Statewide Survey on Bicycle and Pedestrian Facilities

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Research Objectives and Methodology

To improve the planning, implementation, and maintenance of bicycle and pedestrian facilities, the Florida Department of Transportation (FDOT) needs to periodically assess the knowledge, attitudes, and perceptions of Florida residents in regard to bicycling and walking facilities. This survey and report were designed to provide statewide measurements on Florida residents' satisfaction with bicycle and pedestrian facilities and collect data on bicycling behavior.

To gain an understanding of knowledge, attitudes and perceptions of bicycling and walking facilities and their use, the Center for Urban Transportation Research (CUTR) at the University of South Florida (USF) conducted a telephone survey of Florida residents over the age of 18. A total of 1750 telephone surveys were conducted, or 250 from each of the seven FDOT districts. Given the sample size in relation to the number of households in Florida, the sampling error for statewide results is +/- 2.2 percent at the 95 percent confidence interval. Due to the relatively smaller sample size at the district level, the sampling error is much larger at the district level, averaging +/- 6.8 percent. Of the total, 555 reported bicycling once per month or more and for the purpose of this report are classified as "bicyclists." Based on the sample size of the subpopulations, the sampling error for bicyclists is +/- 4.8 percent and +/-2.8 percent for non-bicyclists at the 95 percent confidence interval.

Key Pedestrian Findings

- Approximately 93 percent of respondent agree or strongly agree that good pedestrian facilities add value to their community, and 69 percent would like to live in a place where more of their daily needs could be met by walking.
- Over half of respondents (56%) would walk more if better pedestrian facilities existed.
- Approximately 69 percent of respondents agree or strongly agree that the government needs to spend more money on pedestrian facilities.
- The most commonly identified pedestrian needs were more/better sidewalks, safer/better crosswalks, and better lighting.
- Just 25 percent of respondents agreed or strongly agreed that it was safe to walk along the U.S. or state road with which they were most familiar and only 30 percent agreed that the road was safe to cross.

Key Bicycle Findings

- The vast majority of bicyclists (95%) and non-bicyclists (85%) agreed that good bicycle facilities add value to their community.
- Approximately 74 percent of bicyclists and 55 percent of non-bicyclists agreed that the government needs to spend more money on bicycle facilities.
- Approximately 40 percent of non-bicyclists agreed or strongly agreed that a greater network of bike lanes would encourage them to bicycle more, and 44 percent in regard to multi-use paths.

- Both bicyclists (85%) and non-bicyclists (75%) agreed that bike lanes should be standard features on Florida roads and over 90 percent of both groups agreed that all bike lanes should be signed and marked.

Bicycle Behavior Findings

- Floridians bicycle for a wide variety of purposes, but most commonly for exercise or recreation.
- Over half of bicyclists biked between 6 and 20 days per month.
- For bicyclists, the mean miles bicycled per month was 73.
- Approximately 43 percent of the "average" Floridian's bicycle-miles traveled occur on roads without bike lanes, 22 percent on multi-use paths, 20 percent on sidewalks, and 15 percent on roads with bike lanes.
- Approximately 41 bicyclists had been involved in a total of 76 bicycle-motor vehicle crashes in the last five years; 38 percent occurred on roadways without bike lanes, 31 percent involved sidewalk bicycling, and 20 percent occurred on roads with bike lanes.
- Bicyclists that averaged over 100 miles per month were less likely to be in crashes with motor vehicles, despite their increased exposure.

Bicycling and Walking by Children

- Approximately 82 percent of children of respondents neither bicycle nor walk to school.
- The most common reasons given by parents as to why their children do not bicycle or walk to school were distance (35%), safety issues (23%), and age of children (14%).
- To make a child's bicycling or walking trip to school safer, parents called for more/better sidewalks (26%), safer crossing facilities (21%), and greater law enforcement (13%).

General Conclusions

Floridians highly value bicycle and pedestrian facilities and want to bicycle and walk more. However, bicycling and walking are not viewed as the safest modes of transportation. As a result, many look to government to invest more money to provide more and better facilities to improve bicycling and walking safety.

FDOT Statewide Survey on Bicycle and Pedestrian Facilities (2005)

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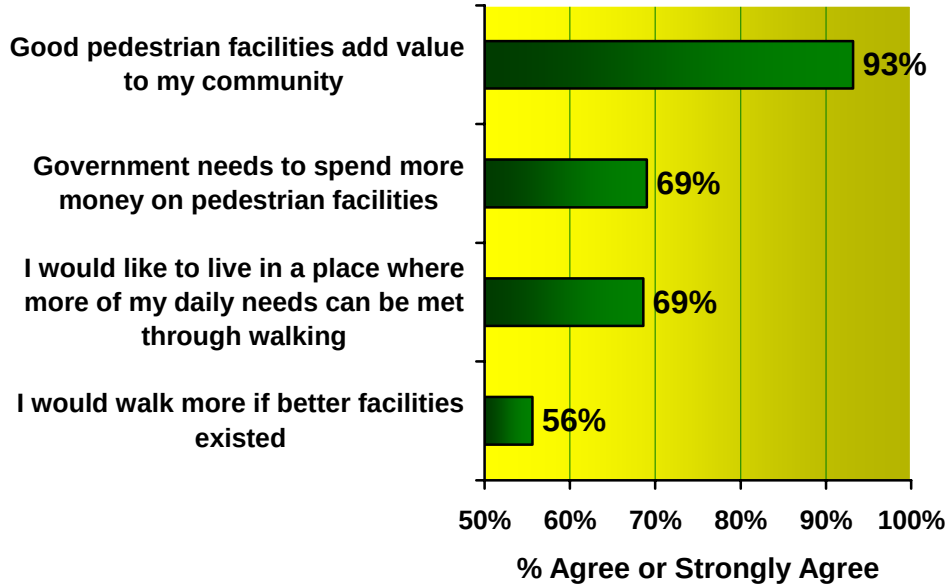
Objectives and Methods

To improve the planning, implementation, and maintenance of bicycle and pedestrian facilities, the Florida Department of Transportation (FDOT) needs to periodically assess the knowledge, attitudes, and perceptions of Florida residents in regard to bicycling and walking facilities.

A total of 1750 Florida residents over the age of 18 were surveyed by telephone, including 555 residents that bicycle at least once per month. Weighted responses have a sampling error of +/- 2.2 % at the 95 percent confidence interval

Pedestrian Facility Findings

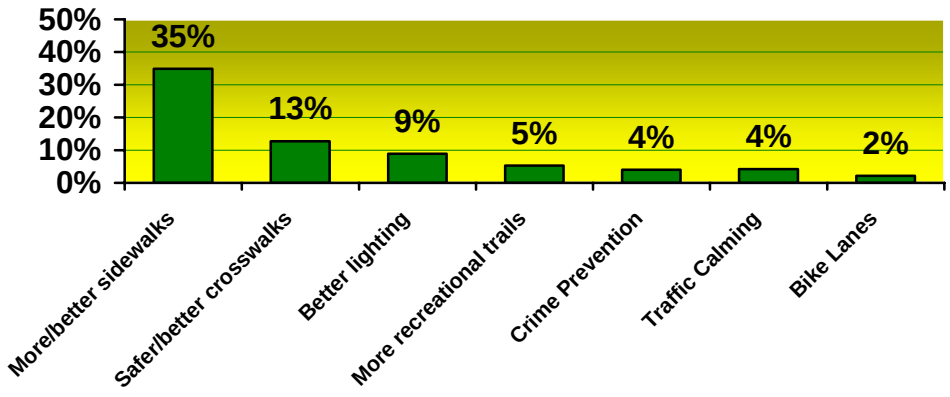
Importance of Pedestrian Facilities



Florida residents place a high value on pedestrian facilities and generally believe that the government should spend more money on pedestrian facilities. If better facilities existed, many Floridians claim they would walk more.

Pedestrian Satisfaction on US/State Roads	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Reasonably safe to walk on roads	5.0%	20.1%	2.1%	30.4%	36.1%
Reasonably safe to cross the roads	3.6%	26.6%	3.1%	33.0%	29.5%
Adequate sidewalks on the roads	5.4%	26.6%	2.3%	33.0%	26.0%
Adequate separation from traffic	5.5%	31.3%	2.3%	29.5%	23.3%
Sidewalks sufficiently smooth/even	5.4%	29.4%	3.2%	25.3%	19.8%

Needed Pedestrian Improvements

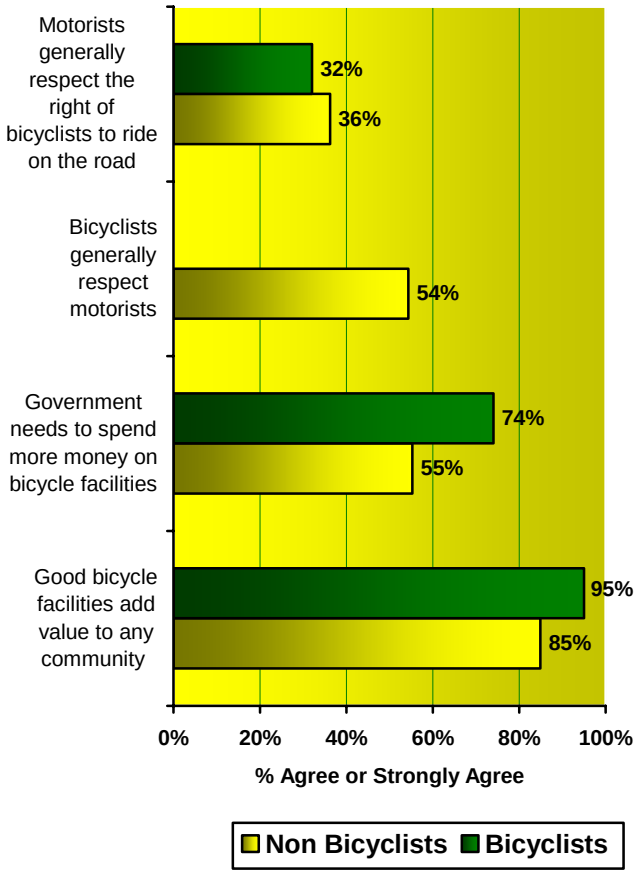


Florida residents generally believe that more money should be invested to improve pedestrian safety. According to the survey respondents, the most needed pedestrian improvements include more and better sidewalks, safer and better crossing facilities, and better lighting. Survey respondents also would like to see more multi-use trails, more law enforcement to protect pedestrians, and traffic calming to reduce vehicle speeds.

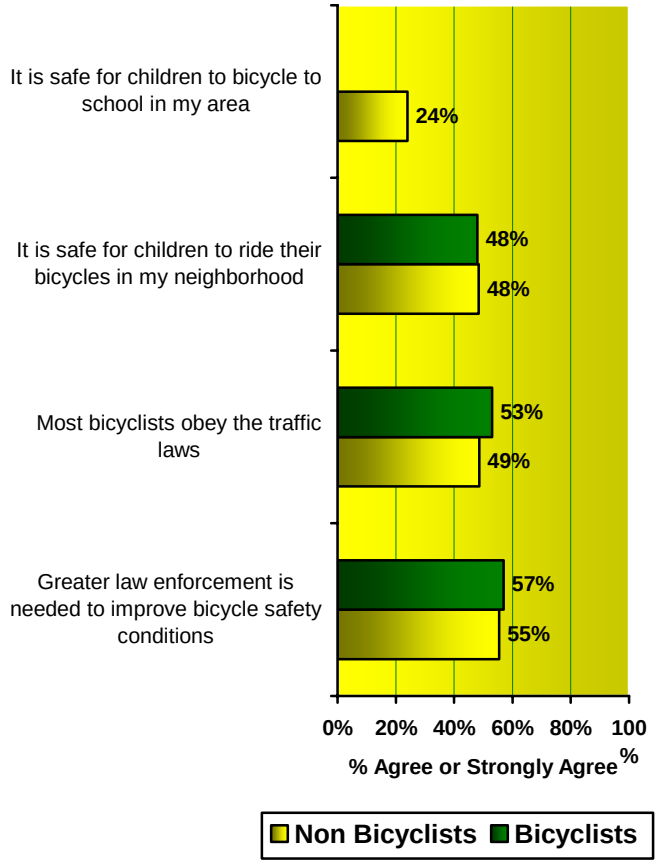
FDOT Statewide Survey on Bicycle and Pedestrian Facilities (2005)

Bicycle Facility Findings

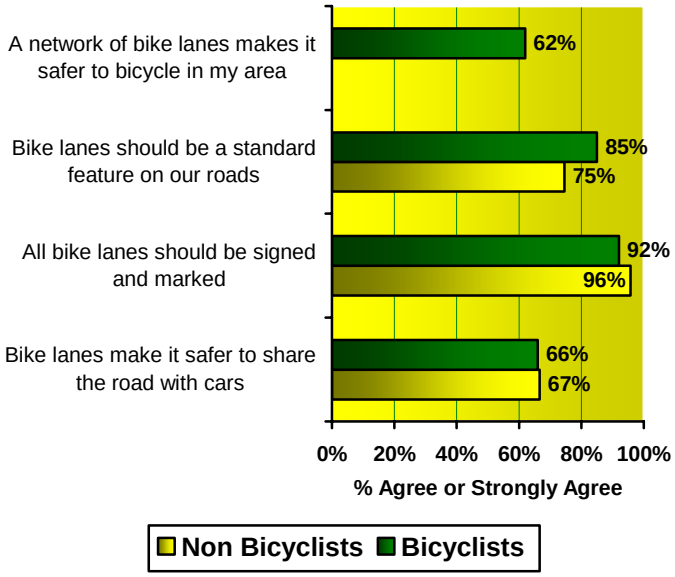
Bicycle Facilities Satisfaction: Use and Value



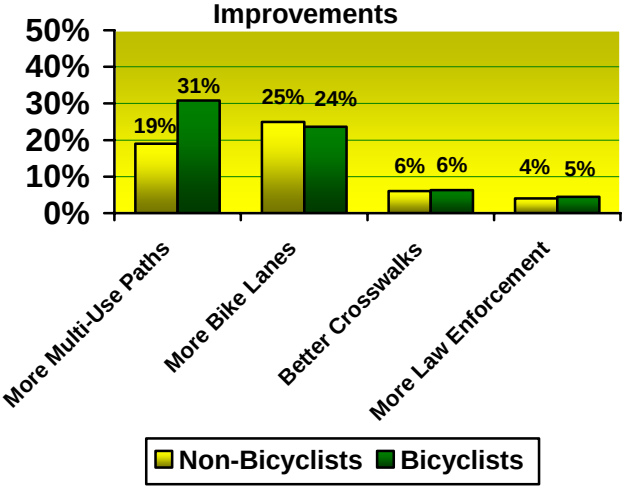
Bicycle Facilities Satisfaction: Safety and Law Enforcement



Views on Bike Lanes



Needed Bicycle Facilities Improvements



Floridians place a high value on bicycle facilities in their communities, and generally believe that more money should be invested in improving bicycling safety. Bicyclists and non-bicyclists both want more bike lanes and multi-use paths to improve bicycle safety.

Research Objectives and Methodology

Statement of the Problem

To improve the planning, implementation, and maintenance of bicycle and pedestrian facilities, the Florida Department of Transportation (FDOT) needs to periodically assess the knowledge, attitudes, and perceptions of Florida residents in regard to bicycling and walking facilities. This survey and report were designed to provide statewide measurements on Florida residents' satisfaction with bicycle and pedestrian facilities and collect data on bicycling behavior.

Research Tasks

To gain an understanding of knowledge, attitudes and perceptions of bicycling and walking facilities and their use, CUTR conducted a telephone survey of Florida residents. The results of this survey will be used to develop a set of recommendations to assist FDOT in the planning, implementation and maintenance of bicycle and pedestrian facilities. There were several steps in the research process including a review of the literature and past surveys, the development of a sampling plan and survey instrument, the hiring of a subcontractor, implementation of telephone survey, analysis of data, a review by FDOT, and the production of a final report.

Review of Literature and Past Surveys

A review was conducted to investigate the variety of methods and question formats used to survey individuals on their attitudes and perceptions in general, and of transportation facilities specifically. CUTR also reviewed the "District 5 Bicycling and Walking Attitudes Survey" (2003), which served as a foundation for this research project.

Sampling Plan

The sample population was stratified in regard to the seven FDOT districts. In addition to the sample being stratified by district, there were other criteria for inclusion. Specifically, only those residents over the age of 18 were eligible for the survey, and a 50/50 male to female ratio quota was used to increase the number of male respondents. When conducting a telephone survey, quotas related to gender are often necessary since females are more likely to answer the telephone than males.

The original sampling plan called for a total of 1400 surveys or 200 per FDOT district. However, because of a higher than expected response rate, a total of 1750 telephone surveys were conducted, 250 from each of the seven FDOT districts without a budget increase. Given the sample size in relation to the number of households in Florida, the sampling error for statewide results is +/- 2.2 percent at the 95 percent confidence interval. There was one respondent per household.

Due to the relatively smaller sample size at the district level, the sampling error is much larger at the district level, averaging out at +/- 6.8 percent. As a result, this report focuses

on statewide measurements and refers to district-level results only where appropriate given the large sampling error.

During data analysis, statewide results were weighted, when appropriate, in regard to the ratio of households per district to the total number of households in Florida, since the sampling unit in a telephone survey is the household. U.S. Census data were used to determine the number of households per district. See Table 1 below for details.

Table 1: Sampling Plan and Sample Weights

District	Competed surveys	Households per FDOT District*	Sample weight
1	250	738,807	0.119
2	250	638,425	0.103
3	250	469,978	0.076
4	250	1,309,978	0.212
5	250	1,156,994	0.187
6	250	811,860	0.131
7	250	1,061,950	0.172
Total	1750	6,187,992	

*Note: Population data are from the U.S. Census 2000, http://factfinder.census.gov (September 12, 2005).

Telephone Survey Instrument Design

In consultation with FDOT pedestrian-bicycle coordinators at both the district and state levels, CUTR developed a telephone survey instrument. State and district-level bicycle/pedestrian coordinators were asked to review the District 5 report and respond to the district coordinator survey. This survey was designed to gather opinions on the questions used in the District 5 report, and specifically whether or not they would delete or modify those questions or add any additional questions. The results of the survey were used to develop the survey instrument in consultation with state-level FDOT staff.

It was determined that, for questions dealing with satisfaction or perception, a Likert scale would be used. The scale range consisted of the following possible responses: strongly agree; agree; neither agree nor disagree; disagree, and strongly disagree. Respondents could also answer “don’t know.” Other questions allowed for respondents to provide open-end responses.

Pedestrian Section

The survey section related to satisfaction with pedestrian facilities was divided into two sections. The first section asked general question about the value of pedestrian facilities, safety, and needed improvements. See Table 2 for specific questions and their format.

Table 2: Pedestrian Section Questions

General Questions	Format
I would like to live in a place where more of my daily needs can be met through walking.	Likert scale
Greater law enforcement is needed to make walking adequately safe in my area.	Likert scale
I would walk more if better facilities existed.	Likert scale
Good pedestrian facilities add value to any community.	Likert scale
Government needs to spend more money on pedestrian facilities.	Likert scale
What kinds of pedestrian improvements are most needed in your area?	Open-end, up to three responses

In the second part of the pedestrian section, respondents were asked to identify a specific U.S. or state road in their area that they are most familiar with in regard to pedestrian facilities. If they could not think of a U.S. or state road in the area, the interviewers were instructed to provide a list of five U.S. or state roads (with their local name, when appropriate) for the respondents. If they were unfamiliar with all of the roads lists, the section was skipped for that particular respondent. If the respondent could identify a road on their own or were able to select one from the list provided, they answered the questions listed in Table 3 below in regard to that specific road in mind.

Table 3: U.S./State Road Pedestrian Questions

Questions	Format
It is reasonably safe to walk on this road.	Likert scale
I can cross this road with reasonable safety.	Likert scale
There are adequate sidewalks on this road.	Likert scale
The sidewalks adequately separate pedestrians from traffic.	Likert scale
The sidewalks have a sufficiently smooth and even surface.	Likert scale

Bicycle Section

Upon reaching the section of the survey on bicycle facilities, respondents were asked whether or not they bicycled once per month or more on average. Those that reported bicycling at least once per month were deemed “bicyclists” for this report. Those that on average did not bicycle at least once per month were considered “non-bicyclists.” Based on the sample size of the subpopulations, the sampling error for bicyclists is +/- 4.8 percent and +/-2.8 percent for non-bicyclists at the 95 percent confidence interval.

Most of the questions asked to bicyclists and non-bicyclists were the same, although some questions were modified to reflect their differential status. The bicyclists were also asked a series of questions regarding their bicycling behavior and their satsifaction with U.S. or state roads in their area with bike lanes.

In general, the survey questions related to bicycle facilities were divided into several sections. There were separate sets of questions related to bike lanes and multi-use paths. To make sure respondents understood the difference between bike lanes and multi-use paths, the following statement was read and their comprehension confirmed.

Bike lanes are parts of the road designated for bicycling that are separated from motor vehicle traffic by a solid white line, and are sometimes marked with a bicycle logo, directional arrow and signage. By contrast, multi-use paths are paved pathways for bicyclists and pedestrians that are not part of any roadway. Cars are not allowed on multi-use paths.

When the interviewers confirmed the respondent's comprehension of the difference between the two kinds of facilities, they proceeded with the set of questions related to satisfaction with bike lanes. The specific questions and their format are listed in Table 4 below. The questions modified for bicyclists are listed in italics.

Table 4: Bike Lane Questions

Questions	Format
I am familiar with bike lanes in my area.	Likert scale
I have used the bike lanes in my area. *I frequently use the bike lanes in my area.*	Likert scale
There are enough bike lanes in my area	Likert scale
Bike lanes are frequently used in my area.	Likert scale
It is safe to bicycle in bike lanes in my area. [*for bicyclists only*]	Likert scale
Bike lanes make it safer to share the road with cars.	Likert scale
A greater network of bike lanes in my area would encourage me to bicycle more. *A network of bike lanes makes it safer to bicycle in my area.*	Likert scale
The bike lanes in my area are well-maintained.	Likert scale
All bike lanes should be signed and marked.	Likert scale
Bike lanes should be a standard design feature on our roads.	Likert scale

Table 5 below lists the questions that were asked in regard to multi-use paths. Again, the questions that were modified for bicyclists appear in italics.

Table 5: Multi-Use Path Questions

Questions	Format
I am familiar with the multi-use paths in my area.	Likert scale
I have used the multi-use paths in my area. *I frequently use the multi-use paths in my area*.	Likert scale
There are enough multi-use paths in my area.	Likert scale
Multi-use paths appear to be frequently used in my area.	Likert scale
It is reasonably safe to bicycle on the multi-use paths in my area.	Likert scale
Pedestrians and bicyclists can safely share multi-use paths.	Likert scale
A greater network of multi-use paths in my area would encourage me to bicycle more.	Likert scale
The multi-use paths in my area are well-maintained.	Likert scale
I could safely bicycle to the multi-use paths in my area. *I can safely bicycle to the multi-use paths in my area.*	Likert scale

The next set of questions was more general in nature. It is important to note that only bicyclists were asked about the bicycle parking, and only non-bicyclists were asked whether most bicyclists obey traffic laws. See Table 6 below for details.

Table 6: General Bicycle Questions

Questions	Format
Good bicycle facilities add value to any community.	Likert scale
There is adequate bicycle parking at my destinations. *[for bicyclists only]*	Likert scale
It is safe for children to ride their bicycles in my neighborhood.	Likert scale
It is safe for children to bicycle to school in my area.	Likert scale
Greater law enforcement is needed to improve bicycle safety/conditions.	Likert scale
Motorists generally respect the right of bicyclists to ride on the road.	Likert scale
Bicyclists generally respect motorists.	Likert scale
Most bicyclists obey the traffic laws. [*for non-bicyclists only*]	Likert scale
Governments need to spend more money on bicycle facilities.	Likert scale
What kinds of bicycle improvements are most needed?	Open-end, provide up to three responses

Bike Lanes on U.S. or State Roads

Since non-bicyclists were assumed to be relatively unfamiliar with U.S. or state roads with bike lanes, only bicyclists were asked the questions listed in Table 7 below. Using the same procedures as used in the pedestrian section, bicyclists were asked to identify a U.S. or state road in the area that they were familiar with and had bike lanes. If they were unable to identify one, a list of five roads was provided from which they could choose. Again, if they could not identify one on their own or one from the list provided, the set of questions was skipped.

Table 7: U.S./State Roads with Bike Lanes Questions

Questions	Format
I have frequently bicycled on this road	Likert scale
The bike lanes on this road are well maintained.	Likert scale
It is adequately safe to bicycle on this road.	Likert scale
It is convenient to bicycle were I need to go using this road.	Likert scale
I can safely bicycle to this road from my home.	Likert scale

Bicycling Behavior Section

This survey also provided an opportunity to gather data on the bicycling behavior of Florida residents. These kind of data, particularly exposure data, is generally lacking in the field of bicycle safety research despite its importance in determining the risk associated with different kinds of facilities. As a result, the survey was designed to collect a variety of information on bicycling behavior.

Bicyclists were asked how often they cycled in regard to trip purpose, specifically, for exercise, recreation, shopping or errands, visits to friends or family, accessing transit, and commuting to work or school. If respondents reported bicycling to work or school, they were also asked how often and the distance bicycled.

All bicyclists were asked how many days per month they bicycled for any reason and to estimate the total number of miles they bicycle on average per month. To examine exposure, bicyclists were asked to estimate what percent of their monthly bicycle-miles travelled were done on different kinds of facilities, specifically, on roads with bike lanes, roads without bike lanes, multi-use paths, and sidewalks.

