Bicyclists, Bicycling Safety

Abstract

This report presents findings from the National Survey of Bicyclist and Pedestrian Attitudes and Behavior, jointly sponsored by the U.S. Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) and the Bureau of Transportation Statistics (BTS) and administered by The Gallup Organization. The goals of the survey were to ascertain the scope and magnitude of bicycle and pedestrian activity and the public’s behavior and attitudes regarding bicycling and walking.

This report, Volume I: Summary Report, provides a top line summary of key data results regarding the behaviors and attitudes on various topics related to walking and bicycling including reported frequency of walking and bicycling during the summer months, trip purpose and characteristics, perceptions of safety, safety practices, facilities available and community design. Volume II: Findings Report presents a detailed analysis on these topics. Volume III: Methods Report describes the methods used to conduct the interviews and analyze the data. It also contains a copy of the questionnaire. The data come from a survey conducted among a representative sample of 9,616 U.S. residents age 16 and older during the Summer of 2002.

The survey findings show that slightly less than half (46%) of those 16 and older have regular access to a bicycle, with access increasing with increases in household income. About 43 percent ride a bicycle at least once in the summer months, making an estimated 2.484 billion trips during the summer of 2002. Bicycling declines with age, with those under 20 most likely to bicycle and doing so more frequently, while the majority over 45 did not bicycle during the summer months. The majority of bicycling trips were for recreation or for exercise, while just one in 5 trips were made to conduct errands (14%) or for commuting to work or school (5%). About half of all trips (48%) were made on paved roads. An additional 13 percent were on shoulders of paved roads, and 5 percent on bike lanes on roads. One in 7 was made on sidewalks (14%) or bike trails/paths (13%). Only half (50%) of bicyclists say bike paths are available in the area they ride, while 32 percent say bike lanes are available. However, over half of those who do not use available bicycle paths or lanes say they don’t use them because they are not convenient, available, or go where they need to go. More than one in 10 bicyclists (13%) felt threatened for their personal safety on the most recent day they rode their bicycle in the past 30 days in the summer of 2002, with 88 percent of these feeling threatened by motorists. One in 5 bicyclists rode in the dark or near-dark for at least part of their trip, with 63 percent of these saying they took actions to make themselves more visible to motorists. About 4 percent of bicyclists or 2.04 million, were injured while riding in the past two years. About .5 million of these were hit by a motorist. Half (50%) of bicyclists wear a helmet for at least some trips, with 35 percent using them for all or most trips. Nine of 10 support helmet laws for children, while 62 percent support such laws for adults. Nearly half (48%) of those 16 and older are satisfied with how their local community is designed for making bicycle riding safer. About as many (47%) would like to see changes including more bike lanes (38%) and bike paths (30%).

About 86 percent of people 16 or older walked, jogged or ran outdoors for 5 minutes or more during the summer months, with 78 percent doing so within the past 30 days. Walking in the past 30 days decreases to just 66 percent for those over 64. An estimated 13.33 billion walking trips were made in the summer months of 2002, with 74 percent of all trips being made by frequent walkers. Personal errands (38%), exercise (28%) and recreation (21%) are the most common reasons for trips. Nearly half (45%) of the trips were mostly made on sidewalks, and 25 percent were mostly on paved roads. Just 6 percent were made mostly on bike or walk paths or trails. About 6 percent of pedestrians felt their personal safety threatened on their most recent trip, with 62 percent saying they felt threatened by motorists. About 25% of people 16 and older (73%) are satisfied with how their local community is designed for walking, though one-third would like to see changes including more sidewalks (42%) and more lights (17%).

Key Words

Attitudes, Survey, Pedestrians, Walking, Bicycling, Bicyclists, Bicycling Safety
National Survey of Bicyclist and Pedestrian
Attitudes and Behavior

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Introduction

Background and Objectives

This report presents findings from the National Survey of Pedestrian and Bicyclist Attitudes and Behaviors, jointly sponsored by the U.S. Department of Transportation’s National Highway Traffic Safety Administration and the Bureau of Transportation Statistics (BTS), and administered by The Gallup Organization. The goals of the survey were to ascertain the scope and magnitude of bicycle and pedestrian activity and the public’s behavior and attitudes regarding bicycling and walking. This national survey is the first of its kind designed specifically to benchmark bicycle and pedestrian trips, behaviors, and attitudes.

