

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS**

**TERM EVALUATION PROJECT**



**2010 BIKE-TO-WORK DAY  
SURVEY RESULTS**

**May 17, 2011**

**Prepared for:  
Metropolitan Washington Council of Governments**

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**in association with:  
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## SECTION 1 INTRODUCTION

### PURPOSE OF THE SURVEY

This brief report presents results of a survey of commuters who participated in the 2010 regional Bike-to-Work Day event, held in May 2010. This survey was conducted by the Metropolitan Washington Council of Governments (COG) to identify the experience of the participants with the Bike-to-Work Day event and to assess participants' use of bike for commute travel before and after the event. The results of the survey described in this summary will be used in the July 2018 - June 2011 Transportation Emission Reduction Measure (TERM) evaluation of the Mass Marketing TERM.

### SURVEY METHODOLOGY

The survey presented in this report was conducted by COG in November 2010, with assistance from LDA Consulting and CIC Research, Inc. The questionnaire was the same as that used in the 2007 BTWD survey, with a few minor modifications to update the survey for 2010.

COG e-mailed copies of the survey to 8,956 commuters who participated in the event. All event participants registered through the Washington Area Bicyclist Association's web site, thus this email list included all event participants. Participants were asked to complete the questionnaire and return it to COG by e-mail. A copy of the questionnaire is provided in Appendix A. COG received 3,038 completed questionnaires, for a response rate of 34%.

### SURVEY DATA COLLECTED

The survey collected information about the following:

- Participation in past Bike-to-Work (BTW) events and source of information on BTW Day
- Use of bike for commuting before and after BTW Day
- Commute patterns on non-bike days
- Bike use for non-commute trips
- Bike commute assistance offered by employers

Section 2 summarizes results of these survey topics. Survey result percentages presented in the results tables show percentages of the number of respondents for the relevant questions, indicated as "n=\_\_\_."

### Highlights of Findings

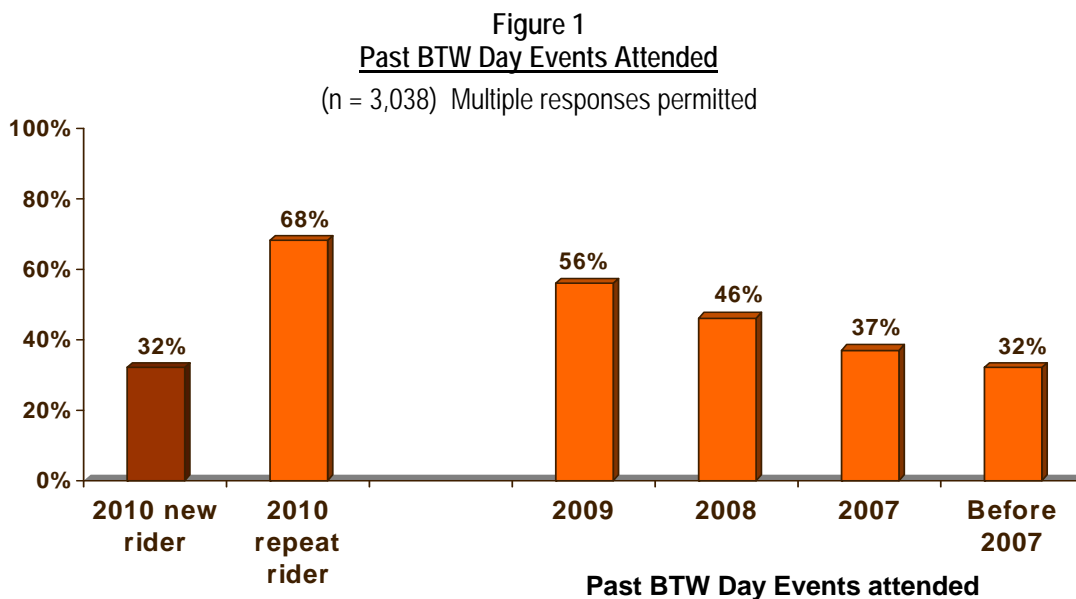
- 2010 was the first BTW Day event for 32% of participants.
- Most common BTW Day information sources were internet (39%) and referrals (20%).
- 83% of participants rode to work at least occasionally before BTW Day; 90% rode to work in the summer after BTW Day, 81% were still riding during the late fall (November).
- 10% of participants started riding to work after their first BTW Day event and 22% started riding more often.
- Respondents who rode to work before BTW Day rode an average of 2.4 days per week. The average frequency increased during the summer after BTW Day to 2.6 days/week. In late fall, the average frequency dropped back to 2.4 days per week.

