BICYCLE AND PEDESTRIAN TRAVEL: EXPLORATION OF COLLISION EXPOSURE IN FLORIDA

FINAL REPORT

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DISCLAIMER

This report was prepared for the State Safety Office, Department of Transportation, State of Florida in cooperation with the National Highway Traffic Safety Administration, U.S. Department of Transportation and/or Federal Highway Administration, U.S. Department of Transportation.

The conclusions and opinions expressed in this report are those of the subgrantee, and do not necessarily represent those of the State of Florida, Department of Transportation, State Safety Office, U.S. Department of Transportation, or any other agency of the State or Federal Government.

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EXECUTIVE SUMMARY

Florida has consistently ranked as one of the worst states in terms of pedestrian and bicycle crashes, injuries, and fatalities. Over the past 10 years, trends show a slight decline in the pedestrian fatality rate in Florida while the number of bicyclists killed over the same period has remained fairly constant. Although the reasons for these trends are not clear, one possible explanation may be related to how much people are walking and bicycling.

In 1998, the Florida Department of Transportation (FDOT) conducted a survey to determine the degree to which people were walking and bicycling in Florida[1]. The survey generated descriptive information on motor vehicle crashes involving bicyclists and pedestrians[2] as well as information to estimate bicycle and pedestrian travel and exposure to collisions (crashes)[3] in Florida.

The FDOT Safety Office contracted with the Center for Urban Transportation Research (CUTR) at the University of South Florida to conduct a similar survey to better understand the high levels of bicycle and pedestrian crashes, injuries and fatalities involving motor vehicles that occur in Florida, relative to other states, and the circumstances surrounding these phenomena. CUTR subcontracted with NuStats, Inc, of Austin, Texas, to conduct the survey, process and analyze the data, and prepare a report on the findings.

In May – June 2002, NuStats, Inc, conducted telephone interviews with 963 Florida residents residing in the Tampa, Orlando, Miami, and Jacksonville metropolitan areas to gather data about bicycle and pedestrian travel and collision involvement from randomly selected adults, aged 18 years and older. The primary survey objectives were to compare changes in walking and bicycling since 1998 to determine if trip frequencies and trip lengths are increasing or decreasing, and determine if exposure to crashes is increasing or decreasing and to what degree. To that extent, the survey instrument and methods were identical to the1998 survey.

To accomplish the survey objectives, respondents were asked about crash involvement, patterns of travel activity by pedestrian or bicycle modes, perceptions about safety and knowledge regarding pedestrian and bicycle travel, and demographic characteristics of the respondent and household. The interviews in the four surveyed metropolitan areas generated data from 174 respondents reporting on 183 collision events (nine respondents reported one bicycle and pedestrian crash each, the other 165 respondents had one crash each).

Trip generation estimates and trip characteristics were calculated for the four metropolitan areas and analyzed by demographic and socioeconomic factors. Exposure was determined based on bicycle and pedestrian trip rates and lengths; incidental pedestrian travel habits;

[1]Florida Department of Transportation, Office of Policy Planning, *Bicycle and Pedestrian Travel: Exploration of Collision Exposure in Florida*, NuStats International, Austin, Texas, December 1998.
[2]Respondents were asked, "Have you ever been personally involved in a collision or crash involving someone on a bicycle or a pedestrian? This includes your being the pedestrian, the bicyclist, the driver, or a passenger in the vehicle involved in the collision." Thus, the survey data includes only pedestrian and bicycle crash data involving motor vehicles.
[3]"Collision" and "crash" are used interchangeably throughout the report.

and perceptions about safety and knowledge of laws regarding bicycle and pedestrian travel. The survey also provided data to examine trends and make comparisons to the 1998 survey results.

The following highlights key survey findings.

PEDESTRIAN COLLISION REPORTS

The percentage of pedestrian crashes reported to police is increasing.
One-fourth of pedestrians involved in crashes are under 20 years of age.

State traffic crash data generated from police crash reports are typically used to collect information about bicycle and pedestrian crashes. Often, crash reports are not completed, resulting in the loss of important information about crash causes and the nature of injuries received in pedestrian crashes.[4] The 2002 survey data show that the number of pedestrian crashes reported to law enforcement agencies by respondents increased by 15 percentage points, from 69% in 1998 to 84% in 2002.

According to the 1998 survey results, adults between the ages of 21 and 49 years accounted for nearly half (47%) of the pedestrians involved in crashes. The same age group accounted for only 13% of the pedestrians involved in crashes in 2002 (a decrease of 34 percentage points). The decrease was countered by an increase of 11 percentage points in the pedestrian crash involvement of the 16 to 20 year age group (from 15% in 1998 to 26% in 2002) and 12 percentage points in the 65 and older age group (from 4% in 1998 to 16% in 2002).

BICYCLE COLLISION REPORTS

The percentage of bicycle crashes reported to the police is increasing.
A significant number of bicycle crashes involve alcohol either by the bicyclists or the driver.

The 2002 data indicate that nearly two-thirds (64%) of the respondents reported the bicycle crash to the police. This is a slight increase from over half (54%) of the respondent-reported bicycle crashes in 1998 and a possible explanation may be associated with an increase in crashes involving alcohol.

According to the Florida Department of Highway Safety and Motor Vehicles (DHSMV), there were 24,411 alcohol-related motor vehicle crashes in 2001, resulting in 20,001 injuries and 1,000 fatalities.[5] The 2002 survey data indicate that 18% of the motorists involved in the bicycle crashes were reportedly under the influence of alcohol. Because alcohol was involved, this may have prompted those involved to notify law enforcement when, under similar circumstances not involving alcohol, law enforcement may not have been summoned. Interestingly, the percentage of bicyclists involved in bicycle crashes and reportedly under the influence of alcohol also increased from 2% in 1998 to 6% in 2002.

[4] *Injury to Pedestrians and Bicyclists: An Analysis Based on Hospital Emergency Department Data*, Pedestrian and Bicycle Information Center, 2000
[5] *Florida Crash Facts*, Florida Department of Highway Safety and Motor Vehicles: 2001

PEDESTRIAN TRIP GENERATION ESTIMATES AND TRIP CHARACTERISTICS

The pedestrian trip rate is increasing.

The pedestrian trip rate of surveyed Florida residents increased from 0.91 trips per person per day in 1998 to 1.08 trips per person per day in 2002, an increase of 18.7%. The 2002 mean pedestrian trip distance is 1.17 miles[6].

BICYCLES PER HOUSEHOLD AND BICYCLE TRIP GENERATION ESTIMATES

The number of bicycles per household and bicycles per person is increasing.
Bicycle trip rates and mean trip distances are increasing.

The mean number of bicycles per household increased from 1.28 in 1998 to 1.36 in 2002, while the mean number of bicycles per person has increased from 0.45 in 1998 to 0.50 in 2002.

Bicycle trip rates have also increased from 0.12 mean trips per person per day in 1998 to 0.17 mean trips per person per day in 2002. On average, adults between the age of 21 and 49 years are the most active at 0.25 mean trips per person per day. Interestingly, Florida residents are not only taking more trips, but the length of their trips is increasing. Based on the survey results, the average bicycle trip length in 1998 was slightly over 4 miles. In 2002, the average bicycle trip length increased to 4.53 miles.

PERCEPTIONS OF TRIP MAKERS

Most bicyclists and pedestrians understand road rules for safe travel.
The majority of respondents feel "safe" while using pedestrian or bicycle modes of travel.

Florida residents appear to have a solid understanding of the "basic rules of the road." Nearly nine out of ten respondents (89%) knew that the statement "it's legal to ride a bicycle while intoxicated" was false. Most of those surveyed knew that bicyclists on the road must stop at stop signs or signals (98%) and that motorists are required to yield the right of way to pedestrians at crosswalks (94%).

Ninety-two percent of respondents reported that they were not nervous when making their most recent pedestrian trip, while 87% of the respondents reported that they were not nervous when making their most recent bicycle trip. Respondents that did feel unsafe commented that their feelings could be attributed to speeding or inattentive motorists. Others cited issues regarding infrastructure, such as heavy traffic, poor lighting at night, and the absence of bicycle paths or sidewalks.

COLLISION EXPOSURE

Exposure to bicycle and pedestrian collisions is increasing.

Several estimates presented in this report suggest that exposure to crashes may be increasing for bicyclists and pedestrians in Florida. Perhaps the most convincing of these

[6]Comparative value for 1998 is not available.

estimates concern trip rates, as both bicycle and pedestrian trip rates and trip lengths have increased over the past four years.

The bicycle trip rate increased by 29% from 1998 to 2002, while the pedestrian trip rate increased by 16%. The average bicycle trip length increased to 4.53 miles in 2002, up from slightly over 4 miles in 1998.

Survey results suggest that collision exposure for pedestrians in motorized vehicle environments is increasing. From 1998 to 2002, more people indicated crossing intersections with and without lights, walking on roads without sidewalks, and crossing the street in the middle of a block. Incidental exposure will likely continue to increase based on the general trends indicating that people are traveling more across all modes.

The data suggest that pedestrian and bicycle safety in general may be improving. The number of bicycle injuries has steadily declined since 1998 and the number of bicycle fatalities has remained fairly constant over the same period. These results suggest that there may be other factors that have kept bicycle injury and fatalities from rising due to increased exposure such as bicycle safety efforts. In contrast, the increased collision exposure for pedestrians may partly explain why pedestrian injuries have been on the increase since 1999. While pedestrian fatalities have increased slightly since 1999, they are still not as high as fatalities were in 1996-1998, suggesting that safety may be improving for pedestrians as well.

INTRODUCTION

BACKGROUND

In 2000, in the United States, 4,739 pedestrians were killed as a result of injuries resulting from motor vehicle-related pedestrian crashes. While the number of deaths has decreased significantly (down 4% since 1999), pedestrian deaths still account for 11% of all motor vehicle deaths.[7] A total of 687 bicyclists were killed nationwide in crashes with automobiles in 2000. While not occurring as frequently as pedestrian deaths, these 687 deaths accounted for 2% of all motor vehicle deaths.[8]

Florida has consistently ranked as one of the worst states in terms of pedestrian and bicycle fatality rates. According to Figure 1, the numbers of bicyclists injured in motor vehicle crashes have declined by 30% since 1996, from 6,412 in 1996 to 4,476 in 2001. Although overall pedestrian injuries have declined slightly from 8,019 in 1992 to 7,894 in 2001, the figure shows an upward trend in injuries since 1999.

As shown in Figure 2, the number of pedestrian fatalities has declined slightly since 1996, while bicycle fatality trends remain fairly constant.

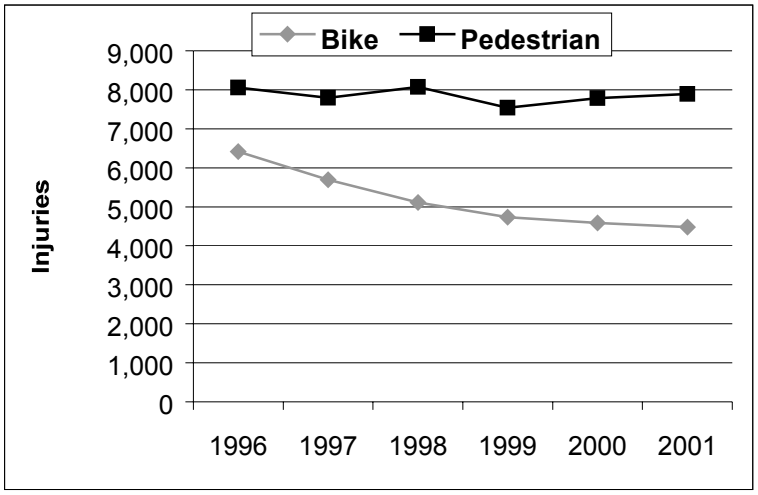
In 1998, the Florida Department of Transportation (FDOT) funded a survey of bicyclists and pedestrians[9] to gather descriptive information on crashes involving bicyclists and pedestrians as well as information to estimate bicycle and pedestrian travel and exposure to collisions[10] in Florida. The survey was unique in that a general population survey was used to gather information about trip generation, crashes, and opinions and perceptions regarding safety in pedestrian and bicycle travel.

The FDOT Safety Office contracted with the Center for Urban Transportation Research (CUTR) at the University of South Florida to conduct a similar survey in 2002 to better understand the high levels of bicycle and pedestrian-related crashes, injuries and fatalities that occur in Florida, relative to other states, and the circumstances surrounding these phenomena.

CUTR subcontracted with NuStats, Inc, of Austin, Texas, to conduct the survey, process and analyze the data, and prepare a report on the findings. The primary survey objectives were to compare changes in walking and bicycling since 1998 to determine if trip frequencies and trip lengths are increasing or decreasing, and determine if exposure to crashes is increasing or decreasing and to what degree. To that extent, the survey instrument and methods were identical to the1998 survey.

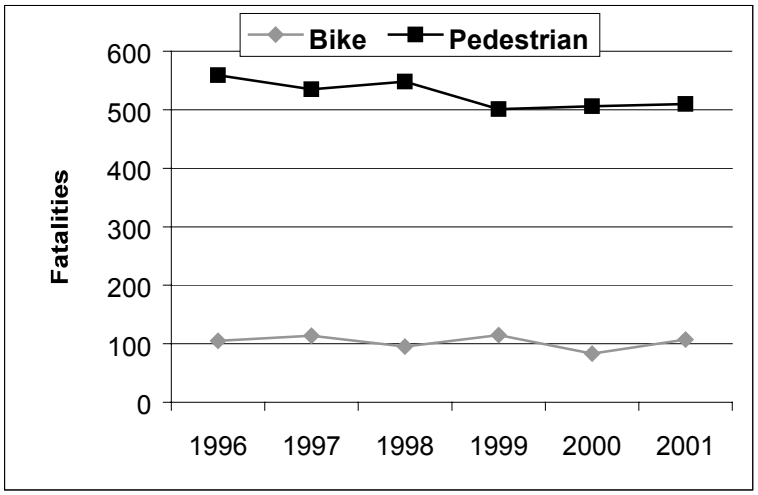
[7] *Fatality Facts*, Insurance Institute for Highway Safety: 2001
[8] *Fatality Facts*, Insurance Institute for Highway Safety: 2001
[9] Florida Department of Transportation, Office of Policy Planning, *Bicycle and Pedestrian Travel: Exploration of Collision Exposure in Florida*, NuStats International, Austin, Texas, December 1998.
[10] "Collision" and "crash" are used interchangeably throughout the report.

FIGURE 1: BICYCLE AND PEDESTRIAN CRASH INJURIES – FLORIDA, 1996 - 2001



Source: Florida Department of Highway Safety and Motor Vehicles *Traffic Crash Facts 2001*

FIGURE 2: BICYCLE AND PEDESTRIAN CRASH FATALITIES – FLORIDA, 1996 - 2001



Source: Florida Department of Highway Safety and Motor Vehicles *Traffic Crash Facts 2001*

To accomplish the survey objectives, respondents were asked about collision involvement, patterns of travel activity by pedestrian or bicycle modes, perceptions about safety and knowledge regarding pedestrian and bicycle travel, and demographic characteristics of the respondent and household.

Trip generation estimates and trip characteristics were calculated and analyzed by demographic and socioeconomic factors. Exposure was determined based on bicycle and pedestrian trip rates and lengths; incidental pedestrian travel habits; and perceptions about

safety and knowledge of laws regarding bicycle and pedestrian travel. The survey also provided data to examine trends and make comparisons to the 1998 survey results.

METHODS

In May – June 2002, NuStats conducted telephone interviews with 963 Florida residents residing in the Tampa, Orlando, Miami, and Jacksonville metropolitan areas to gather data about bicycle and pedestrian travel and crash involvement from randomly selected adults, aged 18 years and older.

English-speaking households[11] were selected at random using a random digit dial (RDD) sample consisting of both listed and unlisted telephone numbers. The survey was administered between the hours of 4:00 PM and 9:00 PM EST. The overall survey response rate was 40%. (See Appendix A for additional information on the survey methods and sampling information.)

The survey instrument included questions covering the following four main topics:

a) occurrence of and probing details about collisions of which respondents had some personal knowledge;

b) patterns of travel activity by pedestrian or bicycle modes or by pedestrian activity linked to other travel modes;

c) perceptions about safety and knowledge regarding pedestrian and bicycle travel; and

d) demographic characteristics of the respondents and their households.

Because the survey was designed to solicit information about pedestrian and bicycle crashes in which the respondent or their families or close associates were involved, a screening question was added near the beginning of the interview that inquired whether the respondent, a household member, or an acquaintance had ever been involved in a bicycle or pedestrian crash. (See Appendix B for survey questionnaire.)

Respondents selected to report on a collision (either personal or proxy reporting)[12] were subject to a long interview. In contrast to the short interview, which collected data on patterns of bicycle and pedestrian travel, perceptions about safety, personal knowledge of pedestrian and bicycle travel, and demographic characteristics about the respondent and the respondent's household, the long interview also collected details about bicycle and/or pedestrian crash involvement.

Some respondents provided data on multiple crashes or multiple types of crashes (bicycle and pedestrian vs. bicycle or pedestrian) or multiple crashes of multiple types. In order to remain consistent with the 1998 survey, respondents involved in multiple crashes of the same type were asked to provide data on only one crash. Likewise, respondents reporting on multiple crashes of both types, were asked to provide data about one bicycle and one pedestrian crash.

[11] In order to remain consistent with the 1998 methodology, only English speaking households were eligible for the survey.

[12] If the respondent provided information about a crash involving other family members or close associates, this is referred to as "proxy" reporting.

When choosing which crash to probe, interviewers were instructed to select crashes involving the respondent first, then household (HH) members, followed by other acquaintances. This was done to obtain the most accurate account of the crash. Preference was also given to the most recent crash in hopes that details about recent crashes would be easier for respondents to recall, thus more accurate. The last criterion for crash selection was severity, with emphasis given to fatal crashes, then crashes requiring hospitalization, then crashes requiring medical care, and, finally, crashes requiring only minor medical assistance.

The interviews generated data from 174 respondents reporting on 183 collision events (nine respondents reported one bicycle and pedestrian crash each, the other 165 respondents had one crash each).