Telephone interviews were conducted with a nationally representative sample of 9,616 respondents 16 or older in the United States between June 11 and August 20, 2002. These results were then weighted to reflect the national population of 208 million non-institutionalized people 16 or older residing in the United States.

Survey respondents were asked to provide information about their overall bicycling and walking behaviors during the previous 30 days to provide for the best recall of actual behavior. While each respondent was asked to respond for the 30-day period prior to the interview date, the cumulative responses in this report represent an average 30-day period from May 11 through August 20, 2002. The survey focused on individual trips taken on the most recent day they bicycled or walked within that past 30 day period. Specific trip data (including trip origin and destination, purpose, time, distance, etc.) were collected for up to six walking and six bicycling trips on the most recent day traveled. These data cannot be used to project year-round bicycling and walking behaviors, but offer a solid reflection of biking and walking activity in the summer months.

The findings of this study are presented in two parts. The first section examines the results regarding bicycling attitudes and behaviors. The second section examines results regarding pedestrian attitudes and behaviors. The report is not intended to provide in-depth analyses of any one topic, but rather to give the reader a general overview of the data.

For purposes of this study, the following definitions are used throughout the report.

**Bicyclists:** People who reported riding bicycles at least once in the past 30 days in the summer months of 2002.

**Pedestrians:** People who reported walking, running, or jogging outdoors for at least five minutes at least once in the past 30 days in the summer months of 2002.

**Trip:** A trip is defined as going from a starting point to a destination for a specific purpose without any stops along the way.

**Summer:** Summer months are May through August.

**Geographical Areas:** The respondents’ geographical area of residence and travel was categorized into 1 of 3 urbanicity areas based on U.S. Census Bureau classifications: suburban, urban, and rural.
Key Findings: Bicyclist Attitudes and Behaviors

Access to and Use of Bicycle in Summer Months

Nearly half of people 16 or older (46%) had bicycles available for their use on a regular basis. Those under 21 were the most likely to have access (62%), while less than one-quarter (23%) of those 65 or older reported access.

Access to a bicycle rises along with household income. Just 29 percent of those with household incomes under $15,000 reported regular access, increasing to nearly half (47%) of those with incomes of $30,000 to $49,000, and two-thirds (65%) of those with household incomes of $75,000 or more.

Nearly 6 in 10 (57%) people 16 or older reported that they never use bicycles during the summer months (18% of these nonusers have access to a bicycle, and 82% do not). About one in seven (13%) said they use a bicycle less than once a month, while 1 in 10 (11%) rode at least once a month, but not weekly, and 19 percent rode a bicycle at least weekly during the summer months.

While males are only somewhat more likely to have access to a bicycle than females (51% versus 42%), they are nearly twice as likely as females (24% versus 13%) to say they ride their bicycle at least once a week in the summer months.

Q1: Do you have a bicycle available for your use on a regular basis? [Base: Total Population; n=9,616]

Q2: On average, during the summer months, how often do you use a bicycle? [Base: Total population; n=9,616; Male=3,936; Female=5,680]
People 16 and older who bicycled at all in the summer months rode bicycles on an average of 5.0 days during the past 30 days in the summer months. Males rode an average of 5.8 days, compared to 3.9 days for females. People 16 to 20 rode bicycles more often (6.1 days) in the past 30 days than did those of older age groups.