Due to the influence of bicycling experience on perceptions of safety and risk, bicyclists were read three phrases and asked to identify which phrase best described their level of comfort.

> *1. I feel comfortable riding under most traffic conditions, including major streets with busy traffic and higher speeds.*
>
> *2. I only feel comfortable riding on streets with less traffic and lower speeds, or on streets with bike lanes.*
>
> *3. I only feel comfortable riding on multi-use paths or sidewalks.*

Finally, bicyclists were asked about any crashes with motor vehicles they had experienced in the last five years, what kind of facility they were using when the crash occurred, and whether or not the police were notified of the crash. The type of facility being used at the time of the crash is a key factor in determining the relative safety of different facilities. Respondents were asked whether the police were notified of the crash so as to assess the extent to which bicycle-motor vehicle crashes are under-reported.

Bicycling and Walking by Children Section

Both bicyclists and non-bicyclists who lived in households with school-age children were asked a series of questions about bicycling and/or walking to school. Specifically, they were asked if children in the household biked or walked to school, and if so, the type of facility they used. All respondents were asked what improvements should be made to make it safer for children to bicycle or walk to school. Those respondents whose children did not bicycle or walk to school were asked why those modes were not used. Table 8 below lists the specific questions and formats.

Table 8: Bicycling and Walking By Children Questions

General Questions	Format
Do any of these children ride their bike or walk to school?	Open-ended, allowed for combining both modes
When bicycling to school, do they bicycle on the road, in a bike lane, on a multi-use path, on a sidewalk, or a combination of facilities?	Open-ended, allowed for combinations of facilities
What improvements would make it safer for your children to bicycle or walk to school?	Open-ended, provide up to three responses
What are the main reasons why your children do not bicycle or walk to school?	Open-ended

Demographic Section

The final section of the survey collected demographic information on all respondents. The demographic data collected included:

- Highest level of education achieved by respondent
- Age of respondent
- Race or Ethnicity of respondent
- Annual Household Income for 2004
- Location of residence: urban, suburban, or rural
- Number of working automobiles in household
- Total household population
- Number of children under 16 in household
- Marital status of respondent

Telephone Survey Specifics

Western Wats of Provo, Utah, conducted the telephone survey under a subcontract. The surveys were conducted from August 3rd to August 30th of 2005. The average interview length was 12 minutes and 43 seconds. Respondents who bicycled more than once per month had longer interviews on average due to the additional questions focused on their bicycling habits. The net effective incidence rate was 73 percent. This is a measurement of the level of effort required to reach qualified respondents, which takes into account completed interviews, partial interviews, and contact with non-qualified respondents. The telephone survey script is included in Appendix D.

Analysis of Results

The analysis of the data collected during the telephone surveys primarily consisted of the calculation of frequencies and cross-tabulations between correlated variables. When appropriate, results were weighted.

T-tests and one-way ANOVA tests were run to determine if there are statistically significant differences between bicyclists and non-bicyclists and between various demographic groups for general statements on bicycle and pedestrian facilities that used the Likert scales. Chi-square analyses were also run for children from households in which the survey respondent bicycles at least once a month and households in which the survey respondent does not. In addition, chi-square analyses and independent samples t-tests were run to determine whether statistically significant differences exist between bicyclists and non-bicyclists for a number of demographic variables.

Pedestrian Facilities Satisfaction

A total of 1750 respondents were surveyed on their satisfaction with pedestrian facilities. For each figure, n=1750 unless indicated. Complete data tables for the questions related to pedestrian facilities is located in Appendix A.

General Pedestrian Satisfaction

During the survey, each respondent was asked five general questions about pedestrian facilities. The five questions can be grouped into two basic categories, opinions on the importance of pedestrian facilities, and support of government expenditures related to pedestrian facilities. The following tables and figures in this section show weighted statewide totals unless otherwise indicated.

Statewide, 93 percent of respondents agreed or strongly agreed that pedestrian facilities add value to their communities. Over half of respondents (56%) agreed or strongly agreed that they would walk more if better pedestrian facilities existed in their area. Approximately 37 percent of respondents disagreed or strongly disagreed that they would walk more if better facilities existed. Furthermore, 69 percent of respondents would like to live in a place where more of their daily needs could be met through walking. This shows that Floridians, in general, place a high value on being able to walk in their communities and would like more opportunities to walk in their area. See Figure 1 for details.

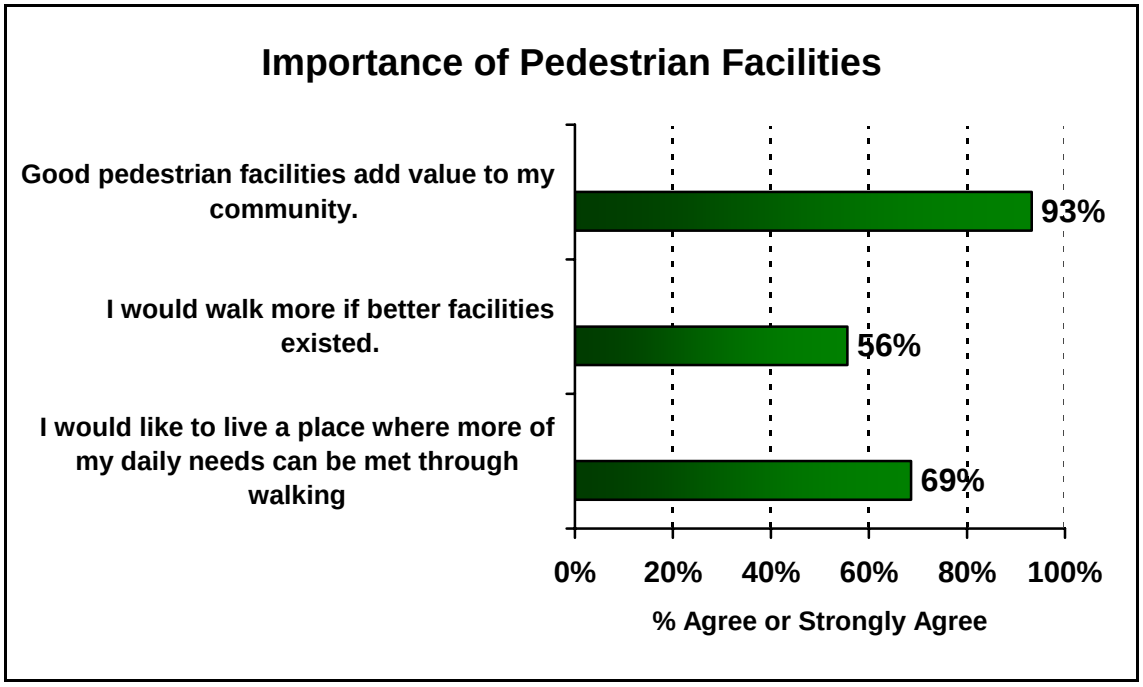


Figure 1: Importance of Pedestrian Facilities

It is very interesting to note that demographic characteristics, in terms of gender, age, household income, ethnicity, car ownership and land use (i.e. urban, suburban or rural) had very little effect on a respondent's opinions. In terms of the value placed on pedestrian

facilities, there were no significant relationships in regard to all demographic characteristics. In reference to wanting to walk more if better facilities existed, there were also no statistically significant relationships; however there were some noticeable trends. For example, women and respondents between 18 and 24 were slightly more likely to agree or strongly agree that they would walk more if better facilities existed. Suburban residents and whites were slightly less likely to agree or strongly agree they would walk more. While there were also no significant relationships on whether or not respondents would like more of their daily needs met by walking, there were some interesting differences. For example, urban dwellers and Hispanics were slightly more likely to want to walk more to meet their daily needs, and respondents over 65 years of age or earning over $100,000 annually were less likely to want to walk more to meet their needs.

As Figure 2 indicates, over two-thirds of Floridians (69%) agree or strongly agree that the government needs to spend more money on pedestrian facilities. However less than half believe that greater law enforcement is necessary to improve pedestrian safety. In fact, 45 percent of respondents disagreed or strongly disagreed that greater law enforcement is needed to improve pedestrian safety in their area.

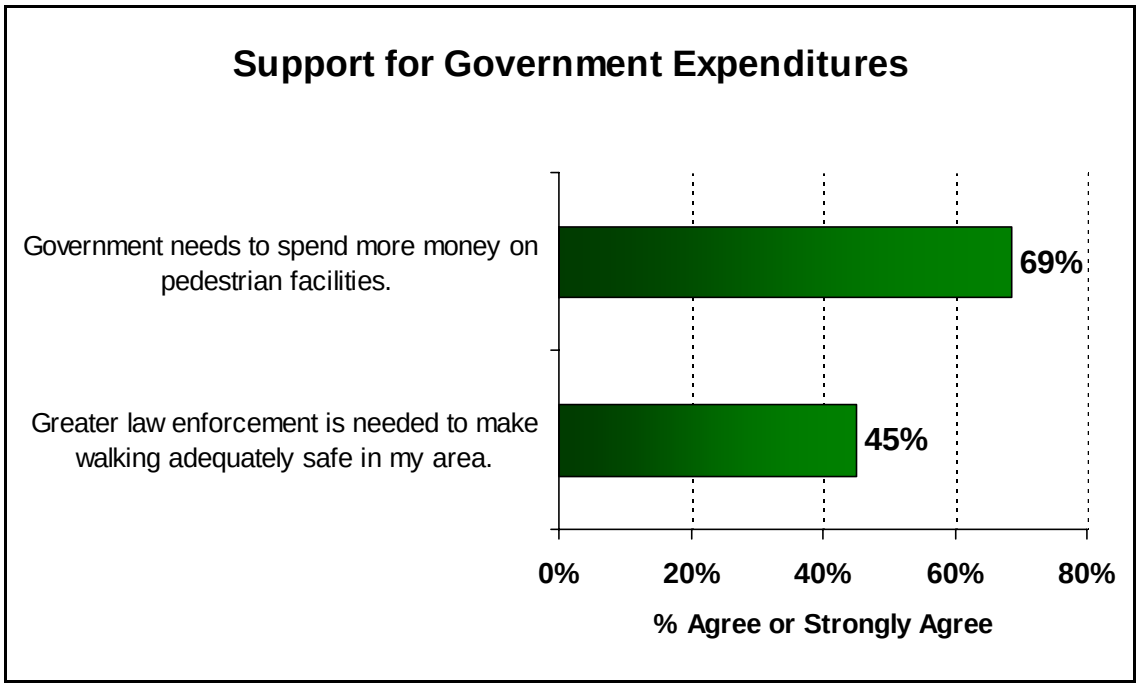


Figure 2: Support for Government Expenditures

As with the first set, demographic characteristics did not significantly influence a respondent's likelihood of agreeing or strongly agreeing on the need for more spending on law enforcement. However, women and urban dwellers were slightly more likely to agree or strongly agree that more money needs to be spent on pedestrian facilities, while whites and those earning over $100,000 per year were slightly less likely to see the need for increased government spending. Not surprisingly, women and those between the ages of 25 and 54, who are much more likely to have children under 16 living in the household, were slightly more likely to see the need for increased law enforcement.

Needed Pedestrian Improvements

While law enforcement is not necessary the primary method to improve walking in their area according to the respondents, there were a number of needed improvements identified by Florida residents. In the survey, respondents were asked what improvements were needed for pedestrian facilities in their area and the line of questioning allowed for up to three responses. The most common responses appear in Figure 3 below. Approximately 35 percent of answers expressed by respondents related to the need for more and better sidewalks. The next most common response was the call for safer and/or better crossing facilities. A number of respondents also called for better lighting along pedestrian facilities in their area, more recreational or multi-use paths, crime prevention and traffic calming. It is also interesting to note that respondents also included the provision of bike lanes on roadways as a means to improve pedestrian safety. Presumably, this is related to the need to shift bicycles from sidewalks and onto the road and reduce conflicts between bicyclists and other users.

It should be noted, however, that approximately 13 percent of respondents indicated that they did not know what improvements were needed, and several improvements (trees/landscaping, benches, water fountains, shade trees, signs, and road improvements) were suggested by about 1 percent of respondents or less.

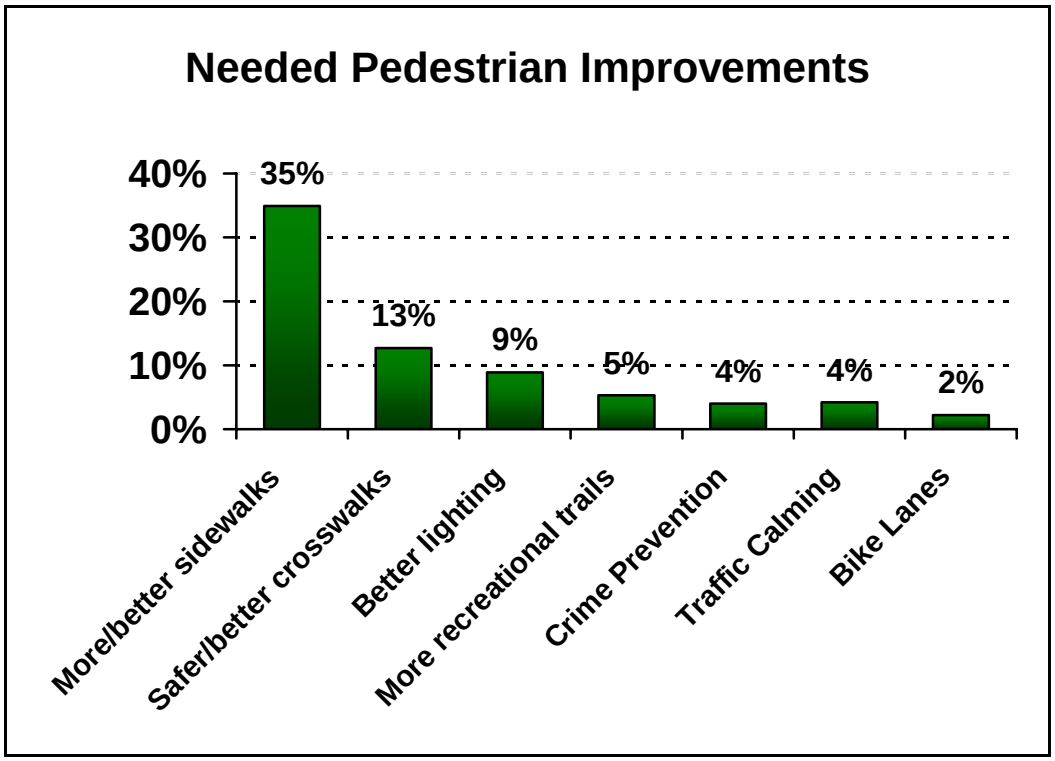


Figure 3: Pedestrian Improvements Most Needed in Your Area (multiple responses allowed)

Pedestrian Facilities on U.S./State Roads

Survey respondents were also asked if they were familiar with a state or U.S. road in their area. If they were not, they were provided five state or U.S. roads in their corresponding FDOT district. Respondents were asked their opinions on whether it is reasonably safe to walk on the road they identified, and if it is reasonably safe to cross it. They were also asked if there are adequate sidewalks on the road in question and whether they believed the surface was smooth and even, and adequately separated from the road.

In general, Floridians rate pedestrian facilities on state or U.S. roads relatively low. Only one in four residents agreed or strongly agreed that it is reasonably safe to walk along the road they identified. On the other hand, approximately two-thirds disagreed or strongly disagreed that it is reasonably safe to walk on the state or U.S. road they are most familiar with in their area. One reason for this low opinion of safety is that only 32 percent of residents agreed that there are adequate sidewalks on the road they identified, and 59 percent disagreed or strongly disagreed. Furthermore, just 35 percent of those surveyed agreed that the sidewalks that are present are smooth and have an even surface. Floridians had similar opinions on their ability to cross these roads. In total, approximately 63 percent disagreed or strongly disagreed that it is reasonably safe to cross the road in question. So although Floridians place a high value on sidewalks in their communities, they are in general dissatisfied with the quality and safety of sidewalks on U.S. and state roads in their communities. This is most likely the reason why survey respondents feel a need for greater government investment in pedestrian facilities.

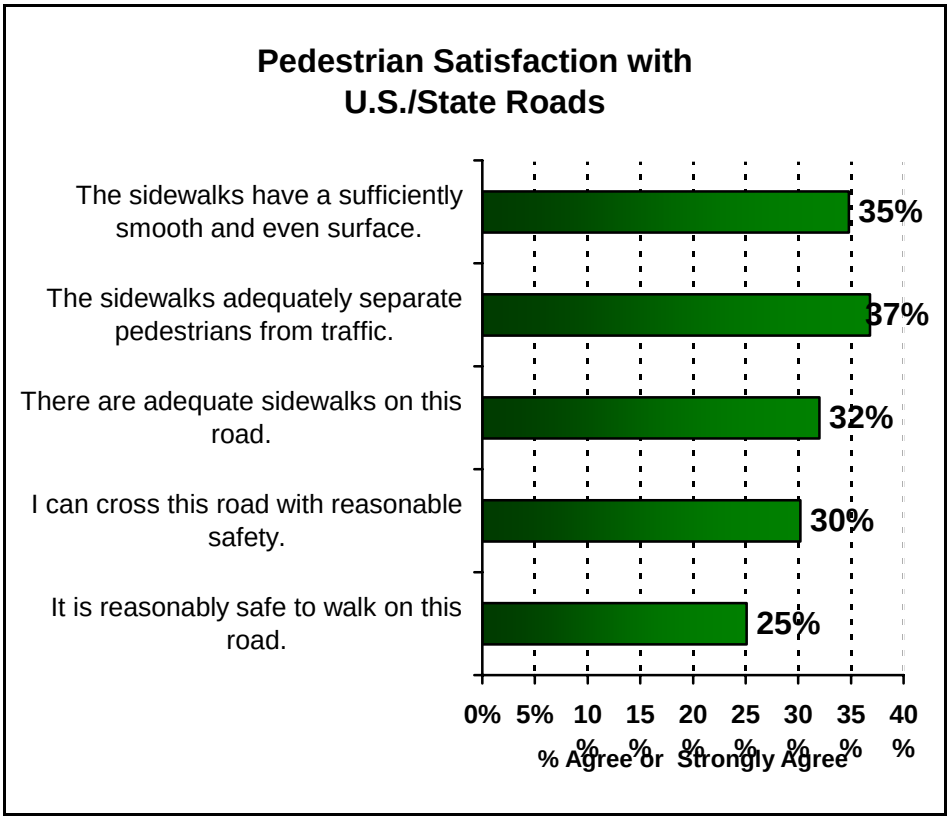


Figure 4: Pedestrian Satisfaction with U.S./State Roads

District-Level Findings

When examining responses at the district level, it is important to remember that the sampling error at the 95 percent confidence level is +/-6.8 percent. Therefore, any conclusions based on district level results should be used with caution. The roads listed in the following tables were selected by at least 20 respondents.