SURVEY LIMITATIONS

Telephone surveys are subject to both sampling and non-sampling errors. Sampling errors arise because a sample represents something less than the population of interest. As such, the characteristics of the sample will not likely exactly match the characteristics of the population. Non-sampling errors include errors that arise during or following data collection, such as selecting ineligible respondents, interviewing subjects who purposely provide non-truthful data, or miscoding data. Some of the differences in statistical estimates between the 1998 and 2002 surveys may be the result of both sampling and non-sampling errors.

Sources of error unique to this study include the following:

1. Proxy Reporting: The majority of crash report data came from respondents that were not personally involved in the crash event. Instead, the respondent acts as a "proxy" for the individual involved in the crash. As such, the crash data gathered during these interviews may not be as accurate or reliable as data gathered from those respondents personally involved in bicycle or pedestrian crashes.

2. No time limit on date of crash occurrence: Although information on when the crash occurred was obtained, there was no time criteria established. Therefore, data obtained from crashes occurring in the distant past (greater than three years ago) may not yield data that is as accurate as data obtained in the more recent past (within three years).

3. Surveys conducted in English only: The 2002 survey was administered in English only to remain consistent with the 1998 methodology. In addition, time and budget constraints do not allow for the translation into Spanish, Creole, and Haitian – popular dialects spoken in the Miami area. As a result, all non-English speaking households in the survey area were ineligible for the survey. As a result, the survey findings are not reflective of the attitudes, behaviors, and experiences of non-English speaking households in the four urbanized areas.

4. Exclusion of non-telephone households: This survey, like any telephone survey, excludes from participation households without telephone service. Therefore, the opinions of portions of the survey population, such as low-income households that often do not have telephone service, may not be represented in the survey.

To reduce the amount of non-sampling error introduced into the survey, NuStats provided interviewer training to survey technicians prior to survey administration. The training session lasted approximately four hours and culminated with a mock interview session where NuStats survey technicians interviewed each other. The mock interview session utilized the Computer Assisted Telephone Interview (CATI) software program. NuStats project manager and project coordinator were available to answer questions asked by survey technicians.

PROFILE OF SURVEY PARTICIPANTS

This section provides demographic information about survey participants such as age, gender, employment status, income, etc. As in the 1998 survey, the sample of participants was designed to include residents of the Jacksonville, Miami, Orlando and Tampa metropolitan areas. The 1998 survey yielded an approximately equal distribution of households from each of the sampled Florida metropolitan areas. For this reason, no geographic quotas were established at the onset of the 2002 study.

The sampling plan was designed to produce a minimum of 1,000[13] completed interviews and detailed data on a minimum of 60 crashes. It was anticipated that approximately 20% of the 1,000 completed interviews (200) would be long interviews. (This assumption was made based on the results of the 1998 survey, when 144 long interviews were collected).

In the 2002 study, 174 surveys (18%) were long interviews that included detailed data regarding bicycle or pedestrian crashes. (See Table 1 for details). The distribution of long interviews ranged from 30% in Tampa to 18% in Miami. Four percent of all call attempts made in Miami resulted in contact with a Spanish-speaking only resident, with whom no interview could be conducted compared to Tampa (0.3%), Jacksonville (0.2%) and Orlando (0.7%).

TABLE 1: SHORT AND LONG SURVEY DISTRIBUTION BY METROPOLITAN AREA

Metropolitan Area	Short Interviews		Long Interviews		Total Interviews	
	2002	1998	2002	1998	2002	1998
Jacksonville	201 (25%)	129 (24%)	45 (26%)	31 (23%)	246 (26%)	160 (24%)
Miami	135 (17%)	149 (28%)	32 (18%)	30 (22%)	167 (17%)	179 (27%)
Orlando	247 (31%)	123 (23%)	45 (26%)	40 (30%)	251 (26%)	163 (24%)
Tampa	206 (26%)	131 (25%)	52 (30%)	33 (25%)	299 (31%)	164 (25%)
Total	**789**	**532**	**174**	**134**	**963**	**666**

AGE AND GENDER

Table 2 shows the age distribution of respondents by gender. Of the 963 survey respondents, 59% were female and 41% were male. As was the case in 1998, females were more likely to be contacted than males. The majority of respondents in both 1998 and 2002 fell between the ages of 21 to 49 years (58%). All respondents except those under 20 (which had a 3 percentage point decline from 1998) remained consistent in 2002.[14]

[13] Initially, 1,010 surveys were completed but due to a programming error, 47 cases had to be deleted. Thus, the final number of completed surveys is 963.

[14] During the 1998 survey, data were captured from respondents aged 16 and older. Institutional Review Board requirements to obtain parental consent for those under 18 years of age prevented the inclusion of respondents under 18 years in the 2002 survey.

TABLE 2: AGE DISTRIBUTION BY GENDER

Gender	Under Age 20		21 to 49 years		50 to 64 years		65 years and older		Percent Total Sample	
	2002	1998	2002	1998	2002	1998	2002	1998	2002	1998
Male	1.2%	2.0%	23.6%	23.0%	9.9%	8.0%	7.1%	5.0%	41.3%	38.0%
Female	1.5%	4.0%	31.2%	32.0%	14.0%	14.0%	11.6%	12.0%	58.7%	62.0%
Total	2.7%	6.0%	54.8%	55.0%	23.9%	22.0%	18.7%	17.0%	100.0%	100.0%

HOUSEHOLD SIZE

Table 3 shows respondents by household size for the 1998 and 2002 surveys. Over 80% of respondents' households have two or more persons living the household. The mean household size is 2.71 persons (slightly smaller than the 1998 mean household size, 2.84). This number is slightly higher than the current figure for the entire state of Florida, 2.46 persons per household.

TABLE 3: 2002 AND 1998 HOUSEHOLD SIZE

Household Size	2002	1998
One person	19.2%	16.7%
Two person	37.3%	34.7%
Three person	16.4%	18.3%
Four person	15.1%	17.3%
Five plus person	12.0%	13.0%
Total	100.0%	100.0%

Note: 2002 mean household size = 2.71

RESIDENCE

Identical to 1998, the 2002 survey respondents are overwhelmingly full-time, year-round residents of the state (98%). Only 2% indicated they were seasonal residents of Florida. This is not surprising given that many part-time or seasonal residents tend to visit Florida in the winter. As previously noted, data collection was conducted during the late spring/early summer.

DRIVER'S LICENSE AND DISABILITY

Approximately 91% of all respondents reported having a valid driver's license (92% in 1998). Six percent of the total sample indicated that they suffer from a disability that makes travel outside the home difficult. Overwhelmingly, these were older respondents.

EMPLOYMENT STATUS

Table 4 illustrates the employment status of the respondents compared between 1998 and 2002. Almost one half of all respondents are full-time workers (49%), which is consistent with the data from 1998 (57%). The number of retired increased by almost 5 percentage points, from 19% in 1998 to 25% in 2002. This may be an indicator of Florida's aging population.

TABLE 4: 2002 AND 1998 EMPLOYMENT STATUS

Employment Status	2002	1998
Full time	49.1%	57.0%
Part time	9.0%	8.0%
Retired	24.8%	19.0%
Not working	17.1%	16.0%
Total	100.0%	100.0%

HOUSEHOLD INCOME

Table 5 shows the income distribution among survey respondents by metropolitan areas. All income distributions were similar between the 1998 and 2002 surveys, with the exception of the $60,000 and over category, which increased by 11 percentage points, from 23% in 1998 to 33% in 2002.

TABLE 5: INCOME DISTRIBUTION BY METROPOLITAN AREAS

HH Income	Jacksonville		Miami		Orlando		Tampa		Total	
	2002	1998	2002	1998	2002	1998	2002	1998	2002	1998
Less than $15,000	12.8%	6.3%	9.8%	11.7%	7.8%	3.7%	9.0%	7.3%	9.8%	7.4%
$15,000 - $24,999	11.7%	11.9%	12.0%	17.9%	14.6%	12.9%	17.5%	14.0%	14.3%	14.3%
$25,000 - $39,999	15.8%	26.9%	15.8%	27.9%	25.4%	25.8%	23.9%	27.4%	20.8%	27.0%
$40,000 - $59,999	25.5%	31.9%	22.6%	22.3%	19.5%	32.5%	20.5%	26.2%	21.9%	28.1%
$60,000+	34.2%	23.1%	39.8%	20.1%	32.7%	25.2%	29.1%	25.0%	33.2%	23.3%
Total	100.0%	100.1%	100.0%	99.9%	100.0%	100.1%	100.0%	99.9%	100.0%	100.1%

Notes: 2002 Base: All households that reported income (n=768). 1998 Base: (n=666).
1998 percentages do not add to 100 percent due to rounding errors.

CHILDREN AND YOUNG ADULTS IN HOUSEHOLD

Table 6 illustrates the percentage of respondents with children under 16 in their household. More than one-third of the respondents (35%) indicated that they have at least one person under the age of 16 years living in their household (a slight increase from 1998). Households with younger people tend to have more bicycle and pedestrian trips, due to the presence of unlicensed drivers.

TABLE 6: CHILDREN UNDER 16 IN HOUSEHOLD – 2002 AND 1998

Children under 16	2002	1998
0	64.9%	66.7%
1	16.5%	14.1%
2	12.0%	12.5%
3+	6.6%	6.8%
Total	100.0%	100.0%

Table 7 shows that nearly one-fifth (18%) of the surveyed households indicated having driving-age persons (aged 16 to 20 years) living with them and 5% have two or more persons in that age group.

TABLE 7: YOUNG ADULTS AGE 16 TO 20 IN HOUSEHOLD – 2002 AND 1998

Young adults 16 to 20	2002	1998
0	82.5%	81.8%
1	12.2%	13.1%
2+	5.3%	5.1%
Total	100.0%	100.0%

BICYCLES PER HOUSEHOLD

Table 8 shows that the majority of households have at least one bicycle (58%), a slight increase from 1998 (56%). Because one of the areas of interest is bicycle travel, it is important to examine the presence of bicycles in the surveyed households. The 2002 mean number of bicycles per household was 1.39.

TABLE 8: BICYCLES PER HOUSEHOLD – 2002 AND 1998

Bicycles per Household	2002	1998
0	41.8%	44.4%
1	18.0%	17.9%
2	19.5%	18.2%
3	10.7%	10.5%
4+	10.0%	9.0%
Total	100.0%	100.0%

Note: 2002 mean number of bicycles per household = 1.39

Another way to analyze the number of bicycles is bicycles per person. When data are examined this way, the 1998 and 2002 data are similar. Table 9 indicates that, from 1998 to 2002, the percentage of households with no bicycles decreased by approximately 3 percentage points, while the percentage of households with one or more bicycles per person increased by approximately 5 percentage points.

TABLE 9: BICYCLES PER PERSON – 2002 AND 1998

Bicycles per Person	2002	1998
0	41.8%	44.4%
Less than one bicycle	27.8%	30.8%
One or more bicycles	30.3%	24.8%
Total	100.0%	100.0%

MOTOR VEHICLES PER HOUSEHOLD

Table 10 shows the number of motor vehicles per household. In 2002, 96% of respondents' households had at least one car. More than half (66%) of the respondents had two or more cars in their household. Households with two or more motor vehicles saw decreases between 1998 and 2002, while one-vehicle households increased from 22% to 30%. The mean number of motor vehicles per household is 1.95, down from 2.1 in 1998.

TABLE 10: MOTOR VEHICLES PER HOUSEHOLD – 2002 AND 1998

Motor Vehicles per Household	2002	1998
0	4.2%	5.0%
1	30.3%	22.0%
2	43.7%	44.0%
3	13.7%	17.0%
4+	8.1%	12.0%
Total	100.0%	100.0%

Similar to the previous study, the survey sample was drawn from four Florida metropolitan areas and cannot be used to generalize to the entire state, because it has not been statistically weighted and/or expanded to the states' population parameters.

SURVEY RESPONDENT PROFILE

Based on the above results, a typical survey respondent can best be described as:

- Female (59%)
- 21-49 years (58%)
- Have 2 or more person living in HH (83%)
- Florida resident (98%)
- Valid driver's license (91%)
- Full time worker (49%)
- HH income of $40,000 and greater (55%)
- Have children 16 years and under (35%)
- Have at least one bicycle (58%)
- Have at least one motor vehicle (96%)

COLLISION REPORTS

This section details information reported by survey respondents about the occurrence of motor vehicle-related pedestrian and bicycle crashes as well as details about these crashes in which the respondent had some personal knowledge. Information about pedestrian and bicycle collisions are presented separately.

COLLISION REPORTING

The 963 interviews generated data from 174 respondents reporting on 183 collision events (nine respondents reported one bicycle and pedestrian crash each, the other 165 respondents had one crash each). If the crash event involved either a household member (HH) or a non-household acquaintance, the respondent acted as a proxy for the individual involved in the crash and provided the crash specific data. Crash data gained via proxy reporting is likely to be less accurate than crash data obtained from personal accounts, and caution should be used when interpreting the statistics presented in this section.

As shown in Table 11, slightly over one-fourth (26%) of the respondents reported on collisions in which they were personally involved, while more than one-half (52%) reported on collisions involving a non-household acquaintance.

TABLE 11: COLLISION REPORTING – 2002

Crash Reported For	Total Collisions 2002	Percent Total Collisions 2002
Respondent	47	26%
Other HH Members	40	22%
Non-HH Members	96	52%
Total	174	100%

Approximately 20 variables were collected for each reported crash event. A total of 69 long interviews were conducted to collect information about pedestrian crashes, while 114 interviews were conducted to collect information about bicycle crashes. (See Table 12 for more detail).

TABLE 12: DISTRIBUTION OF LONG INTERVIEWS – 2002 AND 1998

Crash Reported For	2002 Long Interviews[15]	Percent Total 2002 Long Interviews	1998 Long Interviews	Percent Total 1998 Long Interviews
Pedestrian	60	34%	51	38%
Bicycle	105	60%	73	55%
Both	9	6%	10	7%
Total	174	100%	134	100%

[15] Because there were 9 cases that reported on both a bicycle and a pedestrian collision, there were actually 69 long pedestrian interviews and 114 long bicycle interviews, for a total of 183 crashes for which data was collected during 174 long interviews.

PEDESTRIAN COLLISIONS

Respondents were asked about pedestrian crashes that involved themselves, their immediate family (or member of their household), or someone else close to them (i.e., neighbor, friend, or relative not residing in their household). As previously stated, a total of 69 pedestrian crashes were reported. Table 13 depicts that of these 69 pedestrian crashes, 13% were self-reported by respondents. An overwhelming majority of respondents reported by proxy (87%), an 11 percentage-point increase from 1998. Among proxy reporting, crashes were reported for close non-household friends and relatives (58%) or other household members (29%).

TABLE 13: REPORT OF PEDESTRIAN CRASHES SELECTED FOR LONG INTERVIEW – 2002 AND 1998

Crash Reported For	Total 2002	Percent 2002	Total 1998	Percent 1998
Respondent	9	13%	17	29%
Other HH Members	20	29%	14	24%
Non-HH Members	40	58%	27	47%
Total	69	100%	58	100%

As was the case in 1998, the majority of the reported pedestrian crash data is from the perspective of the pedestrian (59%), while 39% is from the driver's perspective, and 2% is from the passenger in the vehicle. See Figure 3 for further detail.

FIGURE 3: REPORTING PERSPECTIVE FOR PEDESTRIAN CRASHES – 2002 AND 1998
N=69 (2002)

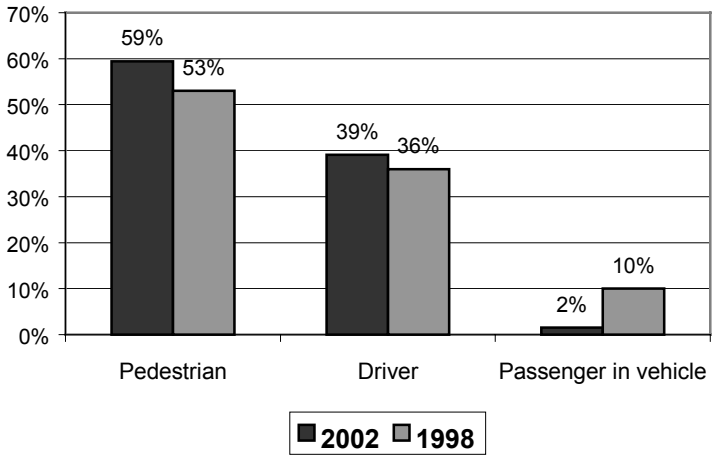


Figure 4 shows that police reports were completed in more than three-fourths (84%) of the crashes reported by respondents (an increase from 69% in 1998). Twelve percent of the crashes reported on were not captured on a police report (down from 21% in 1998), while report status was unknown 4% of the time.

FIGURE 4: PEDESTRIAN CRASHES REPORTED TO POLICE – 2002 AND 1998
N=69 (2002)

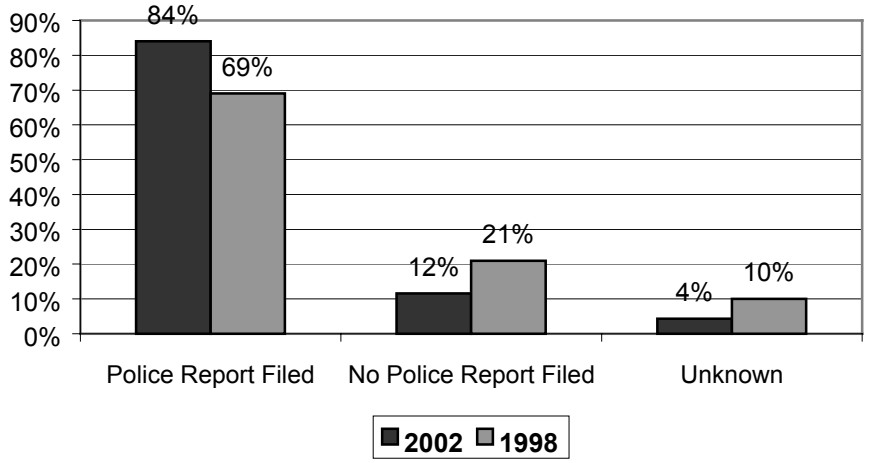


Figure 5 shows that slightly over one half (52%) of the pedestrians involved in reported crashes were aged 20 years and under. This is a large deviation from the 1998 survey, when nearly one half of the pedestrians involved in reported crashes were between the ages of 21 and 49 years.