Bicycle riders were categorized into heavy (riding 20 or more days per month), medium (riding 8 to 19 days per month) and light (riding 1 to 7 days per month) riders. Using this classification, the majority were light-frequency bicyclists (64%), 22 percent were medium-frequency bicyclists, and 14 percent were heavy-frequency bicyclists during the preceding 30 days.
Nearly three-fourths of those 16 or older (72%) never rode a bicycle or had not done so during the past 30 days in the summer of 2002. This represents approximately 151 million people who did not bicycle. Reasons for not bicycling include lack of access to a bicycle (28%) and lack of need or desire to ride a bicycle (25%). Physical difficulty (11%) or weather conditions (10%) were each mentioned by 1 in 10. Bicyclists 65 and older were most likely to cite physical difficulty (21%) as their primary reason for not bicycling recently.

![Figure 5: Reasons for not bicycling in the summer or for not riding a bicycle more recently](image)

Q2e: What is the primary reason you never ride a bicycle in the summer/have not ridden a bicycle more recently? [Base: Never bicycle in summer months or have not bicycled in past 30 days; n=7,015]

Considering riding activity in the previous 30 days, about one quarter of people 16 and older (27%) reported bicycling at least once.

Males were more likely to be bicyclists than females (34% versus 21%), and those under 20 were much more likely than older adults to bicycle (42% of 16 to 20 versus 8% of 64+). The proportion of those 16 and older who rode at least once in the past 30 days ranged from highs of about one-third in the Midwest (NHTSA Region 5), Mountain States (NHTSA Region 8) and Pacific Northwest (NHTSA Region 10), to lows of 22 percent in the Southeast (NHTSA Region 4) and Mid Southwest (NHTSA Region 6).

![Figure 6: Those who rode bicycle at least once past thirty days, by NHTSA region](image)

Q2c: Thinking about the past 30 days, about how many of those days did you ride a bicycle? [Base: Total population; n=9,616]

<table>
<thead>
<tr>
<th>NHTSA Region</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<tr>
<td>Total Population</td>
<td>507</td>
<td>843</td>
<td>1027</td>
<td>1754</td>
<td>1681</td>
<td>1149</td>
<td>498</td>
<td>358</td>
<td>1316</td>
<td>483</td>
</tr>
</tbody>
</table>
During the summer months of 2002, a projected 2.484 billion bicycling trips were made by people 16 and older. Male bicyclists make a disproportionately high percentage of bicycle trips (given their size in the population) as compared to females. Bicyclists under 21 also make up more than their fair share of bicycle trips (making 26% of trips while they account for just 12% of the total bicycling population).

Light-frequency bicyclists (fewer than 7 days/month) account for the majority (59%) of all bicycling trips, while heavy cyclists (20+ days/month) account for just 19 percent of all trips.

**Origin-Destination Information for Bicycling**

Nearly 9 in 10 (89%) trips began at a residence either belonging to the bicyclist or someone else. An additional 7 percent of trips began at a leisure or recreational site such as a park. Just 1 percent began at work, and 3 percent began in some other location.

The most common purposes of trips were for recreation or leisure (29%) and for exercise or health reasons (24%). Fewer trips were made to run personal errands (14%), to go home (14%), and to visit a friend or relative (10%). Just 5 percent said they used their bicycles for commuting to work or school.
Characteristics of Bicycling Trips

Nearly 2 of 5 trips (39%) on the most recent day of bicycling were reported to be 1 mile or less. Just 1 in 5 trips (19%) was reported as more than 5 miles (7% were deemed 10 or more miles).

Nearly half (48%) of bicyclists’ trips were ridden mainly on paved roads, not on shoulders (48%). Other facilities used for bicycling trips included sidewalks (14%), bicycle paths, walking paths or trails (13%), shoulders of paved roads (13%), unpaved roads (5%), and bicycle lanes on roads (5%).

The bicycle was a preferred mode of transportation even when other modes of transportation were available. Among those who reported bicycling trips that were not just for recreational purposes, nearly 9 in 10 (86%) reported that other types of transportation were available to them that day that they could have used instead of their bicycles. Younger bicyclists (79%, 16 to 20), non-Hispanic Blacks (75%), and those with household incomes less than $15,000 (73%) were least likely to have alternate modes of transportation available. When alternative modes of transportation were available, the bicycle was chosen primarily for the exercise (41%), though others said they chose it because they enjoy biking or good weather (21%), bicycling is convenient (12%) or for recreation (10%).

