



# 2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior

## Volume 1: Summary Report



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**



## DISCLAIMER

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade names, manufacturers' names, or specific products are mentioned, it is because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

### Suggested APA Format Citation:

Schroeder, P. & Wilbur, M. (2013, October). *2012 National survey of bicyclist and pedestrian attitudes and behavior, volume 1: Summary report*. (Report No. DOT HS 811 841 A). Washington, DC: National Highway Traffic Safety Administration.

1. Report No. DOT HS 811 841 A	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle 2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior Volume 1: Summary Report		5. Report Date October 2013	
		6. Performing Organization Code	
7. Author(s) Paul Schroeder, Melanie Wilbur Abt SRBI, Inc		8. Performing Organization Report No.	
9. Performing Organization Name and Address  Abt SRBI, Inc 8405 Colesville, Road, Ste 300 Silver Spring, MD 20910		10. Work Unit No. (TRAI5)	
		11. Contract or Grant No. DTNH22-11-C-00219	
12. Sponsoring Agency Name and Address  Office of Behavioral Safety Research National Highway Traffic Safety Administration 1200 New Jersey Avenue SE. Washington, DC 20590		13. Type of Report and Period Covered Survey conducted July 12, 2012 to November 18, 2012	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract  The 2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior is the second survey on this topic conducted for the National Highway Traffic Safety Administration (NHTSA). Data collection was conducted by Abt SRBI, Inc, a national research organization. The survey utilized an overlapping dual frame (landline and cell) sample design and included an oversample of 16-39 year olds. A total of 7,509 interviews were conducted with persons 16 years of age or older living in the United States. Interviewing began on July 12, 2012, and ended on November 18, 2012. The samples were combined and weighted to produce national estimates of the target population. This report presents summary findings from the survey and compares selected results to the 2002 administration.			
17. Key Words Bicyclist, Pedestrian, Safety, Summary		18. Distribution Statement  This document is available from the National Technical Information Service at <a href="http://www.ntis.gov">www.ntis.gov</a>	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 29	22. Price

## Table of Contents

1. Introduction.....	iii
1.1 Background and Objectives .....	iii
1.2 Definitions.....	iv
2. Key Findings: Bicyclist Attitudes and Behavior .....	1
2.1 Use of Bicycle in Summer Months.....	1
2.2 Bicycling Safety.....	2
2.3 Awareness of Helmet Laws .....	3
2.4 Helmet Use.....	4
2.5 Availability of Bicycle Paths/Bicycle Lanes .....	5
2.6 Use of Bicycle Paths .....	6
2.7 Use of Bicycle Lanes .....	7
2.8 Distracted Bicycle Riding.....	8
2.9 Bicycle-Related Injuries.....	9
2.10 Satisfaction With Community.....	10
2.11 Bicycle Safety Training .....	11
2.12 Perceptions Regarding Bicyclist Road Behavior.....	12
3. Key Findings: Pedestrian Attitudes and Behavior .....	13
3.1 Walking Behavior in Summer Months .....	13
3.2 Pedestrian Safety.....	14
3.3 Availability of Sidewalks.....	15
3.4 Use of Sidewalks.....	16
3.5 Walking-Related Injuries.....	17
3.6 Satisfaction With Community.....	18
4. Comparison of 2002 and 2012 Results .....	19
4.1 Frequency of Bicycling.....	19
4.2 Change in Bicycling Behavior .....	20
4.3 Frequency of Walking.....	21
4.4 Change in Walking Behavior.....	22

# 1. Introduction

## 1.1 Background and Objectives

The National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation (DOT) was established to reduce the number of deaths, injuries, and economic losses resulting from motor vehicle crashes on the Nation's highways. As part of this mission, NHTSA has implemented comprehensive programs involving education, enforcement, and outreach to promote bicyclist and pedestrian safety and reduce the number of injuries and fatalities incurred.

While NHTSA encourages bicycling as an alternate mode of transportation to motor vehicle travel, an increase in this behavior often results in increased exposure to vehicles and other risks, accentuating the criticality of designing and implementing effective safety programs. Despite all preventative measures, crashes and collisions continue to occur. While bicyclists on the road have the same rights and responsibilities as motorists, motorists and bicyclists do not necessarily abide by the same rules.

Similarly, pedestrian injuries and fatalities result from a number of contributing influences that may include the inappropriate use of sidewalks, distracted walking, and high-risk environments. Many injuries and fatalities resulting from crashes and collisions may have been prevented with changes in behavior.

Improvements have been made in recent years regarding the safety of pedestrians, particularly America's youngest pedestrians. For example, from 2002 to 2011, the number of pedestrian fatalities among those 14 and younger decreased by 41 percent.<sup>1</sup> Nonetheless, more work remains to be done.

To better understand the attitudes and self-reported behaviors related to bicyclist and pedestrian activities, NHTSA conducted the National Survey of Bicyclist and Pedestrian Attitudes and Behaviors in 2002, and again in 2012. This report presents findings from the 2012 National Survey of Bicyclist and Pedestrian Attitudes and Behaviors (NSBPAB). Specifically, the 2012 NSBPAB survey assessed the extent to which respondents engaged in bicycling and walking outdoors; demographic and typological descriptions of bicyclists and pedestrians; the extent and frequency of using electronic devices while biking or walking; attitudes and perceptions about bicycling and pedestrian activity; the availability and use of bike paths and lanes in the community; knowledge of various laws pertaining to bicyclists and pedestrians; and changes in bicycling and pedestrian behavior and attitudes since 2002.

---

<sup>1</sup> NHTSA, Traffic Safety Facts, 2011 Data, Children (DOT HS 811 767), May, 2013