FIGURE 5: AGE OF PEDESTRIAN INVOLVED IN CRASHES – 2002 AND 1998
N=69 (2002)

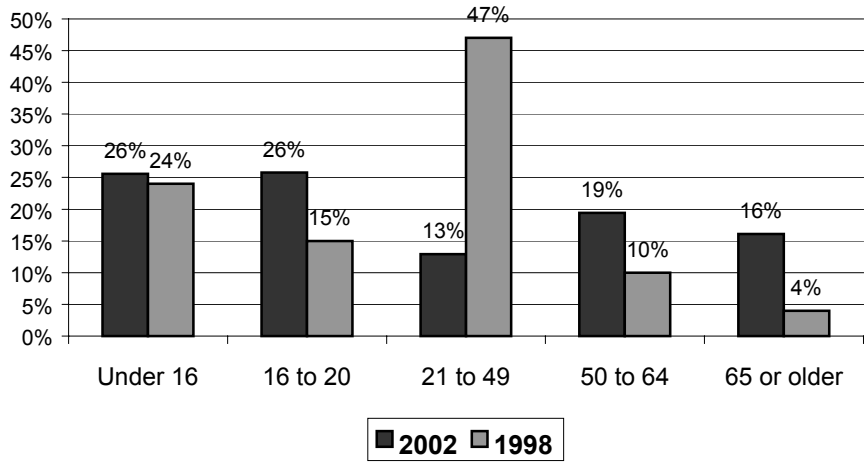
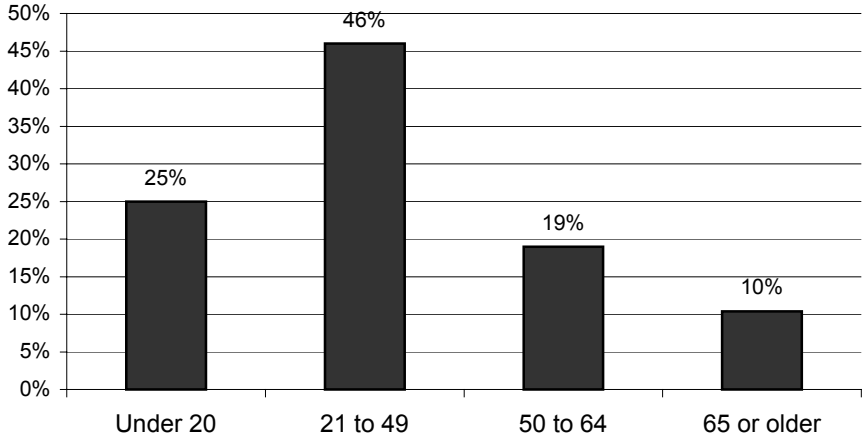


Figure 6 shows the age distribution for the driver's involved in the crashes. As in 1998, the age range most likely characteristic of the driver involved in the crash was 21 to 49 years (46%).

FIGURE 6: AGE OF DRIVER INVOLVED IN PEDESTRIAN CRASHES – 2002
N=48



Notes: Comparative data for 1998 was not available for use. The 2002 base data includes only those who reported age.

Respondents were asked when the crash event occurred. As Table 14 indicates, about one half (49%) of the reported crashes occurred earlier than 1998, 41% between 1998 and 2001, and 10% within the past year. Most of the reported crashes occurred during daylight hours (67%). Thirteen percent occurred during the dark, 13% during dusk, and 7% during dawn hours. Traffic was reported as "light" in 44% of the crashes, "moderate" in 35% of the crashes, and "heavy" for 21% of the crashes. Ninety-three percent of all crashes occurred during "clear" weather conditions, with 7% during rain.

Similar to the 1998 survey, the 2002 data suggest that the majority of pedestrian crashes occur at "non-intersections." Table 15 shows that 63% of the reported pedestrian crashes in 2002 occurred at "non-intersections", with exactly one-forth occurring at signalized intersections and 12% occurring at non-signalized intersections.

For those crashes occurring at intersections, 45% of the respondents reported the presence of pedestrian signals (up from 17% in 1998). Thirty-four percent said there were no crossing signals (down 26 percentage points from 1998), and 21% could not recall whether signals were present or not.

TABLE 14: OCCURRENCE OF PEDESTRIAN CRASHES – 2002 AND 1998
N=63 (2002)

Occurrence	2002	1998
Date		
More than three years ago	49%	34%
Past three years	41%	51%
This year	10%	15%
Time of Day		
Daylight	67%	74%
Dark	13%	19%
Dusk	13%	3%
Dawn	7%	2%
Traffic Conditions		
Light	44%	48%
Moderate	35%	27%
Heavy	21%	25%
Weather Conditions		
Rain	7%	6%
Clear	93%	92%
Fog	0%	2%

Note: Table excludes "don't know" or "refused "(DK/RF) response.

TABLE 15: TYPE OF INTERSECTION AND PRESENCE OF PEDESTRIAN SIGNALS – 2002 AND 1998

Location of Crash	2002	1998
Type of Intersection (n=64)		
Non-intersection	63%	52%
Non-signalized intersection	12%	28%
Signalized intersection	25%	20%
Presence Pedestrian of Signals (n=29)		
Yes	45%	17%
No	34%	60%
Cannot recall	21%	23%

Table 16 shows information about crosswalk availability at the time of the crash. In 2002, a considerably higher percentage of reported pedestrian crashes occurred at intersections with marked crosswalks (48% in 2002 compared to 30% in 1998). In total, 22 crashes occurred at intersections with marked crosswalks. Of those, 36% reported that the pedestrian used the crosswalk; 27% said they did not. Thus, out of the 69 pedestrian crashes reported, 8 (11%) involved the pedestrian actually using a pedestrian designated crosswalk (up from 7% in 1998). The remaining 89% of the crashes either took place at locations without marked crosswalks or apparently did not use them, if they were available.

TABLE 16: CROSSWALK AVAILABILITY AND USE BY PEDESTRIAN – 2002 AND 1998

Intersection Crashes	2002	1998
Crosswalk Availability (n=29)		
Pedestrian crosswalks	48%	30%
No crosswalks	24%	60%
Cannot recall	28%	10%
Pedestrian used crosswalk (n=22)		
Yes	36%	33%
No	27%	33%
Cannot recall	37%	34%

In total, 49% of the crashes were described as occurring at "mid-block" and only 13% at a driveway location (see Table 17). Twenty-three percent of the crashes occurred at a location where there was a raised median in the street. The crash site was reported to have sidewalks 54% of the time, and described as "a road or street with curbs" 36% of the time.

TABLE 17: PEDESTRIAN CRASH CONDITIONS – 2002 AND 1998

Crash Conditions	2002	1998
Crash at Mid-block (n=53)		
Yes	49%	41%
Presence of Raised Median (n=69)		
Yes	23%	16%
Sidewalk Available (n=69)		
Yes	54%	52%

Fifty-one percent of the respondents indicated that, to the best of their knowledge, the crash was not the fault of the pedestrian, while 42% said the pedestrian was at fault. Seven percent of the respondents could not assign fault. The data for 2002 and 1998 is presented in Table 18.

TABLE 18: FAULT ATTRIBUTED TO PEDESTRIAN – 2002 AND 1998
N=69 (2002)

Fault Attributed	2002	1998
Yes	42%	41%
No	51%	41%
Cannot Assign Blame	7%	18%

The survey instrument was designed to capture details regarding pedestrian behavior prior to the crash. Table 19 indicates that the pedestrian was either walking or jogging in the same direction as the traffic flow 17% of the time; crossing the street 61% of the time; or walking against traffic flow 10% of the time. In 12% of the reported crashes, respondents did not know the pedestrian activity at the time of the crash.

TABLE 19: PRE-CRASH CONDITIONS – 2002 AND 1998
N=69 (2002)

Pre-Crash Condition	2002	1998
Walking/Jogging same direction as traffic	17%	17%
Crossing Street	61%	41%
Walking/Jogging opposite direction as traffic	10%	9%
Action not provided	12%	33%

Although not shown in the table, the pedestrian walked into traffic in 49% of the reported crashes and came out from between parked cars in 9% of the crashes.

Table 20 shows the activity of the motor vehicle prior to the crash. In 25% of the crashes, the motor vehicle made a turn and then struck the pedestrian. The motor vehicle was backing up when it struck the pedestrian in 5% of the reported crashes. The motorist left the roadway and then struck the pedestrian in 21% of the crashes.

TABLE 20: MOTOR VEHICLE ACTIVITY SURROUNDING PEDESTRIAN CRASH– 2002 AND 1998
N=69 (2002)

Pre-Crash Condition	2002	1998
Vehicle turned and then struck pedestrian	25%	21%
Vehicle backing up and then struck pedestrian	5%	7%
Vehicle left roadway and then struck pedestrian	21%	9%

Literature suggests that alcohol usage plays a key role in pedestrian crashes. Respondents were asked if, to the best of their knowledge, the driver or pedestrian had been drinking. As shown in Table 21, alcohol on the part of the driver was reported only 7% of the time and for the pedestrian 6% of the time.

TABLE 21: ALCOHOL USE BY DRIVER OR PEDESTRIAN – 2002 AND 1998
N=69 (2002)

Alcohol Used by Driver or Pedestrian	2002	1998
Driver	7%	9%
Pedestrian	6%	7%

Note: Table excludes DK/RF response.

BICYCLE COLLISIONS

Respondents were asked to report motor vehicle-related bicycle crashes that involved themselves, a household member, or someone close to them (i.e., neighbor, friend, relative). As shown in Table 22, of the 114 bicycle crashes probed, over two-thirds (67%) were by proxy for close non-household friends and relatives (49%) or other household members (18%). The respondent was directly involved in 33% of the reported crashes.

TABLE 22: REPORT OF BICYCLE CRASHES SELECTED FOR LONG INTERVIEW– 2002 AND 1998
N=114 (2002)

Crash Reported For	Total 2002	Percent 2002	Total 1998	Percent 1998
Respondent	38	33%	21	25%
Other HH Members	20	18%	43	52%
Non-HH Members	56	49%	19	23%
Total	114	100%	83	100%

The majority of the information reported is from the perspective of the bicyclist (83%), while 14% is from the driver and 3% is from a passenger in the vehicle. See Figure 7 for details.

FIGURE 7: REPORTING PERSPECTIVE FOR BICYCLE CRASHES – 2002 AND 1998
N=114 (2002)

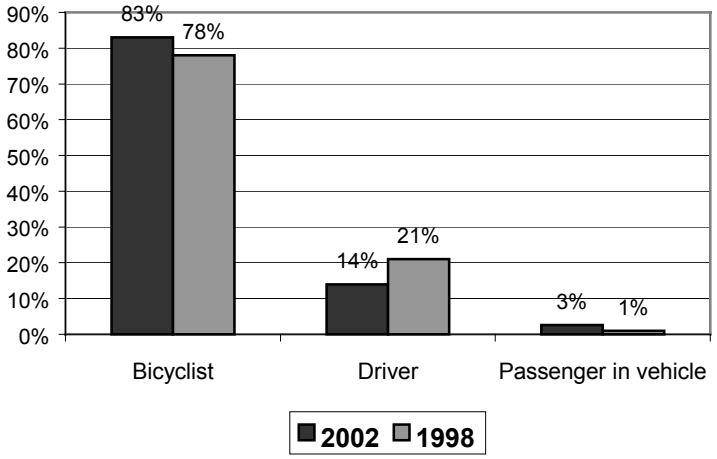


Figure 8 identifies the frequency with which crashes were reported to the police. Nearly two-thirds (64%) of the crashes reported were also filed under a police report. This is an increase of 10 percentage points since 1998. Twenty-eight percent of the crashes are not associated with a police report, while report status was unknown 8% of the time.

FIGURE 8: BICYCLE CRASHES REPORTED TO POLICE – 2002 AND 1998
N=114 (2002)

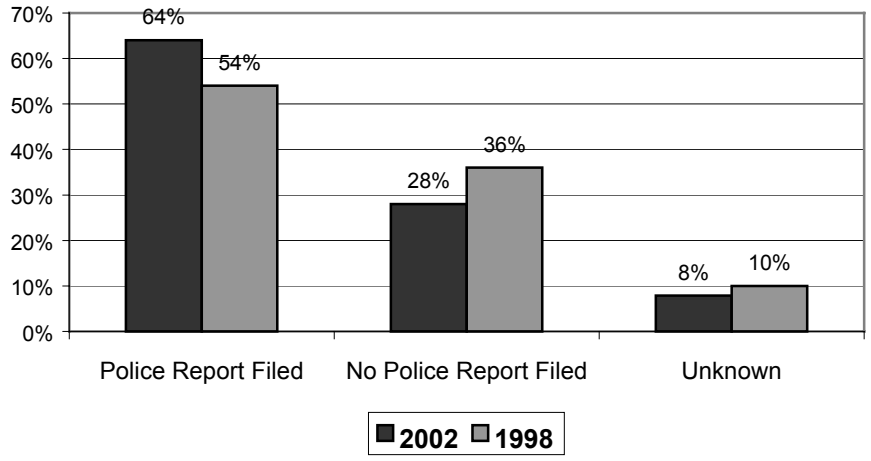
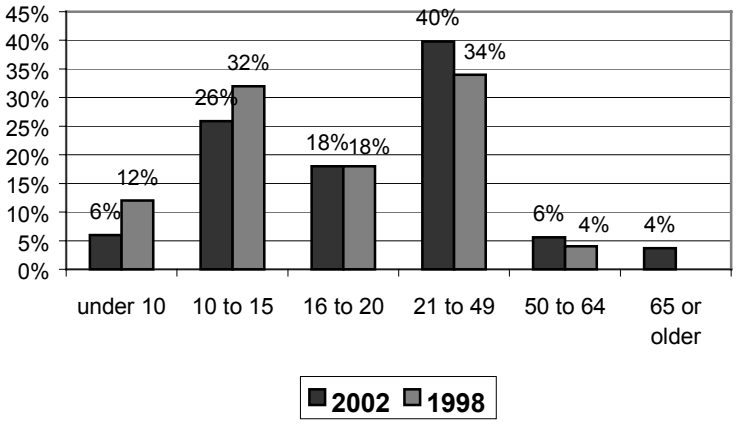


Figure 9 depicts that more than one-third of the reported crashes (40%) involved an adult bicyclist age 21 to 49 years. The 10 to 15 year age group accounted for one-fourth (26%) of all bicycle riders involved in crashes.

FIGURE 9: AGE OF BICYCLIST INVOLVED IN CRASHES – 2002 AND 1998
N=108 (2002)

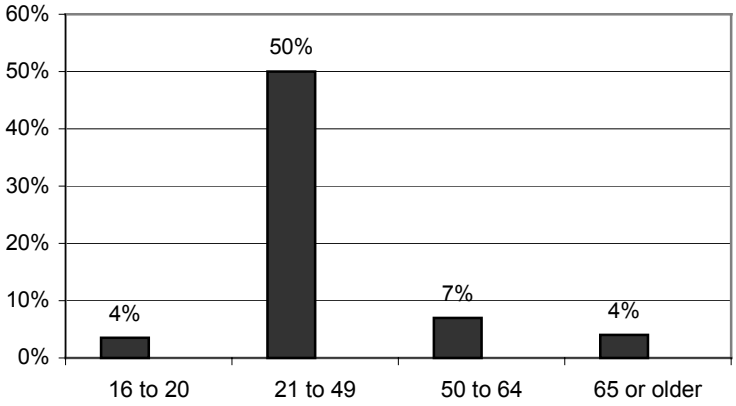


Notes: The 1998 data set did not include sufficient responses from respondents 65 years or older to facilitate a statistically valid analysis of this age group. The 2002 base data includes only those who reported age.

Bicyclist skill level was mostly reported as "advanced" or "casual" (50% and 40% respectively). "Basic" skills were reported 10% of the time.

As Figure 10 suggests, the age of the driver involved in bicycle crashes was 21 to 49 years exactly one-half of the time. The age of the driver was not known 35% of the time.

FIGURE 10: AGE OF DRIVER INVOLVED IN BICYCLE CRASHES – 2002
N=114 (2002)



Notes: Comparative data for 1998 was not available. The 2002 base data includes only those who reported age.

Table 23 provides detailed information regarding the conditions surrounding the bicycle crash. More than one-half of the reported bicycle crashes occurred earlier than 1998 (58%), 33% between 1998 and 2001, and 9% within 2002. More than two-thirds of the reported crashes occurred during daylight hours (69%, a decline of 19 percentage points from 1998). Eighteen percent of the reported crashes occurred during dusk hours, 12% when it was dark, and 1% during dawn hours. Traffic was reported as "light" in 53% of the crashes, "moderate" in 30% of the crashes, and "heavy" for 18% of the crashes. These traffic conditions are nearly identical to the 1998 reported bicycle crash characteristics. Ninety-five percent of all crashes occurred during "clear" weather conditions, with 3% during rain and 2% during fog.

As Table 24 indicates, approximately half of the crashes (46%) occurred at locations described as non-intersections, 31% at non-signalized intersections, and 23% at signalized intersections. For crashes not occurring at intersections, three-fourths (76%) were described as occurring at "mid-block".

In one-third of the reported crashes (26%), the crash occurred because the motor vehicle was making a turn, then struck the bicyclist, while 21% resulted from a motor vehicle turning directly in front of a bicyclist. Table 25 suggests that seven percent of the crashes were a result of the motor vehicle striking the bicyclist while backing up, and another 2% are attributable to a motor vehicle pulling out from a parking space. Sixteen percent of the crashes were due to the motorist ignoring a stop sign or traffic signal.

TABLE 23: OCCURRENCE OF BICYCLE CRASHES – 2002 AND 1998

Occurrence	2002	1998
Date (n=114)		
More than three years ago	58%	37%
Past three years	33%	42%
This year	9%	21%
Time of Day (n=111)		
Daylight	69%	88%
Dark	12%	10%
Dusk	18%	1%
Dawn	1%	1%
Traffic Conditions (n=101)		
Light	53%	51%
Moderate	30%	32%
Heavy	18%	17%
Weather Conditions (n=107)		
Clear	95%	96%
Rain	3%	3%
Fog	2%	1%

TABLE 24: TYPE OF INTERSECTION AND LOCATION OF BICYCLE CRASH – 2002 AND 1998

Location of Crash	2002	1998
Type of Intersection (n=109)		
Non-intersection	46%	57%
Non-signalized intersection	31%	23%
Signalized intersection	23%	20%
Mid-block (n=149)		
Yes	76%	64%
No	24%	36%

Note: Table excludes DK/RF responses.