Bicycling Safety

More than 1 in 10 bicyclists (13%) felt threatened for their personal safety on the most recent day they rode their bicycles in the previous 30 days in the summer of 2002. There were no statistically significant differences by age or gender. Bicyclists in suburban areas were more likely to feel threatened (17%) than those living in urban (13%) or rural (9%) areas. Non-Hispanic White bicyclists (12%) were less likely than those of other races to feel threatened while bicycling.
Overwhelmingly, bicyclists felt threatened while bicycling primarily due to motorists (88%). More than one-third of bicyclists (37%) also reported feeling threatened for their personal safety because of uneven walkways or roadways. One in 4 (24%) felt threatened by dogs or other animals, while 17 percent felt threatened by the potential for crime. Rural bicyclists were more likely to feel threatened by dogs or other animals (33%) than were other cyclists.

Among those who reported they felt threatened by a motorist (11% of bicyclists), the top two actions seen as threatening were motorists driving too close to the bicyclist (40%), and motorists driving too fast (32%). Other reasons included the driver not seeing the bicyclist (16%), the presence of the motorist was threatening (11%), the motorist was rude (8%) and the motorist did not obey traffic laws (7%).

One in 5 (20%) bicyclists who rode in the past 30 days reported riding in the dark or near-dark for part of their rides on the last day they rode their bicycles. The proportion riding in the dark decreased with age.

Among those who spent at least some time riding in the dark or near-dark in the past year, more than 6 in 10 (63%) made efforts to make themselves more visible to motorists. The most frequently reported methods for making themselves more visible were wearing special clothing with reflectors or lights (50%), using a bicycle headlight or taillight (36%), making sure the bicycle has reflectors (32%), and wearing light-colored clothing (16%).
Helmet Laws and Use

Overall, 1 in 4 people 16 and older (24%) expressed uncertainty over whether their State has a bicycle helmet law or not, while 18 percent did say their State does not have any such law. One in 3 (32%) say their State has a law that applies to both adults and children, while 25 percent say their law applies only to children.

Those with children 5 to 15 living in the household were slightly more likely to say their State has a bicycle helmet law for children (28%) than were those without children 5 to 15 (24%).

Nine in 10 people 16 and older (90%) supported laws that require children to wear helmets whenever they are riding bicycles, but just 6 in 10 (62%) supported such a law for adults to always wear bicycle helmets. Bicyclists were similar to nonbicyclists in level of support for bicycle helmet laws for children (88% versus 91%) but less supportive of bicycle helmet laws than nonbicyclists (49% versus 67%).

![FIGURE 12: SUPPORT FOR HELMET LAWS, BY BICYCLIST STATUS](image)

Q50: Do you favor or oppose laws that require ...? [Base: Total Adults; Bicyclist n=2,510; Nonbicyclist=7,106]

Half (50%) of all bicyclists said they never wear helmets or did not have access to helmets. About one-third (35%) reported that they wear a helmet for all (24%) or nearly all/most (11%) of their rides. Riders under 30 are less likely than older riders to wear a helmet for all rides. Usage of helmets for all bicycle rides tended to increase as household income increased, as does access to helmets.

![FIGURE 13: FREQUENCY OF HELMET USAGE, BY HOUSEHOLD INCOME](image)

Q47: When riding a bicycle, do you wear a helmet for...? [Base: Rode bicycle past 30 days]
Bicyclists who do not wear a helmet were asked which of a list of potential reasons for not wearing a helmet applied to them. The top reasons for not wearing a helmet were that the bicyclist does not have one (50%), that it is too hot in the summer months to wear a helmet (47%), that helmets are uncomfortable (45%), and that they do not wear helmets for short bicycling trips (42%). Fewer agreed that their reason for not wearing a helmet was because they do not like the way they look in a helmet (27%), that they forgot to wear it (26%), that the helmet does not provide much protection (22%), that they obstruct vision (12%), and that they are too expensive (12%).