## 1.2 Definitions

**Bicycle Path.** Path away from the roadway on which bicycles can travel. For example, a path through a wooded area.

**Bicycle Lane.** Marked lane on a public road reserved for bicycles to travel.

**Summer.** Summer months are May through September.

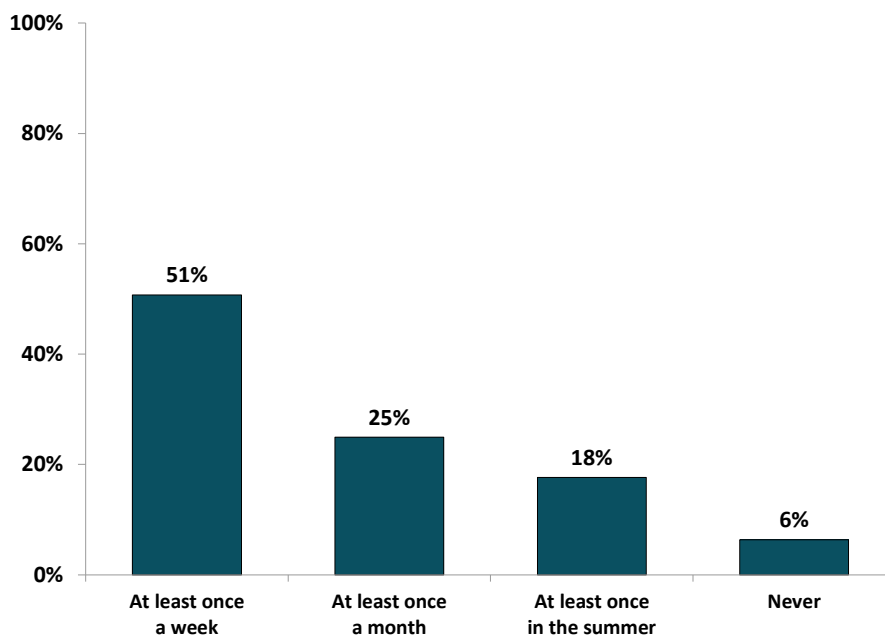
**Trip.** A trip is defined as going from a starting point to a destination for a specific purpose. If you left your house to go on a bike ride with no real destination and returned to your house that would be one trip. If you rode from your house to a friend's house for a visit, then rode back home, that would be two trips. If you rode from your home to a friend's house, then to a store, and then back home again, that would count as three trips.

## 2. Key Findings: Bicyclist Attitudes and Behavior

### 2.1 Use of Bicycle in Summer Months

Respondents who had ridden their bicycle at least once during the past year were asked how often they rode their bicycle during the summer months. The responses were limited to the summer months as this tends to be the time of year when people ride their bicycle more frequently, particularly in seasonal areas of the United States. The majority of respondents who rode their bicycle within the past year reported they used their bicycle at least once a week. Very few respondents claimed that they never rode their bicycle during the summer months.

**Figure 2.1**  
**Frequency of Riding a Bicycle During the Summer Months,  
Those Who Rode a Bicycle in Past Year**



Q27. On average during the summer months, how often do you use a bicycle?

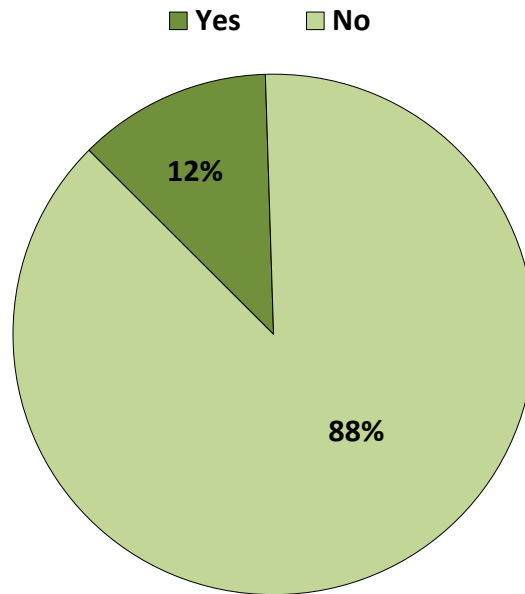
Base: Rode a bicycle within the past year

Unweighted N=2,580

## 2.2 Bicycling Safety

When asked whether they felt threatened for their personal safety while riding a bicycle on their most recent travel day, one in eight respondents that had ridden in the past 30 days reported that they felt threatened during some point on their ride.

**Figure 2.2**  
**Felt Threatened for Personal Safety While Bicycling on Last Travel Day**



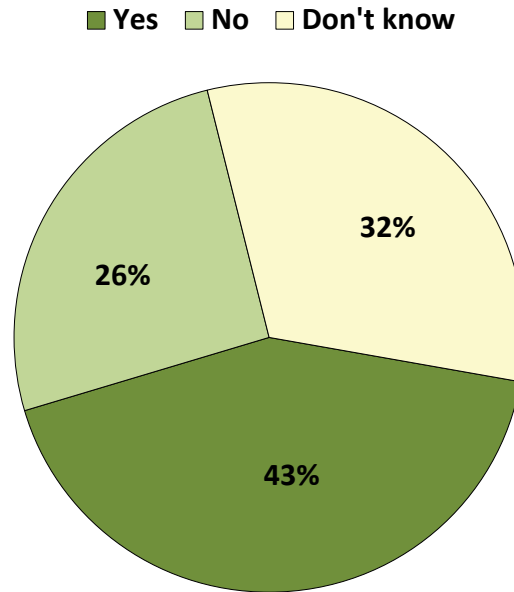
Q17. Did you feel threatened for your personal safety at any time when you rode your bike that day?  
Base: Rode a bicycle at least once in the past 30 days at Q4  
Unweighted N=1,551



## 2.3 Awareness of Helmet Laws

Respondents were asked if there was a State, city, or county law requiring bicycle helmet use by adults and/or children. Forty-three percent believed their locality had such a law.

**Figure 2.3**  
**Believe Locality Has Bicycle Helmet Law**



Q47. Is there a law or ordinance in your State, city, or county that requires adults and/or children to wear a helmet when riding a bike?

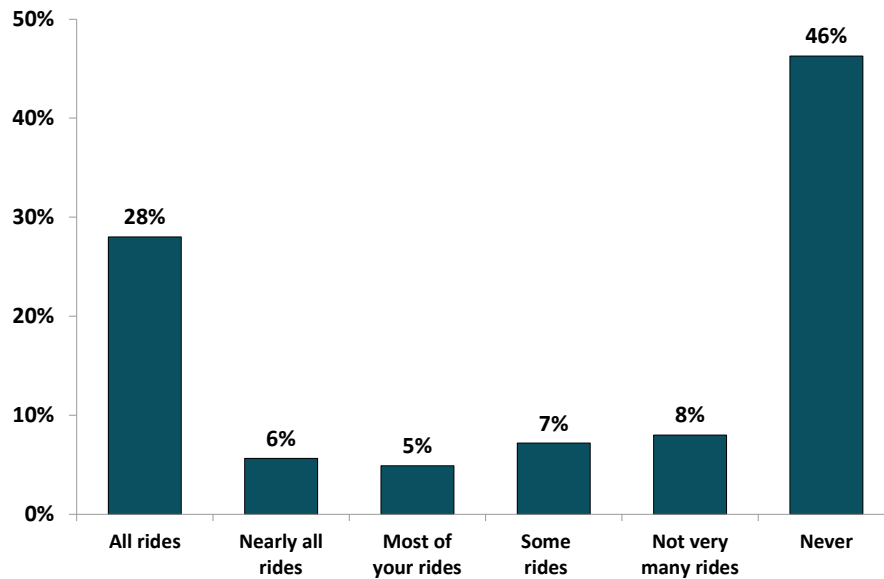
Base: All respondents

Unweighted N=7,509

## 2.4 Helmet Use

The respondents who had ridden a bicycle within the past year were asked how often they wear a helmet. Close to 3 in 10 responded that they wear a bicycle helmet for all rides. Nearly half of the respondents reported that they never wear one when riding a bicycle.