## SECTION 2 SUMMARY OF RESULTS

### 2010 BIKE TO WORK DAY PARTICIPATION

#### Past Participation in BTW Days (Figure 1)

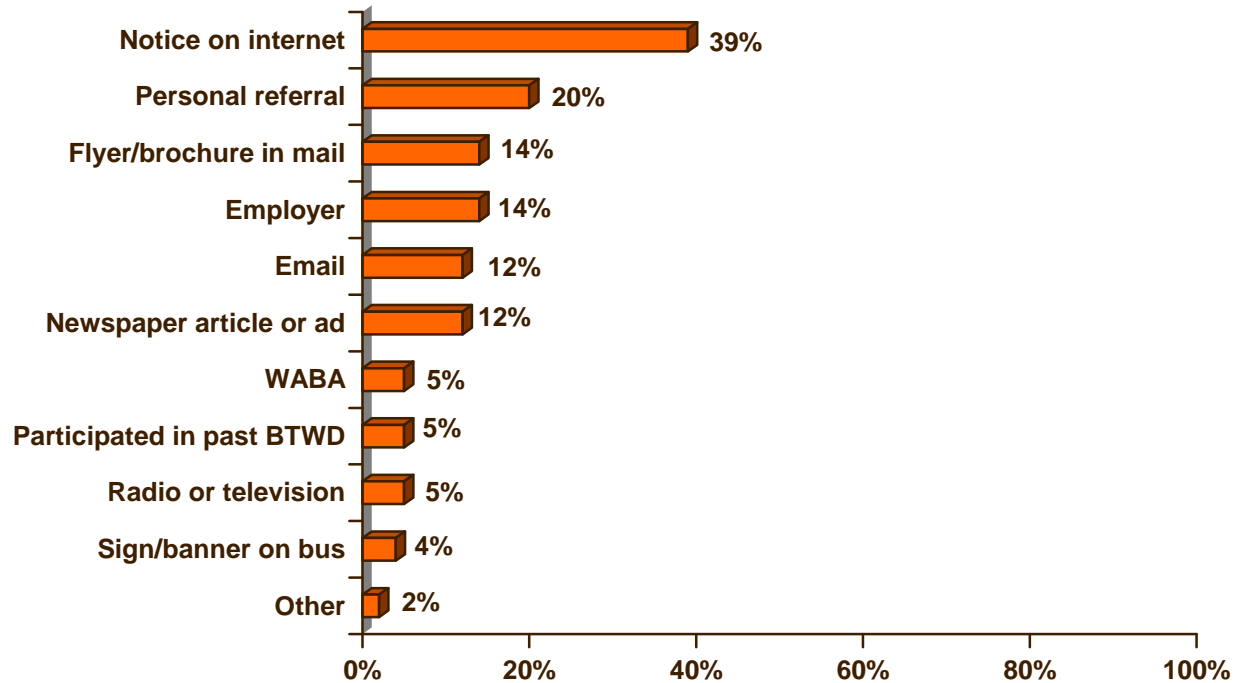
- About a third (32%) of respondents said this was their first BTW Day event. This was less than the results of the 2007 BTW Day survey, in which 36% reported that year as their first event. The remaining 68% said they had participated in a BTW Day before 2010.
- More than half (56%) of the respondents said they also participated in the 2009 BTW Day and 46% participated in 2008. Forty-three percent participated in an event prior to 2008, either the 2007 BTW Day event and/or an event before 2007.



#### Source of Information on 2010 BTW Day (Figure 2)

- The most common source of information about BTW Day was a notice on the internet, noted by 39% of respondents. This was a considerable increase from 2007; in 2007, 28% of respondents cited the internet as their source. About one in five respondents (20%) said they learned of BTW Day through a personal referral from a family member, co-worker, or friend.
- Other common sources noted by 10% or more respondents included: from a flyer or brochure they received in the mail (14%), from an employer (14%), through an email (12%), or through a newspaper article or advertisement (12%). These percentages were approximately the same as the percentages of respondents who cited these sources in 2007.
- About one in twenty said they heard about BTW Day from the Washington Area Bicyclists Association (WABA) (5%). Similar shares cited radio (5%), participation in past BTW Day event (5%), or a sign / banner on a bus (4%).

Figure 2  
Sources of Information About Bike to Work Day Event  
(n = 3,015)



- Respondents for whom 2010 was the first BTW Day were less likely to report learning about BTW Day from the internet (30%) than were respondents who had participated in previous BTW Day events (43%). New participants were more likely to cite a referral from family member, co-worker, or friend (28%) than were repeat participants (17%). A higher share of new participants also noted hearing about the event from their employer (20%) than did past participants (11%).
- Respondents cited similar sources of BTW Day information regardless of the mode they used on non-bike days or the distance they traveled to work. There were no significant differences for either of these two travel characteristics.