FIGURE 14: REASONS FOR NOT WEARING A HELMET

Q48: What are the reasons you don’t always wear a bicycle helmet? Is it because…? [Base: Bicyclists who do not wear a helmet for all of their rides n=1,848]

Availability and Use of Bicycle Paths/Bicycle Lanes

Half of bicyclists reported that bicycle paths (paths away from the road on which bikes can travel) are available in the areas they rode (50%), while one-third reported that bicycle lanes (marked lanes on a public road reserved for bikes to travel) are available (32%). The frequency of using bicycle paths and bicycle lanes was very similar, with 73 percent using bicycle paths at least some of the time they rode (39% most or all of the time), and 75 percent reporting using bicycle lanes at least some of the time they rode (43% most or all of the time).

Urban bicyclists were more likely to use bicycle paths and bicycle lanes all or most of the time (41% and 43%) than were bicyclists living in rural areas (31% and 33%).

FIGURE 15: FREQUENCY OF USING BICYCLE PATHS AND LANES, BY URBANICITY

Q42a, 44a: Do you ride on bicycle paths/bicycle lanes…? [Base: Bicyclists who have bicycle paths available where ride. n=1,292; Urban=667; Rural=199; Suburban=426/ have bicycle lanes available n=833; Urban=402; Rural=109; Suburban=322]
The majority of nonusers said they do not use bicycle paths (58%) or bicycle lanes (51%) because of the lack of convenience, meaning they were either not available or did not go where the bicyclist wanted to go. Another frequent reason for not using bicycle lanes was that bicyclists did not feel safe using them (20%), but this is cited much less often as a reason for not using bicycle paths (5%).

Seven in 10 bicyclists (69%) reported that they typically ride with traffic when riding their bicycles in the street, that is, riding in the same direction as the cars. One in four (24%) said they typically ride against traffic.

Even when riding on the sidewalk, nearly half (45%) of bicyclists said they ride in the same direction as the cars on the adjacent street. Just 16 percent said they ride facing traffic while on a sidewalk.
Bicycle-Related Injuries

Just 4 percent of bicyclists 16 and older have been injured in the past two years while riding a bicycle (10% of those 16 to 20). Heavy-frequency bicyclists (20+ days/month) were more likely to experience an injury while bicycling (11%) than were medium- (4%) or light-frequency (2%) bicyclists.

A projected 2 million bicyclists reported being injured while riding a bicycle in the past two years. An estimated 457,000 reported the injury was a result of being hit by motor vehicles. Heavy-frequency bicyclists accounted for nearly 900,000 injuries and 257,000 reported motor-vehicle-related injuries. Light-frequency bicyclists experienced nearly 700,000 injuries in the past two years, with just over 100,000 being hit by motor vehicles.
Satisfaction with How Community is Designed for Bicycling

Almost half (48%) of those 16 and older were satisfied with how their communities are designed for bicycle safety. One in 5 (19%) was very satisfied. Bicyclists were more likely to be satisfied with their communities (57% very or somewhat satisfied) than were nonbicyclists (45%). Those who had access to bike lanes (70%) and bike paths (63%) were significantly more likely to be satisfied with their community than those who had neither available (30%).

Regardless of how satisfied they were with the way their communities are designed for bicycling safety, almost half of people 16 or older (47%) would like to see some changes made in their community for bicyclists. Those living in suburban areas were more likely (51%) than those in urban (47%) or rural (42%) areas to desire change.

The change most desired in the community among all cycling frequencies was to increase bicycling facilities such as more bicycle lanes (38%), more bicycle paths (30%), and more bicycle trails (14%).