TABLE 25: MOTOR VEHICLE ACTIVITY SURROUNDING BICYCLE CRASH – 2002 AND 1998

N=114 (2002)

Motor Vehicle Activity	2002	1998
Driver opened door of parked car	0%	0%
Vehicle pulling out from parking space	2%	7%
Vehicle backing up	7%	5%
Motorist ignored stop sign or traffic signal	16%	15%
Vehicle turning in front	21%	17%
Vehicle turning	26%	15%

Note: Totals do not add to 100% due to different response rates per question. Table excludes DK/RF responses.

Table 26 shows that exactly one in five crashes (20%) were the result of the bicyclist swerving into traffic, while only 7% were the result of the bicyclist ignoring a signal or stop sign. One percent of the crashes were attributed to the bicyclist making a left turn in front of the vehicle.

TABLE 26: BICYCLIST ACTIVITY SURROUNDING CRASH – 2002 AND 1998
N=114 (2002)

Bicyclist Activity	2002	1998
Bicyclist swerved into traffic	20%	33%
Bicyclist ignored signal or stop sign	7%	18%
Bicyclist made left turn in front of vehicle	1%	3%

Note: Totals do not add to 100% due to different response rates per question. Table excludes DK/RF responses.

Sixty-eight percent of the respondents indicated that, to the best of their knowledge, the crash was not the fault of the bicyclist, while another 24% said it was the bicyclist's fault. Eight percent of the respondents could not assign fault. See Table 27 for further detail.

TABLE 27: FAULT ATTRIBUTED TO BICYCLIST – 2002 AND 1998
N=114 (2002)

Fault Attributed	2002	1998
Yes	24%	40%
No	68%	52%
Cannot Assign Blame	8%	8%

To the best of the respondents' knowledge, alcohol usage among drivers was reported for 18% of the crashes (up 11 percentage points from 1998), and among bicyclists only 6% of the time. See Table 28 for further detail.

TABLE 28: ALCOHOL USAGE IN BICYCLE CRASHES – 2002 AND 1998

Alcohol Usage Reported	2002	1998
Driver (n=90)		
Yes	18%	7%
No	82%	93%
Bicyclist (n=107)		
Yes	6%	2%
No	94%	98%

TRIP GENERATION ESTIMATES AND TRIP CHARACTERISTICS

This section discusses trip generation estimates based on information provided by survey respondents on patterns of personal travel by pedestrian and bicycle modes or by pedestrian activity linked to other travel modes, as well as general information about such travel by other household members. Characteristics about recent bicycle and pedestrian trips made by the respondents are discussed as well as exposure from incidental pedestrian trips.

TRIP RATES

As shown in Table 29, residents in the surveyed Florida metropolitan areas reported generating 1.08 walk trips per person per day (up from 0.91 walk trips per person per day in 1998) and 0.17 bicycle trips per person per day (up slightly from 0.12 bicycle trips per person per day in 1998).

TABLE 29: BICYCLE AND PEDESTRIAN DAILY TRIP RATES

Survey	Bicycle Trip Rate	Pedestrian Trip Rate
1998 Florida Bicycle and Pedestrian	0.12	0.91
2002 Florida Bicycle and Pedestrian	0.17	1.08
Percent increase	42%	19%

Note: Trip rates provided in trips per person per day.

Trip rates are calculated by dividing the total number of reported trips made by respondents in the 24 hours immediately prior to the telephone interview by the total number of interviewed respondents (n=963). See Table 30 for information regarding the number of reported bicycle and pedestrian trips.

TABLE 30: BICYCLE AND PEDESTRIAN TRIPS – 2002
N=963

Mode	Respondents Reporting Trips	Total Trips Reported
Bicycle	77	164
Pedestrian	416	1032

Note: Table indicates trips made in 24-hour period prior to survey.

When bicycle and trip rates are examined by metropolitan area, the data suggests that Miami is characterized by the highest bicycle and pedestrian trip rates (0.25 and 1.13 trips per person per day respectively). Conversely, Jacksonville is characterized by the lowest bicycle and pedestrian trip rates (0.12 and 0.99 trips per person per day respectively). See Table 31 for further detail.

TABLE 31: BICYCLE AND PEDESTRIAN DAILY TRIP RATES BY METROPOLITAN AREA – 2002

Metropolitan Area	Bicycle Trip Rate	Pedestrian Trip Rate
Jacksonville (n=246)	0.12	0.99
Miami (n=167)	0.25	1.13
Orlando (n=251)	0.16	1.06
Tampa (n=299)	0.17	1.12

Note: Trip rates provided in trips per person per day.

ROLE OF TRIP LENGTH

The average length of bicycle and pedestrian trips in miles by trip purpose is shown in Table 32. Comparable data are not available from the 1998 survey.[16] In 2002, the average bicycle trip length was 4.53 miles and the average pedestrian trip length was 1.17 miles. For both bicycle and pedestrian modes, the largest percentage of trips was made for social, recreational, and shopping purposes. Social or recreation trips were the longest by distance (5.07 for bicycle and 1.47 pedestrian respectively). In contrast, only 5% of the respondents indicated their most recent bicycle and pedestrian trip was for work commute purposes.

TABLE 32: TRIP PURPOSE AND TRIP LENGTH – 2002

Trip Purpose	Average Bicycle Trip Length[1] (N=183)	Percent Total Trips	Average Pedestrian Trip Length[1] (N=168)	Percent Total Trips
Home to work	4.33	5%	0.67	5%
Shopping	2.46	13%	0.63	21%
School	1.00	<1%	0.67	2%
Religious	0.00	0%	1.00	1%
Personal Business	3.67	5%	1.03	11%
Visit Friends or Relatives	1.75	2%	1.16	5%
Other (Social/Recreation)	5.07	75%	1.47	55%
All	4.53	100%	1.17	100%

Notes: Trip length is based on round trip. To calculate pedestrian trip length, respondents were asked, "On the average, about how far was your typical walking round trip." For responses reported in something other than miles, such as blocks, the distance in linear miles was estimated using best practical judgment. For bike trip length, respondents were asked to estimate their most recent bike trip in miles.

TRIP GENERATION AND CORRELATES

Pedestrian Trip Generation

The frequency of daily (past 24 hours) pedestrian trips suggests that pedestrians in 2002 are making more trips than were made by respondents in 1998. The full distribution of trips is identified in Table 33. More than one-half of all respondents (56%) reported making zero trips during the 24-hour period prior to survey administration. Slightly less than one-fourth

[16] In the 1998 survey, National Personal Transportation Survey (NPTS) data on average trip lengths of bike and walk trips in Florida were compared to the US as a whole. Because no new data were available, this was not repeated for the 2002 survey. The last NPTS was completed in 1995. Since then, the NPTS has combined with the American Travel Survey (ATS) to form the National Household Travel Survey (NHTS), which was first conducted in 2000. State and metropolitan statistical area data on mode, trip length, and travel time is expected to be available in the Summer 2003.

(21%) reported making a single trip during that same time period. Of the remaining respondents, 10% reported making two trips, 5% reported making three trips, and 8% reported making 4 or more trips.

TABLE 33: FREQUENCY OF PEDESTRIAN TRIPS – 2002
N=963

Number of Trips	Percent Sample Making Number of Pedestrian Trips
0	56%
1	21%
2	10%
3	5%
4+	8%

Note: Table indicates trips made by respondent in 24-hour period prior to survey.

As was the case in 1998, the most active age group for pedestrian activity is the 21 to 49 year age group (1.20 daily pedestrian trips per person). As shown in Table 34, respondents age 65 and older reported making 1.01 daily pedestrian trips per person, while 50 to 64 year old respondents reported making 0.84 daily pedestrian trips per person. All age groups reported making more trips in 2002 than were made in 1998, with the largest increase reported for respondents age 65 and older (up from 0.58 daily pedestrian trips per person).

TABLE 34: DAILY PEDESTRIAN TRIP RATES BY AGE – 2002 AND 1998
N=921 (2002)

Age	2002	1998
21 to 49 (n=518)	1.20	1.14
50 to 64 (n=226)	0.84	0.62
65 and older (n=177)	1.01	0.58

Notes: Trip rates provided in trips per person per day for 24-hour period prior to survey.
1998 and 2002 <20- year old sample size too small for valid statistical analysis.

In 1998, males made more daily pedestrian trips per person than females. In 2002, males reported a daily pedestrian trip rate of 1.27 trips per person per day, while females reported a rate of 0.93 trips per person per day. The 2002 data in Table 35 suggests that the male trip rate is approximately 35% higher than that of females.

TABLE 35: DAILY PEDESTRIAN TRIP RATES BY GENDER– 2002 AND 1998
N=963 (2002)

Gender	2002	1998
Male (n=398)	1.27	1.05
Female (n=565)	0.93	0.83

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey.

Table 36 implies that respondents with physical disabilities make fewer pedestrian trips per person per day (0.79) than do respondents who do not have physical disabilities (1.10). These estimates are similar to those generated in 1998, as physically disabled respondents also reported lower trip rates relative to non-disabled respondents.

TABLE 36: PHYSICAL DISABILITY AND PEDESTRIAN TRIP RATES 2002 AND 1998
N=963 (2002)

Physical Disability	2002	1998
Yes (n=67)	0.79	0.88
No (n=896)	1.10	1.32

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey administration

As Table 37 indicates, data suggests that non-licensed individuals rely more on pedestrian travel than do respondents with driver's licenses. In 2002, non-licensed respondents reported making 1.16 daily pedestrian trips per person, while licensed respondents reported 1.07 daily pedestrian trips per person. The magnitude of the difference in trip rates between licensed and non-licensed respondents has decreased from a difference of 0.18 pedestrian trips per person per day in 1998 to a difference of 0.09 pedestrian trips per person per day in 2002.

TABLE 37: DRIVER'S LICENSE STATUS AND PEDESTRIAN TRIP RATES - 2002 AND 1998
N=963

Licensed Driver	2002	1998
Yes (n=893)	1.07	0.74
No (n=70)	1.16	0.92

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey.

With the exception of 5-person households, trip rates for all household sizes have increased from 1998 to 2002. The largest increase occurred in 6+ person households, where the trip rate increased from 0.58 to 1.32 trips per person per day. Table 38 shows that the 2002 respondents make more pedestrian trips than respondents in the 1998 survey.

TABLE 38: DAILY PEDESTRIAN TRIP RATES BY HOUSEHOLD SIZE – 2002 AND 1998
N=963 (2002)

Persons per Household	2002	2002 Population Percent	1998	1998 Population Percent
1	0.98	19%	0.78	17%
2	0.97	37%	0.83	35%
3	1.08	16%	0.87	18%
4	1.26	15%	1.12	17%
5	1.30	7%	1.41	8%
6+	1.32	6%	0.58	5%

Note: Trip rates provided in trips per person per day.

Similar to the 1998 pedestrian trip rate estimates, 2002 respondents with a full time job reported making more daily pedestrian trips (1.15) than did respondents with part time jobs (1.10 daily pedestrian trips) or unemployed respondents (0.98 daily pedestrian trips). In contrast to the 1998 data, part time workers in 2002 reported making more trips than did their unemployed counterparts (see Table 39).

TABLE 39: DAILY PEDESTRIAN TRIP RATES BY EMPLOYMENT STATUS – 2002 AND 1998
N=963 (2002)

Employment Status	2002	% 2002 Survey Population	1998	% 1998 Survey Population
Full time	1.15	49%	0.97	57%
Part time	1.10	9%	0.82	8%
Not employed	0.98	42%	0.85	35%

Note: Trip rates provided in trips per person per day.

When daily pedestrian trip rates are examined by household size, the 2002 data in Table 40 suggests that households reporting annual incomes from $40,000 to $60,000 are characterized by the highest trip rates (1.38 daily pedestrian trips). This is similar to the 1998 data when this income category shared the highest trip rate estimates with those respondents reporting $15,000 to $25,000 (1.05 personal daily pedestrian trips). Both the 1998 and 2002 data suggest that trip rates do not have a linear relationship with income. Of all households that provided income, those reporting annual incomes from $25,000 to $40,000 were characterized by the lowest trip rates in 2002 (0.96 personal daily pedestrian trips) and 1998 (0.93 personal daily pedestrian trips).

TABLE 40: DAILY PEDESTRIAN TRIP RATES BY HOUSEHOLD INCOME – 2002 AND 1998
N=963 (2002)

Household Income	2002	% 2002 Survey Population	1998	% 1998 Survey Population
Under $15k	1.07	8%	0.95	6%
$15 to $25 k	1.03	11%	1.05	11%
$25 to $40k	0.96	17%	0.93	19%
$40 to $60k	1.38	17%	1.05	20%
Over $60k	1.04	26%	0.99	21%
Refused	0.99	21%	0.63	23%

Note: Trip rates provided in trips per person per day.

As was the case in 1998, households with less than one motor vehicle per adult reported higher daily pedestrian trip rates than did households with greater than or equal to one motor vehicle per adult (see Table 41). The data suggests that households with fewer cars rely more on pedestrian travel to make personal trips than do households with more than one vehicle. With the exception of households with no vehicles, all categories of vehicles per adult in 2002 were characterized by higher trip rates than were the same categories in 1998.

TABLE 41: DAILY PEDESTRIAN TRIP RATES BY MOTOR VEHICLE OWNERSHIP – 2002 AND 1998
N=963 (2002)

Motor Vehicles per Adult	2002	% 2002 Survey Population	1998	% 1998 Survey Population
None	1.24	4%	1.37	6%
>0 to 0.5	1.36	17%	1.19	18%
0.6 to 0.9	1.59	7%	0.69	8%
1.0 to 1.49	0.94	61%	0.82	59%
1.5 and over	1.02	12%	0.90	9%

Note: Trip rates provided in trips per person per day.

Bicycle Trip Generation

The frequency of daily (past 24 hours) bicycle trips suggests that fewer than one in ten persons made any trips. The full distribution is identified in Table 42.

TABLE 42: FREQUENCY OF BICYCLE TRIPS – 2002
N=963

Number of Trips	Percent Sample Making Number of Bicycle Trips
0	92%
1	4%
2	2%
3	1%
4+	1%

Note: Table indicates trips made by respondent in 24-hour period prior to survey.

More than two-thirds of respondents (69%) said this rate of travel by bicycle was typical; 15% of respondents said they usually made fewer trips, while 16% said they usually made more trips. See Table 43 for further details.

TABLE 43: TYPICALITY OF RECENT BICYCLE TRIPS – 2002
N=185

Comment about number of trips in 24-hour period prior to administering survey	Percent Sample Making Number of Trips
Typical number of trips	69%
Usually make fewer bicycle trips	15%
Usually make more bicycle trips	16%

Note: Table excludes DK/RF responses.

Travel by age provides some interesting patterns in bicycle trip rates, particularly with respect to the older segments of the Florida population. The trip generation pattern appears to show a marked difference between younger and older adults. For the 21 to 49 year old population, the daily bicycle trip rate is 0.25 trips. The rate declines to 0.09 for persons 50

to 64 years old, and to 0.07 daily trips per person for the persons aged 65 and older. Table 44 suggests that the age groups of 21 to 49 years and 65 years and older are approximately twice as mobile in 2002 as they were in 1998. In contrast, the 50 to 64 year age group did not report as many trips as in 1998.

TABLE 44: DAILY BICYCLE TRIP RATES BY AGE – 2002 AND 1998
N=921 (2002)

Age	2002	1998
21 to 49 (n=518)	0.25	0.15
50 to 64 (n=226)	0.09	0.13
65 and older (n=177)	0.07	0.03

Notes: Trip rates provided in trips per person per day for 24-hour period prior to survey. 1998 and 2002 <20-year old sample size too small for valid statistical analysis.

As in 1998, gender is correlated with bicycle travel. The bicycle trip rate for males is twice that of females (0.24 vs. 0.12 trips per day). Because the survey respondents were disproportionately female (59%), the survey results in the overall bicycle trip rates may be slightly lower than they actually appear.[17] The data in Table 45 suggests that both males and females are making more daily bicycle trips in 2002 than were made in 1998.

TABLE 45: DAILY BICYCLE TRIP RATES BY GENDER – 2002 AND 1998
N=963 (2002)

Gender	2002	1998
Male (n=398)	0.24	0.17
Female (n=565)	0.12	0.09

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey.

Disability (condition that make getting around difficult) did not have a substantial impact on bicycle travel rates. About one in 14 respondents (7%) indicated that they have some form of disability. As shown in Table 46, the portion of the survey population that indicated having some sort of disability actually reported more daily bicycle trips than the remainder of the population (0.19 daily bicycle trips and 0.17 daily bicycle trips respectively). This may be due to the disabled population who use bicycles as a form of exercise or physical therapy.

TABLE 46: PHYSICAL DISABILITY AND BICYCLE TRIP RATES 2002 AND 1998
N=963 (2002)

Physical Disability	2002	1998
Yes (n=67)	0.19	0.17
No (n=896)	0.17	0.09

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey administration

[17] The 1998 survey was also characterized by a high percentage of female respondents (60%). This may be attributable to the fact that females are more likely to be home during the hours the survey was dialed. While this may artificially lower trip rates, because the same phenomena occurred in 1998 and 2002, bicycle trip rates are comparable.

Almost all of the respondents reported they had a valid driver's license; only 7% did not. As might be expected, those respondents that do not have a valid driver's license reported making three and a half times more trips than those with valid driver's licenses (0.61 daily bicycle trips and 0.14 daily bicycle trips respectively). The data suggests that those individuals without a valid driver's license depend more on bicycles for transportation. See Table 47 for further details.

TABLE 47: DRIVER'S LICENSE STATUS AND BICYCLE TRIP RATES 2002 AND 1998
N=963 (2002)

Valid Driver's License	2002	1998
Yes (n=893)	0.14	0.17
No (n=70)	0.61	0.09

Note: Trip rates provided in trips per person per day for 24-hour period prior to survey.