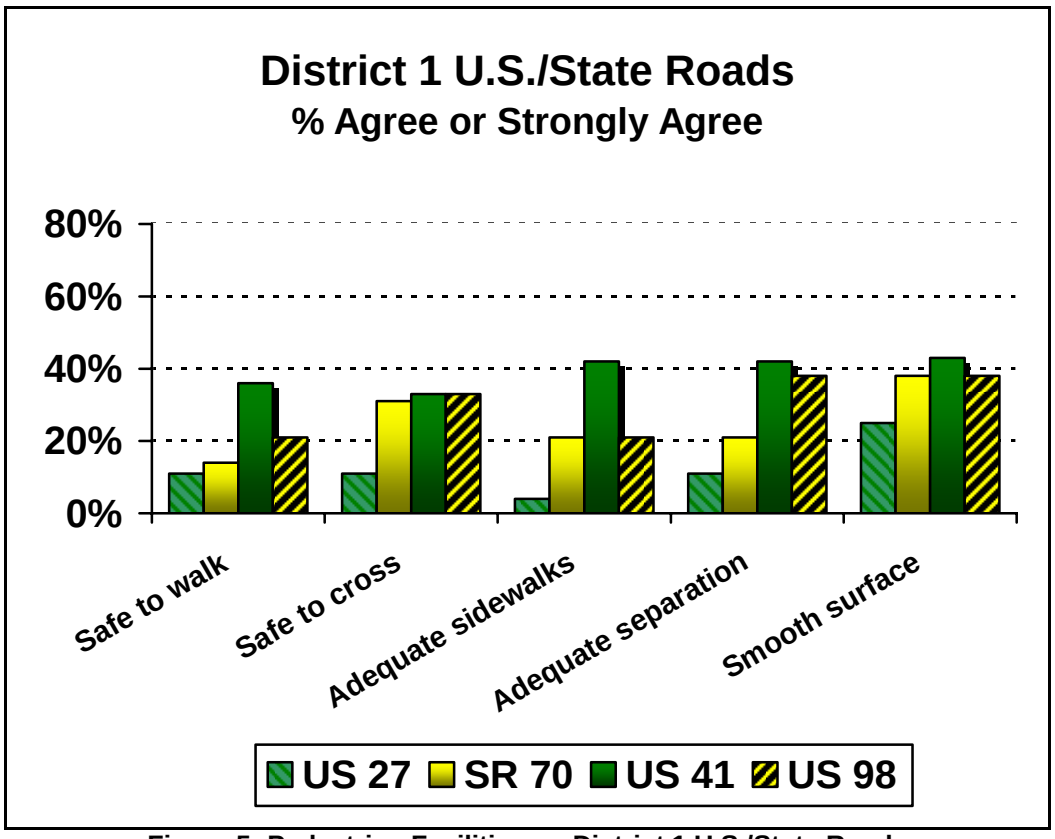


Figure 5: Pedestrian Facilities on District 1 U.S./State Roads

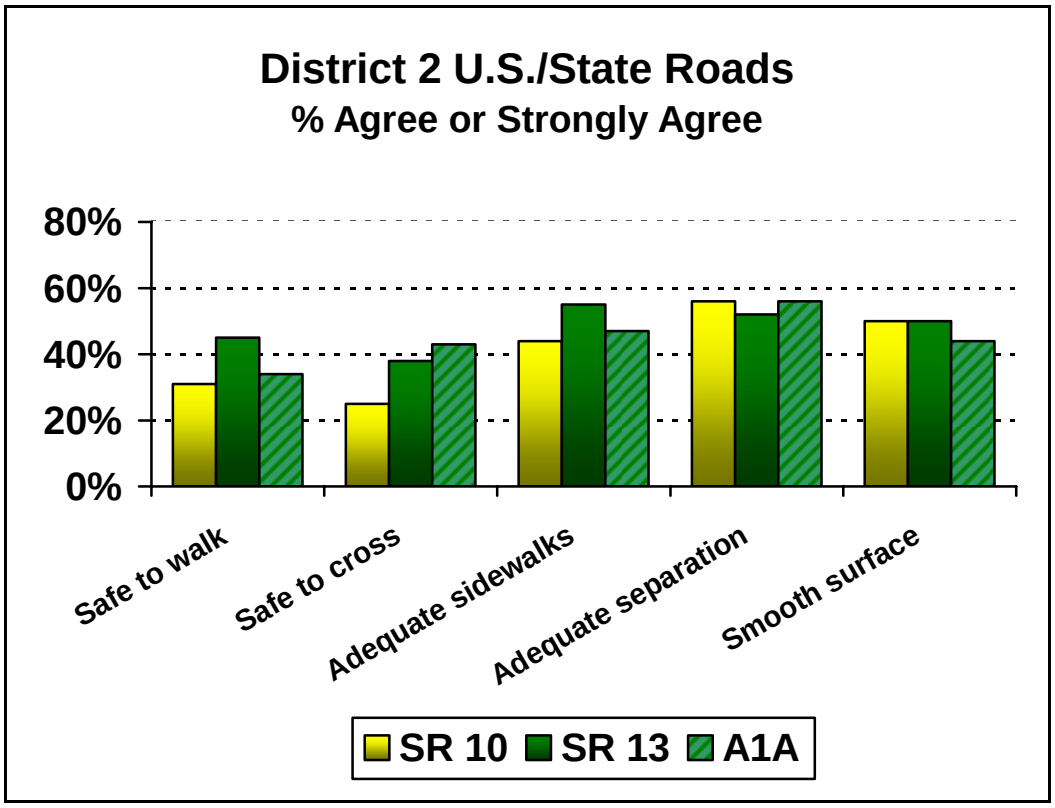


Figure 6: Pedestrian Facilities on District 2 U.S./State Roads

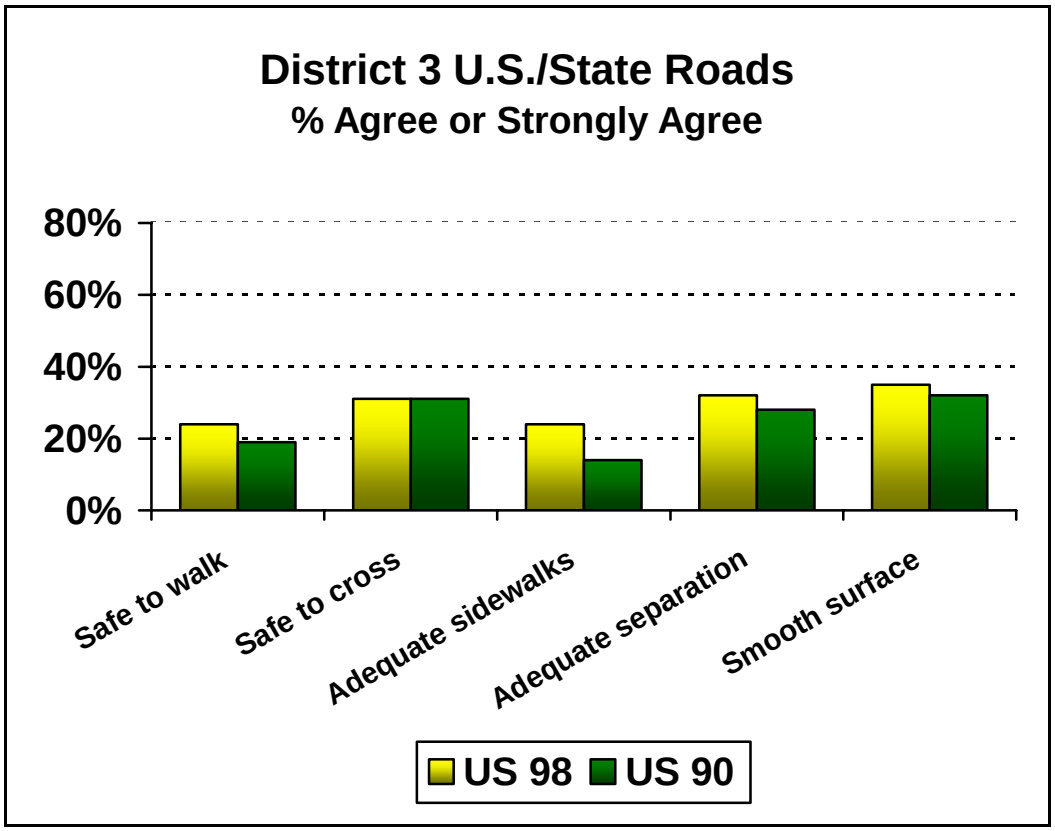


Figure 7: Pedestrian Facilities on District 3 U.S./State Roads

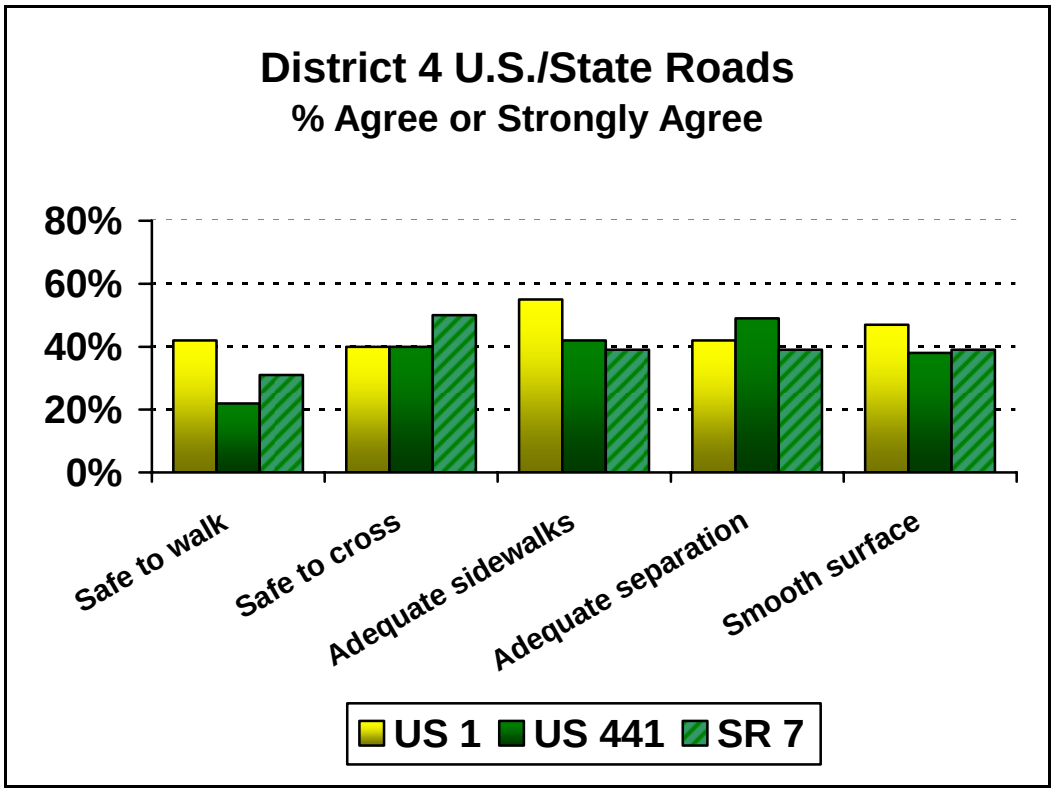


Figure 8: Pedestrian Facilities on District 4 U.S./State Roads

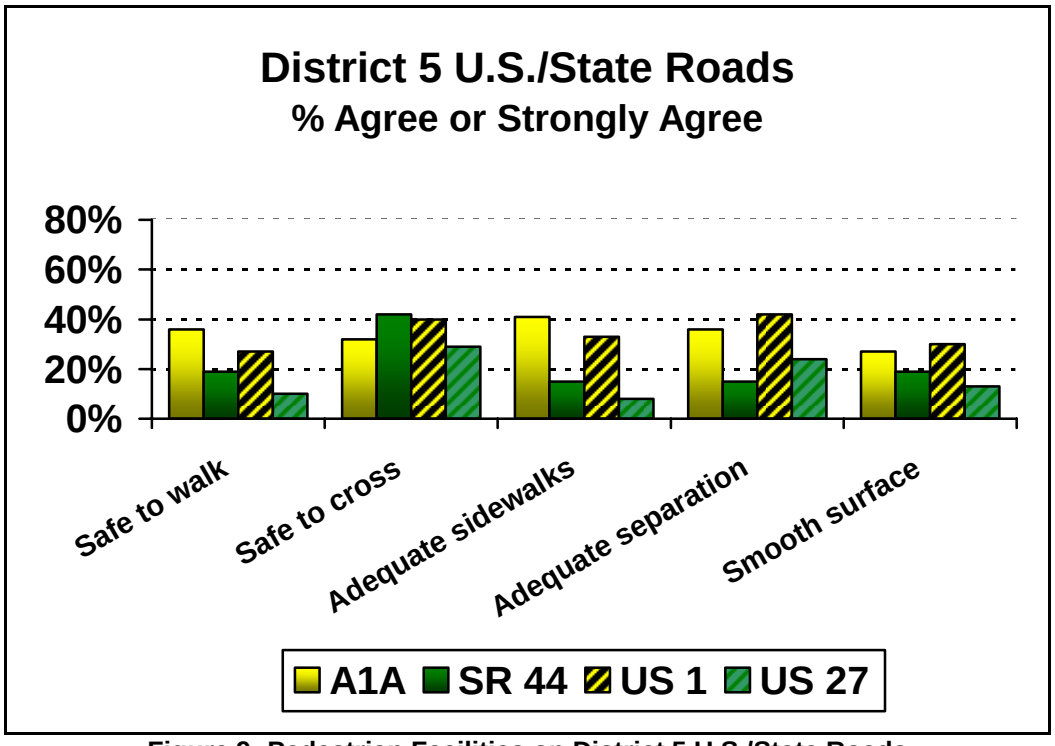


Figure 9: Pedestrian Facilities on District 5 U.S./State Roads

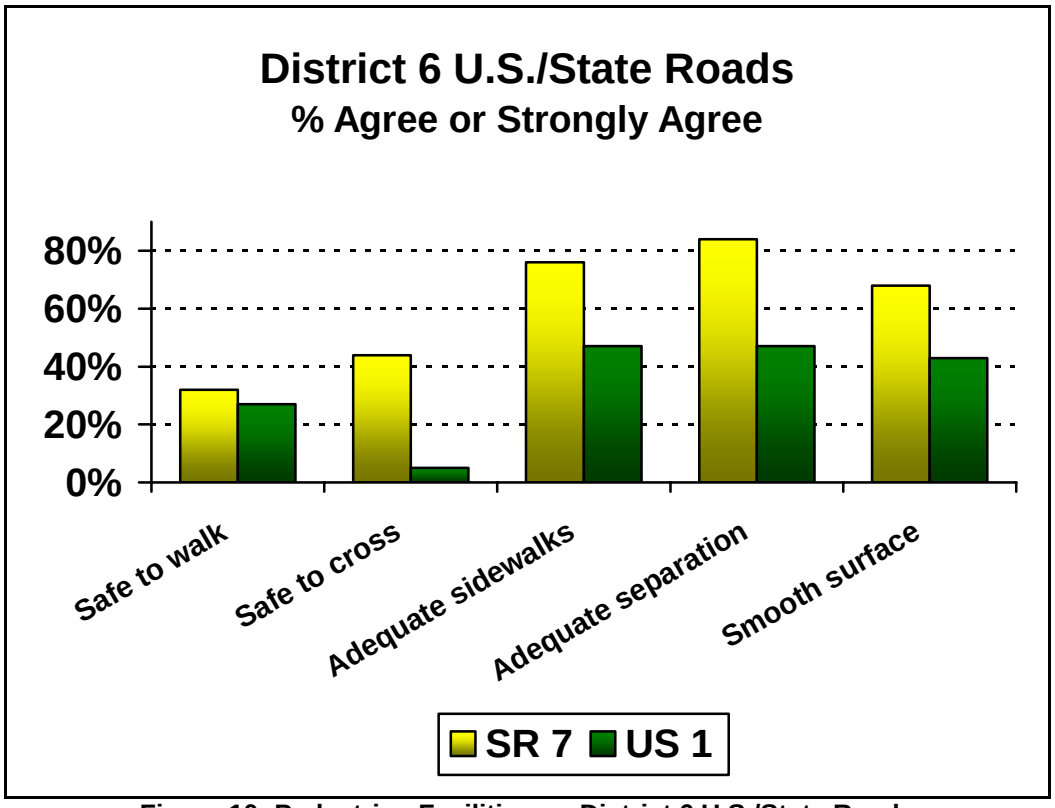


Figure 10: Pedestrian Facilities on District 6 U.S./State Roads

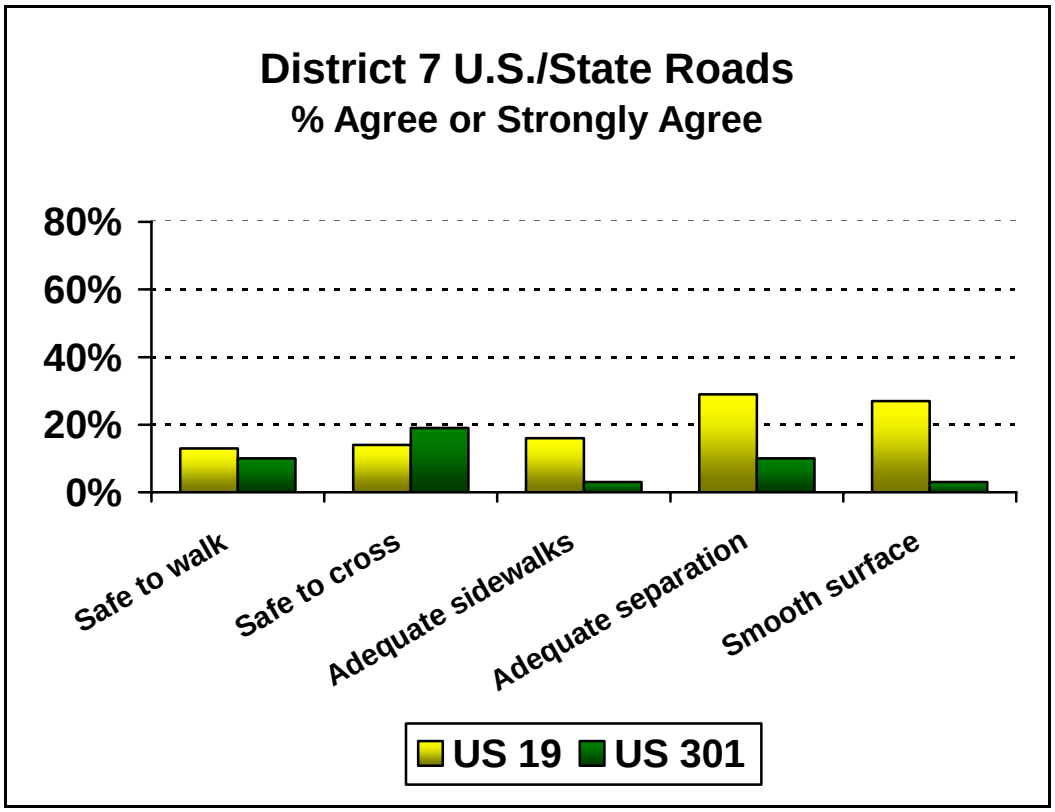


Figure 11: Pedestrian Facilities on District 7 U.S./State Roads

As Figures 5 through11 illustrate, low percentages of Florida residents agreed or strongly agreed that the U.S./state roads identified were safe to walk along or cross. For example, there were no selected roads in which over half of the respondents agreed or strongly agreed that it was safe to walk or cross them. There were only three identified roads for which half of the respondents agreed or strongly agreed that there were adequate sidewalks, SR 13 in District 2, U.S. 1 in District 4, and SR 7 in District 6. Over half of respondents agreed or strongly agreed that there is adequate separation between sidewalks and the roadway for just six roads--three in District 2, U.S. 441 in District 4, U.S. 1 in District 5, and SR 7 in District 6. Furthermore, there were just three roads for which half of the respondents agreed or strongly agreed that the sidewalks had smooth and even surfaces.

Pedestrian Facilities Conclusions

In general, Floridians place a high value on pedestrian facilities and would like more opportunities to walk in their communities. As a result, the majority of Floridians would like to see greater investment in pedestrian facilities. Specifically, they want more and better sidewalks, safer crossing facilities, and other improvements, such as better lighting, crime prevention, and traffic calming. It is very important to note that demographic characteristics, such as age, gender, ethnicity, income, and location did not significantly influence their opinions on pedestrian facilities.

In regard to U.S. or state roads, which are maintained by FDOT, approximately two-thirds of respondents disagreed or strongly disagreed that it was safe to walk along or cross the roads with which they were most familiar.

Bicycle Facilities Satisfaction

Of the 1750 respondents to the survey, 555 reported bicycling at least once per month or more. For the purpose of this research, those 555 respondents are considered to be bicyclists, while those that did not report bicycling once per month or more are non-bicyclists. Based on the sample size of the subpopulations, the sampling error for bicyclists is +/- 4.8 percent and +/-2.8 percent for non-bicyclists.

Bike Lane Satisfaction

Both bicyclists and non-bicyclists are familiar with bike lanes in their area, although bicyclists are significantly more likely to be familiar with them and use bike lanes. The majority of both bicyclists (70%) and non-bicyclists (53%) disagreed or strongly disagreed that there are enough bike lanes in their area. It is also interesting to note that approximately 40 percent of non-bicyclists agreed or strongly agreed that a greater network of bike lanes would encourage them to bicycle more. The figure below provides details on bike lane familiarity and adequacy. Detailed tables are located in Appendix B.

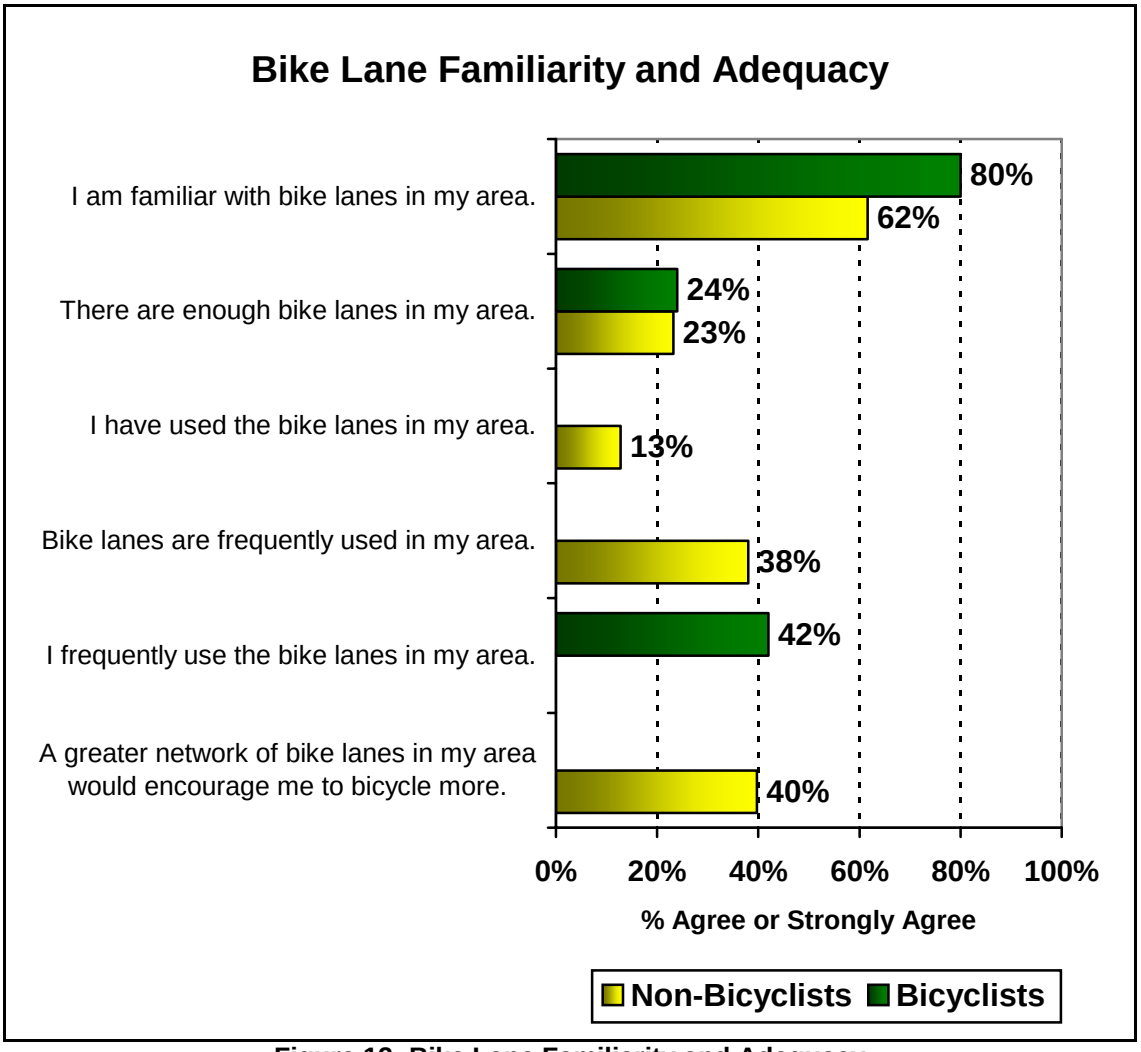


Figure 12: Bike Lane Familiarity and Adequacy

In regard to bike lane safety and maintenance, both bicyclists and non-bicyclists share similar opinions that bike lanes make it safer to bicycle and share the road with cars. The vast majorities of both groups agreed or strongly agreed that bike lanes should be standard features on Florida roads and should be signed and marked. However, bicyclists were significantly more likely to agree or strongly agree that bike lanes should be standard design features on Florida roads. Only 18 percent of non-bicyclists disagreed or strongly disagreed that bike lanes should be standard features on Florida roads.

Approximately two-thirds of both groups also agreed or strongly agreed that bike lanes make it safer to share the road with cars, but 52 percent of bicyclists disagreed or strongly disagreed that it was safe to bicycle in the bike lanes in their area. Just 36 percent of bicyclists agreed or strongly agreed that it is safe to access the bike lanes in their area. Only half agreed or strongly agreed that the bike lanes in their area are well maintained, and 33 percent disagreed or strongly disagreed that the bike lanes are well maintained. Figure 13 below highlights these views.

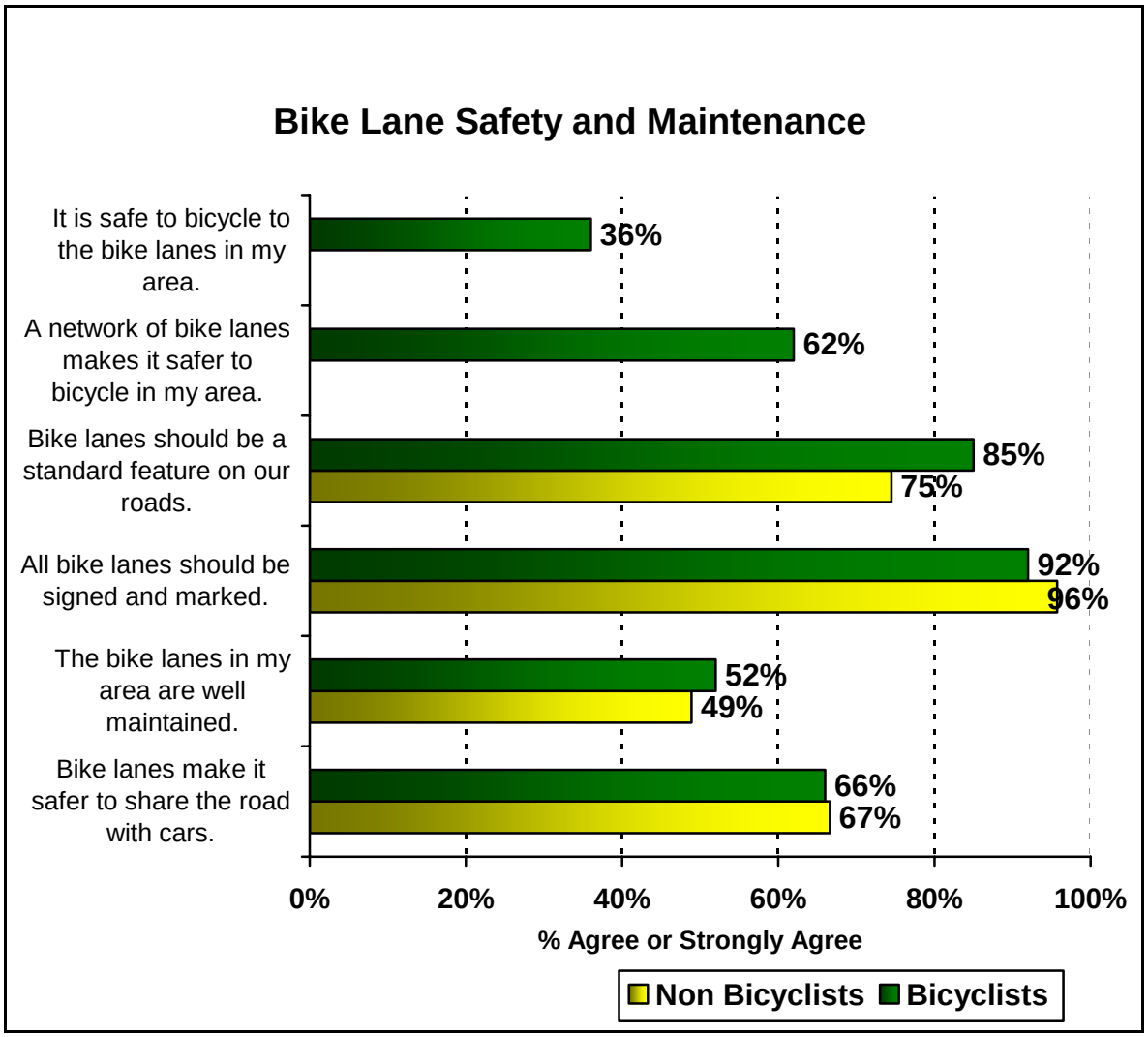


Figure 13: Bike lane Safety and Maintenance

Multi-Use Path Satisfaction

Bicyclists are more likely to have used multi-use paths in their area and to have the perception that multi-use paths are frequently used than non-bicyclists. However, the majority of both bicyclists (60%) and non-bicyclists (51%) disagreed or strongly disagreed that there are an enough multi-use paths in their areas. In fact, 44 percent of non-bicyclists agreed or strongly agreed that a greater network of multi-use paths would encourage them to bicycle more. See Figure 14 for details.