Q48a: How satisfied are you with how your local community is designed for making bike riding safe? [Base total population n=9,575; Bike Paths=4,721; Bike Lanes=3,046; Neither=3,966]

Q48c: What changes would you like to see made in your community? [Base: Desire changes in community for bicyclists]
Key Findings: Pedestrian Attitudes and Behaviors

Walking Behavior in Summer Months

Nearly 3 in 4 (72%) people 16 or older reported that they walked on average at least once a week during the summer months. Walking was defined as any outdoor walking, jogging, or running that lasts at least five minutes or more. About 1 in 10 (9%) said they walk less – at least once a month, but not weekly. Just 4 percent reported walking less than once a month, and 14 percent reported never walking in the summer months. Those 65 or older were more apt to report they never walk (25%) than were those of younger age groups.

![Figure 22: Frequency of Walking in Summer Months, by Age](image)

Q52: On average, during the summer months, how often do you walk?

People 16 and older who walked in the summer months walked on average 14.9 days during the previous 30-day period in the summer months. Those 16 to 20 (15.8) and 65 and older (15.9) walked more often in the past 30 days than did those in other age groups.

![Figure 23: Average Number of Days in Past Month Walked, by Gender and Age](image)

Q52c: Thinking about the past 30 days, about how many of those days did you walk? [Base: Total who walk in the summer]

<table>
<thead>
<tr>
<th>Total who walk in the summer</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>16-20</th>
<th>21-29</th>
<th>30-45</th>
<th>46-64</th>
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<td></td>
<td>8147</td>
<td>3309</td>
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<td>641</td>
<td>1152</td>
<td>2751</td>
<td>2472</td>
<td>1086</td>
</tr>
</tbody>
</table>
More than 3 in 4 people 16 and older (78%) reported walking at least once in the past 30 days in the summer months. There was no difference between males and females, nor between most age groups. The exception was the oldest age group, who were less likely to report walking in the 30 days preceding the interview (66%).

![Figure 24: Those who walked at least once past thirty days, by gender and age](image)

Q52c: Thinking about the past 30 days, about how many of those days did you walk? [Base: Total population]

<table>
<thead>
<tr>
<th>Total Population</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>16-20</th>
<th>21-29</th>
<th>30-45</th>
<th>46-64</th>
<th>65+</th>
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</thead>
<tbody>
<tr>
<td>9616</td>
<td>3936</td>
<td>5680</td>
<td>724</td>
<td>1309</td>
<td>3132</td>
<td>2914</td>
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</tbody>
</table>

Pedestrians were categorized into heavy (walking 20 or more days per month), medium (walking 8 to 19 days per month) and light (walking 1 to 7 days per month) walkers. About 3 in 10 pedestrians are light-frequency (31%), almost as many are medium-frequency pedestrians (29%), while 41 percent are heavy- frequency pedestrians.

![Figure 25: Walking frequency, based on days per month walked](image)

Q52c: Thinking about the past 30 days, about how many of those days did you walk? [Base: Total population; n=9,616]
Overall, the reported walking habits of pedestrians has increased slightly since a year ago. While about one half (51%) of all pedestrians reported no change in their walking behavior compared to a year ago, 3 in 10 (30%) reported walking more often, while 19 percent reported walking less often. Females (32%) were slightly more likely to report an increase in walking behavior from a year ago than were males (28%). The percentage of people reporting an increase in walking declined with age.

One in 5 (20%) people 16 or older reported they never walk or had not done so during the past 30 days over the summer of 2002. This represents approximately 41 million people who did not walk. The top reasons given for not walking included lack of desire or need (27%), disabilities and other health impairments (25%), and weather conditions (23%).

Females were more likely to cite disability (31%) and weather conditions (28%) as a reason for not walking than were males (18% and 19% respectively). Males were more likely to report a lack of desire or need (32%) than females (23%). One-half (50%) of those 65 and older who did not walk reported the main reason was because of a disability.
During the summer months of 2002, over half (57%) of those 16 and older who made walking trips took one trip on the last day they walked, while 29 percent took two trips, and the remainder took three or more trips (13%). This translates to an average of 1.7 trips per pedestrian on the last day they walked.