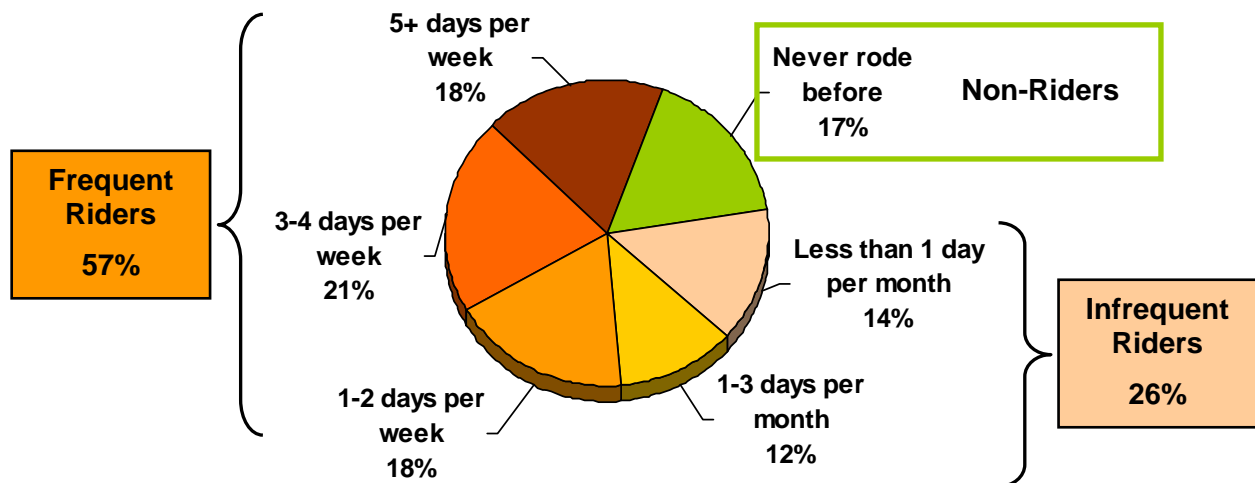
## BIKE COMMUTING BEFORE AND AFTER BIKE TO WORK DAY

A primary objective of the BTW Day survey was to determine the change in biking after BTW Day. To determine a baseline against which to measure change, respondents were asked how often they rode to work before their first BTW Day event. Then, to gauge both the immediate continued impact of BTW Day and the longer-term benefit, respondents were asked about bicycle commuting during two time periods; May through September, immediately after BTW Day, and at the time the survey was conducted, in November.

### Bike Commuting Before Participating in BTW Day (Figure 3)

- Eighty-three percent of respondents rode to work at least occasionally before they participated in a BTW Day event. More than half (57%) were regular riders, riding at least one day per week, 12% rode one to three days per month, and 14% rode less than one day per month. The remaining 17% of respondents said they did not commute by bike before they participated in a BTW Day event.
- First-time BTW participants were more likely to be non-riders before the event than were past participants; 27% of first-time participants were non-riders compared with 12% of past participants.

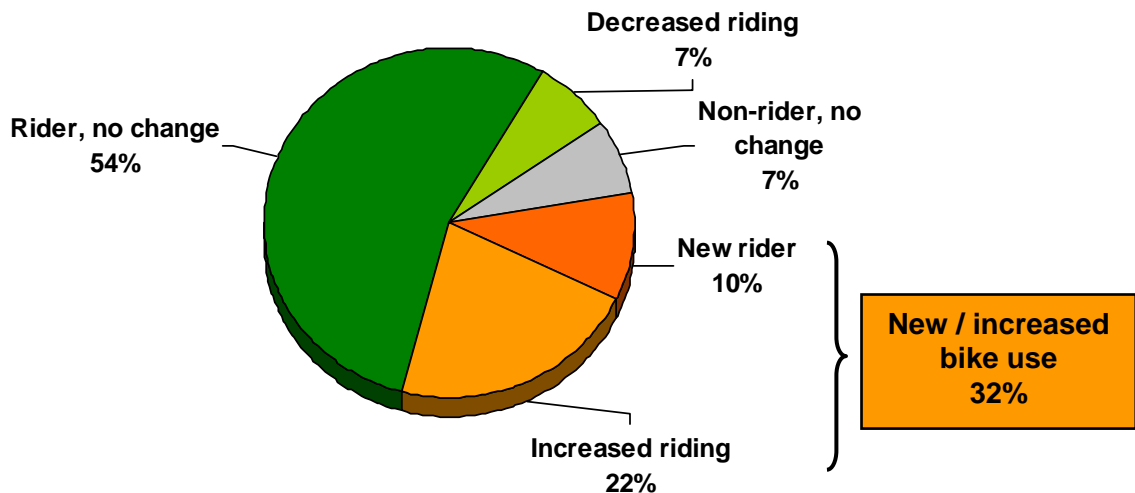
Figure 3  
Frequency of Bike Commuting Before BTW Day  
 (n=3,030)



### Percentage of Respondents Biking During Summer 2010 After BTW Day (Figure 4)

- Between May and September 2010, after the 2010 BTW Day event, 90% of respondents biked to work at least occasionally, an increase of seven percent compared to before BTW Day. Two-thirds rode at least one day per week and 13% rode one to three days per week. One in ten (10%) rode less than once per month, essentially just one or two times during the summer. Ten percent of respondents said they did not ride at all during the summer.
- Figure 4 shows bike commute changes during the summer after 2010 BTW Day. Thirty-two percent of respondents either started biking or increased biking. Ten percent of respondents were new riders; they did not commute by bike before their first BTW day event. Twenty-two percent biked to work before, but started biking more often after BTW Day.