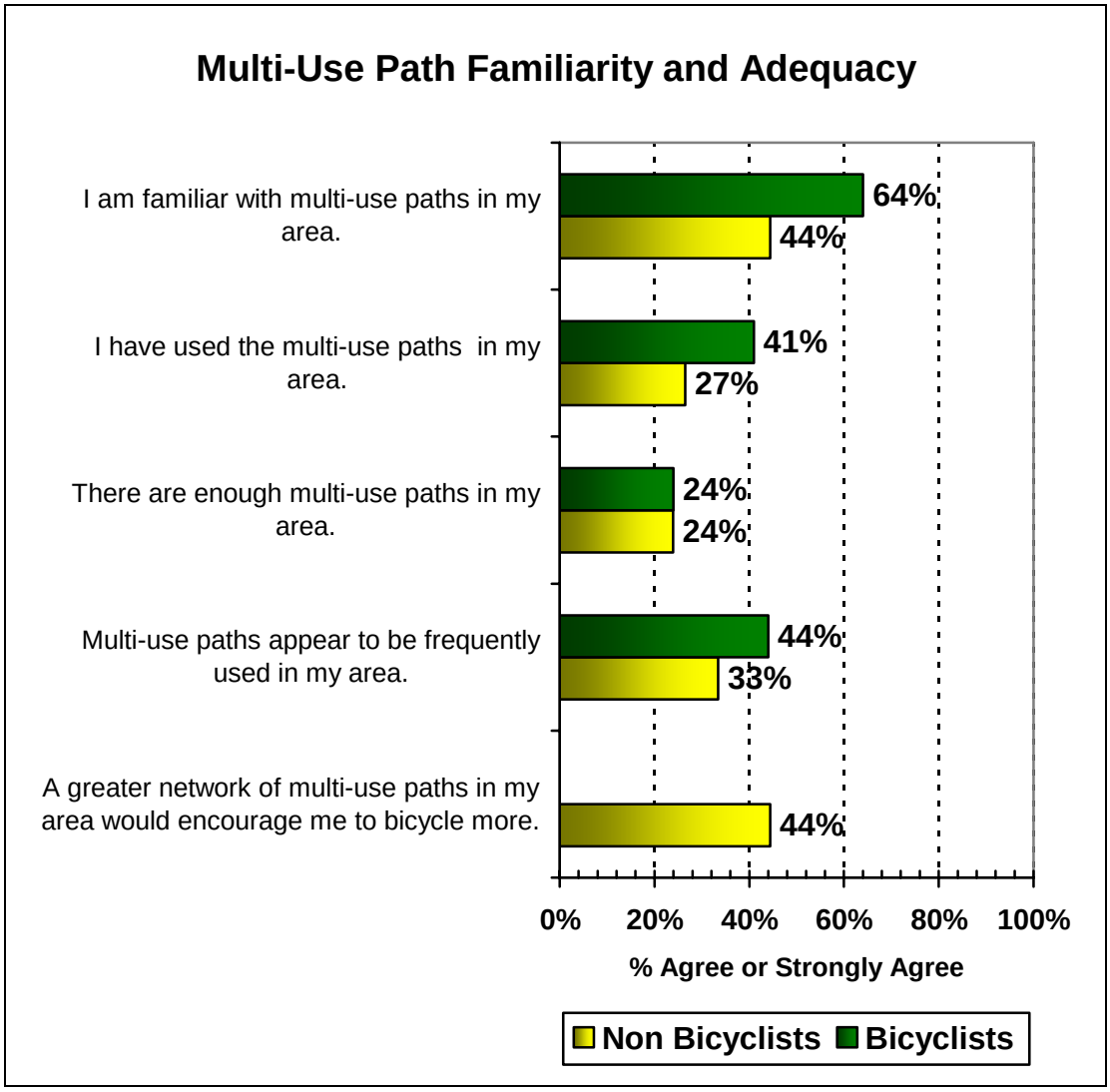


Figure 14: Multi-Use Path Familiarity and Adequacy

In regard to the safety and maintenance of multi-use paths, bicyclists were more likely to agree or strongly agree with each statement in Figure 15 below and, in general, view multi-use paths as safer and better maintained than non-bicyclists.

It is important to note that less than half of non-bicyclists agreed or strongly agreed that it is safe to bicycle to multi-use paths. This highlights the need to provide safe access to multi-use paths by bicycle through a network of on-road facilities.

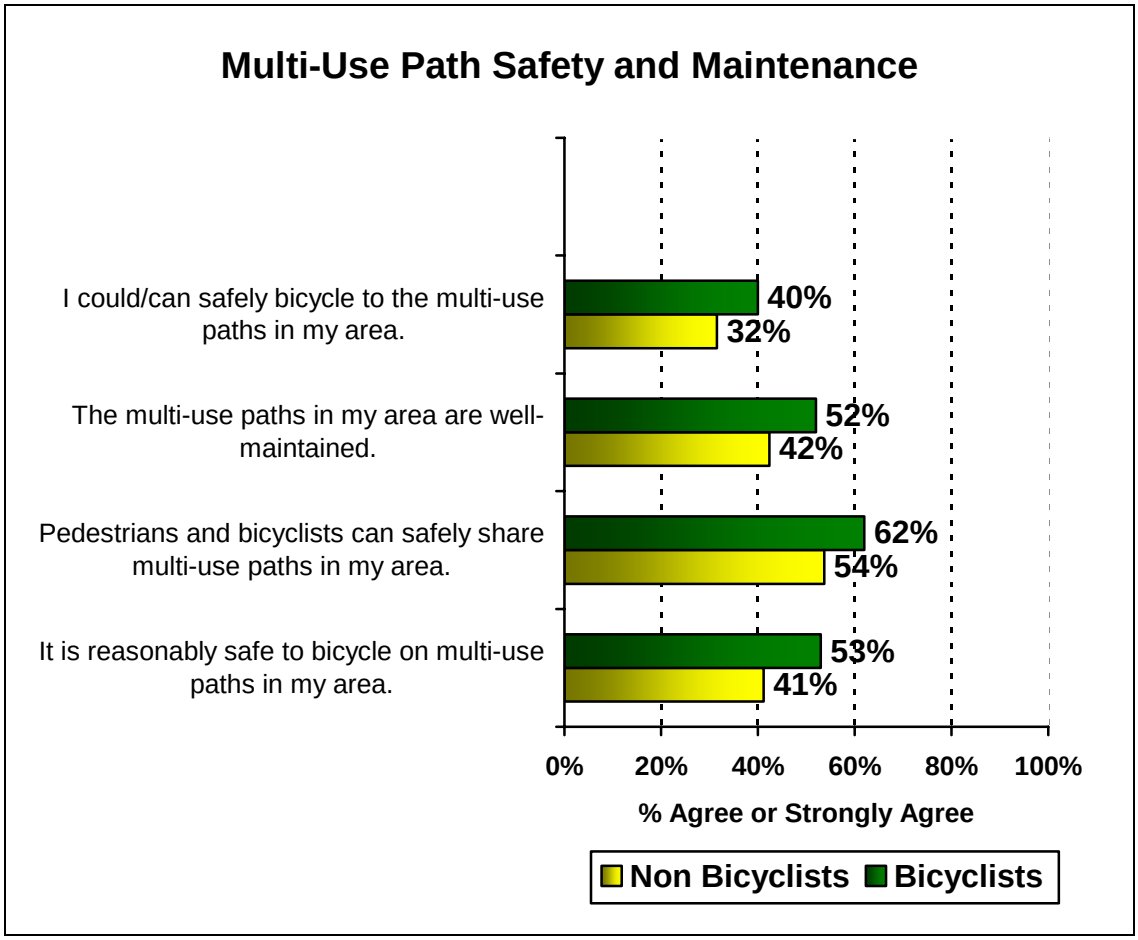


Figure 15: Multi-Use Path Safety and Maintenance

It is important to note that there were no statistically significant differences between bicyclists and non-bicyclists in regard to opinions on multi-use paths.

General Bicycle Facilities

In general, the vast majority of both bicyclists and non-bicyclists agreed or strongly agreed that bicycle facilities are valuable to a community, although more bicyclists agreed or strongly agreed that the government needs to spend more money on bicycle facilities than non-bicyclists. Bicyclists were significantly more likely to agree or strongly agree with the statements “Good bicycle facilities add value to any community” and “Government needs to spend more money on bicycle facilities” than non-bicyclists. Still over half of non-bicyclists agreed that more money is needed to improve bicycle safety. As with the pedestrian

facilities findings, the demographic characteristics of the respondents do not significantly influence their opinions on bicycling facilities in general. However, it appears that individuals from households in the highest income category placed a higher value on bicycle facilities. This was not the case in regard to investing in pedestrian facilities, in which households earning over $100,000 per year were less likely to agree or strongly agree that the government should spend more money on pedestrian facilities. It is important to note that the differences were not statistically significant in regard to the relationship between household income in general and opinions on the need for more government spending.

Both bicyclists (62%) and non-bicyclists (55%) tended to disagree or strongly disagree that motorists adequately respect the right of bicyclists to ride on the road. Just over half of non-bicyclists agreed or strongly agreed that bicyclists generally obey traffic laws. Only 37 percent of bicyclists agree or strongly agree that there is adequate bicycle parking at their destinations, despite the fact that bicycle parking is an important factor in being able to use a bicycle to meet daily needs as well as commute to work.

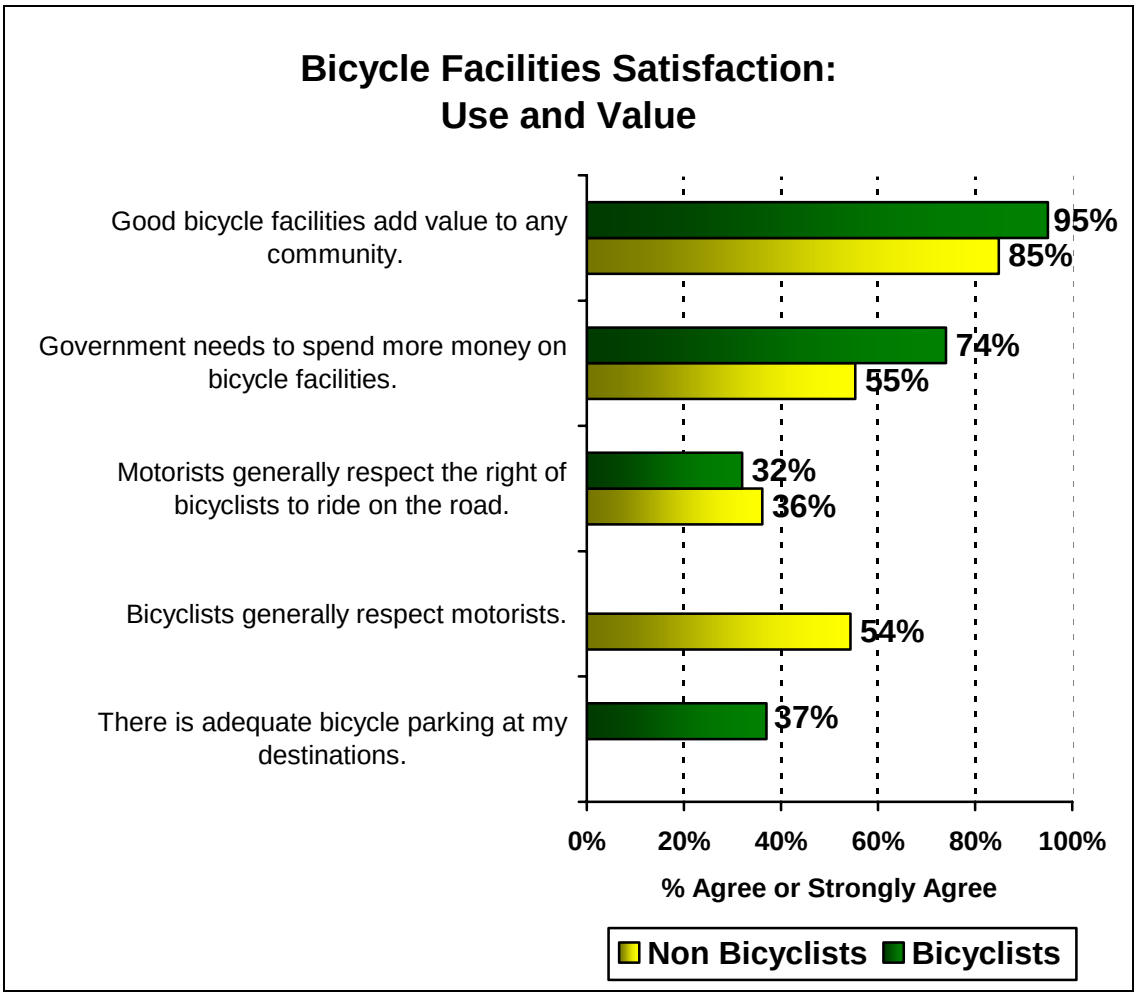


Figure 16: Bicycle Facilities Satisfaction: Use and Value

In terms of general safety and law enforcement issues, there is little difference between bicyclists and non-bicyclists. Nearly half of both bicyclists and non-bicyclists agreed that it is safe for children to bicycle in their neighborhood. Only a quarter of non-bicyclists agreed or strongly agreed that it is safe for children to bicycle to school in their area. Approximately 67

percent of non-bicyclists disagreed or strongly disagreed that it was safe for children to bicycle to school in their area.

Just over half of both bicyclists and non-bicyclists agreed or strongly agreed that more law enforcement is needed to improve bicycle safety. Figure 17 below illustrates the opinions of respondents on issues of safety and law enforcement.

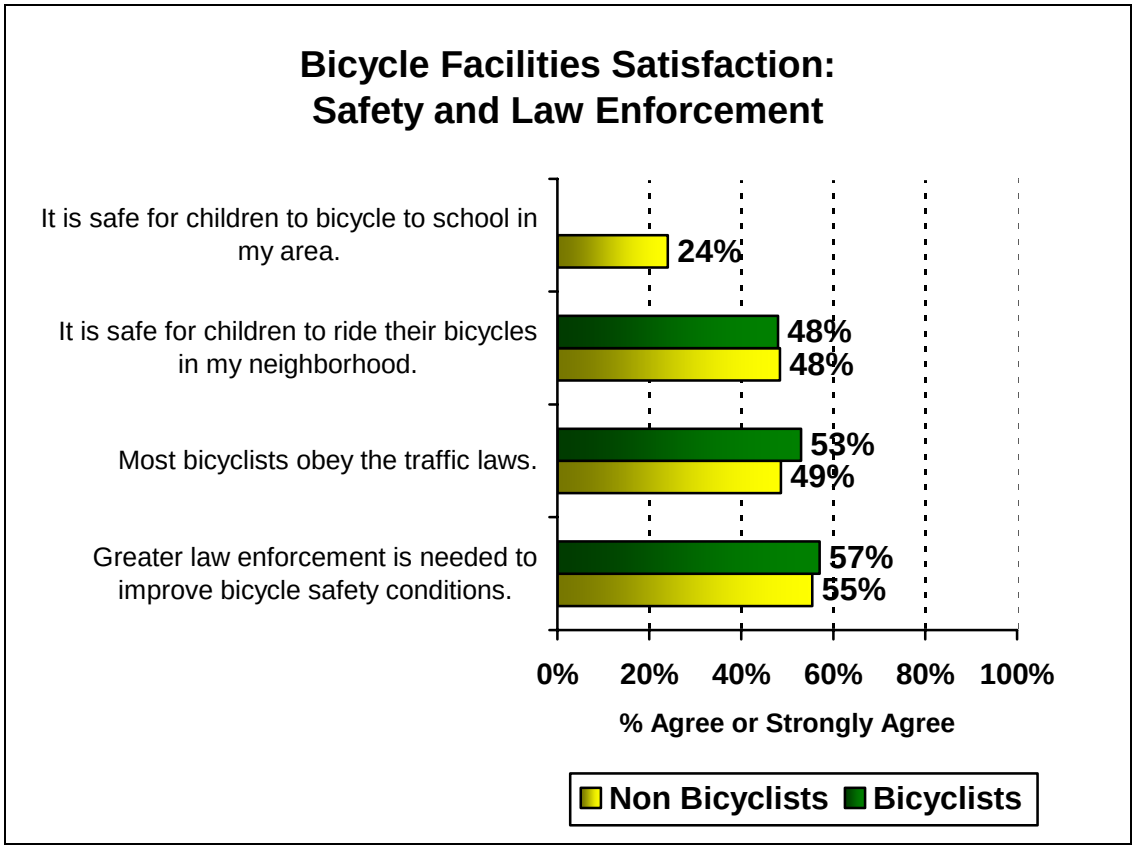


Figure 17: Bicycle Facilities Satisfaction: Safety and Law Enforcement

Needed Bicycle Improvements

Both non-bicyclists and bicyclists were asked what kinds of improvements were needed to improve bicycling in their area. The question was open-ended and allowed up to three responses.

For non-bicyclists, the most common responses were more and improved bike lanes (25%) as well as more and improved multi-use paths (19%). Nearly 23 percent of non-bicyclists, however, said they did not know what improvements were needed. Several improvements (trees/landscaping, signs, traffic calming, more recreational facilities, and placing a barrier between cars and bicyclists) were suggested by about 2 percent of respondents or less. In addition, 8 percent of non-bicyclists suggested other improvements, none of which amounted to more than 1 percent of the total responses. It is important to note that all but the first two responses are in the magnitude of the error margin and statistically insignificant.

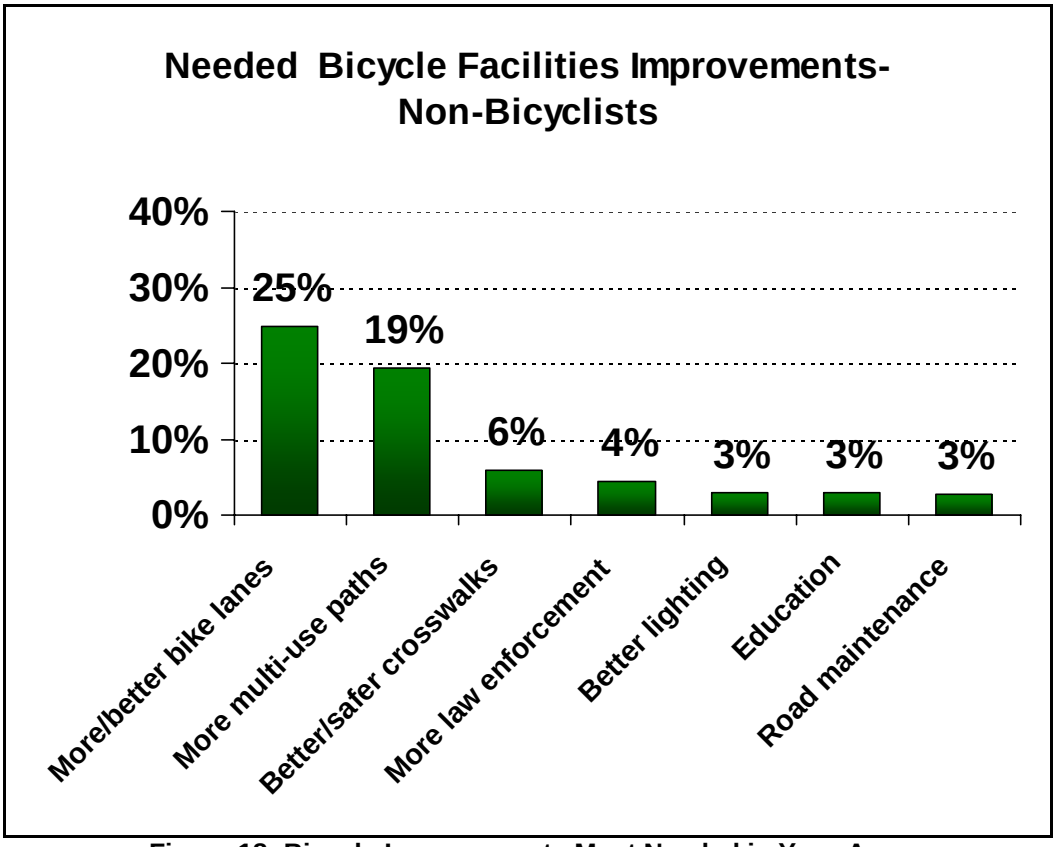


Figure 18: Bicycle Improvements Most Needed in Your Area (multiple responses allowed)

For bicyclists, the most common responses were more and improved multi-use paths (31%) as well as more and improved bike lanes (24%). It is interesting to note that more non-bicyclists suggested bike lanes more often, while bicyclists more often suggested multi-use paths. Several improvements (trees/landscaping, signs, and traffic calming) were suggested by about 1 percent of respondents or less. It should be noted that 3 percent of bicyclists indicated that no improvements are needed, and 3 percent of bicyclists said they did not know what improvements are needed.

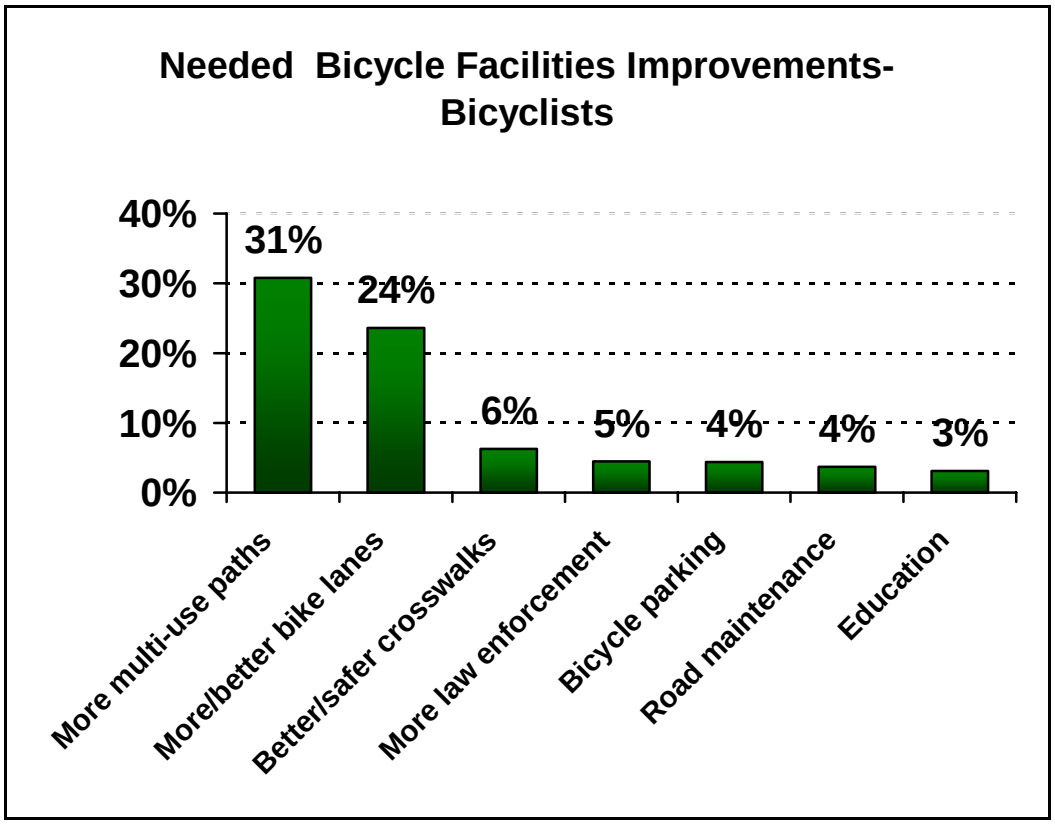


Figure 19: Improvement Most Needed for Bicycle Facilities (multiple responses allowed)

U.S./State Road Bicycle Facilities

Of the 555 bicyclists that completed the survey, just 28 were familiar with a U.S. or state road in their area with bike lanes, even with help of a list provided by the FDOT district coordinators. As a result, no statistically valid conclusions can be inferred from this small sample in which only a few roads were rated by more than one respondent. Therefore, the data is presented in aggregate without references to specific roads in specific districts.

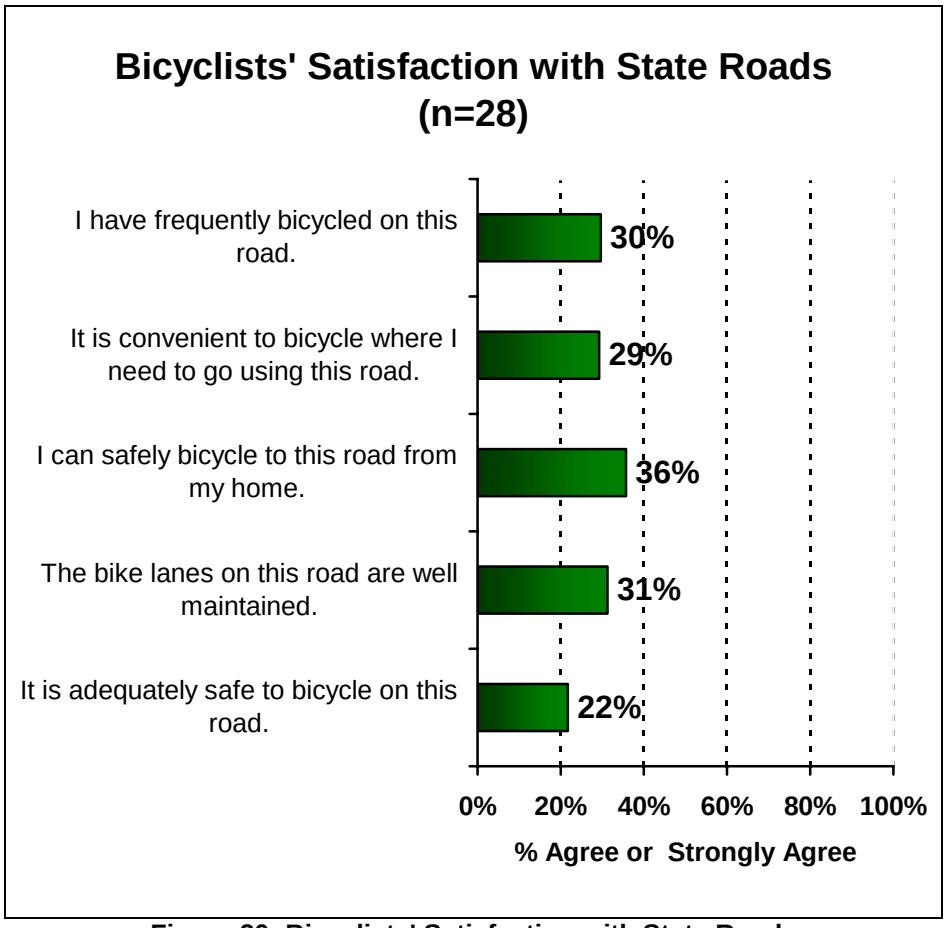


Figure 20: Bicyclists' Satisfaction with State Roads

As Figure 20 indicates, most bicyclists do not believe it is safe to bicycle on the U.S. or state roads with which they are most familiar. In fact, 65 percent of bicyclists disagreed or strongly disagreed that it was safe to bicycle on that specific road. The bicyclists surveyed also indicated that is was generally unsafe to access these roads by bicycle and that bike lanes were not adequately maintained. However, it is important to note that only 30 percent of the bicyclists, who were able to identify a U.S. or state road with which they are familiar, reported that they frequently bicycled on the road in question.