In all, a projected 13.33 billion walking trips were made by people 16 and older in the summer of 2002. This reflects an estimated 6.31 billion trips made by male pedestrians and 7.02 billion trips made by female pedestrians. Younger walkers (those under 46) made a slightly larger proportion of trips than might be expected, though pedestrians over 45 account for 36 percent of all walking trips (and 45% of all pedestrians).
Origin-Destination Information for Walking Trips

Eight in 10 (80%) walking trips began at a residence either belonging to the pedestrian or someone else. An additional 8 percent of trips began at a leisure or recreational site such as a park. Just 5 percent began at work, 3 percent began at a transportation site, and 4 percent began in some other location.

The most common purpose of trips was for personal errands (38%). Additional trip purposes included exercise/for health reasons (28%) and for recreation or leisure (21%). Just 5 percent said they walked to commute to work or school, and 4 percent said that walking is required for their job.

Characteristics of Walking Trips

The average reported walking trip most recently taken during the summer was reported to be 1.3 miles in length. Half of trips (50%) were less than one mile, and an additional 13 percent were one mile in length. Just 7 percent of trips were more than five miles.

During the most recent day of walking, 45% of pedestrians walked mostly on sidewalks. Other facilities used for walking trips included paved roads, not on shoulders (25%), shoulders of paved roads (8%), unpaved roads (8%), and bicycle paths, walking paths, or trails (6%).

Walking was a preferred mode of transportation even when other modes of transportation were available. Among those who reported walking trips for non-recreational purposes, 3 in 4 (75%) reported that other types of transportation were available to them that day that they could have used instead of walking.

Younger (73%, 16-20) and older (69% 65+) walkers, heavy frequency walkers (72%), and those with household incomes less than $15,000 (70%) were least likely to have alternate modes of transportation available. In cases where alternate modes were available, walking was chosen primarily for the exercise (39%). Other reasons provided were because they enjoy walking or good weather (26%), walking is convenient (12%), or for recreation (6%).
Pedestrian Safety

About 6 percent of pedestrians felt threatened for their personal safety on the most recent day they walked in the summer of 2002. Males and females were equally likely to have felt threatened. Pedestrians 16 to 20 were more likely to have felt threatened (10%) than were those of other age groups.

![Figure 31: Percent felt threatened for personal safety, by gender and age](image)

**Q88: Did you feel threatened for your personal safety at any time when you walked that day?** [Base: Walked past 30 days]

<table>
<thead>
<tr>
<th>Walked past 30 days</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>16-20</th>
<th>21-29</th>
<th>30-45</th>
<th>46-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7562</td>
<td>3072</td>
<td>4490</td>
<td>600</td>
<td>1075</td>
<td>2575</td>
<td>2290</td>
<td>982</td>
</tr>
</tbody>
</table>

Overwhelmingly, the top reason pedestrians felt threatened while walking was due to motorists (62%). More than one-third of pedestrians also reported feeling threatened for their personal safety because of dogs or other animals (36%) or because of the potential for crime (36%). More than one-quarter (28%) felt threatened by uneven walkways or roadways.

Females were more likely to have felt threatened by the potential for crime (42%) than were males (30%). Suburban pedestrians who felt threatened for their personal safety while walking were more likely to say it was because of the potential for crime (50%) than were those from urban (28%) or rural (33%) areas.

![Figure 32: Top reasons felt threatened, by urbanicity](image)

**Q88a: Did you feel threatened for your personal safety because of any of the following...?** [Base: Felt threatened for personal safety last time walked; Suburban n=138; Urban=207; Rural=88]
Among those who reported that they felt threatened by a motorist (4% of pedestrians), the two actions that were seen as most threatening were driving too fast (41%) and driving too close to the pedestrian (35%).

Overall, 22 percent of pedestrians reported walking in the dark or near-dark for part of their most recent walk. Males (25%) were more likely than females (20%) to have walked in the dark. The proportion walking in the dark decreased with age from about 1 in 3 pedestrians under 30 to just 9 percent of those 65 and older.