As in 1998, the general trend is for larger households to exhibit higher individual trip rates (see Table 48). This is most likely related to family composition. Larger households are more likely to be characterized by children or young adults, who typically make more trips than older adults. Moreover, these adults make more bicycle trips, probably in conjunction with children. Smaller households may be more likely to contain older persons who make fewer bicycle trips. The 2002 data suggests that 6+ person households are characterized by the highest individual trip rates (0.40 bicycle trips per person per day), followed by the 4-person household (0.28 bicycle trips per person per day).

TABLE 48: DAILY BICYCLE TRIP RATES BY HOUSEHOLD SIZE – 2002 AND 1998
N=963 (2002)

Persons per Household	2002	2002 Population Percent	1998	1998 Population Percent
1	0.14	19%	0.05	17%
2	0.14	37%	0.07	35%
3	0.13	17%	0.14	18%
4	0.28	15%	0.19	17%
5	0.12	7%	0.17	8%
6+	0.40	5%	N/A	5%

Note: Trip rates provided in bicycle trips per person per day.

Table 49 displays the relationship between employment status and bicycle trip rates. Unlike the 1998 survey (when the majority of surveyed adults (57%) were employed full time) the 2002 survey has about an equal mix of respondents not employed as employed full time (42% and 49% respectively). An analysis of unemployed respondents reveals that over half (59%) are retired and 38% are 65 or older. It is expected that the current state of the US economy is also contributing to the observed increase in unemployment. The results show that among the three employment groups, respondents that are employed full time exhibit the highest trip rates (0.18 bicycle trips per person per day), followed by unemployed

respondents (0.17 bicycle trips per person per day), and those respondents employed part time (0.13 bicycle trips per person per day).

TABLE 49: DAILY BICYCLE TRIP RATES BY EMPLOYMENT STATUS – 2002 AND 1998
N=963 (2002)

Employment Status	2002	% 2002 Survey Population	1998	% 1998 Survey Population
Full time	0.18	49%	0.15	57%
Part time	0.13	9%	0.11	8%
Not employed	0.17	42%	0.09	35%

Note: Trip rates provided in bicycle trips per person per day.

The 2002 data suggests that the highest bicycle trip rates occur in households with incomes of $25,000 to $40,000 at 0.32 bicycle trips per day, followed closely by those households reporting an annual income under $15,000, at 0.27 bicycle trips per day. Unlike in 1998, bicycle trip rates do not increase linearly with income. See Table 50 for details.

TABLE 50: DAILY BICYCLE TRIP RATES BY HOUSEHOLD INCOME – 2002 AND 1998
N=963 (2002)

Household Income	2002	% 2002 Survey Population	1998	% 1998 Survey Population
Under $15k	0.27	8%	0.02	7%
$15 to $25k	0.15	11%	0.03	11%
$25 to $40k	0.32	17%	0.08	19%
$40 to $60k	0.20	17%	0.21	20%
Over $60k	0.07	27%	0.20	21%
Refused	0.13	20%	0.08	23%

Note: Trip rates provided in bicycle trips per person per day.

Vehicle ownership and vehicle "demand" (vehicles per adult) have an interesting but inconsistent relationship to bicycle trip rates (see Table 51). The highest bicycle trip rates are in those households with less than 0.5 vehicles per adult (0.30 bicycle trips per person per day).

TABLE 51: DAILY BICYCLE TRIP RATES BY MOTOR VEHICLE OWNERSHIP – 2002 AND 1998
N=963 (2002)

Motor Vehicles per Adult	2002	% 2002 Survey Population	1998	% 1998 Survey Population
None	0.30	4%	0.11	6%
>0 to 0.5	0.30	17%	0.17	18%
0.6 to 0.9	0.06	6%	0.11	8%
1.0 to 1.49	0.13	61%	0.10	59%
1.5 and over	0.23	12%	0.21	9%

Note: Trip rates provided in bicycle trips per person per day.

The 2002 data suggests a linear relationship between bicycle ownership and trip rates. As the number of bicycles per person increases, so does the trip rate. See Table 52 for further detail.

TABLE 52: DAILY BICYCLE TRIP RATES BY BICYCLE OWNERSHIP – 2002 AND 1998
N=963 (2002)

Bicycles per Person	2002	% 2002 Survey Population	1998	% 1998 Survey Population
None	0.01	42%	0.01	44%
>0 to 0.5	0.24	19%	0.12	20%
0.6 to 0.9	0.24	9%	0.27	11%
1.0 to 1.49	0.29	24%	0.29	21%
1.5 and over	0.48	6%	0.15	4%

Trip rates provided in bicycle trips per person per day.

PROFILE OF PEDESTRIAN TRIPS

As in 1998, a series of questions was asked of all respondents that reported making at least one pedestrian trip in the past seven days. These questions targeted the most recent pedestrian trip and gathered trip specific quantitative and qualitative data. The results are presented below and provide a profile of the average Florida urban area pedestrian.[18] The following data are based on the responses of 172 survey respondents.

- Trip length. Based on round trip distance, about 35% of trips were less than 0.5 mile in length; another 37% were 0.51 – l mile; and the remaining 28% were over one mile.
- Route characteristics. The 2002 trip route conditions were:

✓ Nearly three-fourths (70%) of the pedestrian trips were on sidewalks or dedicated footpaths.

✓ Over half of the pedestrian trips (52%) did not require crossing at intersections.

✓ A majority of the pedestrian trips (56%) involved walking alongside vehicular traffic.

✓ More than two-thirds of pedestrian trips (68%) involved crossing streets.

EXPOSURE FROM INCIDENTAL PEDESTRIAN TRIPS

Additional exposure measures were captured by a series of questions about situations not easily recognized by people as trips (referred to as incidental pedestrian trips). All respondents were asked about pedestrian situations beyond the specific pedestrian trips they reported as trips. Questions were asked about situations in parking lots, or walking from a car or bus, or other such incidental behaviors that would provide estimates of exposure beyond specific trips.

Specifically, the question was worded: “Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot.

[18]Among the 963 survey respondents, 416 (43%) reported making walk trips in the 24 hours before the survey, and 172 (18%) reported making walk trips in the six days prior to the 24 hours before the survey. A total of 588 respondents (61%) reported making trips in the last seven days. Due to an error in the Computer Assisted Telephone Interview (CATI) program, only the 18% of respondents who reported making walk trips in the six days prior to the last 24 hours were asked trip specific qualitative and quantitative data.

Not counting the walking trips I just asked you about, how many times did you do any of the following?" Results suggest significant exposure of pedestrians in motorized vehicle environments. These include:

- ✓ Twenty-four percent of respondents crossed intersections without lights – a mean of 0.85 such daily crossings per capita (up from 0.69 in 1998).
- ✓ Twenty-two percent of respondents crossed intersections with lights, for a mean of 0.76 daily crossings per capita (a slight increase from 0.74 daily crossings per capita in 1998).
- ✓ Seven percent of respondents indicated they crossed an intersection against a red light – this produced a mean of 0.13 daily crossings per capita (nearly identical to 1998).
- ✓ Twenty two percent of respondents took walks on roads without sidewalks, for a mean of 0.50 daily trips per capita (up slightly from 0.42 daily trips per capita in 1998).
- ✓ Twenty six percent of respondents said they crossed a street in the middle of a block, for a mean of 0.69 daily crossings (up slightly from 0.59 daily crossings in 1998).
- ✓ Forty-seven percent of respondents indicated walking in a parking lot "with busy vehicle traffic" for a total of 1.21 such walking events daily per capita (up from 0.80 in 1998).

PROFILE OF BICYCLE TRIPS

Similar to the questions asked of pedestrian trip makers, a series of questions was asked of bicycle trip makers. These questions targeted the most recent bicycle trip and gathered trip specific quantitative and qualitative data. The results are presented below and are based on 185 respondents who reported making at least one bicycle trip in the last seven days (19% of the survey population). The results provide a profile of the average Florida urban area bicycle rider.

- Trip length. Based on round trip distance, about one fourth (25%) of trips were one mile or shorter in length; another third (38%) were 2 or 3 miles; 27% were 4 to 9 miles; and the remainder (10%) were over 10 miles. The average trip length was reported to be 4.53 miles.
- Route characteristics. The 2002 trip route conditions were:
  - ✓ Thirty-two percent were mostly in bicycle paths or lanes while another 13% were partially in bicycle paths or lanes.
  - ✓ Almost one half (46%) of the bicycle trips were on routes with parked cars along the road. Thirteen percent were mostly on such routes and 33% were partially on them.
  - ✓ Two-thirds of trips (66%) shared a traffic lane with motorized vehicles – 37% of the trips were mostly in such conditions, another 29% were partially in such lanes.
  - ✓ Nearly two-thirds (64%) involved making turns across motor vehicle traffic. Sixteen percent required substantial such turns, another 48% required a few such turns.

- ✓ Trips were generally in residential areas with little traffic – 64% were mostly in such areas and another 22% were partially in such areas.
- ✓ The majority (61%) of all trips were at times and places without heavy traffic.
- ✓ Fourteen percent of trips required having to cross or travel along multiple busy streets or highways and another 29% required at least one such situation.

- Most trips were made during daylight hours and in reasonably good weather and visibility conditions.
  - ✓ One percent of trips were made at night. Thirty percent were made in the evening, 41% in the afternoon, and the other 29% in the morning hours.
  - ✓ Ninety eight percent of trips were made in clear weather; only 4 (2%) out of all reported trips in the last seven days were made in rainy, foggy or other poor weather.
  - ✓ Similarly, almost all trips (83%) were made under daylight conditions – only 1% was in the dark and another 16% were at dawn or dusk.

PERCEPTIONS OF TRIP MAKERS

A portion of the survey was designed to gather perceptions of bicycle and pedestrian trip makers regarding awareness and knowledge of certain safety related guidelines for pedestrian and bicycle travel; circumstances and specific situations that generate the feeling of danger in bicycle/pedestrian trips; and conditions for feeling safer in such travel. The following section discusses these survey results.

AWARENESS AND KNOWLEDGE

Six items relating to safe travel in pedestrian and bicycling situations were presented to respondents who were asked if each item was true or false. The survey generated the following response patterns:

- There was an overwhelming correct awareness of the law.
  - ✓ An overwhelming majority of respondents (98%) knew that "bicyclists on the road must stop at stop signs or signals" was true.
  - ✓ The majority of all respondents (94%) said it was true that "motorists are required to yield the right of way to pedestrians at crosswalks."
  - ✓ Nearly nine out of ten respondents (88%) knew that "it's legal to ride a bicycle while intoxicated" was false.
- Questions about safety indicated much less awareness and some confusion.
  - ✓ Respondents were almost evenly split on "the safest way to ride a bicycle is against traffic." Slightly over half (54%) correctly indicated that the statement is false; however, an almost equal amount (44%) thought the statement was true. The remaining 2% did not know.
  - ✓ The perception of safety at night with proper reflectors on bicycles also produced a mix of results. One-third (33%) felt that it was true that "bicyclists are safe at night as long as they have all their reflectors." Respondents were not asked about their knowledge of laws that require lighting on bicycles operated between sunset and sunrise.
  - ✓ "Flashing or 'don't walk' signals when crossing a street at an intersection means you should stop and go back to the curb" seems to generate some confusion. Over three-fourths of respondents (76%) consider this to be true. Twenty-one percent thought it to be false and the remaining 2% did not know for sure. In retrospect, the confusion was probably the result of the wording that combined "flashing" and "don't walk" in the same statement.

CONDITIONS THAT PRODUCE PERCEPTIONS OF DANGER

As in 1998, both pedestrian and bicycle trip makers were asked about whether and why they felt safe or unsafe while making such trips. In these questions, the approach was more qualitative and produced open-end responses. A solid majority of pedestrian and bicycle trip makers felt safe when making their trips.

Ninety-two percent of respondents reported that they were not nervous when making their most recent pedestrian trip, while 87% of respondents reported that they were not nervous when making their most recent bicycle trip. Among those that felt unsafe, most of the reasons cited fell into one of two categories: driver behavior or infrastructure. Regarding driver behavior, respondents commented that “speeding” and “inattentive“ drivers made them feel uncomfortable. Regarding infrastructure, respondents cited that heavy traffic, poor lighting at night, and the absence of bicycle paths/sidewalks made them feel unsafe.

With an approach similar to what made people feel they were in danger, respondents were asked about what would make them feel safer. This produced recommendations for improved infrastructure (about 1/3 of the responses), better driver behavior (about 20%), and a few miscellaneous responses that are unrelated to any changes that can be implemented. Nearly half of the respondents (44%) said there was basically nothing that needed to be done; they already felt safe.

TREND ANALYSIS

An analysis of the 1998 and 2002 survey data provide an opportunity to identify trends in survey respondent demographics, bicycle and pedestrian trip rates, and the conditions surrounding reported crashes. The following section provides a comparative analysis of the 1998 and 2002 survey and discusses collision exposure trends.

DEMOGRAPHICS OF INTERVIEWED RESPONDENTS

- Both the 1998 and 2002 surveys were characterized by high percentages of female respondents (62% and 59% respectively). This is not uncommon as the female head of household is often times the individual who will answer the phone most frequently. Because females tend to exhibit slightly lower trip rates (bicycle and pedestrian), both the 1998 and 2002 trip rates may be slightly lower than in reality.
- Both the 1998 and 2002 surveys were characterized by the same respondent age distribution, with the 21 to 49 year old age group constituting more than 50% of all respondents in both surveys. Consequently, this age group reported the highest bicycle trip rate in both the 1998 and 2002 surveys (0.15 bicycle trips per person per day and 0.25 bicycle trips per person per day respectively).
- Perhaps the most noteworthy difference regarding the 1998 and 2002 employment statistics concern difference in the percentage of respondents employed full time. In 1998, 57% of all respondents reported full time employment. In 2002, this number decreased 12 percentage points to 49%. The percentage of retired individuals also increased from 19% in 1998 to 25% in 2002.
- The survey data suggests a significant decrease in the percentage of surveyed households that reported making $25,000 - $39,999 (7 percentage point decrease) and $40,000 - $59,999 (6 percentage point decrease). Conversely, there has been a significant increase in the percentage of households that report annual incomes of $60,000+ (10 percentage point increase).
- The mean household size has decreased slightly from 1998 to 2002 (2.84 persons per household and 2.71 persons per household respectively).
- The mean number of motor vehicles per household has remained relatively constant (2.1 motor vehicles per household in 1998 and 1.95 motor vehicles per household in 2001).
- The mean number of bicycles per household has remained relatively constant (1.28 bicycles per household in 1998 to 1.39 bicycles per household in 2002).

TRAVEL OF INTERVIEWED RESPONDENTS

Pedestrian Travel

- Similar to 1998, male personal daily pedestrian trip rates were higher than female daily pedestrian trip rates. In 2002, male daily pedestrian trip rates were 1.27 person trips

per day, while female daily pedestrian trip rates were 0.93 person trips per day. The data suggests that males make more bicycle and pedestrian trips than females.

- When pedestrian trip rates are cross-tabulated by age, the results show that respondents aged 21 to 49 years make more daily trips (1.20 pedestrian trips per person per day) than any other age group. Pedestrian trip rates have increased (from 1998 to 2002) for every age group. The largest change in personal daily bicycle trip rates has occurred in the 65 and older age group (up from 0.58 in 1998 to 1.01 in 2002).
- As was the case in 1998, full time employees in 2002 exhibited the highest mean pedestrian trip rate (1.15 pedestrian trips per person per day). The largest change from 1998 to 2002 was seen in part time employees (up from 0.82 pedestrian trips per person per day in 1998 to 1.10 pedestrian trips per person per day in 2002).
- Cross tabulations of pedestrian trip rates with income does not produce any notable trends. However, in both 1998 and 2002, those respondents reporting household incomes between $40,000 and $60,000 were characterized by the highest trip rates (0.95 pedestrian trips per person per day in 1998 and 1.38 pedestrian trips per person per day in 2002). Likewise, in both 1998 and 2002, those respondents reporting household incomes between $25,000 and $40,000 were characterized by the lowest trip rates (0.87 pedestrian trips per person per day in 1998 and 0.96 pedestrian trips per person per day in 2002).
- A comparative analysis of the 1998 and 2002 data reveal a trend for pedestrian trip rates to increase as household size increases. Trip rates by household size have increased for every category, with the most significant change occurring in 3-person households and 5-person households (each increasing 0.22 trips per day over their respective 1998 trip rates).

Bicycle Travel

- The mean number of bicycle trips has increased from 0.12 trips per person per day in 1998 to 0.17 trips per day in 2002.
- As in 1998, males made more bicycle trips per day than females. The male bicycle trip rate increased from 0.17 bicycle trips per person per day in 1998 to 0.24 bicycle trips per person per day in 2002. While not as significant as the male trip rate, the female trip rate increased from 0.09 bicycle trips per person per day in 1998 to 0.12 bicycle trips per person per day in 2002. The data suggests that both males and females make more bicycle trips today than in 1998.
- The 1998 and 2002 data suggests that the bicycle trip rate of the 21 to 49 year old age group has increased significantly, from 0.15 bicycle trips per person per day in 1998 to 0.25 bicycle trips per person per day in 2002. This age group was characterized by the highest bicycle trip rate in both the 1998 and 2002 surveys.
- When the 1998 and 2002 bicycle trip rates are cross-tabulated with employment status, the largest increase is exhibited by unemployed individuals (an increase from 0.09 bicycle trips per person per day in 1998 to 0.17 bicycle trips per person per day in 2002.) The trip rate of full time workers has increased from 0.15 bicycle trips per

person per day in 1998 to 0.18 bicycle trips per person per day in 2002. The bicycle trip rate for part time workers remained relatively the same (0.11 bicycle trips per person per day in 1998 to 0.13 bicycle trips per person per day in 2002).