Bicycle Facilities Conclusions

In general, both bicyclists and non-bicyclists place a high value on having bicycle facilities in their area, but view bicycling as unsafe, especially for children. Both groups also agree that more and better on and off-road bicycle facilities are needed, and that the government should increase investment in bicycle facilities.

The majority of both bicyclists and non-bicyclists believe that bike lanes make it safer to share the road with motorists and that bike lanes should be signed and marked and a standard feature on Florida roads. For many non-bicyclists a greater network of both bike lanes and multi-use paths would encourage them to bicycle more.

While many bicyclists and non-bicyclists have used the multi-use paths in their area, most believe that it is relatively unsafe to access them by bicycle. This suggests that a network of on-road bike lanes is needed for Floridians to access the off-road trails in their communities.

While there were some statistically significant differences between bicyclists and non-bicyclists, it is surprising that there were no statistically significant differences between respondents in terms of age, ethnicity, education, residence location, number of working vehicles, or level of income.

Bicycling Behavior

This survey also provided an opportunity to gather data on the bicycling behavior of Florida residents. This kind of data, particularly exposure data, is generally lacking in the field of bicycle safety research despite its importance in determining the risk associated with different kinds of facilities. As a result, the survey was designed to collect a variety of information on bicycling behavior. Since the results in this section are not used to estimate statewide averages, and they are not weighted, but instead represent the actual responses of the 555 respondents that reported bicycling once per month or more.

Bicycle Trip Purpose

Bicyclists were asked how often they bicycle in regard to trip purpose, specifically, bicycling for exercise, recreation, shopping or errands, visits to friends or family, accessing transit, and commuting to work or school. Figure 21 below illustrates the percent of bicyclists that reported bicycling either daily or weekly for specific trip purposes. Additional tables on bicycle trip purpose are located in Appendix C.

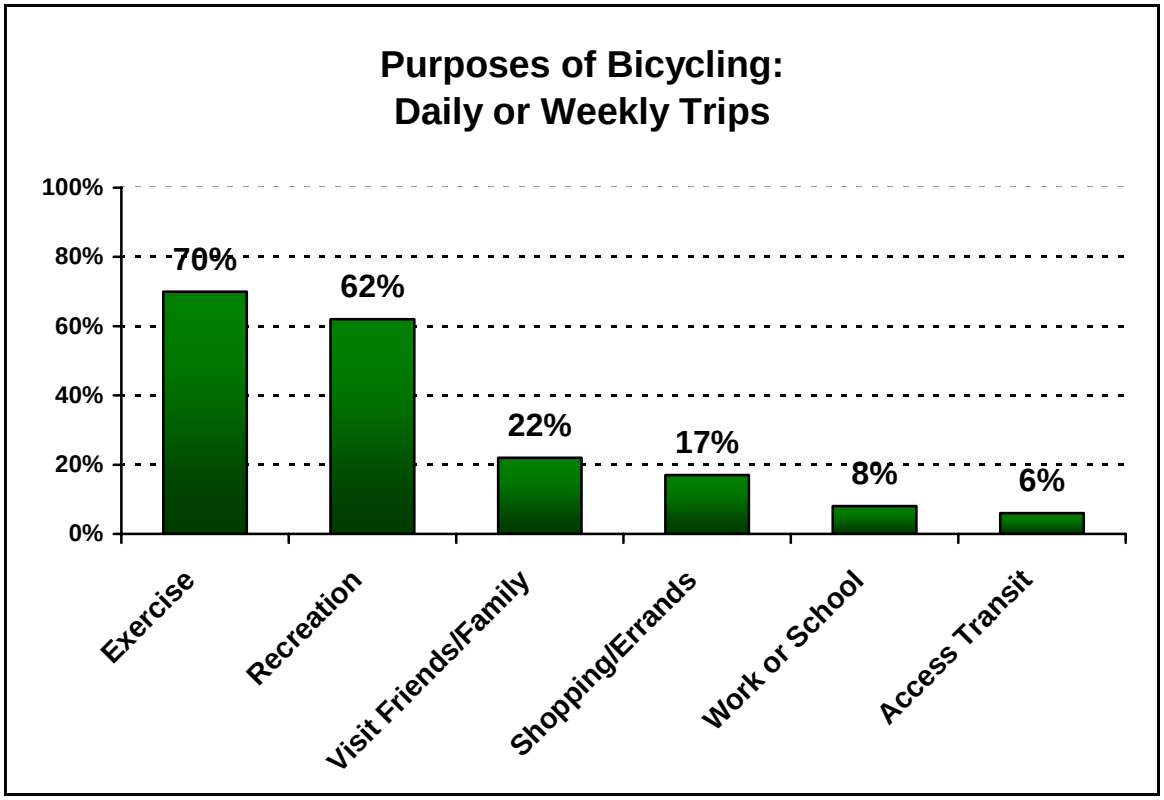


Figure 21: Bicycle Trip Purpose

Bicycle Commuting

If respondents reported bicycling to work or school daily, weekly or monthly, they were also asked how often and the distance bicycled (See Figure 22 below). A total of 67 bicyclists reported bicycling to school or work daily, weekly or monthly. Of these, approximately 37 percent bicycle commute one to five days per month, and 16 percent commute six to ten days per month. Just under half of bicycle commuters average 11 or more days per month, with a quarter of all bicycle commuters biking to work or school 21 days or more per month, which means that they can be classified as "daily bicycle commuters."

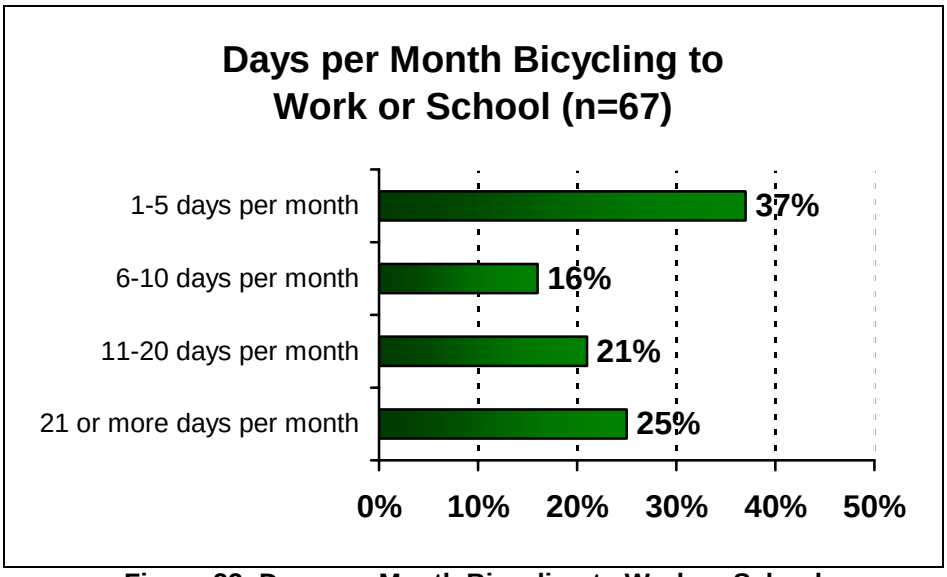


Figure 22: Days per Month Bicycling to Work or School

Approximately 70 percent of bicyclists commuting to work or school travel under 5 miles one-way. Another 24 percent bicycle five to ten miles one way, and 6 percent bicycle over ten miles one way. The mean one-way bicycle distance is 4.27 miles.

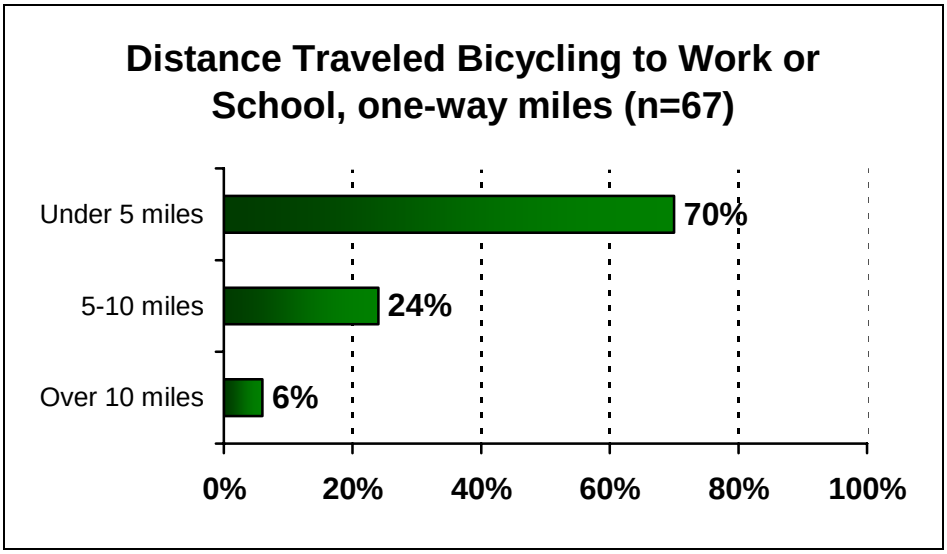


Figure 23: Distance Traveled Bicycling to Work or School

Frequency and Bicycle-Miles Traveled

All bicyclists were asked how many days per month they bicycled for any reason and to estimate the total number of miles they bicycle on average per month. Approximately 36 percent reported that they bicycle one to five days per month on average. Just over half reported bicycling between six and twenty days per month, and 13 percent bicycled on average 21 or more days per month. Figure 23 below provides more details.

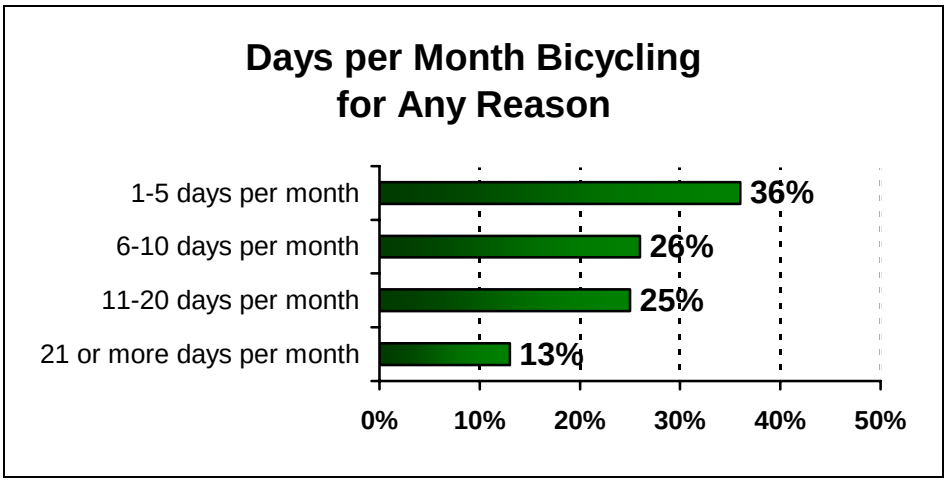


Figure 24: Days per Month Bicycling for Any Reason

As the figure below indicates, bicyclists reported a wide range of average monthly bicycle-miles traveled. Over a quarter of bicyclists reported bicycling less than 10 miles per month on average. However, 22 bicyclists reported averaging over 400 miles per month. For all bicyclists, the mean for the number of miles bicycled per month was 73, and the median value was 30 miles per month. The mean is the average of all responses, while the median is the middle value, meaning 50 percent reported bicycling under 30 miles per month, and 50 percent reported bicycling over 30 miles per month.

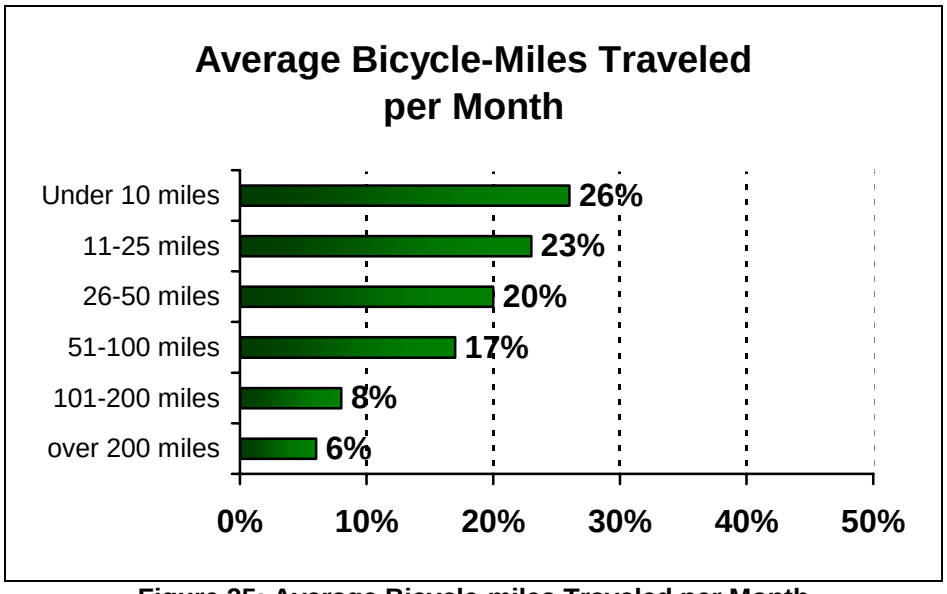


Figure 25: Average Bicycle-miles Traveled per Month

Bicycle Facilities Used

To examine exposure, bicyclists were asked to estimate what percent of their monthly bicycle-miles travelled were done on different types of facilities, specifically, on roads with bike lanes, roads without bike lanes, multi-use paths, and sidewalks.

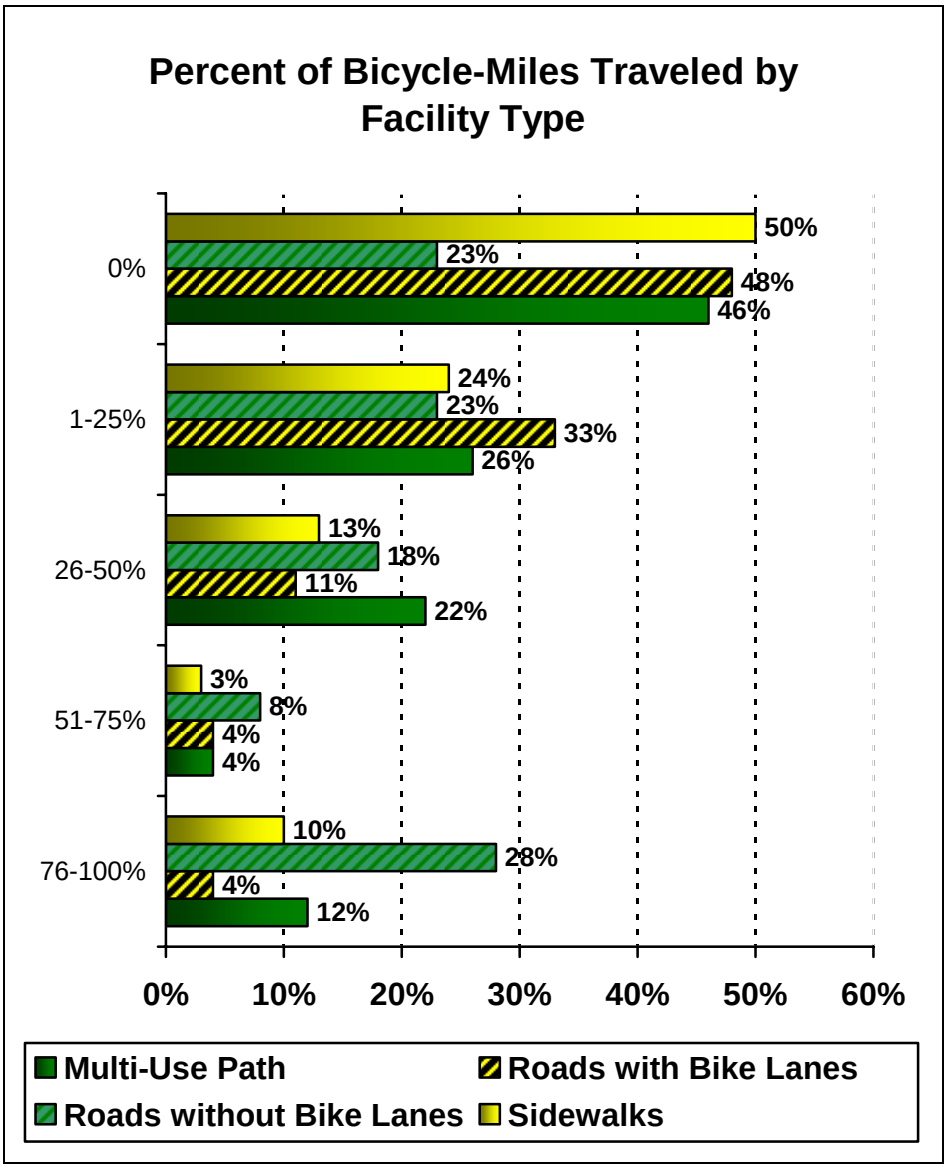


Figure 26: Percent of Bicycle-miles Traveled by Facility Type

The data provided in Figure 26 reveal that most of the bicycle-miles traveled by respondents takes place on roads without bike lanes, and that many of the bicyclists surveyed may not have the opportunity to ride in bike lanes or on multi-use paths. It can be assumed that most have the opportunity to bicycle on sidewalks but make a conscious decision to avoid bicycling on sidewalks. The figure also reveals that the least amount of bicycle-miles traveled may be on roads with bike lanes because 48 percent of respondents reporting that they do not use bike lanes at all. Furthermore, 33 percent indicated that less than a quarter of their average monthly bicycle-miles traveled is done in bike lanes, and just eight percent reported the over 50 percent of their bicycling is done in bike lanes. The low use of bike

lanes is probably related to the lack of bike lanes in residential areas where many bicyclists ride for exercise and/or recreation.

The mean percentages of bicycle-miles traveled on each type of facility indicate that the "average" Florida bicyclist cycles approximately 43 percent of their monthly bicycle-miles on roads without bike lanes, 22 percent on multi-use paths, 20 percent on sidewalks, and 15 percent on roads with bike lanes.

Bicycling Ability

Due to the influence of bicycling experience on perceptions of safety and risk, bicyclists were read three statements and asked to identify which statement best described their level of comfort.

1. *I feel comfortable riding under most traffic conditions, including major streets with busy traffic and higher speeds.*
2. *I only feel comfortable riding on streets with less traffic and lower speeds, or on streets with bike lanes.*
3. *I only feel comfortable riding on multi-use paths or sidewalks.*

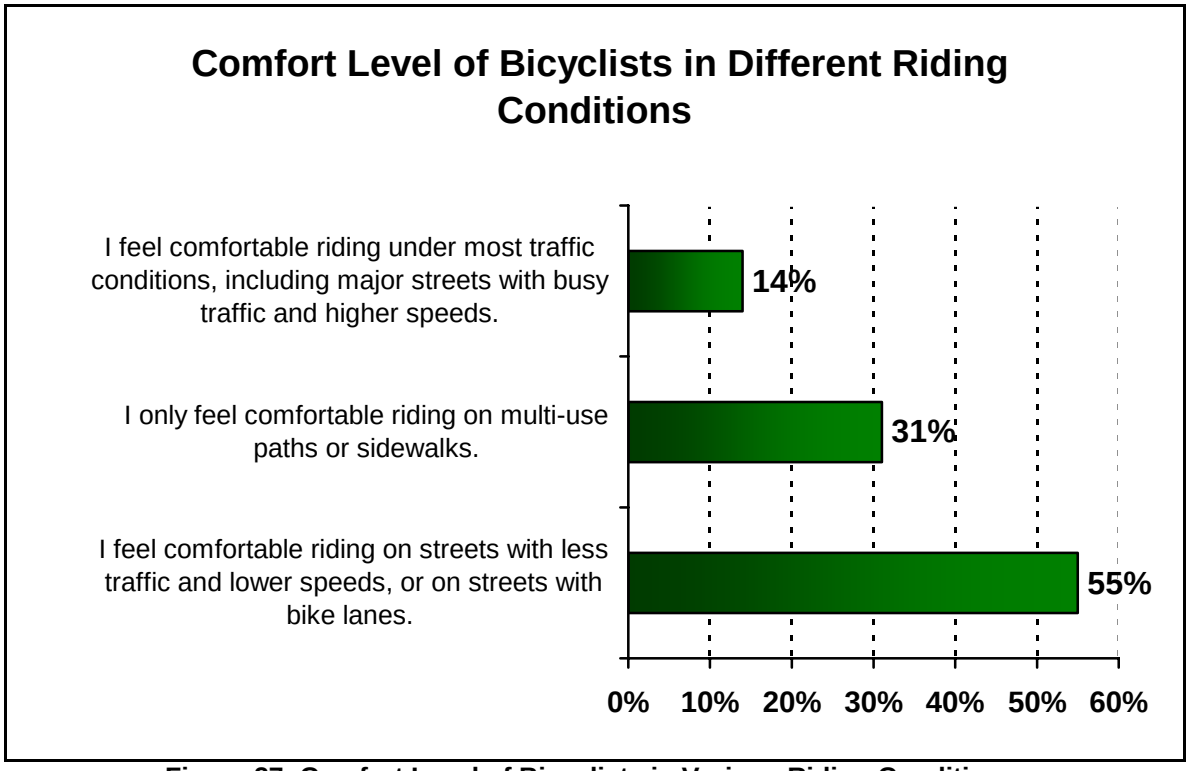


Figure 27: Comfort Level of Bicyclists in Various Riding Conditions.

The most experienced bicyclists, those that felt comfortable riding under most traffic conditions, were least likely to use sidewalks, and most likely to combine riding on roads with or without bike lanes. The least experienced bicyclists, those that felt comfortable only on multi-use paths or sidewalks, were indeed significantly more likely to bicycle on sidewalks and multi-use paths and significantly less likely to ride on roads with or without bike lanes. Bicyclists that described themselves as comfortable riding on roads with low traffic and/or lower speed bicycled most of their miles on roads without bike lanes and tended to avoid bicycling on sidewalks like their more experienced counterparts. It is likely that many the bicycle-miles traveled of all but the most experienced cyclists occur in neighborhoods that do not have bike lanes or sidewalks available.

Approximately 25 percent of the most experienced bicyclists rode over 100 miles per month, compared to 15 percent of those who were comfortable only on sidewalks or multi-use paths.

Involvement in Bicycle-Motor Vehicle Crashes

Bicyclists were asked about any crashes with motor vehicles they had experienced in the last five years, what kind of facility they were using when the crash occurred, and whether or not the police were notified of the crash. The type of facility being used at the time of the crash is a key factor in determining the relative safety of different facilities. Bicyclists were asked whether the police were notified of the crash so as to assess the extent to which bicycle-motor vehicle crashes are under-reported. Data was not collected on injury severity.

Of the 555 bicyclists surveyed, a total of 41 had been involved in crashes with motor vehicles in the past 5 years. Those 41 bicyclists were in a total of 76 crashes over that five-year period, with 19 being involved in one crash, 13 in two crashes, seven in three crashes, one in four crashes, and one in six crashes. The crashes occurred on a variety of facility types. As Figure 28 illustrates, 58 percent of crashes took place on the road, with 38 percent of the 76 reported bicycle-motor vehicle crashes taking place on roads without bike lanes and 20 percent occurring on roads with bike lanes. These figures seem fairly consistent given that 58 percent of the “average” Floridian’s bicycle-miles traveled occur on roads. The figure also shows that just 4 percent of bicycle-motor vehicle crashes occur in relation to multi-use paths despite the fact that 22 percent of the “average” Floridian’s bicycle-miles traveled occur on multi-use paths. Crashes related to sidewalk riding, which include crashes on sidewalks, crosswalks, and driveways, were notably disproportionate to sidewalk use. Approximately 20 percent of the “average” Floridian’s bicycle-miles traveled occur on sidewalks. However, 31 percent of the reported crashes were sidewalk-related.