![Figure 33: Percent walking in dark or near-dark, by gender and age](image)

Q89: You may have already mentioned this but, the last time you walked, was it dark or near-dark outside for any part of your walk? [Base: Walked past 30 days]

Four in 10 (39%) of those who reported walking in the dark/near dark made efforts to make themselves more visible to motorists. Methods used by pedestrians to make themselves more visible after dark included wearing light-colored clothing (64%), wearing fluorescent or reflective clothing (28%), or bringing something visible with them on the walk such as a flashlight or a dog with a reflective collar (18%).

![Figure 34: Methods of making selves more visible to motorists](image)

Q90: What do you do to make yourself more visible when walking after dark? [Base: Do something when walking after dark to make self more visible; n=1,246]
Availability and Use of Sidewalks and Paths

Nearly 7 out of 10 (68%) pedestrians reported that sidewalks or paths are available in the areas where they walk.

Among pedestrians who reported the availability of those facilities, one-third (34%) reported using sidewalks or paths every time they walk. An additional 45 percent reported using them most of the time. The remainder (21%) used sidewalks or paths only some of the time or less. Suburban pedestrians (85%) were most likely to be frequent users of sidewalks.

The most commonly cited reason for not using sidewalks or paths was the lack of convenience (36%), meaning they were either not available or did not go where the pedestrian wanted to go. This is less of an issue for heavy frequency walkers than less frequent walkers.
Six in 10 (60%) pedestrians reported that they typically walk *facing* traffic when walking in the street (i.e., walking against the direction of the traffic) as compared to nearly 1 in 4 (23%) who said they walk *with* traffic. Male and female pedestrians were equally likely to walk against traffic. Pedestrians 45 to 64 (67%) were more apt to walk against traffic than were younger or older pedestrians.

When walking on the sidewalk, pedestrians were about equally likely to walk against (30%) or with (33%) traffic. Nearly 1 in 4 (23%) said it varies, and an additional 12 percent said they never walk on sidewalks.

**Walking-Related Injuries**

Just 2 percent of pedestrians 16 and older reported being injured in the past two years while walking. Heavy-frequency pedestrians (those walking more than 20 out of the past 30 days) were equally likely to experience an injury while walking (2%) as were medium- (2%) and light-frequency (2%) pedestrians.
Nearly 3.6 million pedestrians were injured while walking in the past two years. An estimated 473,000 were injured as the result of being hit by motor vehicles. Heavy-frequency pedestrians accounted for more than 1.6 million injuries and 195,000 motor-vehicle-related injuries. Light-frequency pedestrians experienced 856,000 injuries in the past two years, with just over 200,000 being hit by motor vehicles.

Satisfaction With How Community Is Designed for Walking

Nearly 3 in 4 (73%) people 16 and older expressed satisfaction with how their communities are designed for making walking safe. About 4 in 10 (41%) were very satisfied. Pedestrians were more satisfied with their communities (75% very or somewhat satisfied) than were nonpedestrians (67%).
Regardless of how satisfied they were with the way their communities were designed for walking safety, about one-third of people 16 or older (34%) would like to see some changes made in their community for pedestrians. Those living in urban (35%) and suburban (35%) areas were more likely to desire change than were those in rural (30%) areas.

The change most desired in the community is to increase the number of sidewalks (42%). Smaller numbers would like to see more lights (17%), improved facilities (12%), more paths and trails (10%), or more crosswalks (8%). Light-frequency walkers were most interested in adding more sidewalks.

![FIGURE 41: TOP 3 CHANGES DESIRED IN COMMUNITY, BY WALKING FREQUENCY](image)

Q100: What changes would you like to see made in your community? [Base: Desire changes in community for pedestrians]

<table>
<thead>
<tr>
<th>Desire changes in community for pedestrians</th>
<th>Total</th>
<th>Heavy</th>
<th>Medium</th>
<th>Light</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3352</td>
<td>1129</td>
<td>776</td>
<td>780</td>
</tr>
</tbody>
</table>