Figure 4  
Changes in Bike Commuting After BTW Day  
 (n=3,008)



- About half (54%) of respondents said they biked to work before BTW Day and continued to bike the same number of days per week after the event. Seven percent of respondents previously rode to work but decreased their riding during the summer of 2010. The remaining seven percent said they did not bike to work before BTW Day and still did not bike to work after the event.

#### Bike Commute Frequency Before BTW Day and During Summer 2010 (Table 1 and Figure 5)

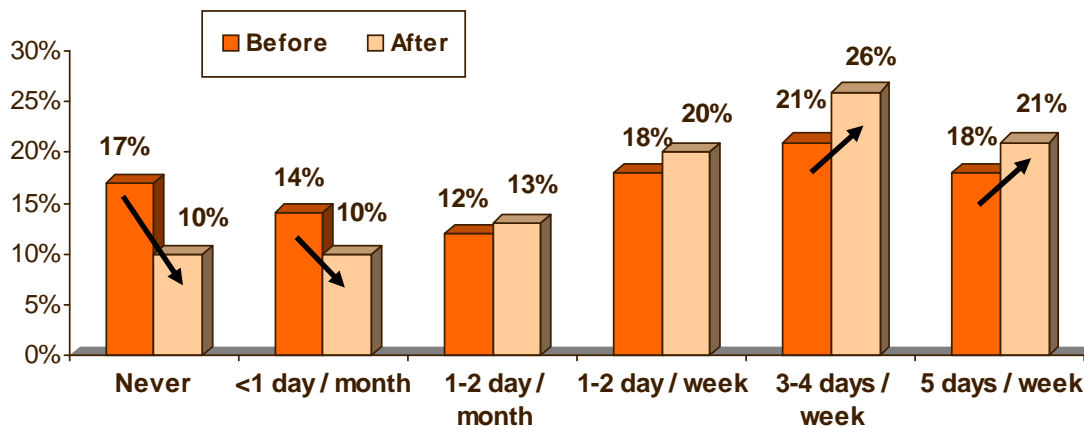
- As shown in Table 1, Respondents who biked to work before the BTW event biked an average of 2.4 days per week. Respondents who biked to work during summer 2010 biked an average of 2.6 days per week, an increase of 0.2 days per week. The increase in average frequency between the Before BTW Day period and the summer of 2010 was generated by a combination of frequency changes: new riders starting to bike, previous riders increasing their biking frequency, offset by previous riders who decreased their riding frequency after BTW Day.
- Respondents who were new riders rode less frequently after BTW Day (1.4 days per week) than did all riders (2.6 days per week). But their summer frequency represented an increase of 1.4 days per week from not riding at all.
- Respondents who were riding before BTW Day and increased their riding rode an average of 2.7 days per week during the summer, an increase of 1.6 days per week over their riding frequency of 1.1 days before BTW Day.
- Some respondents decreased or stopped riding after BTW Day. Their average frequency decreased from 2.1 biking days per week to 0.6 days, a drop of 1.5 days per week.
- Finally, a large share of respondents who rode to work before BTW Day continued riding during the summer at the same frequency. These respondents had the highest riding frequency during both the before BTW Day period (2.8 days) and during the summer after BTW Day (2.8 days).

**Table 1**  
**Average Riding Frequency – Before BTW Day and Summer After BTW Day**

Riding Status	Average Days/Week Riding to Work		
	Before BTWD	Summer After BTWD	Change
- All riders (Pre BTWD n = 2,526, summer n = 2,700)	2.4	2.6	+0.2
- New riders after BTWD (n = 287)	0.0	1.4	+1.4
- Existing riders increased frequency (n = 620)	1.1	2.7	+1.6
- Existing riders decreased frequency (n = 244)	2.1	0.6	-1.5
- Existing riders no frequency change (n = 1,662)	2.8	2.8	0.0

- Bike use rose the most in the frequent rider categories and fell in both the “never” (non-rider) and “less than one day per month” categories (Figure 5).

**Figure 5**  
**Frequency of Bike Commuting Before BTW Day Events and During Summer 2010**  
 (n = 3,023)



**Bike Commuting During Fall 2010 After Participating in BTW Day**

- Eighty-one percent of all respondents were still biking to work at least occasionally during the late fall (early-mid November) after the 2010 BTW Day event. This was a drop-off from summer and early fall, when 90% of respondents were riding.

- Just over half (54%) of respondents were regular riders, biking to work at least one day per week. About one in ten (11%) said they rode one to three days per week and 16% rode less than once per month. The remaining 19% said they did not ride to work at all in the fall.
- Not surprisingly, the average biking frequency fell from the summertime frequency of 2.6 days per week to 2.4 days per week during the late fall (Table 2).
- Respondents who were new riders after BTW Day rode less often during the late fall (1.4 days per week) than did respondents who had been riding before BTW Day (2.5 days per week).