- When the 1998 and 2002 bicycle trip rates are cross-tabulated with income, some noteworthy trends appear. Income was partitioned into five unequal categories. The income category with the highest trip rate in 2002 was the $25k to $40k category (0.32 bicycle trips per person per day). In 1998, the highest trip rate was characteristic of the $40k to $60k age group (0.21 bicycle trips per person per day. Additionally, there has been a significant increase in bicycle trip rates for the three lowest income categories ($0 to $15,000, $15,000 to 25,000, and $40,000 to $60,000), while there has been a reduction in bicycle trip rates for the highest income category. The data suggests that low-income households are making more daily bicycle trips today than in 1998. The exact opposite can be said of high-income households. The data also suggests that a significant decrease in personal daily bicycle trip rates occur once mean household income reaches $60,000.
- Mean bicycle trip rates have increased for every household size category for which data was collected in both surveys, with the exception 3-person and 5-person households. The largest changes were exhibited by 1-person and 4-person households, which increased from 0.05 bicycle trips per person per day in 1998 to 0.14 bicycle trips per person per day in 2002, and from 0.19 bicycle trips per person per day in 1998 to 0.28 bicycle trips per person per day in 2002, respectively.

CRASHES REPORTED BY INTERVIEWED RESPONDENTS

- There has been a significant increase in the percentage of pedestrian and bicycle crashes for which police reports were filed. In 1998, 69% of all reported pedestrian crashes involved police reports. In 2002, this percentage increased to 84%. Likewise, in 1998, 54% of the reported bicycle crashes involved police reports. In 2002, this percentage increased to 64%.
- There has been a significant increase in the percentage of pedestrian crashes that occur at dusk (3% in 1998 and 13% in 2002). This is coupled with a decrease in the percentage of pedestrian crashes that occur in daylight (74% in 1998 and 64% in 2002).
- The percentage of crashes that occur at non-signalized intersections has declined significantly from 28% in 1998 to 13% in 2002.
- There has been a noteworthy increase in the percentage of crashes that occur while pedestrians are crossing the street. In 1998, 41% of all pedestrian crashes occurred while the pedestrian was crossing the street. In 2002, this percentage increased to 61%.
- The 1998 and 2002 data suggest that bicyclists aged 21 to 49 years seem to be the age group most “at risk” of being involved in an crash. This is logical as they exhibit the highest trip rate. Consequently, they are subject to the highest levels of risk exposure.

- Similar to the conditions surrounding pedestrian crashes, there has been a significant decrease in the percentage of the reported bicycle crashes that occur in daylight hours (88% in 1998 and 69% in 2002 respectively) and an increase in the percentage of the reported bicycle crashes that occur at dusk (1% in 1998 and 18% in 2002 respectively).

COLLISION EXPOSURE

Several estimates presented in this report suggest that exposure to crashes may be increasing for bicyclists and pedestrians in Florida. Perhaps the most convincing of these estimates concern trip rates, as both bicycle and pedestrian trip rates and trip lengths have increased over the past four years.

Based on the survey results, the bicycle trip rate increased from 0.12 mean trips per person per day in 1998 to 0.17 mean trips per person per day in 2002, representing a 29% increase. Similarly, the pedestrian trip rate increased by 16%, from 0.91 mean trips per person per day in 1998 to 1.08 mean trips per person per day in 2002. The average bicycle trip length increased from slightly over 4 miles in 1998 to 4.53 miles in 2002. These estimates translate into more Floridians walking and bicycling than four years ago. As such, more bicyclists and pedestrians sharing the road with motorists lead to greater collision exposure, if factors related to safety remained constant.

Bicycles per household and bicycles per person have also increased since 1998. The mean number of bicycles per household increased from 1.28 in 1998 to 1.36 in 2002, while the mean number of bicycles per person increased from 0.45 in 1998 to 0.50 in 2002. More bicycles available for trips could also lead to greater collision exposure for bicyclists.

In addition to estimating exposure to collisions based on pedestrian and bicycle trips, the survey also examined incidental exposure as a result of a pedestrian walking from or to the car in a parking lot, or walking from a car or bus. Survey results suggest that collision exposure for pedestrians in motorized vehicle environments is increasing.

From 1998 to 2002, more people indicated crossing intersections with and without lights (0.76 and 0.85 daily crossings per capita in 2002 respectively, compared to 0.74 and 0.69 daily crossings per capita in 1998 respectively); walking on roads without sidewalks (0.50 daily trips per capita in 2002 compared to 0.42 daily trips per capita in 1998); and crossing the street in the middle of a block (0.69 daily crossings in 2002 compared to 0.59 daily crossings in 1998).

Almost half of the respondents (47%) indicated walking in a parking lot “with busy vehicle traffic” up from 35% in 1998. Incidental exposure will likely continue to increase based on the general trends indicating that people are traveling more across all modes. As traveling increases, people will be walking more to access cars and public transportation.

The survey gathered information about Florida residents’ awareness and knowledge of safety issues regarding walking and bicycling, which can be used to help determine their potential for risky behavior as a pedestrian or bicyclist. There were no significant differences between the 1998 and 2002 survey results. However, a large percentage of respondents continue to be confused about the safest way to ride a bicycle on a road and how to cross a street at an intersection when the “DONT WALK” signal is flashing. A total of 44% of the

respondents thought that the statement, “the safest way to ride a bicycle is against traffic”, was true. Almost three-fourths (76%) thought the statement, “flashing or ‘DONT WALK’ signals when crossing a street at an intersection means you should stop and go back to the curb”, was true. The respondents’ confusion may have resulted from misinterpreting the question. Nonetheless, these results indicate possible areas to focus future pedestrian and bicycle safety education efforts.

Finally, when pedestrian and bicycle fatal crashes and injury trends[19] are compared to the survey results, the data suggest that pedestrian and bicycle safety in general may be improving. We would anticipate that if collision exposure is increasing, there would be a corresponding increase in the number of fatalities and injuries involving bicycle and pedestrian crashes. However, the number of bicycle injuries has steadily declined since 1998 and the number of bicycle fatalities has remained fairly constant over the same period. These results suggest that there may be other factors that have kept bicycle injury and fatalities from rising due to increased exposure, such as increased bicycle helmet usage, statewide and local bicycle education programs, bicycle lanes and paths, “share the road” signage, local re-striping ordinances, and other bicycle safety efforts.

In contrast, the increased collision exposure for pedestrians may partly explain why pedestrian injuries have been on the increase since 1999. While pedestrian fatalities have increased slightly since 1999, they are still not as high as fatalities were in 1996-1998, suggesting that safety may be improving for pedestrians as well.

[19]A more accurate picture could be determined if crash data from the four surveyed metropolitan areas were examined and pedestrian and bicycle trends evaluated. This was not possible due to budget and time constraints.

APPENDIX A: TECHNICAL DOCUMENTATION OF METHODS

TECHNICAL DOCUMENTATION OF METHODS

Questionnaire

NuStats, under the direction of the Center for Urban Transportation Research (CUTR) at the University of South Florida, modified the 1998 survey instrument for use in the 2002 survey. To ensure the comparability of data for an analysis, only minor modifications were made. Final approval of the questionnaire was obtained from CUTR. The questionnaire contained 193 data elements and approximately 110 questions, including one screener question to confirm the eligibility of respondents for participation in the survey. The final English instrument is included in Appendix B.

Data Collection

Survey specialists conducted data collection for the survey May 15 – June 3, 2002. All survey specialists received a training session before beginning actual data collection activities. In addition, interviewers were continually monitored to ensure the highest level of quality was maintained.

The average length of each completed survey was 10 minutes. Data were interactively collected during the interview phase utilizing computer-assisted telephone interviewing (CATI) software. The use of CATI interviewing was essential to the research process to ensure that the right information was collected in the most efficient manner.

Edit Checks

Prior to analysis of data, NuStats performed a comprehensive edit check for each completed interview. During this phase, each interview was required to pass a routine edit check program before it could be included in the final data set. Routine edit checks include such items as data range limitations and skip patterns.

Survey Population

The universe for the survey was defined as English-speaking residents at least eighteen years old with telephone service in one of the following Florida metropolitan statistical areas (MSAs): Jacksonville, Miami, Orlando, or Tampa. Table 53 shows the distribution of survey completed by MSA.

TABLE 53: DISTRIBUTION OF SURVEYS COMPLETED BY MSA – 2002
N=963

MSA	MSA Households	Surveys Completed	% Surveys Completed
Miami	776,774	167	17%
Jacksonville	425,584	246	26%
Orlando	625,248	299	31%
Tampa	1,009,316	251	26%
Total	**2,491,367**	**963**	**100%**

Of the households surveyed:

- 41% of the individuals were male and 59% were female.
- 10% had an annual household income of less than $15,000, 14% had an annual household income of $15,000 to $24,999, 21% had an annual household income of $25,000 to $39,999, 22% had an annual household income of $40,000 to $59,999, 33% had an annual household income of $60,000 or greater.

Sample Generation

A total of 7,843 pieces of listed and unlisted random digit dial telephone sample was purchased form Survey Sampling, Inc. The sample, equally distributed between the four survey MSAs and tagged with a numeric MSA code, was then screened for working numbers using the AXCIOM database. Of the original pieces, 1,264 were discarded due to disconnects, leaving a total of 6,736 working numbers. These numbers were then partitioned into multiple random sub samples (or replicates) of 300 each. A replicate is a systematically selected sub sample of a sample that is geographically representative of the entire sample; the primary benefit of which is that the interviewers did not need to contact the entire sample in order to ensure proper representation. These replicates were released sequentially over the field period.

Sample Distribution

The table below outlines the sample dispositions and calculates the final response rate.

TABLE 54: SAMPLE DISTRIBUTION AND RESPONSE RATE

DISPOSITIONS	COUNT
Eligible Sample	**2,389**
Completed sample	963
Call back	135
Language barrier	338
Refusal	953
Eligibility Unknown	**2,266**
Answering machine	1,077
Busy	73
No Answer	1,116
Ineligible Sample	**2,059**
Business/government	567
Computers/fax machines	363
Disconnect	1,129
Total Sample Pieces	**6,714**

Complete Sample = 963
Eligible Sample = 2,389
Eligibility Unknown = 2,266
Ineligible Sample = 2,059
Response Rate = Completed Sample / Eligible Sample
963 / 2,389
Response Rate = 40%

APPENDIX B: 2002 QUESTIONNAIRE

2002 FLORIDA BICYCLE/PEDESTRIAN EXPOSURE SURVEY INSTRUMENT*[20]

INTRODUCTION

Hello, my name is _____, and I am calling on behalf of the Florida Department of Transportation. We are conducting a brief survey about traffic safety involving pedestrians and bicyclists. It's important because it can help improve safety. We need your opinions and experience; it will not take much more than ten minutes. May I start by just asking a couple of questions?

N=			1010	100%	
Continue	OK		1009	100%	
No Answer	NA	=> END	0	0%	
Busy	BZ	=> END	0	0%	
Answering Machine	AM	=> END	1	0%	
Call Back	CB	=> CB	0	0%	
Language Barrier (SPANISH ALSO)	LB	=> END	0	0%	
Disconnect	DC	=> END	0	0%	
Fax/Computer	FX	=> END	0	0%	
Business/Government	BG	=> END	0	0%	
First Refusal	R1	=> END	0	0%	

4: AGE

First I need to confirm that you are at least 18 years old - is this correct?

N =		963	100%	
YES	1	963	100%	
NO	2	0	0%	

5: SKP18

Is there anyone in your household that is 18 years of age or older? IF THERE IS SOMEONE 18+, SELECT YES NO MATTER WHAT THERE IS SOMEONE 18+, BUT THEY AREN'T HOME: YOU'LL BE SETTING A CALLBACK. THERE IS SOMEONE 18+, BUT THEY REFUSE THE CALL; YOU'LL SELECT RF.

N =			0		100%
YES, SAY: May I please speak with that person?	1	=> INT01	0		0%
NO	2	=> INT10	0		0%

6: Q1

As I mentioned, we are interested in traffic safety. Have you ever been personally involved in a collision or crash involving someone on a bicycle or a pedestrian in Florida? This includes your being the pedestrian, the bicyclist, the driver, or a passenger in the vehicle involved in the collision.

N =		963	100%	
Yes	1	47	5%	
No	2	916	95%	=> Q2

7: Q1NUM

How many accidents?
IF THEY DON'T KNOW, GET THEM TO ESTIMATE. RANGE: 1 - 10

N =		47	100%

8: Q2

Has anyone in your immediate family that lives with you ever been involved in such collisions or crashes involving someone on a bike or a pedestrian in Florida? (PROBE: IF HOUSEHOLD MEMBER WAS IN SAME ACCIDENT, SELECT "NO")

N =		963	100%	
Yes	1	40	4%	
No	2	923	96%	=> Q3

9: Q2NUM

How many accidents, not including any that you mentioned for yourself? IF THEY DON'T KNOW, GET THEM TO ESTIMATE. RANGE: 1 - 10

N =		40	100%

10: Q3

Has anyone else you personally know well, like a relative, neighbor, or close friend been involved in such a crash or collision in Florida? (PROBE: IF AQUAINTANCE WAS IN SAME ACCIDENT, SELECT "NO")

N =		963	100%	
Yes	1	108	11%	
No	2	855	89%	=> SHORT

11: Q3NUM

How many accidents, not including those you mentioned already? IF THEY DON'T KNOW, GET THEM TO ESTIMATE. RANGE: 1 - 10

N =		108	100%

[20]This version of the survey instrument has been modified slightly from the version used during data collection. The complex skip pattern used to select which crash to probe was excluded in order to make the survey instrument easier to read and understand. The survey frequencies indicate a total of 1,010 completed interviews. All surveys collected from respondents less than 18 years old were destroyed. The analysis is based on 963 completed surveys.

12: **SHORT**

COMPUTED: SURVEY IS A SHORT SURVEY

N =		963	100%
LONG	0	174	18%
SHORT	1	789	82%

13: **Q1Q4**

PERSON INVOLVED

Did this (these, IF TWO OR MORE EVENTS ARE BEING PROBED] collision/s involve a pedestrian or a bicyclist? CHECK ALL THAT APPLY

N =		49	100%
Pedestrian	1	10	20%
Bicyclist	2	40	82%

14: **Q1Q5P**

PERSON INVOLVED IN PEDESTRIAN ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		10	100%
FATAL	1	1	10%
REQUIRED HOSPITALIZATION FOR A DAY	2	4	40%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	3	30%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	1	10%
NO INJURY AT ALL	5	2	20%

15: **Q16PF**

PERSON INVOLVED IN PEDESTRIAN ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		1	100%
LT 2 YEARS AGO	1	0	0%
MT 2 YEARS AGO	2	1	100%

16: **Q16PH**

PERSON INVOLVED IN PEDESTRIAN ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		4	100%
LT 2 YEARS AGO	1	2	50%
MT 2 YEARS AGO	2	2	50%

17: **Q16PM**

PERSON INVOLVED IN PEDESTRIAN ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		3	100%
LT 2 YEARS AGO	1	1	33%
MT 2 YEARS AGO	2	2	67%

18: **Q16PN**

PERSON INVOLVED IN PEDESTRIAN ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		1	100%
LT 2 YEARS AGO	1	0	0%
MT 2 YEARS AGO	2	1	100%

19: **Q1Q5B**

PERSON INVOLVED IN BICYCLIST ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		40	100%
FATAL	1	1	3%
REQUIRED HOSPITALIZATION FOR A DAY	2	6	15%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	5	13%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	19	48%
NO INJURY AT ALL	5	12	30%

20: **Q16BF**

PERSON INVOLVED IN BICYCLIST ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		1	100%
LT 2 YEARS AGO	1	0	0%
MT 2 YEARS AGO	2	1	100%

21: **Q16BH**

PERSON INVOLVED IN BICYCLIST ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		6	100%
LT 2 YEARS AGO	1	2	33%
MT 2 YEARS AGO	2	4	67%

22: **Q16BM**

PERSON INVOLVED IN BICYCLIST ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		5	100%
LT 2 YEARS AGO	1	1	20%
MT 2 YEARS AGO	2	4	80%

23: **Q16BN**

PERSON INVOLVED IN BICYCLIST ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		19	100%
LT 2 YEARS AGO	1	6	32%
MT 2 YEARS AGO	2	13	68%

24: **Q2Q4**

FAMILY MEMBER INVOLVED

Did this (these, IF TWO OR MORE EVENTS ARE BEING PROBED] collision/s involve a pedestrian or a bicyclist? CHECK ALL THAT APPLY

N =		42	100%
Pedestrian	1	20	48%
Bicyclist	2	23	55%

25: **Q2Q5P**

FAMILY MEMBER INVOLVED IN PEDESTRIAN ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		20	100%
FATAL	1	3	15%
REQUIRED HOSPITALIZATION FOR A DAY	2	8	40%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	4	20%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	2	10%
NO INJURY AT ALL	5	4	20%

26: **Q26PF**

FAMILY MEMBER INVOLVED IN PEDESTRIAN ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		3	100%
LT 2 YEARS AGO	1	0	0%
MT 2 YEARS AGO	2	3	100%

27: **Q26PH**

FAMILY MEMBER INVOLVED IN PEDESTRIAN ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		8	100%
LT 2 YEARS AGO	1	1	13%
MT 2 YEARS AGO	2	7	88%

28: **Q26PM**

FAMILY MEMBER INVOLVED IN PEDESTRIAN ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		4	100%
LT 2 YEARS AGO	1	2	50%
MT 2 YEARS AGO	2	2	50%

29: **Q26PN**

FAMILY MEMBER INVOLVED IN PEDESTRIAN ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		2	100%
LT 2 YEARS AGO	1	0	0%
MT 2 YEARS AGO	2	2	100%

30: **Q2Q5B**

PERSON INVOLVED IN BICYCLIST ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		24	100%
FATAL	1	2	8%
REQUIRED HOSPITALIZATION FOR A DAY	2	5	21%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	6	25%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	6	25%
NO INJURY AT ALL	5	5	21%

31: **Q26BF**

FAMILY MEMBER INVOLVED IN BICYCLIST ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		2	100%
LT 2 YEARS AGO	1	1	50%
MT 2 YEARS AGO	2	1	50%

32: **Q26BH**

FAMILY MEMBER INVOLVED IN BICYCLIST ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		5	100%
LT 2 YEARS AGO	1	1	20%
MT 2 YEARS AGO	2	4	80%

33: **Q26BM**

FAMILY MEMBER INVOLVED IN BICYCLIST ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		6	100%
LT 2 YEARS AGO	1	3	50%
MT 2 YEARS AGO	2	3	50%

