymptotic Significance (2-
	Value	df	sided)
Pearson Chi-Square	33.091 <sup>a</sup>	5	.000
Likelihood Ratio	38.256	5	.000
Linear-by-Linear Association	7.648	1	.006
N of Valid Cases	378		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is .69.

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### Crosstab

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q9 In warmer months, how	1 At Least Once A Day	4	13	17
often using a bicycle in and		3.0%	5.3%	4.5%
around Ithaca for recreation or	2 At Least Once A Week	6	71	77
exercise		4.5%	28.7%	20.2%
	3 At Least Once A Month	4	34	38
		3.0%	13.8%	10.0%
	4 At Least Once A Year	19	16	35
		14.2%	6.5%	9.2%
	5 Never	100	113	213
		74.6%	45.7%	55.9%
	98 Don't Know/Not Sure	1	0	1
		0.7%	0.0%	0.3%
Total		134	247	381
		100.0%	100.0%	100.0%

### **Chi-Square Tests**

			Asymptotic Significance (2-
	Value	df	sided)
Pearson Chi-Square	56.857 <sup>a</sup>	5	.000
Likelihood Ratio	65.136	5	.000
Linear-by-Linear Association	9.443	1	.002
N of Valid Cases	381		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is .35.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q10 Last time you rode a	1 Within The Last 30 Days	4	31	35
bicycle in and around Ithaca		3.0%	12.6%	9.2%
	2 Within The Last 6 Months	13	69	82
		9.7%	27.9%	21.5%
	3 Within The Last Year	12	33	45
		9.0%	13.4%	11.8%
	4 1-2 Years Ago	8	7	15
		6.0%	2.8%	3.9%
	5 3-5 Years Ago	4	17	21
		3.0%	6.9%	5.5%
	6 More Than 5 Years Ago	0	49	49
		0.0%	19.8%	12.9%
	7 Never	92	40	132
		68.7%	16.2%	34.6%
	98 Don't Know/Not Sure	1	1	2
		0.7%	0.4%	0.5%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	123.852 <sup>a</sup>	7	.000
Likelihood Ratio	139.488	7	.000
Linear-by-Linear Association	7.914	1	.005
N of Valid Cases	381		

a. 2 cells (12.5%) have expected count less than 5. The minimum

expected count is .70.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q11 Comfortable biking - On	1 Very Uncomfortable	29	65	94
almost any street regardless of		21.8%	26.3%	24.7%
traffic conditions	22	54	78	132
		40.6%	31.6%	34.7%
	33	30	57	87
		22.6%	23.1%	22.9%
	4 Very Comfortable	16	38	54
		12.0%	15.4%	14.2%
	98 Don't Know/Not Sure	4	7	11
		3.0%	2.8%	2.9%
	99 NA/Refused	0	2	2
		0.0%	0.8%	0.5%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	4.518 <sup>a</sup>	5	.477	
Likelihood Ratio	5.151	5	.398	
Linear-by-Linear Association	.118	1	.731	
N of Valid Cases	380			