**Figure 2.4**  
**Frequency of Bicycle Helmet Usage**



Q41. When riding a bike, do you wear a helmet for...?

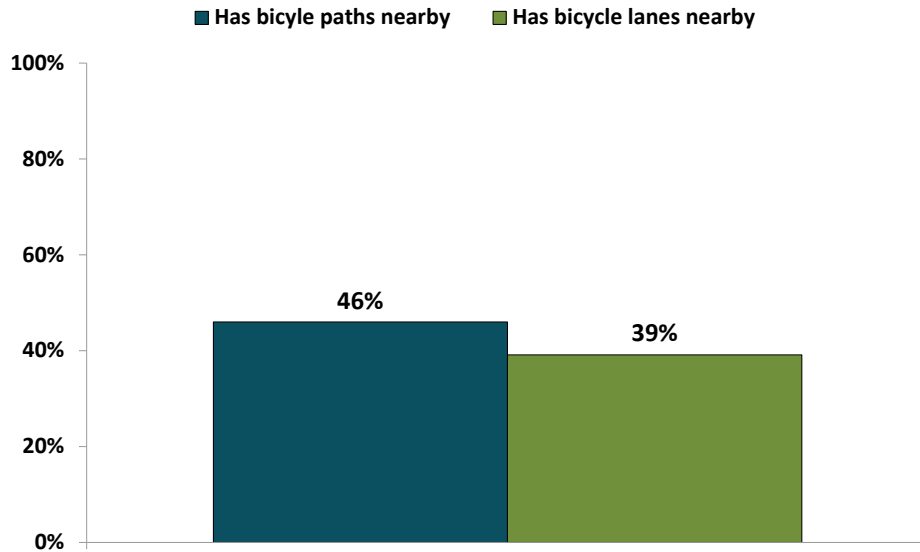
Base: Rode a bicycle within the past year

Unweighted N=2,580

## 2.5 Availability of Bicycle Paths/Bicycle Lanes

Nearly one-half of respondents reported having bicycle paths available within a quarter mile of where they live. Four in 10 reported having bicycle lanes available within a quarter mile of where they live.

**Figure 2.5**  
**Availability of Bicycle Paths/Bicycle Lanes**



Q31. Are bike paths, that is, paths away from the road on which bikes can travel, available within a quarter mile of where you live?

Q34. Are bike lanes, that is, marked lanes on a public road reserved for bikes to travel, available within a quarter mile of where you live?

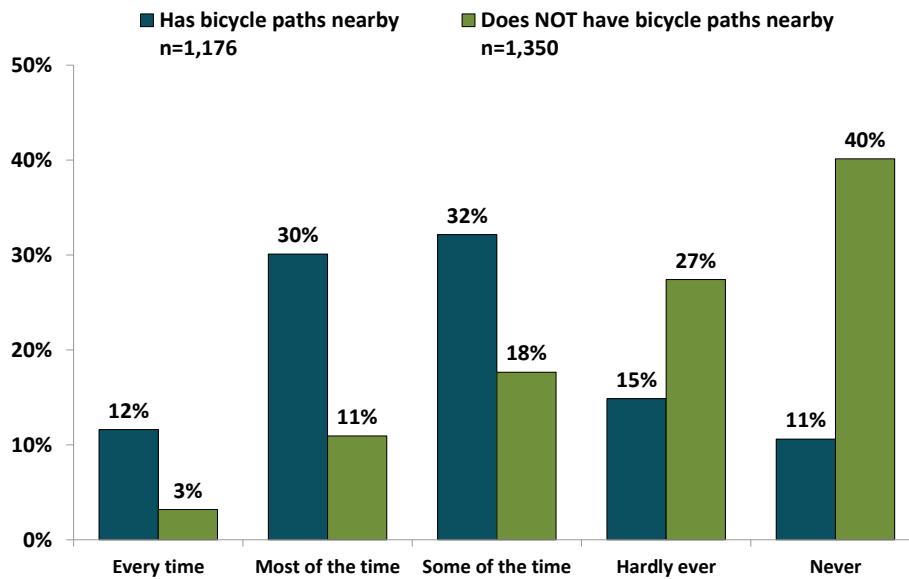
Base: All respondents

Unweighted N=7,509

## 2.6 Use of Bicycle Paths

Respondents who had ridden a bicycle within the past year and who have bicycle paths available within a quarter mile of where they live were more likely to use bicycle paths for at least some of their rides compared to riders not living near bicycle paths.

**Figure 2.6**  
**Frequency of Using Bicycle Paths**  
**By Availability of Bicycle Paths in Neighborhood**

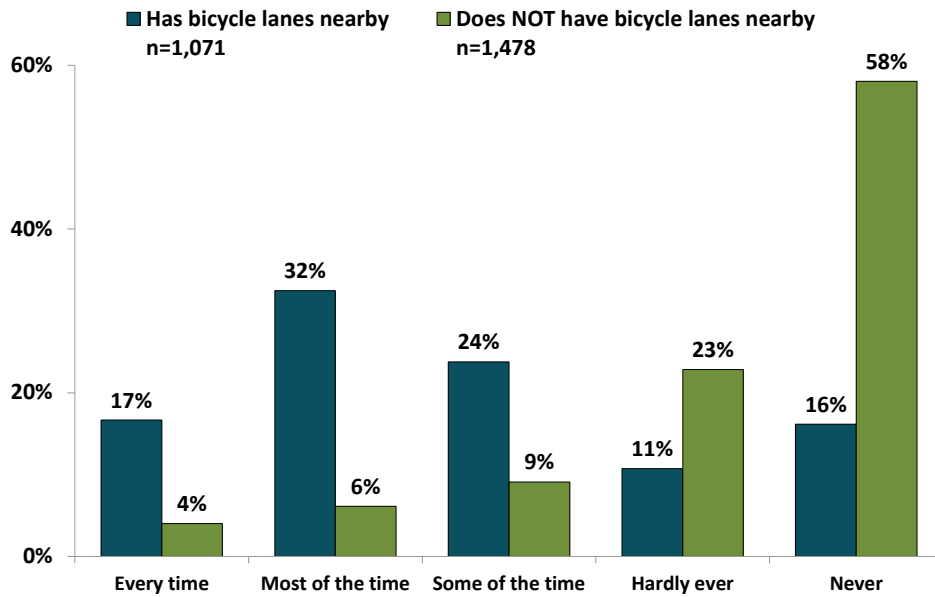


Q32. Do you ride on bike paths...?  
Base: Rode a bicycle within the past year  
Unweighted N=See Chart

## 2.7 Use of Bicycle Lanes

Respondents who had ridden a bicycle within the past year and who have bicycle lanes available within a quarter mile of where they live were also more likely to use bicycle lanes for at least some of their rides compared to riders not living near bicycle lanes.