**Table 2**  
**Average Riding Frequency – Before BTW Day and Summer After BTW Day**

Riding Status	Average Days/Week Riding to Work		
	Summer	Fall	Change
- All riders (summer n = 2,700, fall n = 2,437)	2.6	2.4	-0.2
- New riders after BTWD (n = 224)	1.4	1.4	0.0
- Existing riders (n = 1,437)	2.7	2.5	-0.2

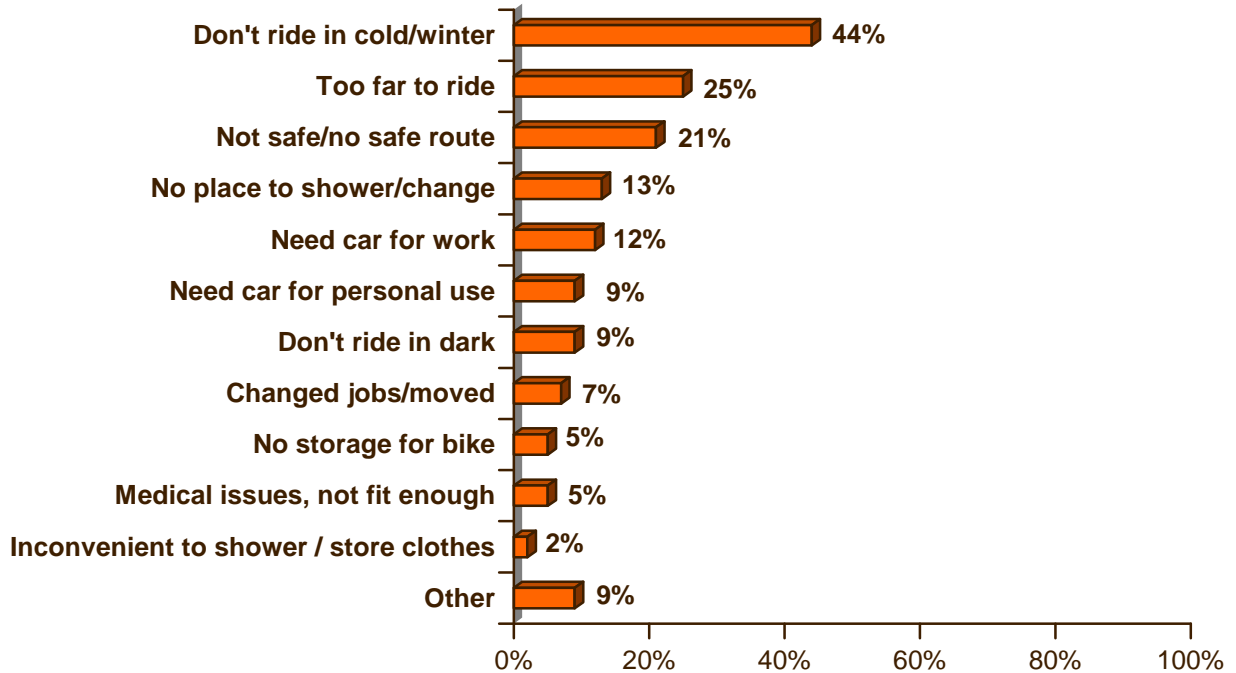
#### **Barriers to Increased Bike Commuting (Figure 6)**

- Respondents who rode to work less than three days per week at the time of the survey were asked why they did not ride or did not ride very often. The most common reasons were that they did not want to ride in inclement or cold/winter weather (44%). A quarter (25%) of respondents said their commute was too far to ride on a regular basis and 21% said they did not feel safe riding or did not have a safe route.
- Other reasons cited were that the respondents did not have a place to shower or change after riding (13%), needed a car for work (12%) or for personal use (9%), or didn't want to ride in the dark.
- Respondents who did not ride during the summer after BTW Day or who rode very infrequently (less than one time per month) reported different concerns than did respondents who rode more often. Four times as many non-riders / infrequent riders (41%) said that their commute distance was too long to ride on a regular basis, compared with just eight percent of respondents who rode at least one day per month. Three in ten (30%) non-riders/infrequent riders cited safety as a reason not to ride, compared with 16% of respondents who rode more often. And 22% of non-riders / infrequent riders said not having a place to shower or change after riding deterred them, compared with seven percent of respondents who rode more often.