34: **Q26BN**

FAMILY MEMBER INVOLVED IN BICYCLIST ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		6	100%
LT 2 YEARS AGO	1	1	17%
MT 2 YEARS AGO	2	5	83%

35: **Q3Q4**

ACQUAINTANCE INVOLVED

Did this (these, IF TWO OR MORE EVENTS ARE BEING PROBED] collision/s involve a pedestrian or a bicyclist? CHECK ALL THAT APPLY

N =		113	100%
Pedestrian	1	44	39%
Bicyclist	2	77	68%

36: **Q3Q5P**

ACQUAINTANCE INVOLVED IN PEDESTRIAN ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		44	100%
FATAL	1	14	32%
REQUIRED HOSPITALIZATION FOR A DAY	2	18	41%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	7	16%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	4	9%
NO INJURY AT ALL	5	3	7%

37: **Q36PF**

ACQUAINTANCE INVOLVED IN PEDESTRIAN ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		14	100%
LT 2 YEARS AGO	1	4	29%
MT 2 YEARS AGO	2	10	71%

38: **Q36PH**

ACQUAINTANCE INVOLVED IN PEDESTRIAN ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		18	100%
LT 2 YEARS AGO	1	11	61%
MT 2 YEARS AGO	2	7	39%

39: **Q36PM**

ACQUAINTANCE INVOLVED IN PEDESTRIAN ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		7	100%
LT 2 YEARS AGO	1	4	57%
MT 2 YEARS AGO	2	3	43%

40: **Q36PN**

ACQUAINTANCE INVOLVED IN PEDESTRIAN ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		4	100%
LT 2 YEARS AGO	1	2	50%
MT 2 YEARS AGO	2	2	50%

41: **Q3Q5B**

PERSON INVOLVED IN BICYCLIST ACCIDENT

How serious was this collision/were these collisions? Did anyone die, or require hospitalization for at least a day, or a lesser injury requiring medical treatment by EMS or doctor, or a real minor injury that did not need medical treatment, or no injury at all? CHECK ALL THAT APPLY

N =		77	100%
FATAL	1	15	19%
REQUIRED HOSPITALIZATION FOR A DAY	2	21	27%
LESSER INJURY REQUIRING MEDICAL TREATMENT	3	14	18%
MINOR INJURY THAT DID NOT NEED MEDICAL TREATMENT	4	20	26%
NO INJURY AT ALL	5	10	13%

42: **Q36BF**

ACQUAINTANCE INVOLVED IN BICYCLIST ACCIDENT FATALITY

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		15	100%
LT 2 YEARS AGO	1	3	20%
MT 2 YEARS AGO	2	12	80%

43: **Q36BH**

ACQUAINTANCE INVOLVED IN BICYCLIST ACCIDENT HOSPITALIZATION

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		21	100%
LT 2 YEARS AGO	1	8	38%
MT 2 YEARS AGO	2	13	62%

44: **Q36BM**

ACQUAINTANCE INVOLVED IN BICYCLIST ACCIDENT MEDICAL CARE REQUIRED

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		14	100%
LT 2 YEARS AGO	1	6	43%
MT 2 YEARS AGO	2	8	57%

45: **Q36BN**

ACQUAINTANCE INVOLVED IN BICYCLIST ACCIDENT MINOR

Did this collision/these collisions happen in the past two years, or before that? CHECK ONLY ONE - IF BOTH, SELECT WITHIN PAST TWO YEARS

N =		20	100%
LT 2 YEARS AGO	1	7	35%
MT 2 YEARS AGO	2	13	65%

46: **SELEC**

SELECT WHICH INCIDENT TO PROBE

PRESS ENTER WHEN YOU'VE SELECTED AN INCIDENT

N =		179	100%	
PEDESTRIAN	1	61	34%	
BICYCLE	2	109	61%	=> Q36
BOTH	3	9	5%	

47: **Q7**

Now I would like to ask some questions about the auto-pedestrian accident. Were you (was your child/spouse/other) the pedestrian, the driver, or a passenger?

N =		70	100%
Pedestrian	1	42	60%
Driver	2	27	39%
Passenger	3	1	1%

48: **Q8**

To the best of your knowledge, was it mostly the pedestrian's fault?

N =		70	100%
Yes	1	29	41%
No	2	35	50%
DK/RF	9	6	9%

49: **Q9**

To the best of your recall, when did this collision take place? PROBE FOR EXACT DATE RANGE: ANY DATE UP TO CURRENT DATE FORMAT: YYMMDD

N =		69	100%

50: **Q10**

At approximately what time did it take place? PROBE FOR EXACT TIME ENTER TIME THEN PERIOD THIS IS NOT MILITARY TIME, BUT REGULAR TIME. IE: 0915 A.M. OR 0600 P.M.

N =			69	100%
A.M.	A.M.	U	14	20%
P.M.	P.M.	U	55	80%

51: **Q11AD**

ACCIDENT ADDRESS

To the best of your recollection, what was the address or nearest intersection of where this incident took place?

N =		59	100%

52: **Q11CI**

CITY

CITY

N =		62	100%

53: **Q11ZI**

ZIPCODE

ZIP

N =		69	100%
MISSING OR INCOMPLETE	99999	35	51%

54: **Q12**

Was it at an intersection with traffic lights, or without, or not at an intersection?

N =		69	100%	
With traffic lights	1	16	23%	
Without	2	8	12%	
Not at an intersection	3	40	58%	=> Q16
DK/RF	9	5	7%	

55: **Q13**

Were there pedestrian signals for crossing an intersection?

N =		29	100%
Yes	1	13	45%
No	2	10	34%
DK/RF	9	6	21%

56: **Q14**

Was there a pedestrian crosswalk available?

N =		29	100%	
Yes	1	14	48%	
No	2	7	24%	=> Q16
DK/RF	9	8	28%	

57: **Q15**

Did the pedestrian use the crosswalk?

N =		22	100%
Yes	1	8	36%
No	2	6	27%
DK/RF	9	8	36%

58: **Q16**

Was there a raised median in the street?

N =		69	100%
Yes	1	16	23%
No	2	44	64%
DK/RF	9	9	13%

59: **Q17**

Was the crash in the middle of a block?

N =		53	100%
Yes	1	26	49%
No	2	20	38%
DK/RF	9	7	13%

60: **Q18**

Was the crash at a driveway?

N =		53	100%
Yes	1	8	15%
No	2	40	75%
DK/RF	9	5	9%

61: **Q19**

Did the pedestrian walk into traffic?

N =		69	100%
Yes	1	34	49%
No	2	31	45%
DK/RF	9	4	6%

62: **Q20**

Did the pedestrian come out from between parked cars?

N =		69	100%
Yes	1	6	9%
No	2	58	84%
DK/RF	9	5	7%

63: **Q21**

Was the pedestrian walking, jogging, or running along the road in the same direction as the traffic, or crossing the street, or walking against traffic?

N =		69	100%
Same direction as traffic	1	12	17%
Crossing the street	2	42	61%
Against traffic	3	7	10%
DK/RF	9	8	12%

64: **Q22**

Was the vehicle making a turn and then struck the pedestrian?

N =		69	100%
Yes	1	15	22%
No	2	47	68%
DK/RF	9	7	10%

65: **Q23**

Was the vehicle backing up when it struck the pedestrian?

N =		69	100%
Yes	1	3	4%
No	2	61	88%
DK/RF	9	5	7%

66: **Q24**

Did the motorist leave the roadway?

N =		69	100%
Yes	1	14	20%
No	2	47	68%
DK/RF	9	8	12%

67: **Q25**

To the best of your knowledge, had the driver been drinking?

N =		69	100%
Yes	1	5	7%
No	2	49	71%
DK/RF	9	15	22%

68: **Q26**

To the best of your knowledge, had the pedestrian been drinking?

N =		69	100%
Yes	1	4	6%
No	2	54	78%
DK/RF	9	11	16%

69: **Q27**

Were sidewalks available for the pedestrian?

N =		69	100%	
Yes	1	37	54%	=> Q29
No	2	25	36%	
DK/RF	9	7	10%	

70: **Q28**

Was this a road or street with curbs?

N =	32	100%	
Yes	1	12	38%
No	2	15	47%
DK/RF	9	5	16%

71: **Q29**

Did the police do a report on this crash?

N =	69	100%	
Yes	1	58	84%
No	2	8	12%
DK/RF	9	3	4%

72: **Q30**

Would you say that the traffic at the time of the incident was heavy, moderate, or light?

N =	69	100%	
Heavy	1	13	19%
Moderate	2	22	32%
Light	3	28	41%
DK/RF	9	6	9%

73: **Q31**

What were the weather conditions at the time of the incident? Were they clear, rainy, foggy?

N =	69	100%	
Clear	1	56	81%
Rainy	2	4	6%
Foggy	3	0	0%
Other	4	0	0%
DK/RF	9	9	13%

74: **Q32**

What were the light conditions at the time, daylight, dawn, dusk, or dark?

N =	69	100%	
Daylight	1	45	65%
Dawn	2	4	6%
Dusk	3	9	13%
Dark	4	9	13%
DK/RF	9	2	3%

75: **Q33**

At the time of the incident, approximately how old was the pedestrian?

N =	69	100%	
UNDER 10	1	9	13%
10 - 15	2	7	10%
16 - 20	3	16	23%
21 - 49	4	8	12%
50 - 64	5	12	17%
65+	6	10	14%
DK/RF	9	7	10%

76: **Q34**

Did the pedestrian have any physical limitations such as blindness, use of a cane, wheelchair, or crutches?

N =	69	100%	
Yes	1	3	4%
No	2	63	91%
DK/RF	9	3	4%

77: **Q35**

Approximately how old was the driver of the vehicle?

N =	69	100%	
16 - 20	1	12	17%
21 - 49	2	22	32%
50 - 64	3	9	13%
65+	4	5	7%
DK/RF	9	21	30%

78: **Q36**

Now I would like to ask some questions about the auto-bicycle accident. Were you (was your child/spouse/other) the bicyclist, the driver, or a passenger?

N =		117	100%
Bicyclist	1	97	83%
Driver	2	17	15%
Passenger	3	3	3%

79: **Q37**

Was it mostly the bicyclist's fault?

N =		117	100%
Yes	1	28	24%
No	2	79	68%
DK/RF	9	10	9%

80: **Q38**

To the best of your recall, when did this collision take place? PROBE FOR EXACT DATE RANGE: ANY DATE UP TO CURRENT DATE FORMAT: YYYYMMDD

N =		116	100%

81: **Q39**

At what time did it take place? PROBE FOR EXACT TIME ENTER TIME THEN PERIOD THIS IS NOT MILITARY TIME, BUT REGULAR TIME. IE: 0915 A.M. OR 0600 P.M.

N =				115	100%
A.M.	A.M.	U		35	30%
P.M.	P.M.	U		80	70%

82: **Q40AD**

ACCIDENT ADDRESS

To the best of your recollection, what was the address or nearest intersection of where this incident took place?

N =		101	100%

83: **Q40CI**

CITY

CITY

N =		112	100%

84: **Q40ZI**

ZIPCODE

ZIP

N =		115	100%
MISSING OR INCOMPLETE	99999	53	46%

85: **Q41**

Was it at an intersection with traffic lights, or without, or not at an intersection?

N =		115	100%	
With traffic lights	1	25	22%	=> Q43
Without	2	34	30%	=> Q43
Not at an intersection	3	50	43%	
DK/RF	9	6	5%	

86: **Q42**

Was it in the middle of a block?

N =		56	100%
Yes	1	38	68%
No	2	12	21%
DK/RF	9	6	11%

87: **Q43**

Was the vehicle making a turn and then struck the bicyclist?

N =		115	100%
Yes	1	30	26%
No	2	75	65%
DK/RF	9	10	9%

88: **Q44**

Was the vehicle backing up when it struck the bicyclist?

N =		114	100%
Yes	1	8	7%
No	2	101	89%
DK/RF	9	5	4%

89: **Q45**

Did the vehicle turn in front of the bicyclist?

N =		114	100%
Yes	1	24	21%
No	2	81	71%
DK/RF	9	9	8%

90: **Q46**

Did the bicyclist make a left turn in front of traffic?

N =		114	100%
Yes	1	13	11%
No	2	91	80%
DK/RF	9	10	9%

91: **Q47**

Did the bicyclist swerve into traffic?

N =		114	100%
Yes	1	23	20%
No	2	82	72%
DK/RF	9	9	8%

92: **Q48**

Did the bicyclist ignore a signal or stop sign?

N =		114	100%
Yes	1	8	7%
No	2	98	86%
DK/RF	9	8	7%

93: **Q49**

Did the motorist ignore a signal or stop sign?

N =		114	100%
Yes	1	18	16%
No	2	82	72%
DK/RF	9	14	12%

94: **Q50**

Did the vehicle pull out from a parking space or driveway and then struck the bicyclist?

N =		114	100%
Yes	1	14	12%
No	2	92	81%
DK/RF	9	8	7%

95: **Q51**

Did the driver open the door of a parked vehicle and strike the bicyclist?

N =		114	100%
Yes	1	3	3%
No	2	106	93%
DK/RF	9	5	4%

96: **Q52**

To the best of your knowledge, had the driver been drinking?

N =		114	100%
Yes	1	16	14%
No	2	74	65%
DK/RF	9	24	21%

97: **Q53**

To the best of your knowledge, had the bicyclist been drinking?

N =		114	100%
Yes	1	6	5%
No	2	101	89%
DK/RF	9	7	6%

98: **Q54**

Were there paved shoulders or was it necessary for the bicyclist to be in the roadway?

N =		114	100%
Paved shoulders	1	34	30%
Necessary to be in roadway	2	67	59%
DK/RF	9	13	11%

99: **Q55**

Was there a bike path or trail for bicyclists separated from traffic?

N =		114	100%	
Yes	1	25	22%	
No	2	82	72%	=> Q56
DK/RF	9	7	6%	=> Q56

100: **Q55A**

Was the bicyclist using the bike path or lane?

N =		25	100%	
Yes	1	20	80%	
No	2	5	20%	
DK/RF	9	0	0%	

101: **Q56**

Did the police do a report on this crash?

N =		114	100%	
Yes	1	73	64%	
No	2	32	28%	
DK/RF	9	9	8%	

102: **Q57**

Would you say that the traffic at the time of the incident was heavy, moderate, or light?

N =		114	100%	
Heavy	1	18	16%	
Moderate	2	30	26%	
Light	3	53	46%	
DK/RF	9	13	11%	

103: **Q58**

What were the weather conditions at the time of the incident? Were they clear, rainy, foggy?

N =		114	100%	
Clear	1	101	89%	
Rainy	2	3	3%	
Foggy	3	2	2%	
Other	4	1	1%	
DK/RF	9	7	6%	

104: **Q59**

What were the light conditions at the time, daylight, dawn, dusk, or dark?

N =		114	100%	
Daylight	1	77	68%	=> Q63
Dawn	2	1	1%	=> Q63
Dusk	3	20	18%	=> Q63
Dark	4	13	11%	
DK/RF	9	3	3%	

105: **Q60**

Was the bicyclist wearing reflective clothing?

N =		16	100%	
Yes	1	3	19%	
No	2	9	56%	
DK/RF	9	4	25%	

106: **Q61**

Did the bicycle have lights?

N =		16	100%	
Yes	1	6	38%	
No	2	6	38%	
DK/RF	9	4	25%	

107: **Q62**

Was there any street lighting?

N =		16	100%	
Yes	1	11	69%	
No	2	2	13%	
DK/RF	9	3	19%	

108: **Q63**

At the time of the incident, approximately how old was the bicyclist?

N =		114	100%
UNDER 10	1	7	6%
10 - 15	2	28	25%
16 - 20	3	20	18%
21 - 49	4	43	38%
50 - 64	5	6	5%
65+	6	4	4%
DK/RF	9	6	5%

109: **Q64**

On average, would you say their bike use skill level was low, casual/intermediate, or advanced?

N =		114	100%
Low	1	13	11%
Casual/Intermediate	2	44	39%
Advanced	3	57	50%

110: **Q65**

Approximately how old was the driver of the vehicle?

N =		114	100%
16 - 20	1	4	4%
21 - 49	2	57	50%
50 - 64	3	8	7%
65+	4	5	4%
DK/RF	9	40	35%

111: **Q66**

How many people live in your household? RANGE: 1 - 15

N =		963	100%

112: **Q66A**

15 AND UNDER

N =		963	100%

113: **Q66B**

16 - 20

N =		963	100%

114: **Q66C**

21 - 49

N =		963	100%

115: **Q66D**

50 - 64

N =		963	100%

116: **Q66E**

65 AND OVER

N =		963	100%

117: **Q66TO**

CALCULATED TOTAL

TOTAL

N =		963	100%

118: **Q66CH**

CHECK TOTAL AGAINST HH NUMBER

N =		0	100%

119: **Q67**

How many bicycles in working condition do you have in your household? RANGE: 0 - 15

N =		963	100%
NONE	00	403	42%
DK/RF	99	0	0%

120: **Q68**

During the past 24 hours, how many trips have you made by bicycle for any purpose, like going to work or school, or to an errand, to visit, or even just to ride around? RANGE: 0 - 25

N =		963	100%
NONE	00	886	92%
DK/RF	99	0	0%

121: **Q69**

How about during the past seven days, about how many trips have you made by bicycle? RANGE: 0 - 25

N =		886	100%	
NONE	00	778	88%	=> Q82
DK/RF	99	0	0%	=> Q82

122: **Q70**

Would you say you typically make more trips than that, fewer trips than that, or was that typical?

N =		185	100%
More trips	1	31	17%
Fewer trips	2	27	15%
Typical	3	127	69%

123: **Q71**

Now I would like to ask you about the most recent bicycle trip you made. What was the purpose of that trip?

N =		185	100%
WORK	01	9	5%
SHOPPING	02	24	13%
SCHOOL	03	1	1%
RELIGIOUS	04	0	0%
PERSONAL BUSINESS	05	5	3%
VIST A FRIEND OR RELATIVE	06	4	2%
OTHER SOCIAL/RECREATIONAL	07	124	67%
OTHER, SPECIFY	97	18	10%
DK/RF	99	0	0%

124: **Q72**

About how many miles was that round trip? PROBE FOR AT LEAST AN APPROXIMATION RANGE: 1 - 80

N =		185	100%
DK/RF	99	2	1%

125: **Q73**

Compared to other bike trips you make, was that the typical distance, or was it shorter or longer?