a. 3 cells (25.0%) have expected count less than 5. The minimum

expected count is .70.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q12 Comfortable biking - On	1 Very Uncomfortable	16	34	50
major streets, provided they		12.0%	13.8%	13.2%
have painted bicycle lanes	22	39	54	93
		29.3%	21.9%	24.5%
	3 3	45	73	118
		33.8%	29.6%	31.1%
	4 Very Comfortable	33	76	109
		24.8%	30.8%	28.7%
	98 Don't Know/Not Sure	0	7	7
		0.0%	2.8%	1.8%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	9.128 <sup>a</sup>	5	.104	
Likelihood Ratio	12.329	5	.031	
Linear-by-Linear Association	5.751	1	.016	
N of Valid Cases	380			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.05.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q13 Comfortable biking - On	1 Very Uncomfortable	14	19	33
major streets, provided they		10.5%	7.7%	8.7%
have bicycle lanes separated	2 2	12	21	33
from traffic with a physical		9.0%	8.5%	8.7%
barrier	3 3	24	48	72
		18.0%	19.4%	18.9%
	4 Very Comfortable	83	145	228
		62.4%	58.7%	60.0%
	98 Don't Know/Not Sure	0	10	10
		0.0%	4.0%	2.6%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	8.650 <sup>a</sup>	5	.124
Likelihood Ratio	13.151	5	.022
Linear-by-Linear Association	7.914	1	.005
N of Valid Cases	380		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.40.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q14 Comfortable biking - On	1 Very Uncomfortable	11	20	31
local neighborhood streets		8.3%	8.1%	8.2%
with little traffic and low	22	9	21	30
speeds		6.8%	8.5%	7.9%
	33	29	60	89
		21.8%	24.3%	23.4%
	4 Very Comfortable	83	141	224
		62.4%	57.1%	58.9%
	98 Don't Know/Not Sure	1	4	5
		0.8%	1.6%	1.3%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	2.009 <sup>a</sup>	5	.848
Likelihood Ratio	2.387	5	.793
Linear-by-Linear Association	.805	1	.370
N of Valid Cases	380		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q15 Comfortable biking - On	1 Very Uncomfortable	9	13	22
bicycles paths or trails		6.8%	5.3%	5.8%
separate from the street	22	8	6	14
		6.0%	2.4%	3.7%
	3 3	20	28	48
		15.0%	11.3%	12.6%
	4 Very Comfortable	95	190	285
		71.4%	76.9%	75.0%
	98 Don't Know/Not Sure	1	8	9
		0.8%	3.2%	2.4%
Total		133	247	380
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	7.975 <sup>a</sup>	5	.158
Likelihood Ratio	8.876	5	.114
Linear-by-Linear Association	3.638	1	.056
N of Valid Cases	380		

a. 4 cells (33.3%) have expected count less than 5. The minimum

expected count is .70.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q16 Interested in traveling by	1 Yes	30	95	125
bicycle more often in and		22.4%	38.5%	32.8%
around Ithaca	2 Maybe	56	22	78
		41.8%	8.9%	20.5%
	3 No, I Am Happy With How	17	66	83
	Much I Currently Bicycle	12.7%	26.7%	21.8%
	4 No, I Want To Travel Less	26	59	85
	Or Not At All By Bicycle	19.4%	23.9%	22.3%
	98 Don't Know/Not Sure	5	4	9
		3.7%	1.6%	2.4%
Total	_	134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	63.546 <sup>a</sup>	5	.000
Likelihood Ratio	62.373	5	.000
Linear-by-Linear Association	.901	1	.343
N of Valid Cases	381		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q17 Reasons encourages you	1 Not At All	14	41	55
to bike - To improve my health		10.4%	16.6%	14.4%
and wellbeing	22	16	28	44
		11.9%	11.3%	11.5%
	33	54	53	107
		40.3%	21.5%	28.1%
	4 Very	47	120	167
		35.1%	48.6%	43.8%
	98 Don't Know/Not Sure	3	2	5
		2.2%	0.8%	1.3%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	19.881 <sup>a</sup>	5	.001
Likelihood Ratio	20.519	5	.001
Linear-by-Linear Association	.014	1	.906
N of Valid Cases	381		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.06.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q18 Reasons encourages you	1 Not At All	21	67	88
to bike - To reduce carbon		15.7%	27.1%	23.1%
emissions	22	30	45	75
		22.4%	18.2%	19.7%
	3 3	50	47	97
		37.3%	19.0%	25.5%
	4 Very	30	81	111
		22.4%	32.8%	29.1%
	98 Don't Know/Not Sure	3	4	7
		2.2%	1.6%	1.8%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	22.147 <sup>a</sup>	5	.000
Likelihood Ratio	23.008	5	.000
Linear-by-Linear Association	.090	1	.764
N of Valid Cases	381		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.06.

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		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q19 Reasons encourages you	1 Not At All	18	43	61
to bike - To do a fun activity		13.4%	17.4%	16.0%
	22	21	33	54
		15.7%	13.4%	14.2%
	3 3	44	61	105
		32.8%	24.7%	27.6%
	4 Very	48	106	154
		35.8%	42.9%	40.4%
	98 Don't Know/Not Sure	3	2	5
		2.2%	0.8%	1.3%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	6.792 <sup>a</sup>	5	.237	
Likelihood Ratio	7.350	5	.196	
Linear-by-Linear Association	.168	1	.682	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .70.