Figure 6  
Barriers to Riding to Work or More Frequent Riding

(n=1,802) Multiple responses permitted

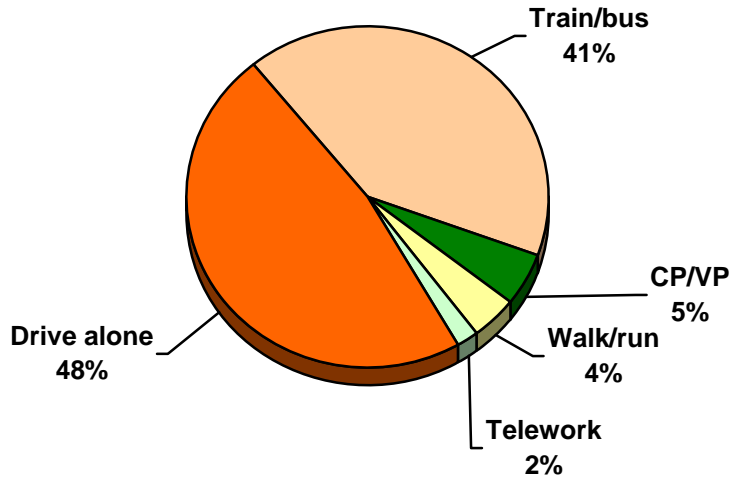


## COMMUTE PATTERNS ON NON-BIKE DAYS

### Commute Mode on Non-Bike Days (Figure 7)

- All respondents who biked after BTW Day, even if only occasionally, were asked how they traveled to work on days they did not bike to work. Nearly half (48%) said they drive alone to work on days they don't bicycle.
- The remaining respondents said they use another commute alternative on non-bike days. About four in ten (41%) used a bus or train, five percent carpool or vanpool, five percent walk or run, and two percent primarily work at home (telework).

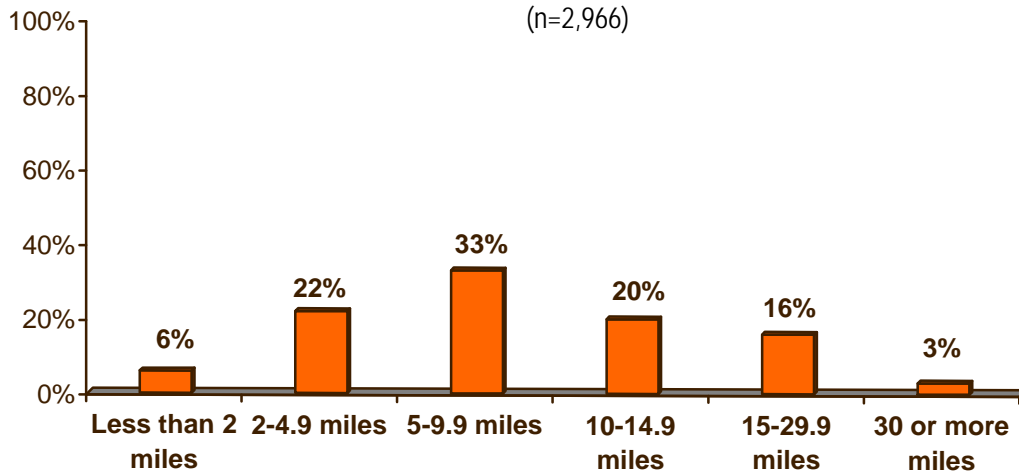
**Figure 7**  
Non-Bike Days Commute Modes – Respondents who Biked After BTW Day  
 (n=3,038)



Travel Distance (Figure 8)

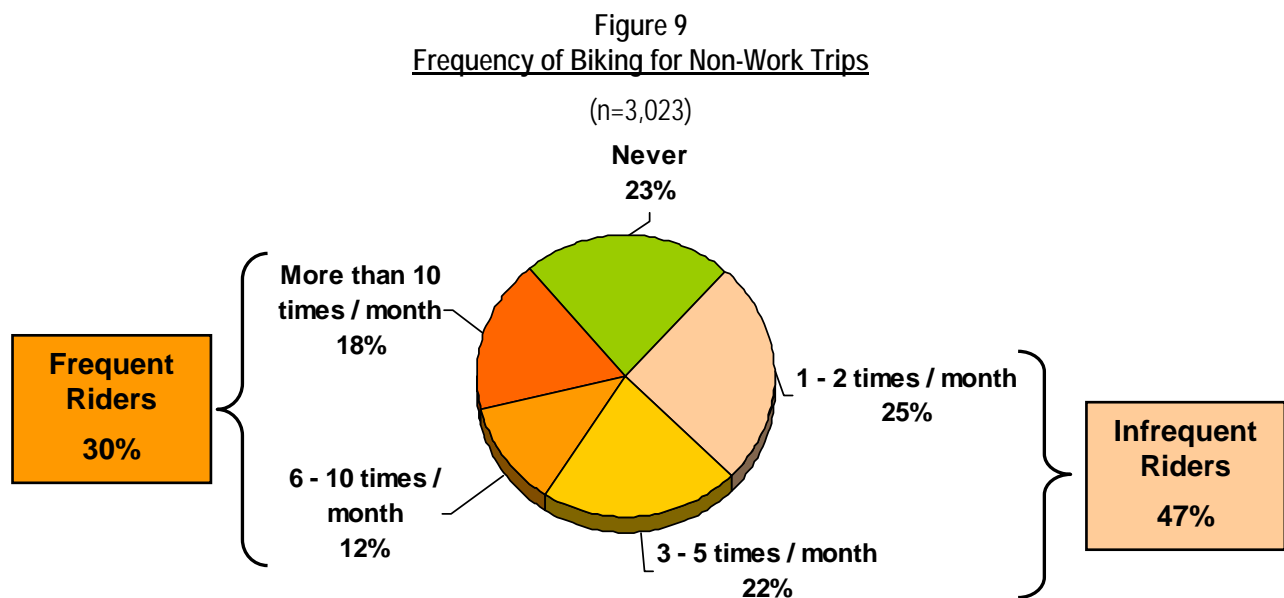
- Respondents traveled an average of 9.6 miles one-way to work.
- More than a quarter (28%) of respondents traveled fewer than five miles to work and 61% traveled fewer than 10 miles one-way.
- Almost two in ten respondents commuted 15 or more miles to work.