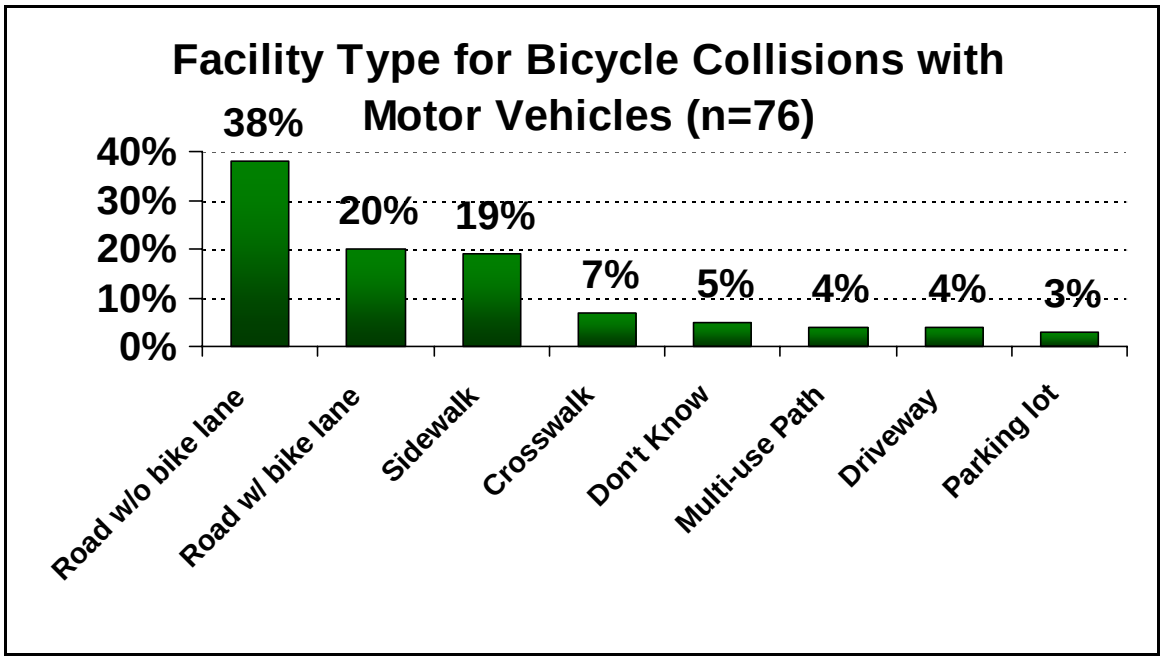


Figure 28: Type of Facility Bicyclist Was on When a Crash With a Motor Vehicle Occurred

Since the number of crashes identified in the survey is a small fraction of the total number of bicycle crashes in Florida, it is not appropriate to use the facility types and use proportions to estimate the safety of facility types relative to exposure. However, the data collected in the report does provide a foundation for future research to determine exposure and the relative safety of different facility types.

Bicyclists that reported being comfortable in most traffic situations generally traveled longer distances by bicycle each month and primarily used roads for their riding. Of the 41 bicyclists involved in crashes with motor vehicles in the last five years, 68 percent bicycle under 100 miles per month on average. Of the total 76 crashes, 67 percent bicycle under 100 miles per month. Therefore, bicyclists that travel over 100 miles per month on average were less likely to be involved in bicycle-motor vehicle crashes despite having greater exposure. This demonstrates that bicycling experience may help to reduce crashes. It is also important to remember that those bicyclists that average over 100 miles per month are most likely to bicycle on roadways (with or without bike lanes), and that bicyclists that travel under 100 miles per month tend primarily to ride on sidewalks and multi-use paths.

According to respondents, only 17 of their 76 crashes (22%) were reported to law enforcement. This figure indicates the extent to which bicycle crashes (presumably those that do not result in serious injury or property damage) go unreported.

Bicycling Behavior Conclusions

The data collected on bicycling behavior clearly indicates that Floridians bicycle for a wide variety of reasons, and put many miles on their bicycles using a variety of facilities. The most common trip purposes are exercise and recreation. Approximately 12 percent of bicyclists reported bicycling to work or school at least once per month, averaging about nine miles round-trip. Approximately 36 percent reported that they bicycle one to five days per month on average for any reason. Just over half reported bicycling between six and twenty days per month, and 13 percent bicycled on average 21 or more days per month. For all bicyclists, the mean of bicycle-miles per month was 73 and the median was 30 miles per month.

The “average” Floridian uses a mixture of facilities for their bicycle trips. Approximately 43 percent of the “average” Floridian’s bicycle-miles traveled occur on roads without bike lanes, 22 percent on multi-use paths, 20 percent on sidewalks, and 15 percent on roads with bike lanes. The most experienced bicyclists tend to ride more on the road, while the least experienced bicyclists tend to use sidewalks and multi-use paths more.

Of the 555 bicyclists surveyed, 41 were involved in a total of 76 bicycle-motor vehicle crashes in the last five years. Approximately 20 percent of the “average” Floridian’s bicycle-miles traveled occur on sidewalks; however, approximately 31 percent of the reported crashes were sidewalk-related. Of the 41 bicyclists involved in crashes with cars in the last five years, 68 percent bicycle under 100 miles per month on average.

Child Pedestrians and Bicyclists

The survey asked respondents about how children in their households travel to school. The answers of the 537 respondents with school age children are included in this section. This section presents data from all respondents, bicyclists as well as non-bicyclists, with school-aged children living in their households. Results, unless otherwise indicated, are weighted.

Children's Travel to School

The vast majority of children of the respondents (81%) neither bicycle nor walk to school. Nearly 19% percent of children bicycle, walk, or use some combination of modes. The decrease in the percent of children who bicycle or walk to school over the last several decades is one of the many reasons for the increase in childhood obesity and diabetes.

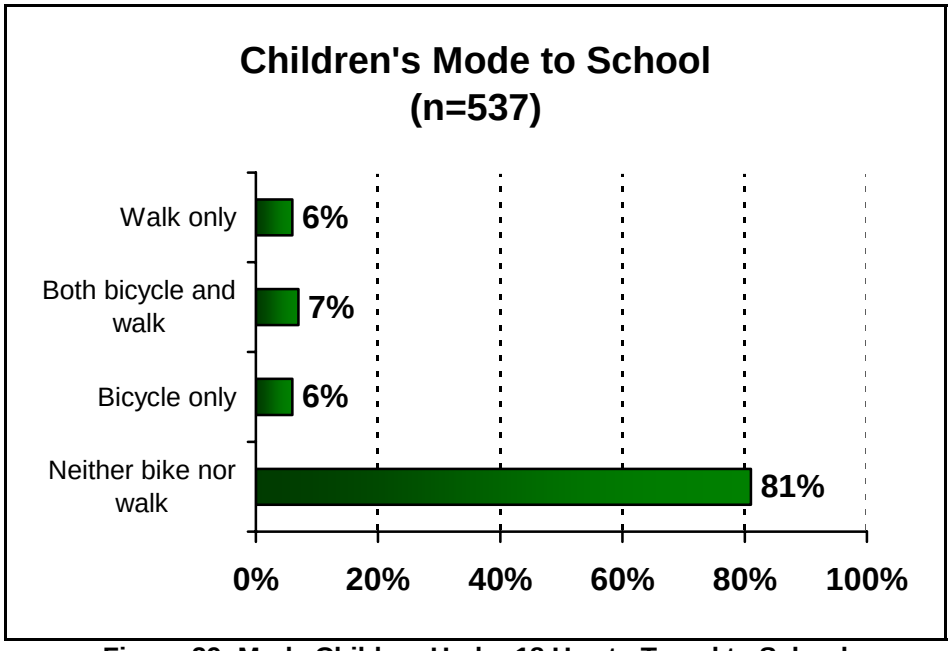


Figure 29: Mode Children Under 18 Use to Travel to School

The majority of children who bicycle or walk to school use sidewalks (62%). Considerable numbers of children also bike or walk on the road (14%) or on some combination of facilities. It is important to note that riding on sidewalks can be dangerous as every driveway and side street represents a potential point of conflict. However, it is likely that most children and parents see bicycling on the road as more dangerous.

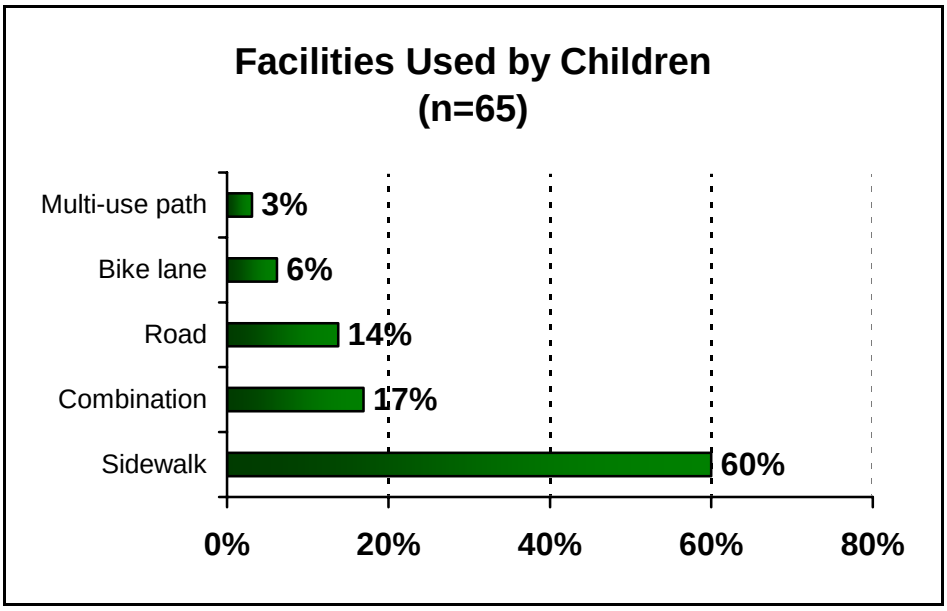


Figure 30: Facilities Used by Children who Bike and/or Walk to School

Respondents with a child living in their household who bicycles or walks to school were asked what improvements were needed to make their travel to school safer. The most common responses were more or improved sidewalks (26%) and safer crossing facilities (21%). It should be noted that 14 percent of respondents indicated that they did not know what improvements are needed, and 9.2 percent of respondents suggested a range of other improvements, none of which, when considered separately, amounted to more than 1% of total responses.

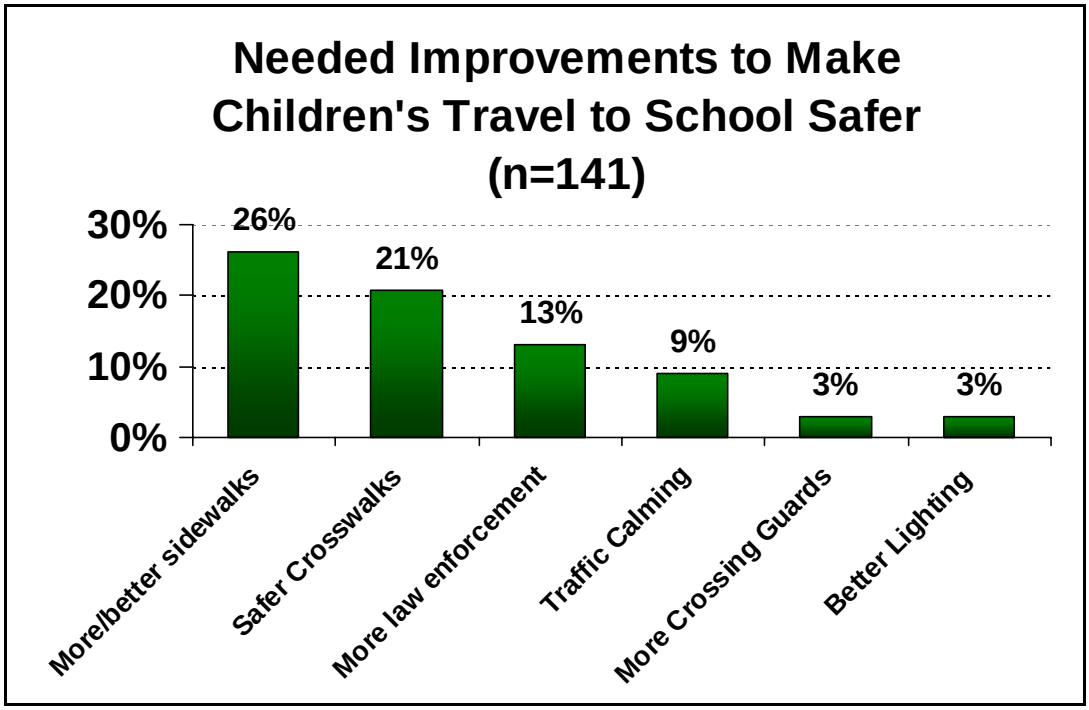


Figure 31: Improvements Needed to Make Travel to School Safer for Children who Bike/Walk (Households with children who bike or walk, multiple responses allowed)

Respondents who had a child living in the household who did not walk or bicycle to school were asked why this was the case. The most common response (35%) was that the distance to school was simply too far to be traveled by foot or bicycle. Twenty-three percent of respondents said that their children did not walk or bike to school because the travel conditions are not safe. For example, the streets are dangerous to cross, cars travel too fast, and sidewalks are lacking. Fourteen percent of respondents indicated that their school-age children were simply too young to bicycle or walk, and 7 percent of respondents indicated that their children did not bicycle or walk because some other transportation alternative, such as driving in a car with friends or parents, is more desirable. Another 7 percent of respondents said that the children in their households take the bus. Finally, 4 percent of respondents said they would not allow their children to walk to school for reasons of personal security, primarily fear of strangers, and another 7 percent indicated safety as a general reason for not allowing their children to bicycle or walk to school, i.e. they did not specify whether it was road safety or fear of strangers, or they indicated that both reasons were safety concerns.

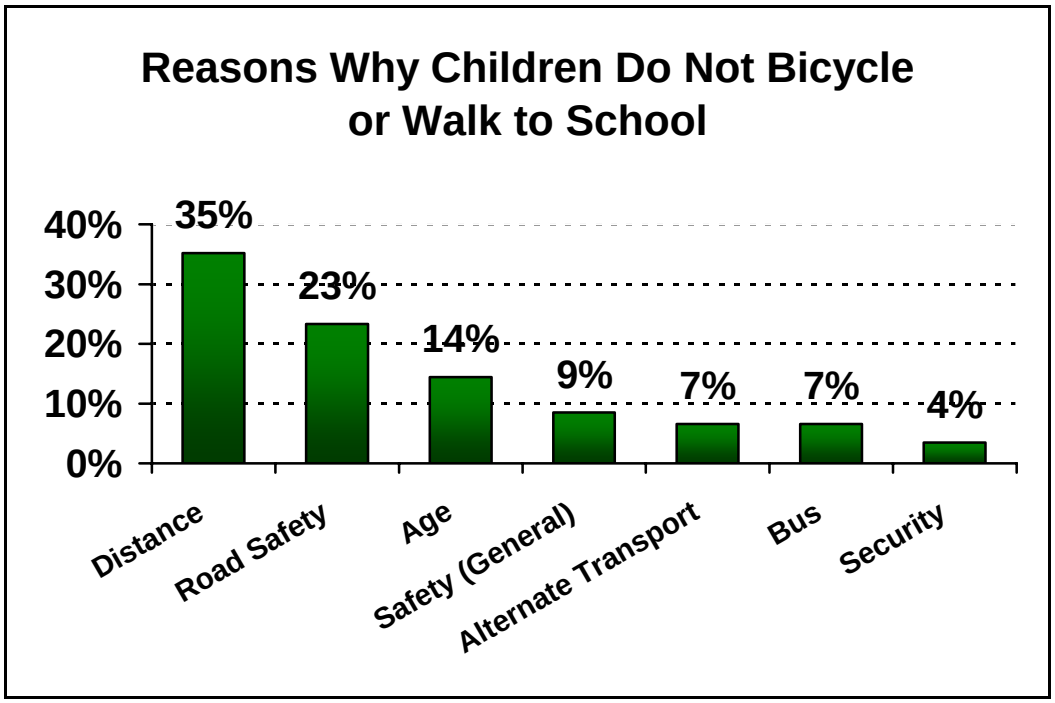


Figure 32: Reasons Why Children do not Bicycle or Walk to School (Household with children who neither bike nor walk, open ended response, n=438)

Comparisons of Children from Bicycling and Non-Bicycling Households

When children from bicycling households are compared with children from non-bicycling households, some significant differences are revealed in terms of how those children travel to school. Children from non-cycling household are considerably *less* likely to cycle or walk to school while children from cycling households are *more* likely to cycle, walk, or both. In addition, among children who bicycle to school, those from bicycling households are much more likely to bicycle on roads, in bike lanes, and on sidewalks while children from non-bicycling households are more likely to bike on multi-use paths or on some combination of

facilities. It should be noted, however, that these differences only reach statistical significance when the samples are not weighted, that is, when the data is not corrected by district to represent the statewide population. Although the differences approach significance when the sample is weighted, these findings cannot be generalized to the statewide population. In addition, there are no significant differences between bicycling and non-bicycling households in terms of why children do not bicycle or walk to school.

Child Bicyclist and Pedestrian Conclusions

Approximately 82 percent of children neither bicycle nor walk to school. The most common reasons given by parents as to why their children do not bicycle or walk to school were distance (35%), road safety (23%), and age of children (14%). Although respondents were not specifically asked how old their children were, many of them provided this information through their open-ended responses. In general, respondents who did provide this information were consistent in their opinions that very young school children, ages 5-7, should not walk or bicycle to school.

In order to make a child's bicycling or walking trip to school safer, parents called for more/better sidewalks (26%), safer crossing facilities (21%), and greater law enforcement (13%). Of the children that do bicycle to school, 60 percent primarily use the sidewalk, and approximately 20 percent ride on roads (with or without bike lanes).

Demographic Characteristics

In this section, comparisons are made between bicyclists and non-bicyclists participating in the survey, in regard to their demographic characteristics, including age, gender, ethnicity, and household income.

In general, bicyclists were found among all socio-economic and demographic groups of the population. 60 percent of bicyclists are males, and 88.1 percent of bicyclists are under 65 years of age. In terms of age, differences between bicyclists and non-bicyclists are statistically significant (X^2=44.5, p<.01), and comparatively greater numbers of bicyclists are found in the 18-24, 35-44, and 45-54 age groups.

The results below also show that Hispanics are more likely to bicycle than similar respondents in the overall sample, while African-Americans are less likely to bicycle. Differences in terms of race between bicyclists and non-bicyclists, however, were not statistically significant. In regard to marital status, differences between bicyclists and non-bicyclists are significant (X^2=17.7, p<.01) with bicyclists being considerably more likely to be married and less likely to be divorced, separated or widowed.

Table 9: Profile of Bicyclists by Age, Gender, Race, and Marital Status

	Non-Bicyclists	Bicyclists	Total Sample
Age:			
18-24	4.9%	7.7%	5.8%
25-34	12.7%	10.8%	12.1%
35-44	17.2%	22.7%	18.9%
45-54	20.9%	25.8%	22.5%
55-64	18.9%	19.6%	19.1%
65+	24.0%	11.9%	20.2%
Refused	1.4%	1.4%	1.4%
Gender:			
Male	60.0%	45.4%	50.0%
Female	40.0%	54.6%	50.0%
Race:			
White	77.5%	78.2%	77.7%
African-American	7.9%	4.3%	6.8%
Hispanic	7.4%	9.4%	8.1%
Asian	1.3%	0.9%	1.2%
American Indian	1.0%	0.5%	0.9%
Pacific Islander	0.4%	0.4%	0.4%
Other	0.8%	1.1%	0.9%
Refused	3.6%	5.2%	4.1%
Marital Status			
Single	20.2%	20.9%	20.4%
Married	58.3%	65.4%	60.6%
Divorced/Separated	10.4%	6.8%	9.3%
Widowed	8.0%	4.0%	6.7%
Refused	3.1%	2.9%	3.0%

Bicycling rates do not vary much by type of urbanization. Differences between bicyclists and non-bicyclists were not statistically significant.

Differences in educational levels attained between bicyclists and non-bicyclists, however, are statistically significant (X^2=18.8, p<.01) with bicyclists being more likely to have a college or post-graduate degree and less likely to have only earned a high school degree or less.

Bicyclists and non-bicyclists also show statistically significance differences in household income (X^2=27.6, p<.01). Respondents with household incomes that are less than $20,000 are less likely to bicycle, and those with incomes over $60,000 are more likely to bicycle, particularly those earning more than $100,000 a year. It should be noted, however, that refusal rates for this question were quite high.

Table 10: Profile of Bicyclists by Income, Education, and Urbanization

	Non-Bicyclists	Bicyclists	Total Sample
Urbanization:			
Urban	26.9%	27.0%	27.0%
Suburban	47.9%	52.8%	49.4%
Rural	20.3%	16.8%	19.1%
Refused	4.9%	3.4%	4.5%
Education:			
Less than HS	4.1%	2.9%	3.7%
High School	21.9%	15.5%	19.9%
Trade/Technical	2.4%	2.2%	2.3%
Some College	22.3%	20.7%	21.8%
College Graduate	33.1%	38.0%	34.7%
Post Graduate	14.5%	19.5%	16.1%
Refused	1.7%	1.3%	1.5%
Income:			
$20,000 or less	8.3%	5.2%	7.3%
$20,001-$30,000	9.7%	6.8%	8.8%
$30,001-$40,000	12.1%	8.1%	10.8%
$40,001-$50,000	9.8%	10.1%	9.9%
$50,001-$75,000	14.4%	17.1%	15.3%
$75,001-$100,000	10.3%	11.5%	10.7%
$100,001 or more	13.0%	19.6%	15.1%
Refused	22.5%	21.4%	22.2%

Comparisons between bicyclists and non-bicyclists did not reveal any statistically significant differences in terms of number of people in the household or number of working automobiles, although bicyclists are less likely to live alone. Differences in the number of children under age 16 living in the household, however, were significant (t=2.2, p=.03, two-tailed) with bicyclists' households having greater numbers of children.

Table 11: Other Household Information

	Non-Bicyclists	Bicyclists	Total Sample
How many working automobiles are available to household members?			
0	3.9%	3.4%	3.8%
1	29.0%	20.2%	26.2%
2	44.5%	53.2%	47.3%
3	14.6%	15.9%	15.0%
4	5.7%	4.5%	5.3%
5	1.6%	2.2%	1.8%
6+	0.7%	0.8%	0.7%
Mean	*2.0*	*2.1*	*2.0*
How many people live in your household?			
1	18.6%	13.0%	16.8%
2	41.7%	44.0%	42.4%
3	16.5%	15.9%	16.3%
4	15.1%	18.0%	16.0%
5	5.6%	5.9%	5.7%
6	1.8%	2.0%	1.8%
7+	0.9%	1.4%	0.9%
Mean	*2.6*	*2.7*	*2.6*
How many people in your house are under 16 years?			
0	66.0%	59.2%	63.7%
1	16.2%	18.8%	17.1%
2	12.8%	16.4%	14.0%
3	3.9%	4.3%	4.1%
4+	1.0%	1.2%	1.1%

Finally, the last table shows how reported bicycling varies across FDOT districts for all respondents and for those under 65 years of age. Reporting on those above 65 years helps address age differences between districts. Respondents in Districts 3 and 4 are least likely to bicycle while districts 5 and 7 are most likely to bicycle. It should be noted, however, that differences between districts are not statistically significant.

Table 12: Bicycling Relative to Age

	% Bicycling Relative to Entire State	% Bicycling 18-65 years Relative to Entire State	% of Population 65+ Years in District
District 1	4.9%	5.0%	4.5%
District 2	4.3%	5.2%	0.8%
District 3	3.9%	4.4%	1.4%
District 4	4.1%	4.3%	3.4%
District 5	5.1%	5.2%	4.5%
District 6	4.4%	5.2%	1.4%
District 7	5.0%	5.7%	2.5%
Total	31.7%	35.1%	18.7%

Conclusions of the Statewide Survey on Bicycle and Pedestrian Facilities

Pedestrian Facilities

In general, Floridians place a high value on pedestrian facilities and would like more opportunities to walk in their communities as approximately 93 percent agreed or strongly agreed that good pedestrian facilities add value to their community. As a result, the majority of Floridians (69%) would like to see greater investment in pedestrian facilities. Specifically, they want more and better sidewalks, safer crossing facilities, and other improvements, such as better lighting, crime prevention, and traffic calming. If better pedestrian facilities existed, approximately 56 percent of respondents stated they would walk more. It is very important to note that demographic characteristics, such as age, gender, ethnicity, income, and location did not significantly influence their opinions on pedestrian facilities.

In regard to walking on U.S. or state roads, which are maintained by FDOT, approximately two-thirds of respondents disagreed or strongly disagreed that it was safe to walk along or cross the roads with which they are most familiar.

Bicycle Facilities

In general, both bicyclists and non-bicyclists place a high value on having bicycle facilities in their area but view bicycling as unsafe, especially for children. Only 24 percent of non-bicyclists agreed that it was safe for children to bicycle to school in their area. Both groups also agree that more and better on- and off-road bicycle facilities are needed, and that the government should increase investment in bicycle facilities. Over half of non-bicyclists and 74 percent of bicyclists agreed or strongly agreed that the government should spend more money on bicycle facilities. The most commonly identified bicycle improvement needs were more and better bike lanes and multi-use paths, and safer ways to cross roads.

Two-thirds of both bicyclists and non-bicyclists believe that bike lanes make it safer to share the road with motorists. Approximately 75 percent of non-bicyclists and 85 percent of bicyclists agree that bike lanes should be a standard feature on Florida roads, and over 90 percent of both bicyclists and non-bicyclists agree that bike lanes should be signed and marked. For over 40 percent of non-bicyclists a greater network of both bike lanes (40%) and multi-use paths (44%) would encourage them to bicycle more.

While many bicyclists and non-bicyclists have used the multi-use paths in their area, most believe that it is relatively unsafe to access them by bicycle. This suggests that a network of on-road bike lanes is needed for Floridians to access the off-road trails in their communities, since 62 percent agreed or strongly agreed that a network of bike lanes makes it safer to bicycle, and 40 percent of non-bicyclists agreed or strongly agreed a greater network of bike lanes would encourage them to bicycle more.

Bicycling Behavior

The data collected on bicycling behavior clearly indicate that Floridians bicycle for a wide variety of reasons, and put many miles on their bicycles using a variety of facilities. The most common trip purposes are exercise and recreation. Approximately 12 percent of bicyclists reported bicycling to work or school at least once per month, averaging about nine miles round-trip.