Crosstab				
		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q20 Reasons encourages you	1 Not At All	43	71	114
to bike - To spend time with		32.1%	28.7%	29.9%
family and friends	22	37	47	84
		27.6%	19.0%	22.0%
	3 3	23	45	68
		17.2%	18.2%	17.8%
	4 Very	25	77	102
		18.7%	31.2%	26.8%
	98 Don't Know/Not Sure	6	4	10
		4.5%	1.6%	2.6%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	12.698 <sup>a</sup>	5	.026
Likelihood Ratio	13.724	5	.017
Linear-by-Linear Association	.461	1	.497
N of Valid Cases	381		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.06.

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Crosstab
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		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q21 Reasons encourages you	1 Not At All	36	111	147
to bike - To lower my		26.9%	44.9%	38.6%
transportation costs	22	28	48	76
		20.9%	19.4%	19.9%
	3 3	36	34	70
		26.9%	13.8%	18.4%
	4 Very	31	50	81
		23.1%	20.2%	21.3%
	98 Don't Know/Not Sure	3	1	4
		2.2%	0.4%	1.0%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	20.315ª	5	.001
Likelihood Ratio	21.190	5	.001
Linear-by-Linear Association	.467	1	.495
N of Valid Cases	381		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.06.

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		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q22 Reasons encourages you	1 Not At All	44	126	170
to bike - To avoid traffic jams		32.8%	51.0%	44.6%
	22	37	40	77
		27.6%	16.2%	20.2%
	33	26	36	62
		19.4%	14.6%	16.3%
	4 Very	23	39	62
		17.2%	15.8%	16.3%
	98 Don't Know/Not Sure	4	3	7
		3.0%	1.2%	1.8%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	16.491ª	5	.006	
Likelihood Ratio	17.442	5	.004	
Linear-by-Linear Association	.221	1	.638	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.06.

		STUDE	STUDENT Status	
		1.00 Student	2.00 Non-Student	Total
Q24 Reasons discourages	1 Not At All	77	117	194
you to bike - My physical		57.5%	47.4%	50.9%
ability or health	2 2	27	48	75
		20.1%	19.4%	19.7%
	3 3	14	32	46
		10.4%	13.0%	12.1%
	4 Very	14	48	62
		10.4%	19.4%	16.3%
	98 Don't Know/Not Sure	2	1	3
		1.5%	0.4%	0.8%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	8.371 <sup>a</sup>	5	.137
Likelihood Ratio	8.918	5	.112
Linear-by-Linear Association	.106	1	.745
N of Valid Cases	381		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q25 Reasons discourages	1 Not At All	42	175	217
you to bike - Cost to own and		31.3%	70.9%	57.0%
maintain a bike	22	37	42	79
		27.6%	17.0%	20.7%
	33	30	13	43
		22.4%	5.3%	11.3%
	4 Very	23	13	36
		17.2%	5.3%	9.4%
	98 Don't Know/Not Sure	2	2	4
		1.5%	0.8%	1.0%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	65.586 <sup>a</sup>	5	.000	
Likelihood Ratio	66.378	5	.000	
Linear-by-Linear Association	.271	1	.603	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .70.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q26 Reasons discourages	1 Not At All	56	148	204
you to bike - Unsure about my		41.8%	59.9%	53.5%
bicycling skills and experience	22	23	37	60
		17.2%	15.0%	15.7%
	33	23	29	52
		17.2%	11.7%	13.6%
	4 Very	29	30	59
		21.6%	12.1%	15.5%
	98 Don't Know/Not Sure	3	1	4
		2.2%	0.4%	1.0%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	16.394 <sup>a</sup>	5	.006	
Likelihood Ratio	16.828	5	.005	
Linear-by-Linear Association	1.169	1	.280	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .70.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q27 Reasons discourages	1 Not At All	23	42	65
you to bike - Feel unsafe		17.2%	17.0%	17.1%
bicycling next to moving	22	27	60	87
vehicles		20.1%	24.3%	22.8%
	3 3	34	59	93
		25.4%	23.9%	24.4%
	4 Very	48	85	133
		35.8%	34.4%	34.9%
	98 Don't Know/Not Sure	2	0	2
		1.5%	0.0%	0.5%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	5.011ª	5	.415	
Likelihood Ratio	5.841	5	.322	
Linear-by-Linear Association	1.397	1	.237	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