**Figure 8**  
Commute Distance  
 (n=2,966)



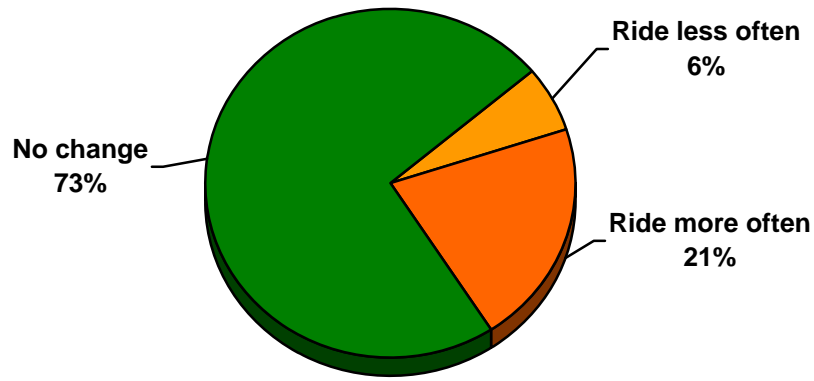
## Use of Bike for Non-work Trips After Participating in BTW Day

- Although the primary focus of the survey was on commuting patterns, respondents also were asked about their use of biking for non-work trips. First, they were asked how many times in the past month they had ridden a bicycle for a non-work trip, such as an errand or shopping trip. Then they were asked how this frequency compared with their use of bike for non-work trips before their first BTW Day.
- Figure 9 indicates that three in ten respondents rode a bike at least six times during the past month for a non-work trip. Almost half (47%) of respondents infrequently made a non-work trip by bike – five times a month or less. Twenty-three percent said they did not ride a bike for a non-work trip at all during the past month.



- Two in ten (21%) respondents said they biked more often for non-work trips after BTW Day than they did before the event (Figure 10). Six percent said they ride less often than they did before BTW Day. The majority of respondents (73%) said they did not make any changes in their use of biking for non-work trips.

Figure 10  
Changes in Use of Bike for Non-Work Trips After BTW Day  
(n=3,008)

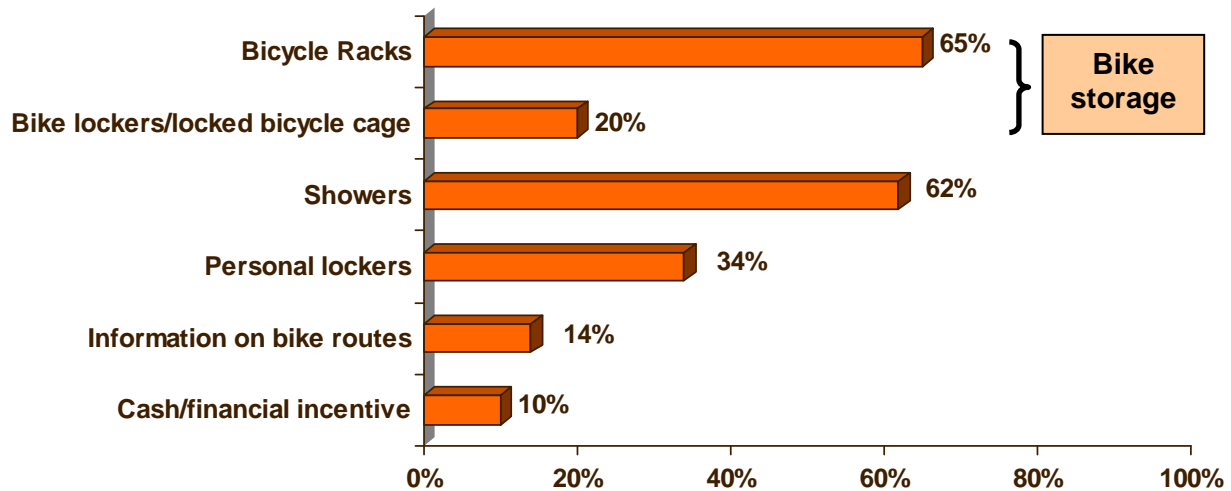


## BIKE COMMUTE ASSISTANCE OFFERED BY EMPLOYERS

### Commute Assistance Services (Figure 11)

- A sizeable majority (79%) of respondents said their employers offered some type of commute assistance information, services, or facilities for employees who biked to work.
- The most common service was bike racks, offered by 65% of employers. Twenty percent said the employer offered a secure form of bicycle storage such as lockers or a locked bicycle cage or permitted employees to store their bicycles in their offices or workstations.
- A large share of respondents also noted that their employers offered personal convenience services including showers (62%) and personal lockers or a locker room (34%).
- Fourteen percent of respondents said their employers offered bike route information and 10% percent said the employer provided a financial incentive for employees who bike.
- Respondents who did not ride during the summer after BTW Day or who rode very infrequently (less than one time per month) were less likely to report that their employers offered bicycle support strategies. Fifty-seven percent of non-riders / infrequent riders said their employers offered bike racks, compared with 66% of respondents who rode at least one day per month. Non-riders and infrequent riders also were less likely than were more frequent riders to report access to bike lockers (13% infrequent riders vs 21% for frequent riders), personal lockers (25% vs 36%), or showers (53% vs 63%) than were more frequent riders.