Approximately 36 percent reported that they bicycle one to five days per month on average for any reason. Just over half reported bicycling between six and twenty days per month, and 13 percent bicycled on average 21 or more days per month. Over a quarter of bicyclists reported bicycling less than 10 miles per month on average; however, 22 bicyclists reported averaging over 400 miles per month. For all bicyclists, the mean of bicycle-miles per month was 73 and the median was 30 miles per month.

The "average" Floridian uses a mixture of facilities during their bicycle trips. Approximately 43 percent of the "average" Floridian's bicycle-miles traveled occur on roads without bike lanes, 22 percent on multi-use paths, 20 percent on sidewalks, and 15 percent on roads with bike lanes. The most experienced bicyclists tend to ride more on the road, while the least experienced bicyclists tend to use sidewalks and multi-use paths more.

Of the 555 bicyclists surveyed, 41 were involved in a total of 76 crashes over the last five years. Approximately 20 percent of the "average" Floridian's bicycle-miles traveled occurred on sidewalks; however, approximately 31 percent of the reported crashes involving motor vehicles were sidewalk-related. Bicyclists that reported being comfortable in most traffic situations generally had higher miles of bicycle travel per month and primarily used roads (with and without bike lanes). Of the 41 bicyclists involved in crashes with motor vehicles in the past five years, 68 percent bicycle under 100 miles per month on average. Of the total 76 crashes, 67 percent involved cyclists who bicycle under 100 miles per month. Therefore, bicyclists that traveled over 100 miles per month on average were less likely to be involved in bicycle-motor vehicle crashes despite having greater exposure. This demonstrates that bicycling experience may help to reduce crashes. It is also important to remember that those bicyclists that average over 100 miles per month are most likely to bicycle on roadways (with or without bike lanes), and that bicyclists who travel under 100 miles per month tend to primarily ride on sidewalks and multi-use paths.

According to respondents, only 17 of the 76 crashes (22%) were reported to law enforcement. This figure indicates the extent to which bicycle crashes, most likely those that do not result in serious injury or property damage, go unreported.

Child Bicyclists and Pedestrians

Approximately 82 percent of children of respondents neither bicycle nor walk to school. The most common reasons given by parents as to why their children do not bicycle or walk to school were distance (35%), road safety(23%), and age of children (14%). In order to make a child's bicycling or walking trip to school safer, parents called for more/better sidewalks (26%), safer crossing facilities (21%), and greater law enforcement (13%). Of the children that do bicycle to school, 60 percent primarily use the sidewalk, and approximately 20 percent ride on roads (with or without bike lanes).

Appendix A: Pedestrian Facilities

For the following tables:

- SA= Strongly Agree
- A= Agree
- Neither= Neither Agree Nor Disagree
- D= Disagree
- SD= Strongly Disagree
- D/K= Don't Know

Table 13: General Pedestrian Satisfaction

	SA	A	Neither	D	SD	D/K
I would like to live in a place where more of my daily needs can be met though walking.	26.5%	42.1%	6.9%	15.4%	4.7%	4.4%
Greater law enforcement is needed to make walking adequately safe in my area.	15.5%	29.6%	6.6%	38.0%	7.0%	3.3%
I would walk more if better facilities existed.	21.2%	34.4%	4.4%	30.5%	6.0%	3.5%
Good pedestrian facilities add value to any community.	38.5%	54.7%	1.3%	2.6%	0.6%	2.4%
Government needs to spend more money on pedestrian facilities.	24.5%	44.0%	6.2%	16.5%	4.3%	4.5%

Table 14: Pedestrian Satisfaction with State Roads

	SA	A	Neither	D	SD	D/K
It is reasonably safe to walk on this road.	5.0%	20.1%	2.1%	30.4%	36.1%	6.3%
I can cross this road with reasonable safety.	3.6%	26.6%	3.1%	33.0%	29.5%	4.3%
There are adequate sidewalks on this road.	5.4%	26.6%	2.3%	33.0%	26.0%	6.6%
The sidewalks adequately separate pedestrians.	5.5%	31.3%	2.3%	29.5%	23.3%	8.2%
The sidewalks have a sufficiently smooth and even surface.	5.4%	29.4%	3.2%	25.3%	19.8%	16.9%

Table 15: It is Reasonably Safe to Walk on this Road.

District 1	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 27 (n=28)	10.7%	0.0%	0.0%	42.9%	46.4%	0.0%
SR 70 (n=29)	10.3%	3.4%	0.0%	41.4%	34.5%	10.3%
U.S. 41 (n=100)	4.0%	32.0%	2.0%	28.0%	34.0%	0.0%
U.S. 98 (n=24)	0.0%	20.8%	0.0%	45.8%	16.7%	16.7%
District 2	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 10 (n=32)	6.3%	25.0%	0.0%	21.9%	18.8%	28.1%
SR 13 (n=42)	11.9%	33.3%	2.4%	26.2%	14.3%	11.9%
AIA (n=32)	12.5%	21.9%	3.1%	25.0%	18.8%	18.8%
District 3	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 98 (n=92)	4.3%	19.6%	0.0%	32.6%	40.2%	3.3%
U.S. 90 (n=65)	3.1%	15.4%	3.1%	43.1%	33.8%	1.5%
District 4	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 1 (n=106)	10.4%	31.1%	1.9%	28.3%	20.8%	7.5%
U.S. 441 (n=45)	6.7%	15.6%	0.0%	26.7%	35.6%	15.6%
SR 7 (n=36)	5.6%	25.0%	2.8%	22.2%	33.3%	11.1%
District 5	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
A1A (n=22)	9.1%	27.3%	0.0%	22.7%	31.8%	9.1%
SR 44 (n=26)	0.0%	19.2%	3.8%	34.6%	42.3%	0.0%
U.S. 1 (n=55)	9.1%	18.2%	0.0%	45.5%	21.8%	5.5%
U.S. 27 (n=38)	0.0%	10.5%	0.0%	34.2%	44.7%	10.5%
District 6	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 7 (n=25)	12.0%	20.0%	4.0%	32.0%	20.0%	12.0%
U.S. 1 (n=151)	6.0%	21.2%	3.3%	27.2%	39.1%	3.3%
District 7	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 19 (n=119)	2.5%	10.1%	0.8%	23.5%	61.3%	1.7%
U.S. 301 (n=31)	3.2%	6.5%	0.0%	48.4%	29.0%	12.9%

Table 16: I Can Cross this Road with Reasonable Safety

District 1	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 27 (n=28)	7.1%	3.6%	0.0%	28.6%	57.1%	3.6%
SR 70 (n=29)	6.9%	24.1%	3.4%	27.6%	37.9%	0.0%
U.S. 41 (n=100)	4.9%	28.0%	4.0%	30.0%	32.0%	2.0%
U.S. 98 (n=24)	0.0%	33.3%	12.5%	20.8%	20.8%	12.5%
District 2	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 10 (n=32)	3.1%	21.9%	3.1%	31.3%	28.1%	12.5%
SR 13 (n=42)	7.1%	31.0%	2.4%	38.1%	14.3%	7.1%
AIA (n=32)	6.3%	37.5%	0.0%	31.3%	12.5%	12.4%
District 3	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 98 (n=92)	3.3%	27.2%	2.2%	22.8%	40.2%	4.3%
U.S. 90 (n=65)	0.0%	30.8%	6.2%	36.9%	24.6%	1.5%
District 4	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 1 (n=106)	5.7%	34.0%	0.0%	34.0%	20.8%	5.7%
U.S. 441 (n=45)	6.7%	33.3%	0.0%	26.7%	28.9%	4.4%
SR 7 (n=36)	5.6%	44.4%	5.6%	19.4%	22.2%	2.8%
District 5	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
A1A (n=22)	4.5%	27.3%	9.1%	31.8%	18.2%	9.1%
SR 44 (n=26)	0.0%	42.3%	7.7%	26.9%	23.1%	0.0%
U.S. 1 (n=55)	3.6%	36.4%	1.8%	34.5%	14.5%	9.1%
U.S. 27 (n=38)	0.0%	28.9%	2.6%	44.7%	23.7%	0.0%
District 6	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 7 (n=25)	20.0%	24.0%	4.0%	32.0%	16.0%	4.0%
U.S. 1 (n=151)	2.7%	4.6%	23.2%	2.6%	35.1%	31.8%
2.6District 7	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 19 (n=119)	1.7%	12.6%	1.7%	34.5%	48.7%	0.8%
U.S. 301 (n=31)	0.0%	19.4%	0.0%	48.4%	19.4%	12.9%

Table 17: There are Adequate Sidewalks on this Road.

District 1	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 27 (n=28)	3.6%	0.0%	0.0%	39.3%	50.0%	7.1%
SR 70 (n=29)	6.9%	13.8%	3.4%	31.0%	41.4%	3.4%
U.S. 41 (n=100)	7.0%	35.0%	1.0%	28.0%	26.0%	3.0%
U.S. 98 (n=24)	0.0%	20.8%	4.2%	54.2%	20.8%	0.0%
District 2	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 10 (n=32)	3.1%	40.6%	9.4%	21.9%	3.1%	21.9%
SR 13 (n=42)	11.9%	42.9%	2.4%	26.2%	9.5%	7.1%
AIA (n=32)	9.4%	37.5%	0.0%	40.6%	3.1%	9.4%
District 3	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 98 (n=92)	4.3%	19.6%	4.3%	28.3%	39.1%	4.3%
U.S. 90 (n=65)	3.1%	10.8%	3.1%	44.6%	35.4%	3.1%
District 4	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 1 (n=106)	11.3%	43.4%	2.8%	24.5%	9.4%	8.5%
U.S. 441 (n=45)	8.9%	33.3%	0.0%	24.4%	20.0%	13.3%
SR 7 (n=36)	5.6%	33.3%	2.8%	27.8%	27.8%	2.8%
District 5	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
A1A (n=22)	4.5%	36.4%	0.0%	27.3%	13.6%	18.2%
SR 44 (n=26)	0.0%	15.4%	0.0%	50.0%	34.6%	0.0%
U.S. 1 (n=55)	9.1%	23.6%	5.5%	30.9%	16.4%	14.5%
U.S. 27 (n=38)	0.0%	7.9%	2.6%	50.0%	28.9%	10.5%
District 6	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 7 (n=25)	16.0%	60.0%	0.0%	12.0%	8.0%	4.0%
U.S. 1 (n=151)	7.9%	39.1%	0.7%	26.5%	21.2%	4.6%
District 7	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 19 (n=119)	1.7%	14.3%	0.8%	42.0%	36.1%	5.0%
U.S. 301 (n=31)	0.0%	3.2%	0.0%	48.4%	35.5%	12.9%

Table 18: The Sidewalks Adequately Separate Pedestrians from Roadway.

District 1	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 27 (n=28)	3.6%	7.1%	0.0%	35.7%	42.9%	10.7%
SR 70 (n=29)	0.0%	20.7%	13.8%	17.2%	37.9%	10.3%
U.S. 41 (n=100)	8.0%	34.0%	5.0%	25.0%	25.0%	3.0%
U.S. 98 (n=24)	4.2%	33.3%	0.0%	41.7%	12.5%	8.3%
District 2	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 10 (n=32)	6.3%	50.0%	3.1%	25.0%	0.0%	15.6%
SR 13 (n=42)	11.9%	40.5%	2.4%	21.4%	14.3%	9.5%
AIA (n=32)	15.6%	40.6%	0.0%	31.3%	3.1%	9.4%
District 3	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 98 (n=92)	4.3%	27.2%	0.0%	28.3%	34.8%	5.4%
U.S. 90 (n=65)	3.1%	24.6%	3.1%	33.8%	26.2%	9.2%
District 4	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 1 (n=106)	10.4%	41.5%	2.8%	26.4%	10.4%	8.5%
U.S. 441 (n=45)	8.9%	40.0%	0.0%	24.4%	17.8%	8.9%
SR 7 (n=36)	5.6%	33.3%	2.8%	30.6%	22.2%	5.6%
District 5	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
A1A (n=22)	0.0%	36.4%	4.5%	27.3%	18.2%	13.6%
SR 44 (n=26)	0.0%	15.4%	7.7%	50.0%	26.9%	0.0%
U.S. 1 (n=55)	5.5%	36.4%	1.8%	27.3%	16.4%	12.7%
U.S. 27 (n=38)	0.0%	23.7%	0.0%	26.3%	28.9%	21.1%
District 6	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 7 (n=25)	20.0%	64.0%	0.0%	12.0%	4.0%	0.0%
U.S. 1 (n=151)	9.3%	37.7%	1.3%	28.5%	18.5%	4.6%
District 7	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 19 (n=119)	2.5%	26.1%	1.7%	30.3%	31.3%	8.4%
U.S. 301 (n=31)	0.0%	9.7%	3.2%	41.9%	22.6%	22.6%

Table 19: The Sidewalks have Sufficiently Smooth and Even Surface.

District 1	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 27 (n=28)	3.6%	21.4%	0.0%	25.0%	32.1%	17.9%
SR 70 (n=29)	3.4%	34.5%	6.9%	10.3%	24.1%	20.7%
U.S. 41 (n=100)	4.0%	39.0%	3.0%	19.0%	19.0%	16.0%
U.S. 98 (n=24)	8.3%	29.2%	0.0%	37.5%	8.3%	16.7%
District 2	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 10 (n=32)	3.1%	46.9%	3.1%	15.6%	3.1%	28.1%
SR 13 (n=42)	7.1%	42.9%	0.0%	7.1%	9.5%	33.3%
AIA (n=32)	9.4%	34.4%	0.0%	28.1%	3.1%	25.0%
District 3	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 98 (n=92)	4.3%	30.4%	1.1%	23.9%	25.0%	15.2%
U.S. 90 (n=65)	6.2%	26.2%	0.0%	32.2%	26.2%	9.2%
District 4	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 1 (n=106)	11.3%	35.8%	0.9%	27.4%	9.4%	15.1%
U.S. 441 (n=45)	4.4%	33.3%	2.2%	8.9%	15.6%	35.6%
SR 7 (n=36)	8.3%	30.6%	5.6%	25.0%	16.7%	13.9%
District 5	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
A1A (n=22)	0.0%	27.3%	0.0%	36.4%	18.2%	18.2%
SR 44 (n=26)	7.7%	11.5%	11.5%	34.6%	30.8%	3.8%
U.S. 1 (n=55)	7.3%	29.1%	3.6%	30.9%	10.9%	18.2%
U.S. 27 (n=38)	0.0%	13.2%	2.6%	31.6%	15.8%	36.8%
District 6	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
SR 7 (n=25)	12.0%	56.0%	4.0%	12.0%	4.0%	12.0%
U.S. 1 (n=151)	7.3%	35.3%	2.6%	25.2%	16.6%	12.6%
District 7	**SA**	**A**	**Neither**	**D**	**SD**	**D/K**
U.S. 19 (n=119)	1.7%	25.2%	2.5%	26.9%	26.9%	16.8%
U.S. 301 (n=31)	0.0%	3.2%	9.7%	41.9%	25.8%	19.4%

Appendix B: Bicycle Facilities

For the following tables:

- SA= Strongly Agree
- A= Agree
- Neither= Neither Agree Nor Disagree
- D= Disagree
- SD= Strongly Disagree
- D/K= Don't Know

Table 20: Bike Lane Familiarity and Adequacy- Non-Bicyclists

	SA	A	Neither	D	SD	D/K
I am familiar with bike lanes in my area.	12.6%	49.0%	1.9%	15.6%	7.2%	13.7%
I have used the bike lanes in my area.	1.7%	11.1%	2.9%	48.8%	27.9%	7.6%
Bike lanes are frequently used in my area.	8.2%	29.8%	1.95	31.1%	15.2%	13.7%
There are enough bike lanes in my area	5.8%	20.9%	3.0%	32.6%	20.4%	17.4%
A greater network of bike lanes in my area would encourage me to bicycle more.	12.0%	27.7%	3.8%	34.5%	17.2%	4.9%

Table 21: Bike Lane Familiarity and Adequacy- Bicyclists

	SA	A	Neither	D	SD	D/K
I am familiar with bike lanes in my area.	23.8%	56.1%	1.0%	9.0%	4.5%	5.6%
I frequently use the bike lanes in my area.	11.6%	30.6%	2.5%	35.1%	15.7%	4.4%
There are enough bike lanes in my area	4.9%	18.9%	2.2%	38.4%	31.9%	3.7%

Table 22: Bike Lane Safety and Maintenance- Non Bicyclists

	SA	A	Neither	D	SD	D/K
Bike lanes make it safer to share the road with cars.	18.7%	47.9%	2.5%	16.7%	10.1%	4.0%
The bikes lanes in my area are well-maintained.	8.1%	40.8%	4.0%	17.0%	10.3%	19.8%
All bike lanes should be signed and marked.	33.7%	62.0%	0.5%	1.8%	0.8%	1.3%
Bike lanes should be a standard feature on our roads.	23.6%	50.9%	3.2%	13.4%	4.8%	4.1%

Table 23: Bike Lane Safety and Maintenance- Bicyclists

	SA	A	Neither	D	SD	D/K
It is safe to bicycle in bike lanes in my area.	5.8%	30.3%	4.4%	29.2%	22.6%	7.6%
Bike lanes make it safer to share the road with cars.	19.9%	46.5%	4.4%	17.4%	10.5%	1.3%
A network of bike lanes makes it safer to bicycle in my area.	18.0%	43.8%	4.0%	17.9%	9.2%	7.0%
The bikes lanes in my area are well-maintained.	9.9%	41.8%	5.2%	23.8%	9.2%	10.0%
All bike lanes should be signed and marked.	35.9%	56.3%	0.4%	4.1%	1.7%	1.6%
Bike lanes should be a standard feature on our roads.	36.1%	49.3%	3.4%	7.2%	2.1%	1.8%

Table 24: Multi-Use Path Familiarity and Adequacy- Non-bicyclists

	SA	A	Neither	D	SD	D/K
I am familiar with the multi-use paths in my area.	8.8%	35.6%	2.0%	28.0%	13.1%	12.5%
I have used the multi-use paths in my area.	5.2%	21.3%	1.7%	43.2%	21.1%	7.5%
Multi-use paths appear to be frequently used in my area.	8.1%	25.3%	2.6%	27.5%	11.6%	24.7%
There are enough multi-use paths in my area.	3.4%	20.5%	3.0%	32.6%	17.8%	22.8%
A greater network of multi-use paths in my area would encourage me to bicycle more.	12.3%	32.1%	2.6%	34.1%	12.2%	6.7%

Table 25: Multi-Use Path Familiarity and Adequacy- Bicyclists

	SA	A	Neither	D	SD	D/K
I am familiar with the multi-use paths in my area.	16.8%	47.0%	2.0%	19.6%	5.8%	9.0%
I frequently use the multi-use paths in my area.	11.0%	30.2%	4.4%	38.2%	10.7%	5.5%
Multi-use paths are frequently used in my area.	12.0%	32.0%	4.1%	27.6%	9.6%	14.7%
There are enough multi-use paths in my area.	4.4%	19.9%	3.3%	38.3%	22.0%	12.1%

Table 26: Multi-Use Path Safety and Maintenance- Non-bicyclists

	SA	A	Neither	D	SD	D/K
It is reasonably safe to bicycle on multi-use paths in my area.	7.3%	33.9%	2.5%	19.2%	9.9%	27.1%
The multi-use paths in my area are well-maintained.	7.3%	35.1%	3.2%	17.6%	7.6%	29.1%
Pedestrians and bicyclists can safely share multi-use paths in my area.	8.3%	45.4%	1.6%	19.3%	7.2%	18.2%
I could safely bicycle to the multi-use paths in my area.	5.0%	26.5%	2.8%	27.1%	12.2%	26.4%

Table 27: Multi-Use Path Safety and Maintenance- Bicyclists

	SA	A	Neither	D	SD	D/K
It is reasonably safe to bicycle on the multi-use paths in my area.	14.5%	38.3%	4.0%	19.7%	9.5%	14.7%
The multi-use paths in my area are well-maintained.	11.5%	40.8%	4.6%	19.8%	6.5%	16.7%
Pedestrians and bicyclists can safely share multi-use paths in my area.	16.3%	45.6%	3.1%	18.5%	6.7%	9.8%
I can safely bicycle to the multi-use paths in my area.	5.9%	34.4%	3.6%	29.7%	14.5%	11.8%

Table 28: General Satisfaction with Bicycle Facilities- Non-bicyclists

	SA	A	Neither	D	SD	D/K
Good bicycle facilities add value to any community.	22.0%	62.9%	2.7%	5.7%	1.2%	5.5%
It is safe for children to ride their bicycles in my neighborhood.	7.9%	40.5%	1.7%	27.8%	17.1%	5.1%
It is safe for children to bicycle to school in my area.	3.5%	20.1%	2.2%	42.0%	25.4%	6.8%
Greater law enforcement is needed to improve bicycle safety conditions.	15.4%	40.0%	4.3%	29.7%	3.0%	7.5%
Motorists generally respect the right of bicyclists to ride on the road.	3.4%	32.8%	3.0%	35.8%	19.4%	5.5%
Bicyclists generally respect motorists.	5.8%	48.5%	2.8%	26.9%	9.6%	6.4%
Most bicyclists obey the traffic laws.	4.7%	43.9%	3.2%	29.0%	9.8%	9.5%
Governments need to spend more money on bicycle facilities.	12.9%	42.4%	5.8%	22.7%	6.3%	9.7%

Table 29: Bicyclists' General Satisfaction with Bicycle Facilities- Bicyclists

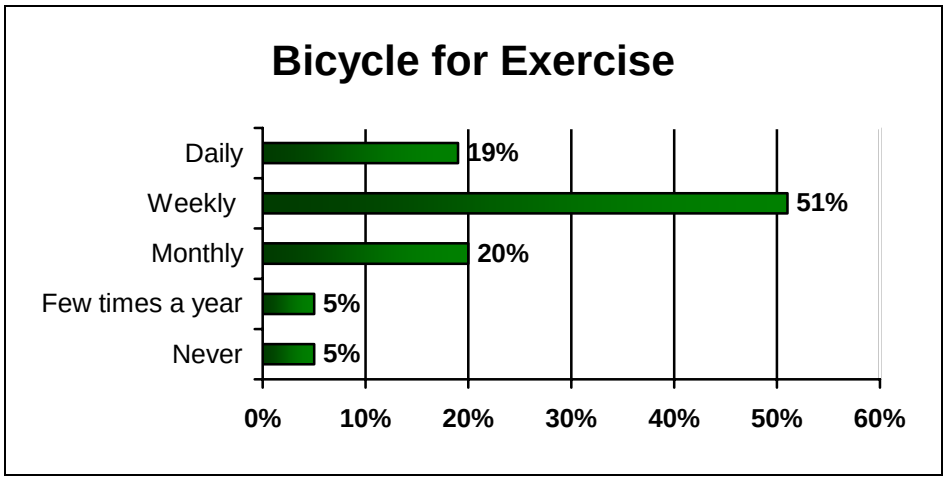
	SA	A	Neither	D	SD	D/K
Good bicycle facilities add value to any community.	40.2%	55.3%	0.9%	1.8%	0.5%	1.3%
There is adequate bicycle parking at my destination.	5.6%	31.2%	2.5%	39.0%	15.7%	6.0%
It is safe for children to ride their bicycles in my neighborhood.	7.7%	40.1%	2.7%	31.2%	15.9%	2.5%
Greater law enforcement is needed to improve bicycle safety conditions.	15.5%	41.2%	5.6%	27.8%	6.3%	3.6%
Motorists generally respect the right of bicyclists to ride on the road.	3.1%	28.4%	3.9%	38.9%	23.1%	2.6%
Bicyclists generally obey traffic laws.	4.7%	48.5%	6.6%	29.2%	8.4%	2.5%
Governments need to spend more money on bicycle facilities.	24.4%	49.6%	4.4%	14.3%	3.9%	3.4%

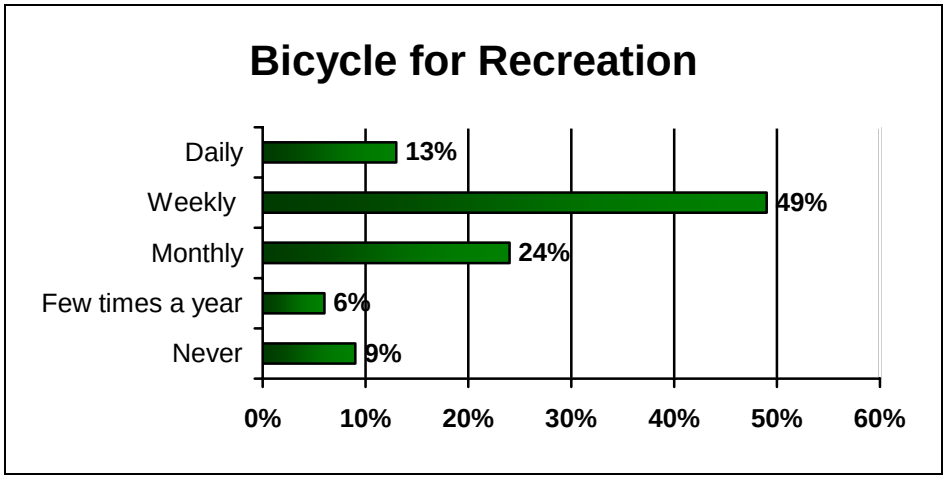
Table 30: Bicyclists' Satisfaction with State Road Bicycle Facilities