N =		185	100%
Typical	1	128	69%
Shorter	2	41	22%
Longer	3	16	9%

126: **Q74A**

Were you nervous about making that trip by bike?

N =		185	100%
YES	1	24	13%
NO	2	161	87%

127: **Q74B**

Why? PROBE FOR REASONS BEFORE ACCEPTING DK/RF

N =		24	100%
RECORD RESPONSE	1	24	100%
DK/RF	9	0	0%

128: **Q74C**

Why not? PROBE FOR REASONS BEFORE ACCEPTING DK/RF

N =		161	100%
RECORD RESPONSE	1	157	98%
DK/RF	9	4	2%

129: **Q75A**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Was it on a bike path or lane separated from traffic?

N =		185	100%
Mostly	1	59	32%
Partially	2	24	13%
Not at all	3	102	55%

130: **Q75B**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Were there parked cars along where you rode?

N =		185	100%
Mostly	1	24	13%
Partially	2	61	33%
Not at all	3	100	54%

131: **Q75C**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Were you in the same lane with motor vehicle traffic?

N =		185	100%
Mostly	1	69	37%
Partially	2	53	29%
Not at all	3	63	34%

132: **Q75D**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Did you make turns across motor vehicle traffic?

N =		185	100%
Mostly	1	30	16%
Partially	2	89	48%
Not at all	3	66	36%

133: **Q75E**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Was it through a residential area with little traffic?

N =		185	100%
Mostly	1	118	64%
Partially	2	40	22%
Not at all	3	27	15%

134: **Q75F**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: Was it in places and times with heavy traffic?

N =		185	100%
Mostly	1	29	16%
Partially	2	44	24%
Not at all	3	112	61%

135: **Q75G**

For just that trip, please tell me if the trip had mostly, partially, or not at all the following conditions: You had to cross or travel along a busy street or highway?

N =		185	100%
Mostly	1	26	14%
Partially	2	54	29%
Not at all	3	105	57%

136: **Q76**

PRESS ENTER TO TYPE IN TEXT

What conditions made that trip feel dangerous to you? PROBE

N =		185	100%
	1	185	100%

137: **Q77**

What types of things would have made you feel safer?

N =		185	100%
IMPROVED INFRASTRUCTURE	1	42	23%
BETTER DRIVER BEHAVIOR	2	25	14%
NOTHING	3	66	36%
OTHER, SPECIFY	7	46	25%
DK/RF	9	6	3%

138: **Q78**

At what time of day was your trip?

N =		185	100%
Morning	1	53	29%
Afternoon	2	75	41%
Evening	3	55	30%
Night	4	2	1%

139: **Q79**

What were the weather conditions? Was it clear, rainy, foggy?

N =		185	100%
Clear	1	181	98%
Rainy	2	3	2%
Foggy	3	0	0%
Other	4	1	1%

140: **Q80**

What were the light conditions at the time, daylight, dawn, dusk, or dark?

N =		185	100%
Daylight	1	154	83%
Dawn	2	6	3%
Dusk	3	23	12%
Dark	4	2	1%

141: **Q81**

How frequently do you make this type of trip? PROBE FOR TIMES PER WEEK

N =		185	100%
5 + times per week	1	29	16%
2-4 times per week	2	84	45%
1 per week	3	39	21%
2-3 times per month	4	17	9%
1 per month	5	9	5%
less that 1 per month	6	7	4%

142: **Q82**

Counting only the people age 18 or older in your household, about how many bicycle trips were made in the past 24 hours by them? RANGE: 0 - 25

N =		963	100%
NONE	00	883	92%
DK/RF	99	2	0%

143: **Q83**

How about in the past seven days? RANGE: 0 - 25

N =		883	100%
NONE	00	811	92%
DK/RF	99	1	0%

144: **Q84**

On average, would you say their bike use skill level was low, casual/intermediate, or advanced?

N =		963	100%
Low	1	316	33%
Casual/Intermediate	2	415	43%
Advanced	3	232	24%

145: **Q85**

How about people under 18, how many bike trips were made in the past 24 hours by them? RANGE: 0 - 25

N =		319	100%
NONE	00	225	71%
DK/RF	99	4	1%

146: **Q86**

How about in the past seven days? RANGE: 0 - 25

N =		225	100%
NONE	00	176	78%
DK/RF	99	2	1%

147: **Q87**

On average, would you say their bike use skill level was low, casual/intermediate, or advanced?

N =		319	100%
Low	1	145	45%
Casual/Intermediate	2	141	44%
Advanced	3	33	10%

148: **Q88**

Now, let me ask you about pedestrian trips, in the past 24 hours, how many times have you made any trips by walking or jogging for any purpose, like going to work, errands, school, exercise, or just walking around? I would like you to include any trips where you walked but you could have driven, such as walking from work to a nearby place for lunch or for an errand? RANGE: 0 - 25

N =		963	100%
NONE	00	544	56%
DK/RF	99	3	0%

149: **Q89**

How about during the past seven days, about how many walking trips have you made? RANGE: 0 - 25

N =		544	100%	
NONE	00	372	68%	=> Q96
DK/RF	99	1	0%	

150: **Q90**

On the average, about how far was your typical walking round trip? SPECIFY DISTANCE IN MILES, BLOCKS OR OTHER, AS CAREFULLY AS POSSIBLE IF THEY DON'T KNOW, GET THEM TO ESTIMATE

N =		171	100%

151: **Q91**

PRESS ENTER TO TYPE IN TEXT

Now I would like to ask you about your most recent walking trip? What was the purpose of that trip?

N =		172	100%
WORK	01	9	5%
SHOPPING	02	34	20%
SCHOOL	03	3	2%
RELIGIOUS	04	1	1%
PERSONAL BUSINESS	05	11	6%
VIST A FRIEND OR RELATIVE	06	8	5%
OTHER SOCIAL/RECREATIONAL	07	87	51%
OTHER, SPECIFY	97	19	11%
DK/RF	99	0	0%

152: **Q92A**

Were you nervous about making that trip on foot?

N =		172	100%
YES	1	14	8%
NO	2	158	92%

153: **Q92B**

Why? PROBE FOR REASONS BEFORE ACCEPTING DK/RF

N =		14	100%
RECORD RESPONSE	1	14	100%
DK/RF	9	0	0%

154: **Q92C**

Why not? PROBE FOR REASONS BEFORE ACCEPTING DK/RF

N =		158	100%
RECORD RESPONSE	1	153	97%
DK/RF	9	5	3%

155: **Q93A**

For just that trip, please tell me yes, no or don't know for each of the following: Was it on sidewalks or dedicated pedestrian paths?

N =		172	100%
Yes	1	120	70%
No	2	51	30%
DK/RF	9	1	1%

156: **Q93B**

For just that trip, please tell me yes, no or don't know for each of the following: Did you cross intersections?

N =		172	100%
Yes	1	82	48%
No	2	90	52%
DK/RF	9	0	0%

157: **Q93C**

For just that trip, please tell me yes, no or don't know for each of the following: Did you walk alongside vehicle traffic?

N =		172	100%
Yes	1	96	56%
No	2	74	43%
DK/RF	9	2	1%

158: **Q93D**

For just that trip, please tell me yes, no or don't know for each of the following: Did you cross streets?

N =		172	100%
Yes	1	117	68%
No	2	54	31%
DK/RF	9	1	1%

159: **Q94**

PRESS ENTER TO TYPE IN TEXT

What conditions made that trip feel dangerous to you? PROBE

N =		172	100%
	1	172	100%

160: **Q95**

What type of things would have made you feel safer?

N =		172	100%
IMPROVED INFRASTRUCTURE	1	21	12%
BETTER DRIVER BEHAVIOR	2	35	20%
NOTHING	3	88	51%
OTHER, SPECIFY	7	21	12%
DK/RF	9	7	4%

161: **Q96**

Counting only the people age 18 or older in your household, about how many pedestrian trips were made in the past 24 hours by them? RANGE: 0 - 25

N =		963	100%
NONE	00	611	63%
DK/RF	99	33	3%

162: **Q97**

How about in the past seven days? RANGE: 0 - 25

N =		611	100%
NONE	00	487	80%
DK/RF	99	5	1%

163: **Q98**

How about people under 18, how many pedestrian trips were made in the past 24 hours by them? RANGE: 0 - 25

N =		319	100%
NONE	00	199	62%
DK/RF	99	8	3%

164: **Q99**

How about in the past seven days? RANGE: 0 - 25

N =		199	100%
NONE	00	168	84%
DK/RF	99	1	1%

165: **Q100A**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Cross an intersection without traffic lights?
RANGE: 0 - 50

N =		963	100%
NONE	00	730	76%
DK/RF	99	7	1%

166: **Q100B**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Cross an intersection with traffic lights?
RANGE: 0 - 50

N =		963	100%
NONE	00	749	78%
DK/RF	99	3	0%

167: **Q100C**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Cross an intersection when light was red, and traffic still had right-of-way
RANGE: 0 - 50

N =		963	100%
NONE	00	900	93%
DK/RF	99	2	0%

168: **Q100D**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Walk along a road without sidewalks?
RANGE: 0 - 50

N =		963	100%
NONE	00	751	78%
DK/RF	99	3	0%

169: **Q100E**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Cross a street in the middle of a block?

RANGE: 0 - 50

N =		963	100%
NONE	00	711	74%
DK/RF	99	6	1%

170: **Q100F**

Sometimes people can get hurt when walking from their car or from a bus, just crossing the street or walking from or to the car in a parking lot. Not counting the walking trips I just asked you about, about how many times did you do each of the following in the past 24 hours? Walk through a parking lot with busy vehicle traffic?

RANGE: 0 - 50

N =		963	100%
NONE	00	510	53%
DK/RF	99	3	0%

171: **Q101A**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. The safest way to ride a bicycle is against traffic.

N =		963	100%
True	1	425	44%
False	2	516	54%
DK/RF	9	22	2%

172: **Q101B**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. Bicyclists are safe at night as long as they have all their reflectors.

N =		963	100%
True	1	313	33%
False	2	627	65%
DK/RF	9	23	2%

173: **Q101C**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. Bicycles on the road must stop at stop signs or signals.

N =		963	100%
True	1	943	98%
False	2	12	1%
DK/RF	9	8	1%

174: **Q101D**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. When crossing a street at an intersection, the flashing or "don't walk" signal means you should stop and go back to the curb.

N =		963	100%
True	1	736	76%
False	2	203	21%
DK/RF	9	24	2%

175: **Q101E**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. It is legal to ride a bicycle while intoxicated.

N =		963	100%
True	1	83	9%
False	2	855	89%
DK/RF	9	25	3%

176: **Q101F**

Now, I'll read you some statements about safety. For each one, please tell me if in you personal opinion, the statement is true or false. Motorists are required to yield the right-of-way to pedestrians at crosswalks

N =		963	100%
True	1	902	94%
False	2	50	5%
DK/RF	9	11	1%

177: **Q102**

Finally, I have a couple of question about you. What is your age? RANGE: 18 - 98 YEARS OLD

N =		963	100%
DK/RF	99	17	2%

178: **Q103**

Do you have a valid driver's license?

N =		963	100%
Yes	1	893	93%
No	2	70	7%
DK/RF	9	0	0%

179: **M104**

Do you have any physical limitations that make it difficult for you to travel outside the home alone, such as blindness, use of a cane, wheelchair, or crutches?

N =		963	100%
Yes	1	67	7%
No	2	896	93%
DK/RF	9	0	0%

180: **Q105**

How many vehicles in working condition are there in your household? RANGE: 0 - 15

N =		963	100%
NONE	00	40	4%
DK/RF	99	0	0%

181: **Q106**

Are you a full-time resident of Florida, or a seasonal resident?

N =		963	100%
Full-time resident	1	945	98%
Seasonal resident	2	18	2%

182: **Q107**

Are you currently employed in a job outside your home full-time, part-time, or not at all?

N =		963	100%	
Full-time	1	473	49%	=> Q109
Part-time	2	87	9%	=> Q109
Not at all	3	403	42%	

183: **Q108**

Are you retired?

N =		403	100%
Yes	1	239	59%
No	2	162	40%
DK/RF	9	2	0%

184: **Q109**

What is the zip code where you live in Florida?

N =		963	100%
DK/RF	99999	22	2%

185: **Q110**

What is you annual household income, combining all sources and all residents in your household? ENTER WHOLE DOLLAR AMOUNT

N =		963	100%
Under $15,000	1	75	8%
$15,000 - $24,999	2	110	11%
$25,000 - $39,999	3	160	17%
$40,000 - $59,999	4	168	17%
$60,000 or greater	5	255	26%
Don't know/Refused	9	195	20%

186: **FNAME**

What is your first name?

N =		951	100%

187: **LNAME**

What is your last name?

N =		933	100%

188: **Q111**

GENDER DO NOT ASK

N =		963	100%	
MALE	1	398	41%	=> THANK
FEMALE	2	565	59%	=> THANK

189: **INT10**

Although you are not qualified for our survey today, we appreciate your time. Thank you and goodbye.

N =		0	100%	
NOT QUALIFIED	NQ	0	0%	=> /END

190: **THANK**

On behalf of the Florida Department of Transportation, I want to thank you for all you time and opinions today. Have a nice day. PRESS ENTER TO CONTINUE

N =		3	100%	

191: **INT**

FINAL DISPOSITION

N =		963	100%	
Continue	OK	0	0%	
No Answer	NA	0	0%	=> END
Busy	BZ	0	0%	=> END
Answering Machine	AM	0	0%	=> END
Call Back	CB	0	0%	=> CB
Language Barrier (SPANISH ALSO)	LB	0	0%	=> END
Disconnect	DC	0	0%	=> END
Fax/Computer	FX	0	0%	=> END
Business/Government	BG	0	0%	=> END
First Refusal	R1	0	0%	=> END
Refusal	RF	0	0%	=> END
Partial Complete	PC	0	0%	=> END
Complete	CM	963	100%	=> END

192: **NOTES**

NOTES ABOUT THE ACCIDENT(S)

Enter any notes about the accident(s).

N =	0	100%	

193: **CB**

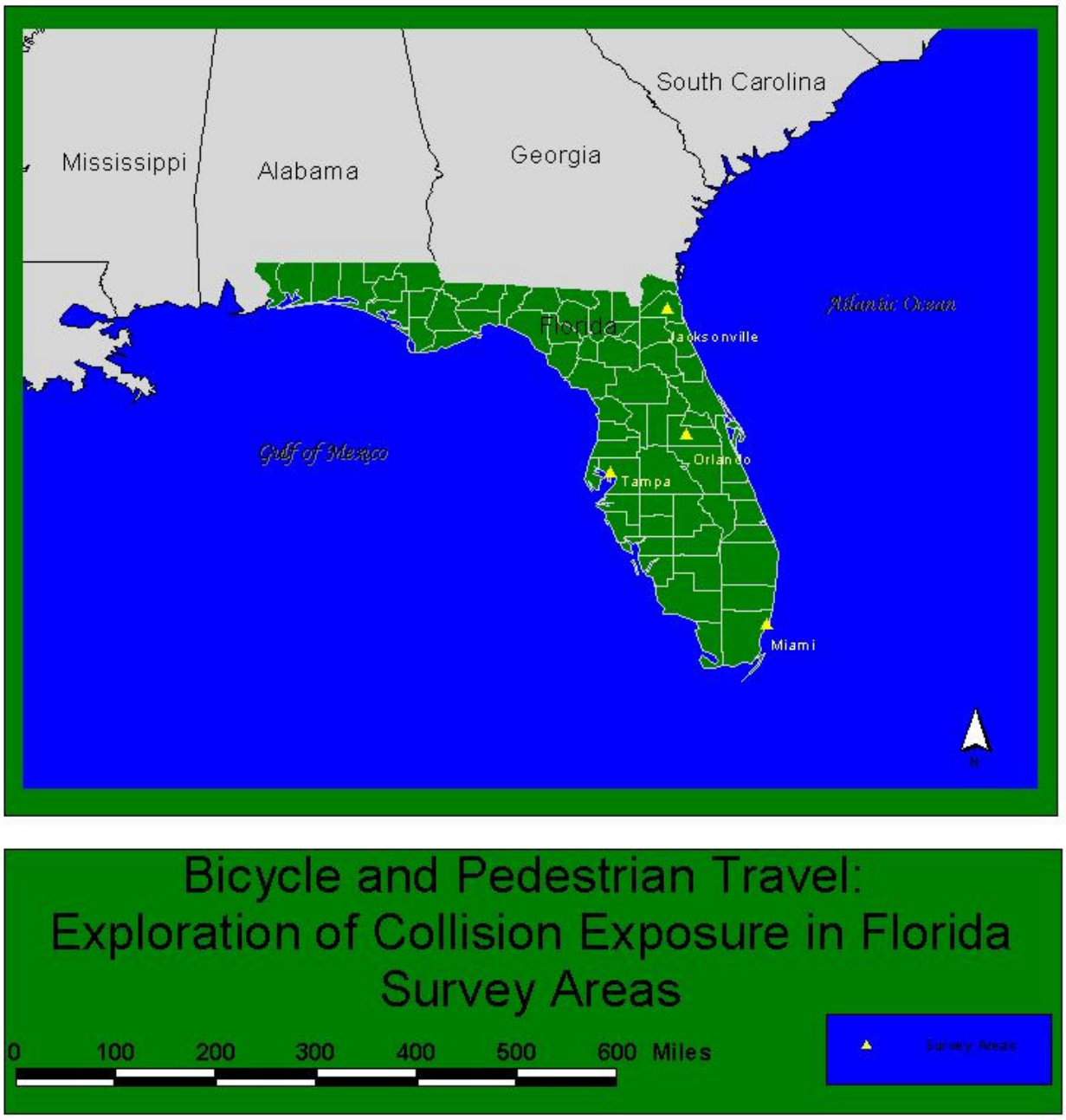
DATE: $D TIME: $H $Q

What would be a good time to call back?

N =	0	100%	

APPENDIX C: MAP OF STUDY AREA

FIGURE 11: MAP OF STUDY AREA



Source: NuStats