Clostab						
		STUDE	STUDENT Status			
		1.00 Student	2.00 Non-Student	Total		
Q28 Reasons discourages	1 Not At All	81	222	303		
you to bike - Concerned about	-	60.9%	89.9%	79.7%		
what people will think of me	22	27	9	36		
		20.3%	3.6%	9.5%		
	33	13	6	19		
		9.8%	2.4%	5.0%		
	4 Very	9	9	18		
		6.8%	3.6%	4.7%		
	98 Don't Know/Not Sure	3	0	3		
		2.3%	0.0%	0.8%		
Total		133	247	380		
		100.0%	100.0%	100.0%		

#### Crosstab

# Chi-Square Tests

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	51.640ª	5	.000
Likelihood Ratio	51.087	5	.000
Linear-by-Linear Association	4.234	1	.040
N of Valid Cases	380		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

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Ciostab					
		STUDE	STUDENT Status		
		1.00 Student	2.00 Non-Student	Total	
Q29 Reasons discourages	1 Not At All	10	26	36	
you to bike - Features specific		7.5%	10.5%	9.4%	
to Ithaca such as hills or	22	10	34	44	
weather		7.5%	13.8%	11.5%	
	33	28	49	77	
		20.9%	19.8%	20.2%	
	4 Very	83	136	219	
		61.9%	55.1%	57.5%	
	98 Don't Know/Not Sure	3	1	4	
		2.2%	0.4%	1.0%	
Total		134	247	381	
		100.0%	100.0%	100.0%	

#### Crosstab

# Chi-Square Tests

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	7.940 <sup>a</sup>	5	.160
Likelihood Ratio	8.362	5	.137
Linear-by-Linear Association	1.761	1	.184
N of Valid Cases	381		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

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		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q30 Reasons discourages	1 Not At All	40	121	161
you to bike - Lack of interest		29.9%	49.0%	42.3%
in bicycling	2 2	42	51	93
		31.3%	20.6%	24.4%
	3 3	33	33	66
		24.6%	13.4%	17.3%
	4 Very	18	39	57
		13.4%	15.8%	15.0%
	98 Don't Know/Not Sure	1	2	3
		0.7%	0.8%	0.8%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	18.835 <sup>a</sup>	5	.002	
Likelihood Ratio	19.169	5	.002	
Linear-by-Linear Association	.034	1	.853	
N of Valid Cases	381			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q32 Past year involved in a	1 A Crash	1	1	2
crash or close call between		0.7%	0.4%	0.5%
bicycle and moving vehicle in	2 A Close Call	6	24	30
and around Ithaca		4.5%	9.7%	7.9%
	4 Neither	124	222	346
		92.5%	89.9%	90.8%
	98 Don't Know/Not Sure	3	0	3
		2.2%	0.0%	0.8%
Total		134	247	381
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	8.819 <sup>a</sup>	3	.032		
Likelihood Ratio	9.840	3	.020		
Linear-by-Linear Association	6.018	1	.014		
N of Valid Cases	381				

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .70.

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		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q33 Were you on the bicycle	1 On the Bicycle	3	9	12
or in the moving vehicle		42.9%	36.0%	37.5%
	2 In the Moving Vehicle	4	14	18
		57.1%	56.0%	56.3%
	3 Both	0	2	2
		0.0%	8.0%	6.3%
Total		7	25	32
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	.630 <sup>a</sup>	2	.730		
Likelihood Ratio	1.055	2	.590		
Linear-by-Linear Association	.344	1	.557		
N of Valid Cases	32				