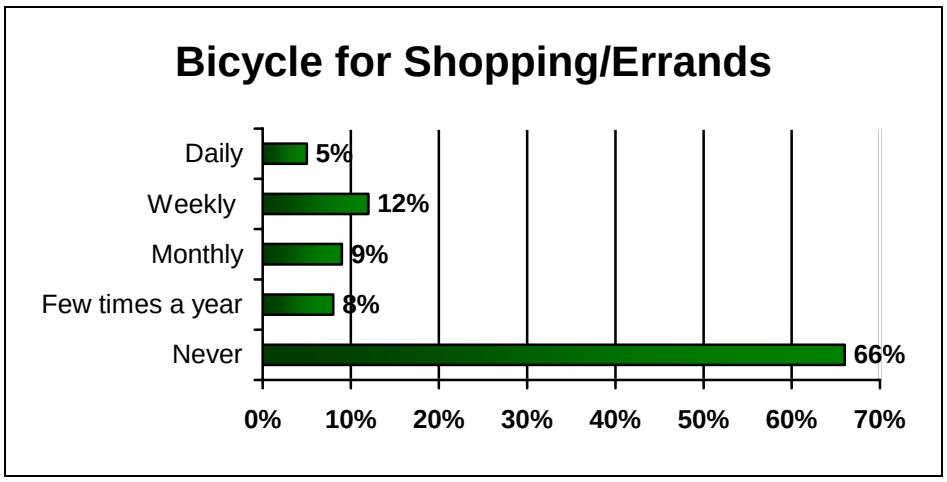
	SA	A	Neither	D	SD	D/K
I have frequently bicycled on this road.	5.5%	24.1%	0.6%	39.8%	25.4%	4.6%
The bike lanes on this road are well maintained.	2.9%	28.3%	3.5%	26.0%	16.8%	22.5%
It is adequately safe to bicycle on this road.	1.9%	19.8%	2.1%	35.4%	30.8%	10.0%
It is convenient to bicycle where I need to go using this road.	3.5%	25.7%	2.9%	35.4%	24.0%	8.4%
I can safely bicycle to this road from my home.	3.5%	32.2%	1.9%	33.7%	23.9%	4.9%

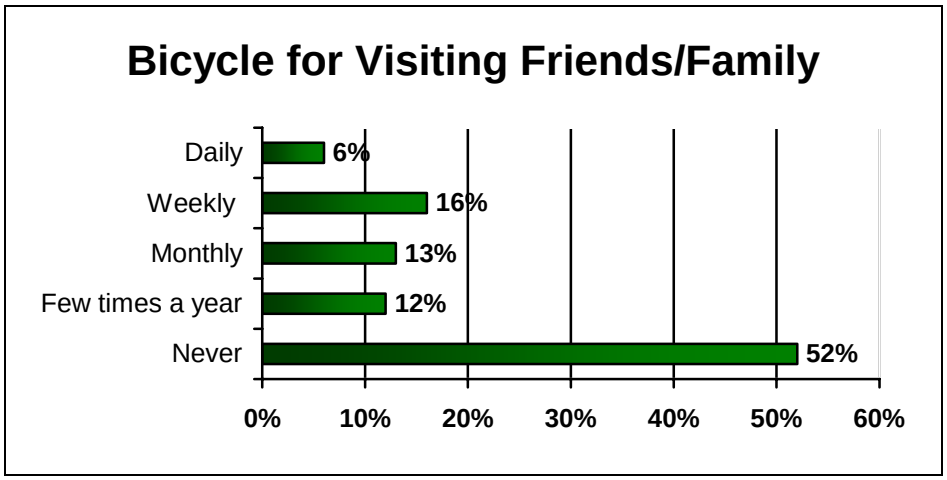
Appendix C: Bicycling Behavior Data

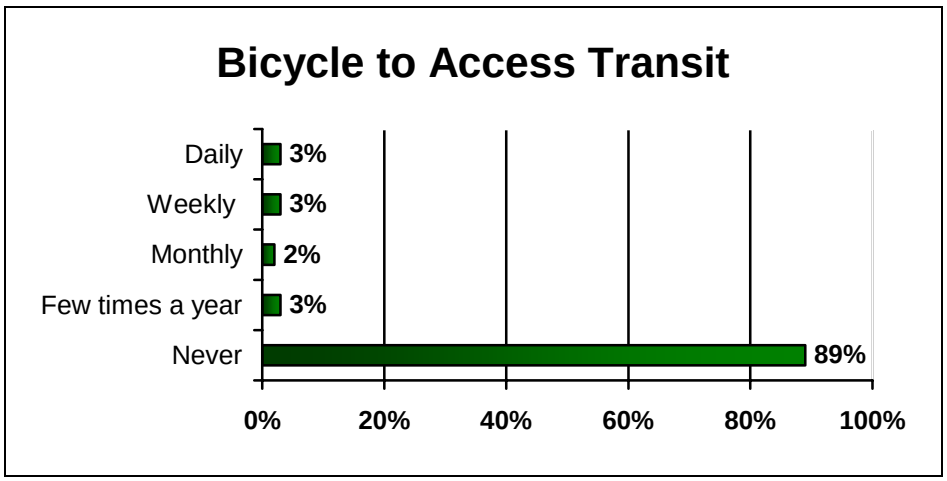
For the following table, n=555.

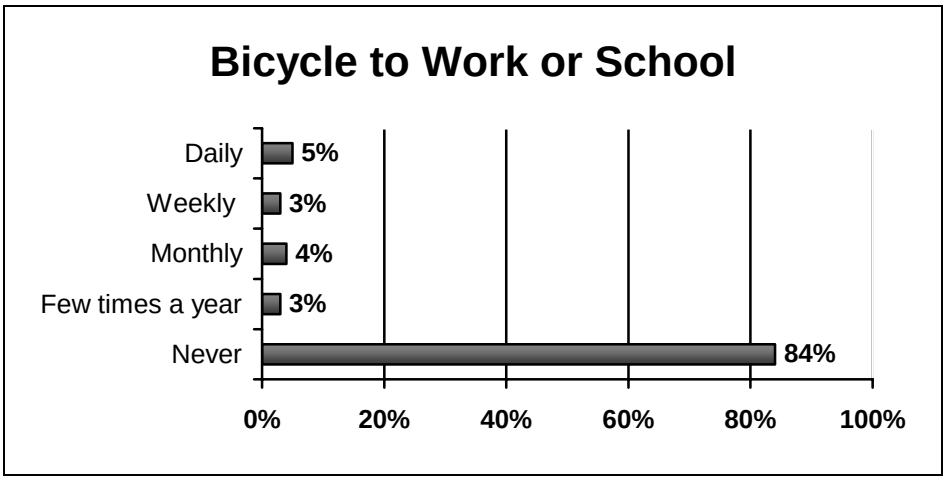







Bicycle for Visiting Friends/Family
Daily
Weekly
Monthly
Few times a year
Never
6%
16%
13%
12%
52%
0%
10%
20%
30%
40%
50%
60%


Bicycle to Access Transit
Daily
Weekly
Monthly
Few times a year
Never
3%
3%
2%
3%
89%
0%
20%
40%
60%
80%
100%


Bicycle to Work or School
Daily
Weekly
Monthly
Few times a year
Never
5%
3%
4%
3%
84%
0%
20%
40%
60%
80%
100%

Appendix D: Statewide Bicycle and Pedestrian Customer Satisfaction Survey

A. Introduction and Informed Consent

"Hello, my name is _____ and I am calling on behalf of the Florida Department of Transportation. We are conducting a survey on your opinions of and satisfaction with pedestrian and bicycle facilities in your area and specifically on U.S. and state roads. The survey is anonymous and voluntary, but you have to be 18 years of age or old to participate."

If you are 18 or older, can you give me ten minutes of your time to help U.S. improve the roads in Florida?

YES [CONTINUE]

NOT 18 OR OLDER [ASK IF THERE IS ANYONE IN THE HOUSEHOLD THAT IS OVER 18 THAT YOU CAN SPEAK TO]

NO [THANK AND TERMINATE]

What is your county of residence? _____

Record Gender

Male	01
Female	02
Refused	99

[NOTE: SEE LIST OF COUNTIES AND THEIR CORRESPONDING DISTRICT TO BE USED FOR LISTINGS OF STATE ROADS FOR SECTIONS C AND K]

B. Pedestrian Section

"For the first set of questions, I will ask you about walking in your area."

"Please tell me whether you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with the following statements about walking in your area. You may also answer, 'Don't know'."

[NOTE: PLEASE USE THE FOLLOWING CODING: STRONGLY AGREE=05; AGREE=05; NEITHER AGREE NOR DISAGREE=03 DISAGREE=02; STRONGLY DISAGREE=01; DON'T KNOW=98]

I would like to live in a place where more of my daily needs can be met through walking.
Greater law enforcement is needed to make walking adequately safe in my area.
I would walk more if better facilities existed.
Good pedestrian facilities add value to any community.
Government needs to spend more money on pedestrian facilities.

For the next question, you can provide up to three answers. What kinds of pedestrian improvements are most needed in your area? [DO NOT READ LIST; OPEN ENDED QUESTION]

More/better sidewalks	01	
Better lighting	02	
Safer/better crossing facilities/crosswalks	03	
More recreational trails		04
More law enforcement/crime prevention		05
Trees/landscaping		06
Traffic calming/reducing traffic		07
Benches		08
Water fountains		09
Shade trees	10	
Other 1 (specify): _____	11	
Other 2 (specify): _____	12	
Other 3 (specify): _____	13	
Don't know	98	
Refused		99

"The next set of questions is about pedestrian facilities on state and U.S. roads. While most of the roads in your area are maintained by local governments, State and U.S. roads are maintained by the Florida Department of Transportation. Their road signs are white with SR or U.S. and numbers in black."

Are you familiar with any U.S. or state roads in your area?

YES [IF YES PROCEED TO Q9]

NO [IF NO, CONTINUE TO Q8]

The following are five state or U.S. roads in your area:

[READ LIST OF THE FIVE STATE ROADS THAT IS LISTED FOR THE DISTRICT IN WHICH THEIR COUNTY (Qii) IS LOCATED, THEN ASK THE FOLLOWING QUESTION]

Which of these U.S. or state roads are you most familiar with? [RECORD SPECIFIC ROAD NAME OR COMMON NAME AND PROCEED TO SECTION C SKIPPING Q9]

[ASK Q9 ONLY IF Q7=YES]
What U.S. or state road are you most familiar with in your area? [RECORD SPECIFIC ROAD NAME OR COMMON NAME AND PROCEED TO SECTION C]

C. U.S. and State Road Questions about Pedestrian Facilities

“Again, please answer if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with the following statements with this specific road in mind.” You may also answer, ‘Don’t know’.”

It is reasonably safe to walk on this road.
I can cross this road with reasonable safety.
There are adequate sidewalks on this road.
The sidewalks adequately separate pedestrians from traffic.
The sidewalks have a sufficiently smooth and even surface.

D. Bicycle Section Explanation
“The next set of questions will be about bicycling.”
Typically, do you bicycle once per month or more?
YES [SKIP TO SECTION H]
NO [CONTINUE]

“The section on bicycling is divided into two sections, the first on bike lanes, and the second on multi-use paths.
[NOTE: BIKE LANE V. MULITUSE PATH DEFINITION BEGINS HERE] “Bike lanes are parts of the road designated for bicycling that are separated from motor vehicle traffic by a solid white line, and are sometimes marked with a bicycle logo, directional arrow and signage. By contrast, multi-use paths are paved pathways for bicyclists and pedestrians that are not part of any roadway. Cars are not allowed on multi-use paths.”
Do you understand the difference between a bike lane and a multi-use path, or would you like me to repeat the definition?
YES [CONTINUE TO SECTION E]
NO [IF NO, RE-READ DEFINITION AND ASK: “DO YOU NOW UNDERSTAND THE DIFFERENCE?” IF YES, CONTINUE TO SECTION E. IF STILL NO, THEN SKIP TO SECTION G]

E. Bike Lane Section for Non-Bicyclists

“Please tell me whether you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with the following statements on bike lanes. You may also answer, ‘Don’t know’.”

I am familiar with bike lanes in my area.
I have used the bike lanes in my area.
There are enough bike lanes in my area
Bike lanes are frequently used in my area.
Bike lanes make it safer to share the road with cars.
A greater network of bike lanes in my area would encourage me to bicycle more.
The bike lanes in my area are well-maintained.
All bike lanes should be signed and marked.
Bike lanes should be a standard design feature on our roads.

F. Multi-use Path Section for Non-Bicyclists

“Next, please respond to following statements on multi-use paths.

I am familiar with the multi-use paths in my area.
I have used the multi-use paths in my area
There are enough multi-use paths in my area.
Multi-use paths appear to be frequently used in my area.
It is reasonably safe to bicycle on the multi-use paths in my area.
Pedestrians and bicyclists can safely share multi-use paths.
A greater network of multi-use paths in my area would encourage me to bicycle more.
The multi-use paths in my area are well-maintained.
I could safely bicycle to the multi-use paths in my area.

G. General Bicycle Questions for Non-Bicyclists

“Next, please respond to the statements about bicycling in general.”

Good bicycle facilities add value to any community.
It is safe for children to ride their bicycles in my neighborhood.
It is safe for children to bicycle to school in my area.
Greater law enforcement is needed to improve bicycle safety/conditions.
Motorists generally respect the right of bicyclists to ride on the road.
Bicyclists generally respect motorists.
Most bicyclists obey the traffic laws.
Governments need to spend more money on bicycle facilities.

For the next question, you can provide up to three answers. What kinds of bicycle improvements are most needed? [DO NOT READ LIST; OPEN-ENDED RESPONSE]

More bike lanes	01
More multi-use paths	02
Better lighting	03
Safer/better crossing facilities/crosswalks	04
More law enforcement/crime prevention	05
Trees/landscaping	06
Traffic calming/reducing traffic	07
Better maintenance of roads	08
Other 1 (specify): _____	09
Other 2 (specify): _____	10
Other 3 (specify): _____	11
Don't know	98
Refused	99

Are there children in your household under the age of 18?

YES [CONTINUE TO Q45]
NO [SKIP TO SECTION M]

Do any of these children ride their bike or walk to school?

Bicycle only	[CONTINUE TO Q46]
Both bicycle and walk	[CONTINUE TO Q46]
Walk only	[SKIP TO Q47]
Neither bike nor walk	[SKIP TO Q48]

When bicycling to school, do they bicycle on the road, in a bike lane, on a multi-use path, on a sidewalk, or a combination of facilities? [CAN PROVIDE MORE THAN ONE RESPONSE IN THE FORM OF A COMBINATION]

On road	01
In bike lane	02
On multi-use path	03
On sidewalk	04
Combination (specify): _____	05

For the next question, you can provide up to three answers. What improvements would make it safer for your children to bicycle or walk to school? [DO NOT READ LIST; OPEN ENDED QUESTION]

More/better sidewalks	01	
Better lighting	02	
Safer/better crossing facilities/crosswalks	03	
More recreational trails		04
More law enforcement/crime prevention		05
Trees/landscaping		06
Traffic calming/reducing traffic		07
Benches		08
Water fountains		09
Shade trees	10	
More teachers/crossing guards		11
Other 1 (specify): _____	12	
Other 2 (specify): _____	13	
Other 3 (specify): _____	14	
Don't know	98	
Refused		99

[ASK Q48 ONLY IF Q45=Neither bike nor walk]
What are the main reasons why your children do not bicycle or walk to school? [RECORD RESPONSE, OPEN-ENDED]

Earlier, you stated that you do not bicycle once per month or more. Did you ever bicycle regularly?

YES [IF YES, PROCEED TO Q50]
NO [IF NO, SKIP TO SECTION M]

What is the main reason why your bicycling habits changed? [RECORD RESPONSE, OPEN-ENDED]

[PROCEED TO SECTION M]

H. Bike Lane Section for Bicyclists
“The section on bicycling is divided into two sections, the first on bike lanes, and the second on multi-use paths.”
[NOTE: BIKE LANE V. MULITUSE PATH DEFINITION BEGINS HERE] “Bike lanes are parts of the road designated for bicycling that are separated from motor vehicle traffic by a solid white line, and are sometimes marked with a bicycle logo, directional arrow and signage. By contrast, multi-use paths are paved pathways for bikes and pedestrians that are not part of any roadway. Cars are not allowed on bike paths.”
Do you understand the difference between a bike lane and a multi-use path, or would you like me to repeat the definition?
YES [CONTINUE TO SECTION E]

NO [IF NO, RE-READ DEFINITION AND ASK: “DO YOU NOW UNDERSTAND THE DIFFERENCE?” IF YES, CONTINUE TO SECTION E. IF STILL NO, THEN SKIP TO SECTION J]

“Please tell me whether you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with the following statements on bike lanes. You may also answer, ‘Don’t know’.”

I am familiar with bike lanes in my area.
I frequently use the bike lanes in my area.
There are enough bike lanes in my area.
It is safe to bicycle in bike lanes in my area.
Bike lanes make it safer to share the road with cars.
A network of bike lanes makes it safer to bicycle in my area.
The bike lanes in my area are well-maintained.
All bike lanes should signed and marked.
Bike lanes should be a standard design feature on our roads

I. Multi-use Path Section for Bicyclists
“Next please respond to the following statements on multi-use paths.”

I am familiar with the multi-use paths in my area.
I frequently use the multi-use paths in my area.
There are enough multi-use paths in my area.
Multi-use paths are frequently used in my area.
It is reasonably safe to bicycle on the multi-use paths in my area.
Pedestrians and bicyclists can safely share multi-use paths.
The multi-use paths in my area are well-maintained.
I can safely bicycle to the multi-use paths in my area.

J. General Bicycle Questions for Bicyclists
"Next, please respond to the statements about bicycling in general."

Good bicycle facilities add value to any community.
There is adequate bicycle parking at my destinations.
It is safe for children to bicycle in my neighborhood.
Greater law enforcement is needed to improve bicycle safety/conditions.
Motorists generally respect the right of bicyclists to ride on the road.
Bicyclists generally obey traffic laws.
Government needs to spend more money on bicycle facilities.

For the next question, you can provide up to three answers. What kinds of bicycle improvements are most needed? [DO NOT READ LIST; OPEN-ENDED RESPONSE]

More bike lanes	01
More bike paths	02
Better lighting	03
Safer/better crossing facilities/crosswalks	04
More law enforcement/crime prevention	05
Trees/landscaping	06
Traffic calming/reducing traffic	07
Better maintenance of roads	08
Other (specify): _____	09

Are there children in your household under the age of 18?
YES [CONTINUE TO Q77]
NO [SKIP TO SECTION K]

Do any of these children ride their bike or walk to school?
Bicycle only [CONTINUE TO Q78]
Both bicycle and walk [CONTINUE TO Q78
Walk only [SKIP TO Q79]
Neither [SKIP TO Q80]

When bicycling to school, do they bicycle on the road, in a bike lane, on a multi-use path or on a sidewalk? [CAN PROVIDE MORE THAN ONE RESPONSE]

On road	01
In bike lane	02
On multi-use path	03
On sidewalk	04
Combination (specify): _____	05

For the next question, you can provide up to three answers. What improvements would make it safer for your children to bicycle or walk to school? [DO NOT READ LIST; OPEN ENDED QUESTION]

More/better sidewalks	01	
Better lighting	02	
Safer/better crossing facilities/crosswalks	03	
More recreational trails		04
More law enforcement/crime prevention		05
Trees/landscaping		06
Traffic calming/reducing traffic		07
Benches		08
Water fountains		09
Shade trees	10	
More teachers/crossing guards		11
Other 1 (specify): _____	12	
Other 2 (specify): _____	13	
Other 3 (specify): _____	14	
Don't know	98	
Refused		99

[ASK Q80 ONLY IF Q77=Neither]
What are the main reasons why your children do not bicycle or walk to school? [RECORD RESPONSE, OPEN-ENDED]

"This next section will ask about your opinions on U.S. and state roads with bike lanes. Remember, state and U.S. roads are maintained by the Florida Department of Transportation. Their road signs are white with SR or U.S. and numbers in black."

Are you familiar with any U.S. or state roads with bike lanes in your area?
YES [IF YES SKIP TO Q83]

NO [IF NO, CONTINUE TO Q82]

The following are five U.S. or state roads in your area with bike lanes:

[READ LIST OF THE FIVE U.S. or STATE ROADS THAT IS LISTED FOR THE DISTRICT IN WHICH THEIR COUNTY (Qii) IS LOCATED, THEN ASK THE FOLLOWING QUESTION]

Which of these roads with bike lanes are you most familiar with? [RECORD SPECIFIC ROAD NAME OR COMMON NAME AND PROCEED TO SECTION K SKIPPING Q83]

[ASK Q83 ONLY IF Q81=YES]
What U.S. or state road with bike lanes are you most familiar with? [RECORD SPECIFIC ROAD NAME OR COMMON NAME AND PROCEED TO SECTION K]

K. State Roads with Bike Lanes Questions for Bicyclists

Again, please answer if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with the following statements with that specific road in mind. You may also answer 'Don't know'."

I have frequently bicycled on this road
The bike lanes on this road are well maintained.
It is adequately safe to bicycle on this road.
It is convenient to bicycle were I need to go using this road.
I can safely bicycle to this road from my home

L. Bicycle Behavior Questions for Bicyclists
In this next section, you will be asked about your bicycling behavior.

For the following statements please respond with either daily, weekly, monthly, a few times a year or Never.

[NOTE: RECORD DAILY=01, WEEKLY=02, MONTHLY=03, FEW TIMES A YEAR=04 AND NEVER=05

I bicycle for exercise
I bicycle for recreation
I bicycle to go shopping or run errands
I bicycle to visit friends and family
I bicycle to transit stops/stations
I bicycle to work or school

[ASK Q90 AND Q91 ONLY IF 89-f = 01, 02, or 03]
On average, how many days per month do you bicycle to work or school? [RECORD RESPONSE, OPEN-ENDED]

How many miles do you bicycle to work or school, one-way? [RECORD RESPONSE, OPEN-ENDED]

On average, how many days per month do you ride your bike for any reason? [RECORD RESPONSE, OPEN-ENDED]

Could you please estimate how many miles do you bicycle per month? [RECORD RESPONSE, OPEN-ENDED]

For the next set of questions I will ask you to estimate how much you bicycle on four types of facilities; on multi-use paths, in bike lanes, on roads without bike lanes or on sidewalks.

Approximately what percent of your bicycling is done on multi-use paths? [RECORD RESPONSE AS PERCENTAGE]

Approximately what percent of your bicycling is done on bike lanes? [RECORD RESPONSE AS PERCENTAGE]

Approximately what percent of your bicycling is done on roads without bike lanes? [RECORD RESPONSE AS PERCENTAGE]

Approximately what percent of your bicycling is done on sidewalks? [RECORD RESPONSE AS PERCENTAGE]

NOTE: RESPONSES TO Q94 THROUGH Q97 SHOULD ADD UP TO 100%. IF NOT ASK RESPONDENT TO CORRECT FIGURES

Next I will read three statement on how you might classify yourself with respect to the experience you have riding in different conditions. After I read all three, please tell me which one best describes yourself:

1. I feel comfortable riding under most traffic conditions, including major streets with busy traffic and higher speeds.
2. I only feel comfortable riding on streets with less traffic and lower speeds, or on streets with bike lanes.
3. I only feel comfortable riding on multi-use paths or sidewalks.

[RECORD RESPONSE AS 1, 2 OR 3]

In the last five years, how many times have you been in collisions with a motor vehicle while bicycling? [RECORD RESPONSE]

What type of facilities were you on when the crash(es) occurred? [LIST FACILITY TYPE FOR EACH CRASH]

	A. Crash 1	B. Crash 2	C. Crash 3
Road with bike lane	01	01	01
Road without bike lane	02	02	02
Multi-use paths	03	03	03
Sidewalk	04	04	04
Crosswalk	05	05	05
Parking lot	06	06	06
Driveway	07	07	07
Alley	08	08	08
Other (specify): ____	09	09	09
Don’t know	98	98	98

How many of these crashes were reported to a law enforcement officer? [RECORD RESPONSE]

M. Demographics
“In this last section, we have just a few questions about yourself.”

What is the highest level of education you have completed? [DO NOT READ LIST]

Did not complete high school	01
High school graduate	02
Trade/technical school	03
Attended college/associate degree	04
College graduate	05
Post Graduate degree	06
Refused	99

Please stop me when I read the category that contains your age:

18 - 24 years old	01
25 - 34	02
35 - 44	03
45 - 54	04
55 - 64	05
65 or older	06

What is your race or ethnicity? [DO NOT READ LIST]

White	01
African-American	02
Hispanic	03
Asian	04
American Indian	05
Pacific Islander	06
Other (specify): _____	98
Refused	99

Please stop me when I read the range that contains your household's total income, including yourself and anyone else in your household that worked, for the year 2004:

Under $20,000	01
$20,000 - $30,000	02
$30,000 - $40,000	03
$40,000 - $50,000	04
$50,000 - $75,000	05
$75,000 - $100,000	06
$100,000 or more	07
(DO NOT READ) Refused	99

Do you live an urban, suburban or rural area?

Urban	01
Suburban	02
Rural	03
Refused	99

How many working automobiles are available to household members? [RECORD RESPONSE]

How many people live in the household? [RECORD RESPONSE]

How many of those are under 16 years of age? [RECORD RESPONSE]

What is your marital status? [DO NOT READ LIST]

Single	01
Married	02
Divorced/Separated	03
Widowed	04
Refused	99

“Thank you for your time and participation!”