**Figure 2.7**  
**Frequency of Using Bicycle Lanes**  
**By Availability of Bicycle Lanes in Neighborhood**



Q35. Do you ride in bike lanes...?

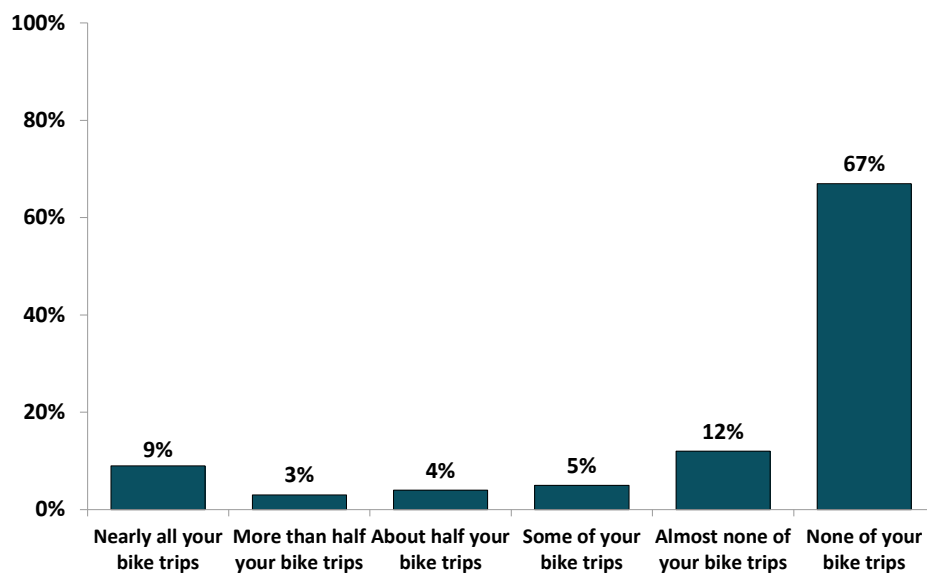
Base: Rode a bicycle within the past year

Unweighted N=See Chart

## 2.8 Distracted Bicycle Riding

Two-thirds of respondents who rode a bicycle within the past year reported that they never used electronic devices during their bicycling trips over that time period. However, one-fifth used electronic devices during at least some of their bicycling trips.

**Figure 2.8**  
**Frequency of Using an Electronic Device While Bicycling**



Q26. During the past year, how often did you use an electronic device like a cell phone or mp3 player WHILE YOU WERE RIDING YOUR BIKE and the bike was in motion? Did you use an electronic device during . . .

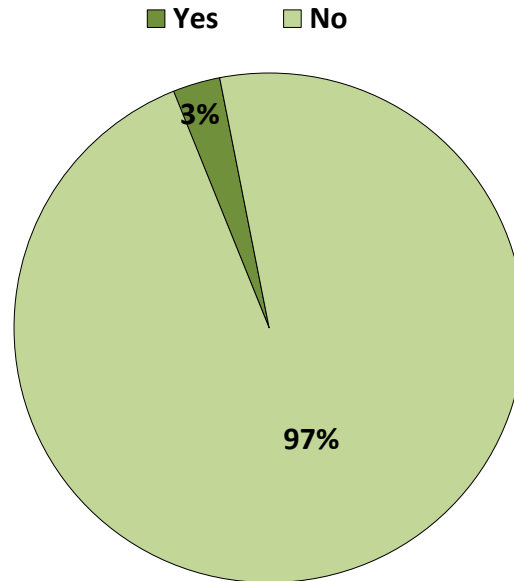
Base: Rode a bicycle within the past year

Unweighted N=2,580

## 2.9 Bicycle-Related Injuries

Three percent of those who had ridden a bicycle in the past two years had been injured while riding their bicycle during that time frame. Respondents were told to only count injuries requiring medical attention.

**Figure 2.9**  
**Injured While Bicycling Within Past Two Years**



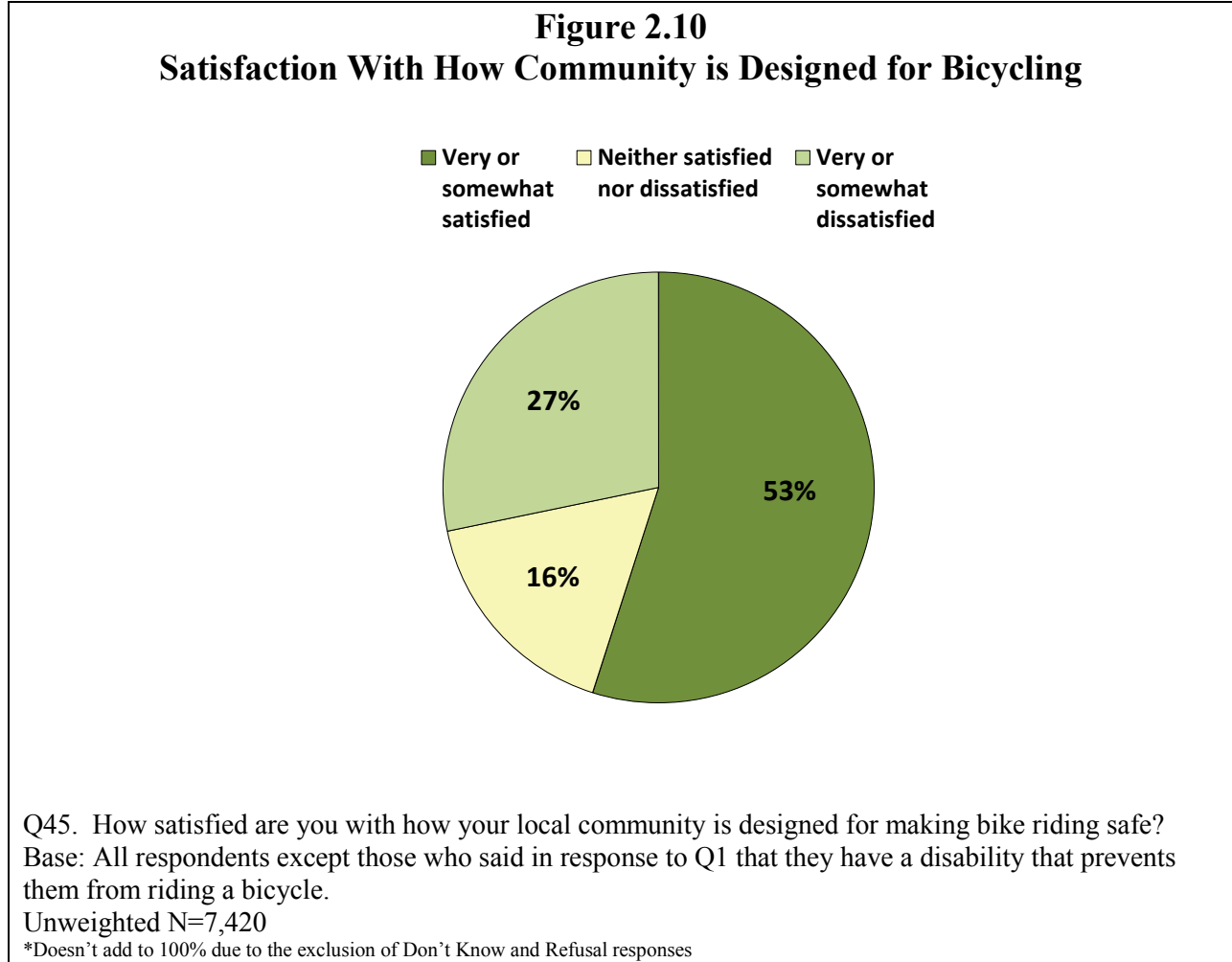
Q38. In the past two years were you ever injured while you were riding a bike? Only count injuries that required attention by a medical professional.