a. 4 cells (66.7%) have expected count less than 5. The minimum

expected count is .44.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q34 Agree/Disagree -	1 Strongly Disagree	10	7	17
Bicycling is a part of the		7.5%	2.8%	4.5%
transportation mix in and	2 2	31	30	61
around Ithaca		23.1%	12.1%	16.0%
	33	59	60	119
		44.0%	24.3%	31.2%
	4 Strongly Agree	33	150	183
		24.6%	60.7%	48.0%
	98 Don't Know/Not Sure	1	0	1
		0.7%	0.0%	0.3%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	46.975 <sup>a</sup>	4	.000
Likelihood Ratio	48.899	4	.000
Linear-by-Linear Association	.076	1	.783
N of Valid Cases	381		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .35.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q35 Agree/Disagree - There	1 Strongly Disagree	2	28	30
should be more bike		1.5%	11.3%	7.9%
infrastructure on the streets in	22	22	28	50
and around Ithaca		16.4%	11.3%	13.1%
	33	58	67	125
		43.3%	27.1%	32.8%
	4 Strongly Agree	49	118	167
	·	36.6%	47.8%	43.8%
	98 Don't Know/Not Sure	3	6	9
		2.2%	2.4%	2.4%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	21.815ª	4	.000
Likelihood Ratio	24.640	4	.000
Linear-by-Linear Association	.009	1	.925
N of Valid Cases	381		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.17.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
Q36 Agree/Disagree - I would	1 Strongly Disagree	43	143	186
take TCAT buses more often		32.1%	57.9%	48.8%
if there were more bike racks	22	37	38	75
near stops		27.6%	15.4%	19.7%
	3 3	16	22	38
		11.9%	8.9%	10.0%
	4 Strongly Agree	14	28	42
		10.4%	11.3%	11.0%
	98 Don't Know/Not Sure	24	13	37
		17.9%	5.3%	9.7%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	35.247ª	5	.000
Likelihood Ratio	35.887	5	.000
Linear-by-Linear Association	12.543	1	.000
N of Valid Cases	381		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.06.

		STUDE	NT Status	
		1.00 Student	2.00 Non-Student	Total
Q37 Type of transportation	1 Walk	60	13	73
you would use less often if		44.8%	5.3%	19.2%
you rode a bicycle more often	2 TCAT Bus	28	16	44
		20.9%	6.5%	11.5%
	3 Drive Alone	23	159	182
		17.2%	64.4%	47.8%
	4 Carpool	6	17	23
		4.5%	6.9%	6.0%
	5 Taxi/ Uber	8	3	11
		6.0%	1.2%	2.9%
	96 None	9	29	38
	-	6.7%	11.7%	10.0%
	97 Other	0	1	1
		0.0%	0.4%	0.3%
	98 Don't Know/Not Sure	0	7	7
		0.0%	2.8%	1.8%
Total		134	247	381
		100.0%	100.0%	100.0%

#### Crosstab

## Chi-Square Tests

			Asymptotic	
			Significance (2-	
	Value	df	sided)	
Pearson Chi-Square	142.215ª	8	.000	
Likelihood Ratio	149.064	8	.000	
Linear-by-Linear Association	7.859	1	.005	
N of Valid Cases	381			

a. 7 cells (38.9%) have expected count less than 5. The minimum expected count is .35.

		STUD		
		1.00 Student	2.00 Non-Student	Total
AGE1 Age	1.00 18 - 21	96	5	101
		74.4%	2.0%	26.9%
	2.00 22 - 24	28	5	33
		21.7%	2.0%	8.8%
	3.00 25 - 29	1	5	6
		0.8%	2.0%	1.6%
	4.00 30 - 34	0	9	9
		0.0%	3.6%	2.4%
	5.00 35 - 39	3	19	22
		2.3%	7.7%	5.9%
	6.00 40 - 44	1	20	21
		0.8%	8.1%	5.6%
	7.00 45 - 49	0	23	23
		0.0%	9.3%	6.1%
	8.00 50 - 54	0	20	20
		0.0%	8.1%	5.3%
	9.00 55 - 59	0	24	24
		0.0%	9.7%	6.4%
	10.00 60 - 64	0	28	28
		0.0%	11.3%	7.4%
	11.00 65 - 69	0	31	31
		0.0%	12.6%	8.2%
	12.00 70 or older	0	58	58
		0.0%	23.5%	15.4%
Total		129	247	376
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	316.671ª	11	.000
Likelihood Ratio	384.732	11	.000
Linear-by-Linear Association	248.110	1	.000
N of Valid Cases	376		

a. 3 cells (12.5%) have expected count less than 5. The minimum

expected count is 2.06.