Base: Rode a bicycle within the past 2 years

Unweighted N=3,401

## 2.10 Satisfaction With Community

The majority of respondents were satisfied with how their community was designed for making bike riding safe, while one-fourth reported they were dissatisfied.

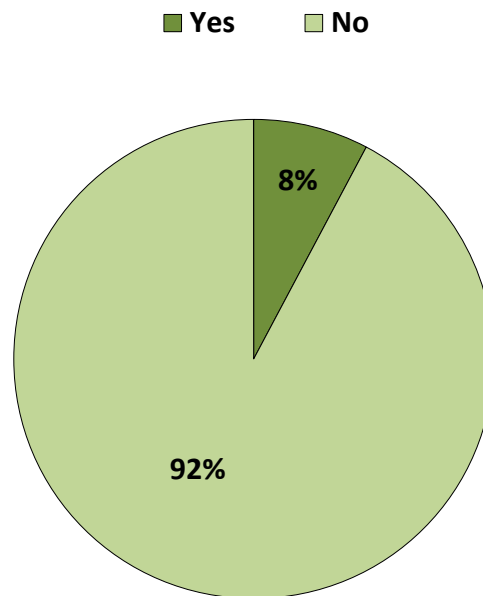




## 2.11 Bicycle Safety Training

The survey asked respondents who had ridden a bicycle within the past five years whether they had received any training in bicycling safety during that time frame. Fewer than 1 in 10 respondents reported that they had.

**Figure 2.11**  
**Received Training in Bicycling Safety**



Q20. Now I'd like to find out how people learn about bicycling safety. In the past five years, have you received any training in bicycling safety?

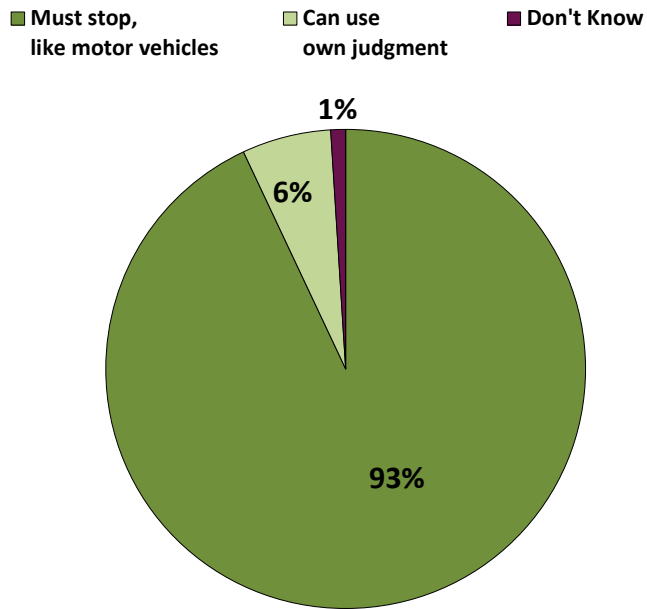
Base: Rode a bicycle within the past 5 years

Unweighted N=4,080

## 2.12 Perceptions Regarding Bicyclist Road Behavior

Nearly all respondents were aware that the rules that apply to motor vehicles regarding traffic lights and stop signs also apply to bicyclists. More than 9 in 10 reported that a bicyclist must stop at traffic lights and stop signs.

**Figure 2.12**  
**Stop at Traffic Lights or Stop Signs While Riding on Road**



Q83. Are bicyclists supposed to stop at traffic lights and stop signs, like motor vehicles, or are they supposed to use their own judgment on whether they need to stop at red lights and stop signs?

Base: All respondents

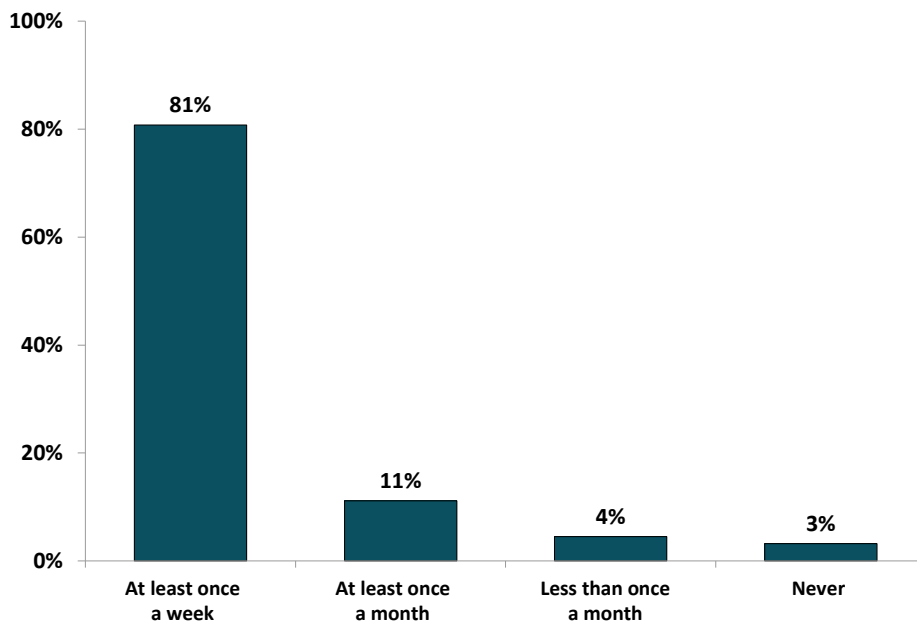
Unweighted N=7,509

### 3. Key Findings: Pedestrian Attitudes and Behavior

#### 3.1 Walking Behavior in Summer Months

Respondents who had walked outside for five minutes or more at least once during the past year were asked how often they walk during the summer months. Four in five respondents reported walking at least once a week. Very few respondents claimed that they never walked during the summer months.

**Figure 3.1**  
**Frequency of Walking During the Summer Months,**  
**Those Who Walked Outside in Past Year**



Q72. On average during the summer months, how often do you walk?

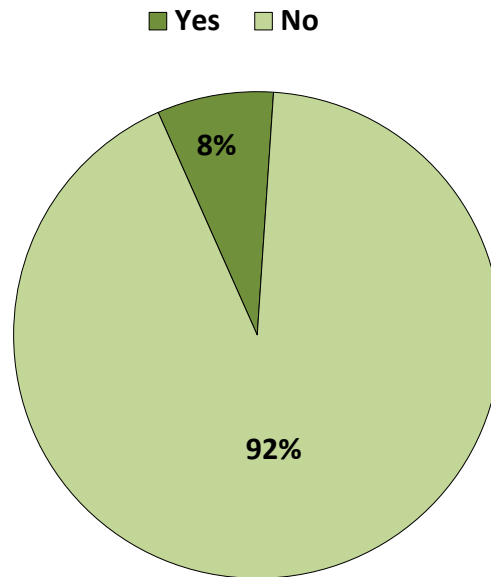
Base: Walked within the past year

Unweighted N = 6,542

### 3.2 Pedestrian Safety

When asked whether they felt threatened for their personal safety during the most recent day they had walked outside, less than 1 in 10 respondents that had walked outside in the past month reported that they felt threatened during some point on their walk.

**Figure 3.2**  
**Felt Threatened for Personal Safety While Walking on Last Travel Day**



Q65. Did you feel threatened for your personal safety at any time while walking, jogging, running, that day?

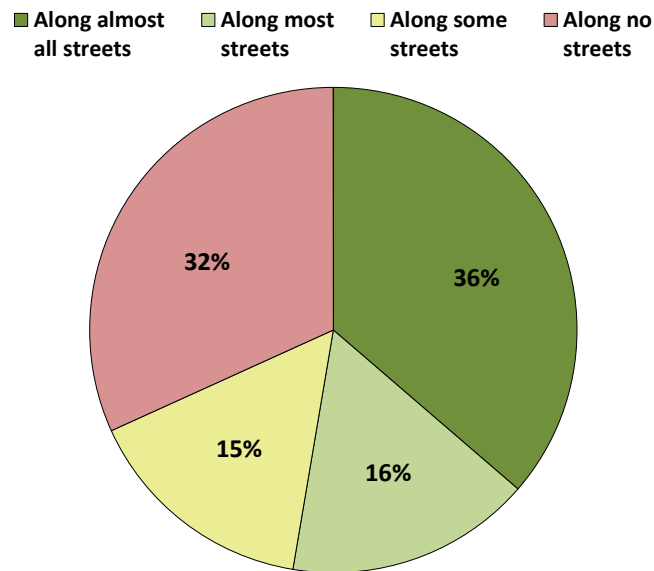
Base: Walked within the past month

N=5,966

### 3.3 Availability of Sidewalks

Respondents were asked about the availability of sidewalks in their neighborhood. More than one-third reported that sidewalks were found along almost all streets in their neighborhood. Just over 3 in 10 reported that there were no sidewalks along any streets in their neighborhood.

**Figure 3.3**  
**Availability of Sidewalks in Neighborhood**



Q74. Are there sidewalks in your neighborhood?

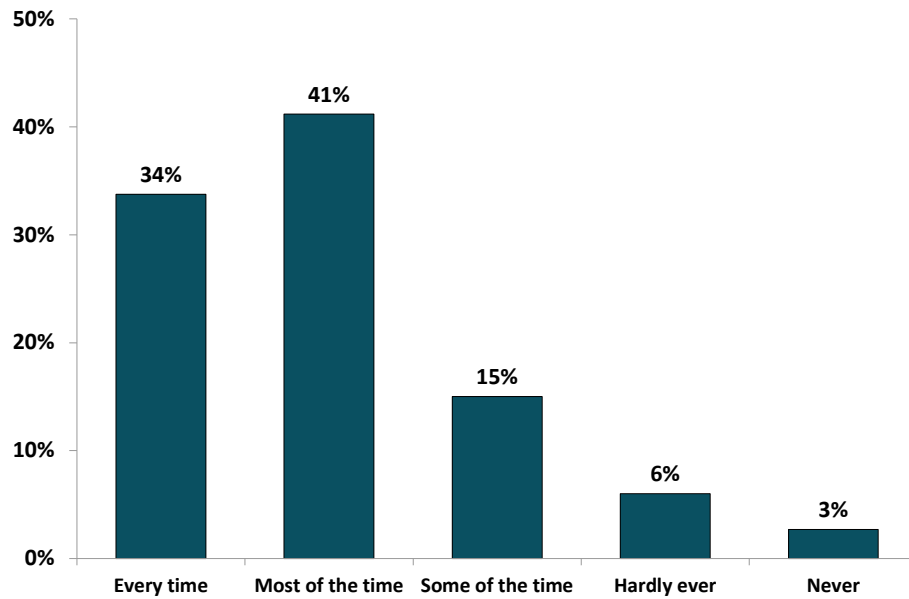
Base: All respondents

Unweighted N= 7,509

### 3.4 Use of Sidewalks

Respondents who reported having sidewalks along at least some streets in their neighborhood were asked how frequently they used them. Three-quarters reported using sidewalks most or every time they walk outside.

**Figure 3.4**  
**Frequency of Sidewalk Use**



Q76. Do you use sidewalks...?

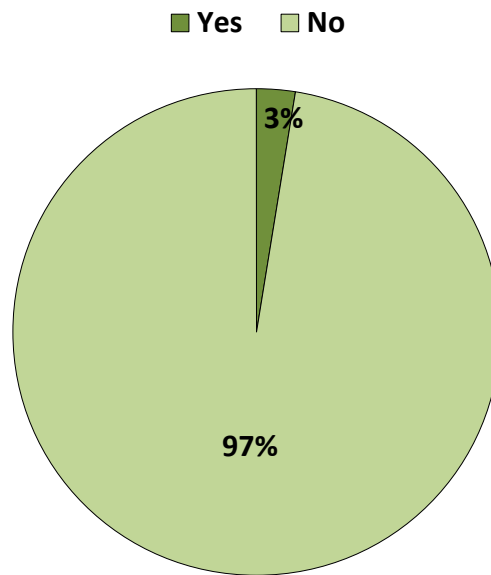
Base: Respondents who walked outside at least once in the past year and have sidewalks available in their neighborhood

Unweighted N=4,416

### 3.5 Walking-Related Injuries

Three percent of respondents who have walked within the past two years had been injured while walking during that time period.

**Figure 3.5**  
**Injured While Walking Within Past Two Years**



Q78. In the past two years, were you ever injured while you were walking? Only count injuries that required attention by a medical professional.