		STUD		
		1.00 Student	2.00 Non-Student	Total
CHILD16 Children Under 16	1.00 Yes	25	52	77
in Household		19.4%	21.2%	20.6%
	2.00 No	104	193	297
		80.6%	78.8%	79.4%
Total	_	129	245	374
		100.0%	100.0%	100.0%

			Asymptotic		
			Significance (2-	Exact Sig. (2-	Exact Sig. (1-
	Value	df	sided)	sided)	sided)
Pearson Chi-Square	.176ª	1	.675		
Continuity Correction <sup>b</sup>	.081	1	.776		
Likelihood Ratio	.177	1	.674		
Fisher's Exact Test				.788	.391
Linear-by-Linear Association	.175	1	.675		
N of Valid Cases	374				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.56.

b. Computed only for a 2x2 table

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
INCOME Household Income	1.00 Less than \$15,000	20	9	29
		15.9%	4.7%	9.2%
	2.00 \$15,000 - \$29,999	6	18	24
		4.8%	9.5%	7.6%
	3.00 \$30,000 - \$44,999	6	22	28
		4.8%	11.6%	8.9%
	4.00 \$45,000 - \$59,999	15	21	36
		11.9%	11.1%	11.4%
	5.00 \$60,000 - \$74,999	16	27	43
		12.7%	14.2%	13.6%
	6.00 \$75,000 - \$99,999	9	26	35
7.0		7.1%	13.7%	11.1%
	7.00 \$100,000 and over	54	67	121
		42.9%	35.3%	38.3%
Total		126	190	316
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Asymptotic		
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	20.669ª	6	.002		
Likelihood Ratio	21.092	6	.002		
Linear-by-Linear Association	.143	1	.705		
N of Valid Cases	316				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.57.

		STUDE		
		1.00 Student	2.00 Non-Student	Total
RACE Race	1.00 White or Caucasian	63	196	259
		48.1%	83.4%	70.8%
	2.00 Black or African	7	8	15
	American	5.3%	3.4%	4.1%
	3.00 Hispanic or Latino/a	15	4	19
		11.5%	1.7%	5.2%
	4.00 American Indian or	0	3	3
	Alaska Native	0.0%	1.3%	0.8%
	5.00 Asian or Asian American	36	7	43
		27.5%	3.0%	11.7%
	7.00 Mixed Race	9	10	19
		6.9%	4.3%	5.2%
	8.00 Other	1	7	8
		0.8%	3.0%	2.2%
Total		131	235	366
		100.0%	100.0%	100.0%

Chi-Square Tests					
			Asymptotic		
			Significance (2-		
	Value	df	sided)		
Pearson Chi-Square	78.641ª	6	.000		
Likelihood Ratio	79.233	6	.000		
Linear-by-Linear Association	28.666	1	.000		
N of Valid Cases	366				

a. 3 cells (21.4%) have expected count less than 5. The minimum expected count is 1.07.

		STUDENT Status		
		1.00 Student	2.00 Non-Student	Total
EMPLOY Employment Status	1.00 Employed	0	116	116
		0.0%	47.0%	30.4%
	2.00 Undergraduate Student	125	0	125
		93.3%	0.0%	32.8%
	3.00 Graduate/Professional	9	0	9
	Student	6.7%	0.0%	2.4%
	4.00 Self-Employed	0	37	37
		0.0%	15.0%	9.7%
	5.00 Stay-At-Home	0	9	9
		0.0%	3.6%	2.4%
	6.00 Retired	0	76	76
		0.0%	30.8%	19.9%
	7.00 Unemployed	0	4	4
		0.0%	1.6%	1.0%
	8.00 Other Employment	0	5	5
	Status	0.0%	2.0%	1.3%
Total		134	247	381
		100.0%	100.0%	100.0%

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	381.000ª	7	.000
Likelihood Ratio	494.154	7	.000
Linear-by-Linear Association	36.710	1	.000
N of Valid Cases	381		

a. 6 cells (37.5%) have expected count less than 5. The minimum

expected count is 1.41.

Vancouver Panel Survey, prepared for the City of Vancouver by McElhanney Consulting Services