Base: Walked within the past two years

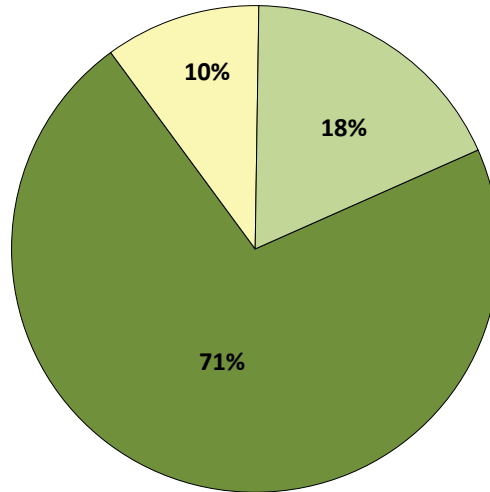
Unweighted N=6,771

### 3.6 Satisfaction With Community

Seven in 10 respondents reported being very or somewhat satisfied with how their community is designed for walking. Fewer than one in five respondents were somewhat or very dissatisfied with the design of their community for walking purposes.

**Figure 3.6**  
**Satisfaction With How Community is Designed for Walking**

■ Very or somewhat satisfied    ■ Neither satisfied nor dissatisfied    ■ Very or somewhat dissatisfied



Q81. How satisfied are you with your local community is designed for making walking safe?  
Base: All respondents except those who said in response to Q51 that they have a disability that prevents them from walking  
Unweighted N=7,456

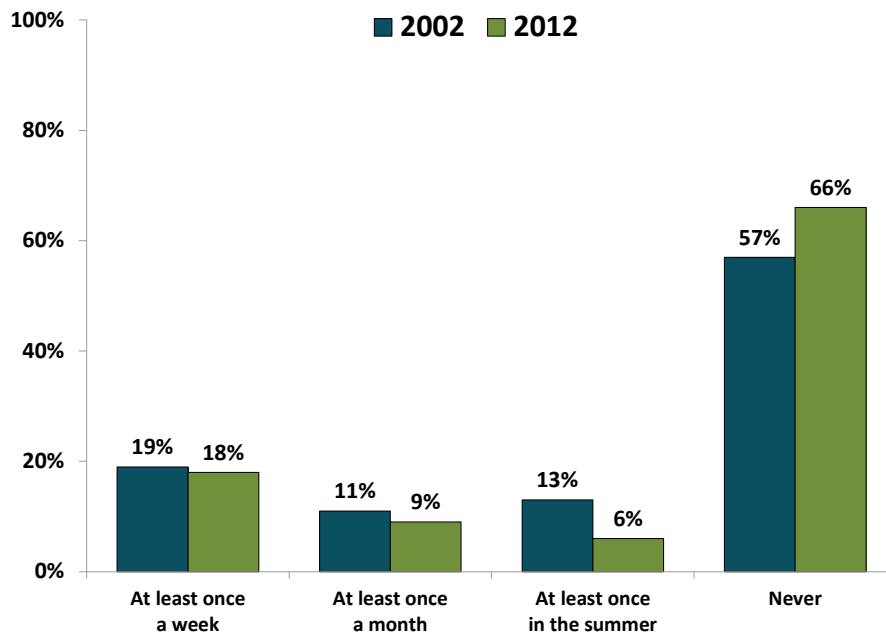


## 4. Comparison of 2002 and 2012 Results

### 4.1 Frequency of Bicycling

The 2002 survey asked all respondents how often they rode a bicycle during the summer months. The majority of respondents reported that they never rode a bicycle in the summer. The 2012 questionnaire asked the same question only to those respondents who reported riding their bicycle within the past year. The question was rebased for comparison purposes to include as “Never” in Figure 4.1 those respondents in 2012 that had not ridden a bicycle in more than a year. Using this method, two-thirds of respondents in 2012 reported that they never ride a bicycle during the summer months. Fifty-seven percent of respondents in 2002 claimed that they never ride a bicycle during the summer months.

**Figure 4.1**  
**Frequency of Riding a Bicycle During the Summer Months**



2002: Q2. On average during the summer months, how often to you use a bicycle?

Base: All Respondents

Unweighted N=9,616

2012: Q27. On average during the summer months, how often do you use a bicycle?

Base: All Respondents\*

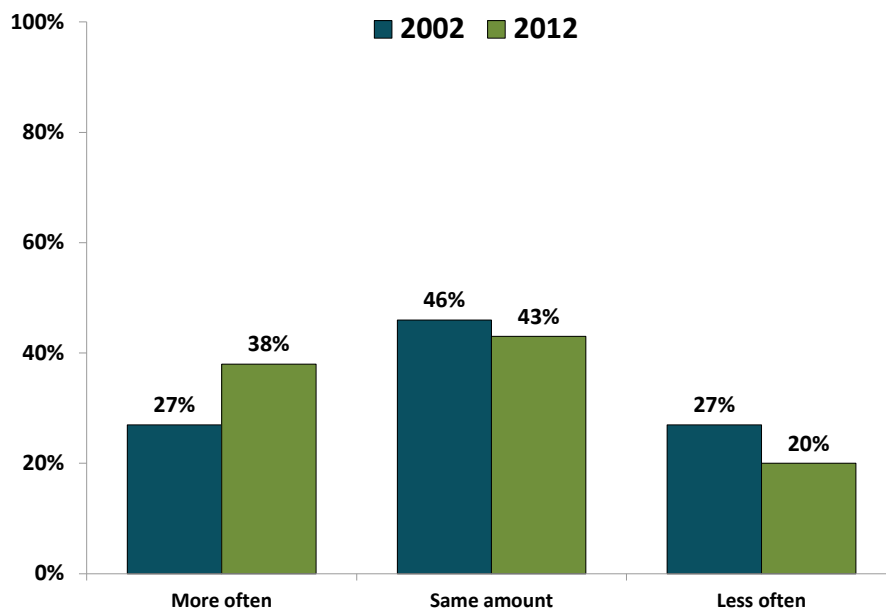
Unweighted N=7,509

\*Rebased from: Rode a bike within the past year

## 4.2 Change in Bicycling Behavior

The majority of the bicycle questions in the 2002 survey were asked only of respondents who reported riding their bicycle within the past 30 days. As a result, a number of 2012 estimates have been rebased to provide accurate comparisons. Figure 4.2 presents estimates from the 2012 survey for those who rode in the past 30 days despite the question having been answered by those who rode within the past year. Nearly 4 in 10 respondents in 2012 reported cycling more often than they did a year ago. In 2002, fewer than 3 in 10 reported cycling more often than they did a year ago.

**Figure 4.2**  
**Riding a Bicycle Now Compared to a Year Ago**



2002: Q41. Compared to about a year ago, would you say you are now riding a bike more often, less often, or about the same amount?

Base: Rode a bicycle in the past 30 days

Unweighted N=2,525

2012: Q30. Compared to about a year ago, would you say you are now riding a bike more often, less often, or about the same amount?

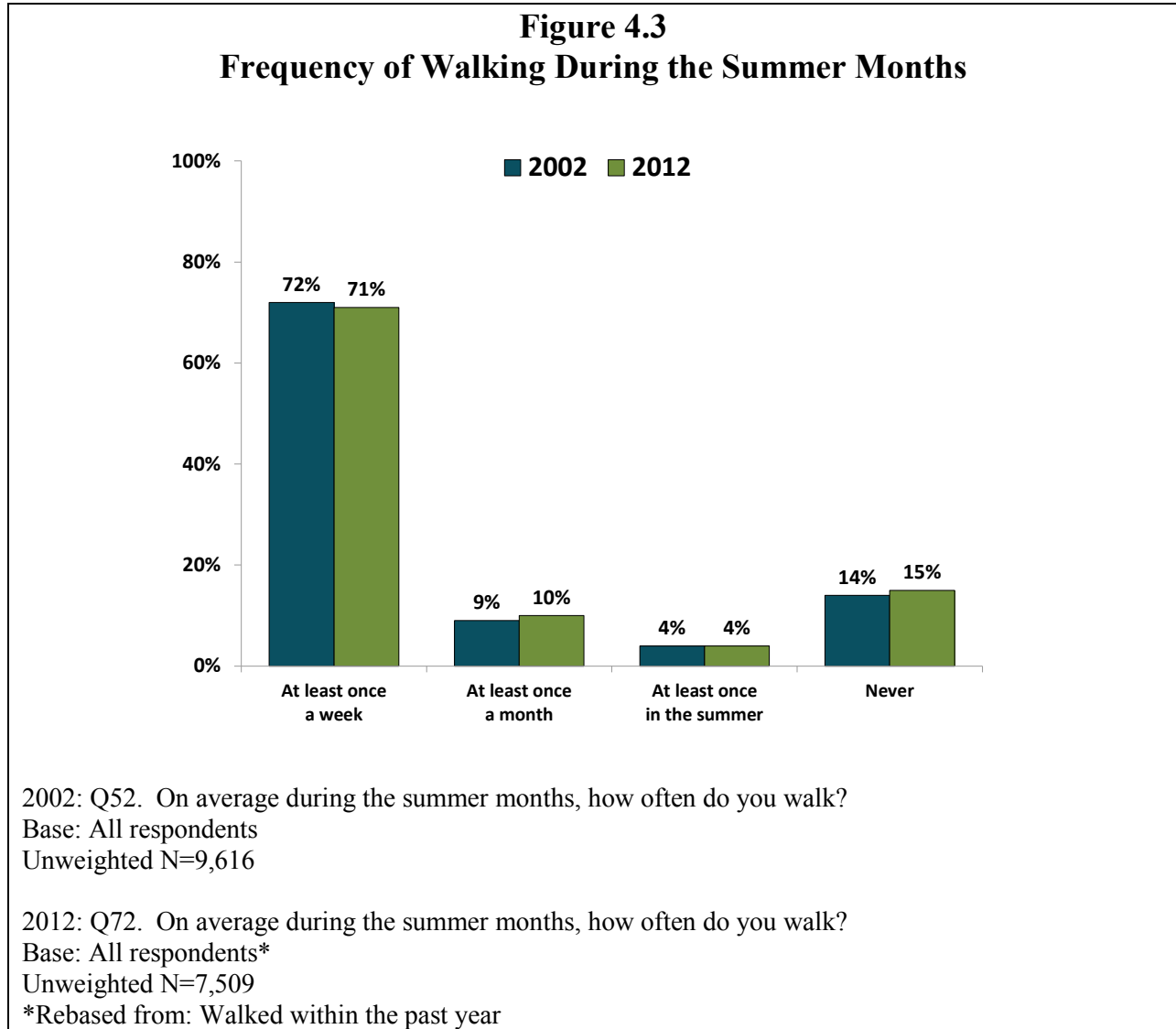
Base: Rode a bicycle in the past 30 days\*

Unweighted N=1,551

\* Rebased from: Rode a bike within the past year

### 4.3 Frequency of Walking

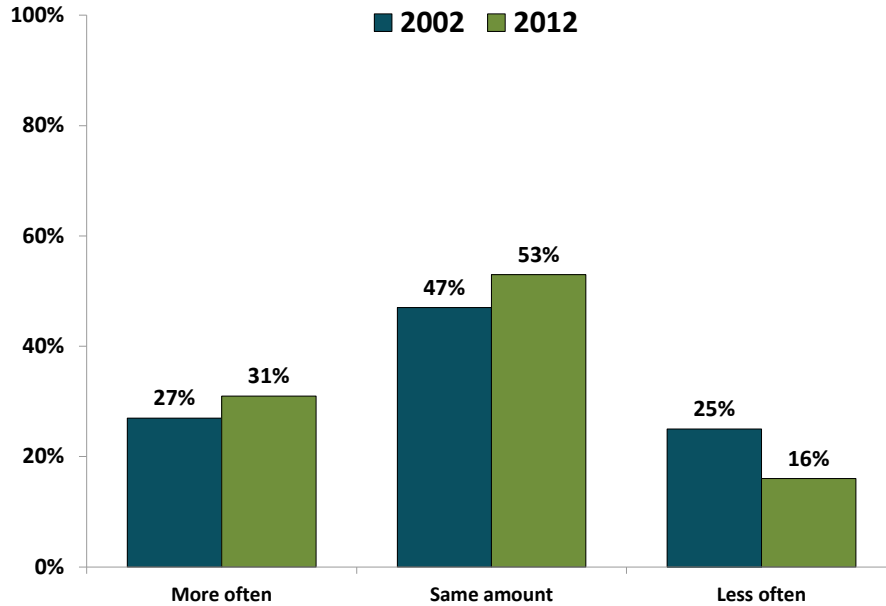
The frequency of walking during the summer months is largely unchanged from 2002 to 2012. The 2012 estimate was rebased to all respondents, although it was originally asked only of those who walked within the past year.



## 4.4 Change in Walking Behavior

In 2002, 27 percent of respondents that had walked in the past 30 days said they were now walking more often than a year ago compared to 31 percent in 2012.

**Figure 4.4**  
**Walking Frequency Now Compared to a Year Ago**



2002: Q91. Compared to about a year ago, would you say you are now walking more often, less often, or about the same amount?

Base: Walked in the past 30 days

Unweighted N=7,585

2012: Q73. Compared to about a year ago, would you say you are now walking more often, less often, or about the same amount?

Base: Walked in the past 30 days\*

Unweighted N=5,999

\*Rebased from: Walked within the past year

DOT HS 811 841 A  
October 2013



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**



10002a-092613-v1c