Figure 11  
**Bicycle Commute Assistance Services Offered**  
(n=2,991) multiple responses permitted



**Requested “Biking to Work in the Washington Area Guide”**

- About one in ten respondents said they had requested a copy of the bicycling guide produced by Commuter Connections, “Biking to Work in the Washington Area Guide.” The remaining 91% said they had not requested the guide.

## APPENDIX A – SURVEY QUESTIONNAIRE

### Bike-to-Work Day Survey – 2010

Survey was programmed for internet administration.

The Metropolitan Washington Council of Governments and the Washington Area Bicyclist Association are conducting this survey to learn about the commute travel of participants in recent Bike-to-Work Day events held in the Washington DC metropolitan region. Please take a few minutes to answer and submit this brief questionnaire. If you have questions, call us at (800) 745-RIDE. Thanks for your help.

1. How did you hear about the 2010 Bike-to-Work Day? (Check all that apply)
  - 1 Received a flyer/brochure
  - 2 Saw a newspaper article or advertisement
  - 3 My employer/boss told me
  - 4 Family member, co-worker, or friend told me
  - 5 Heard it on the radio or television
  - 6 Saw sign or banner on bus
  - 7 Saw notice on the internet
  - 8 Other \_\_\_\_\_
  
2. Was 2010 the first year you participated in the Bike-to-Work Day event?
  - 1 Yes
  - 2 No, I also participated in (check all that apply):
 

2009	2008	2007	Event before 2007
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3. On average, how often did you ride your bicycle to work **before** your first Bike-to-Work Day event?
  - 1 Never rode my bike before my first BTW Day
  - 2 Less than 1 day per month
  - 3 1-3 days per month
  - 4 1-2 days per week
  - 5 3-4 days per week
  - 6 5 days per week
  - 7 Other \_\_\_\_\_
  
6. On average, how often did you ride your bicycle to work during May – September, 2010, **after** the 2010 Bike-to-Work Day event?
  - 1 Never rode my bike during May-September 2010
  - 2 Less than 1 day per month
  - 3 1-3 days per month
  - 4 1-2 days per week
  - 5 3-4 days per week
  - 6 5 days per week
  - 7 Other \_\_\_\_\_

7. How often do you bicycle to work now?
- 1 Never ride my bike now
  - 2 Less than 1 day per month
  - 3 1-3 days per month
  - 4 1-2 days per week
  - 5 3-4 days per week (SKIP TO Q9)
  - 6 5 days per week (SKIP TO Q9)
  - 7 Other \_\_\_\_\_
8. Why do you not ride your bicycle to work or not ride more often now? (check all that apply)
- 1 Don't feel safe/no safe route
  - 2 Don't like to ride in winter/cold weather
  - 3 Need my car for work
  - 4 Too far to ride on a regular basis
  - 5 Changed jobs/moved
  - 6 No place to shower or change after riding
  - 7 No place to store my bicycle
  - 8 Other \_\_\_\_\_
9. On days you do not ride your bicycle, how do you usually commute to work? (If you use more than one method, check the one you use MOST OFTEN)
- 1 Drive alone
  - 2 Carpool
  - 3 Vanpool
  - 4 Walk
  - 5 Ride Metrorail
  - 6 Ride a bus
  - 7 Telecommute / telework
  - 8 Ride a commuter train (MARC, VRE, AMTRAK)
  - 9 Other \_\_\_\_\_
10. How many miles do you travel from home to work (one-way)? \_\_\_\_\_ miles
- 10a In the past month, how many times did you ride your bicycle for a NON-WORK trip, such as for errands or shopping?
- 1 Never
  - 2 1 – 2 times
  - 3 3 – 5 times
  - 4 6 – 10 times
  - 5 More than 10 times
  - 9 Don't know
11. Do you ride your bicycle for non-work trips more often, less often, or about same as before you first participated in a Bike-to-Work Day event? (Please check only one box)
- 1 Ride more often for non-work trips
  - 2 Ride less often for non-work trips
  - 3 Ride about the same - did not change how often I ride for non-work trips
  - 9 Don't know

12. Does your employer offer any of the following commute assistance information or services to employees who bike to work? (Check all that apply.)
- 1 No, my employer does not offer any of these services
  - 2 Information on bicycle routes
  - 3 Bicycle racks
  - 4 Bicycle lockers, locked bike cage
  - 5 Personal lockers, locker room
  - 6 Showers on-site
  - 7 Cash or other financial benefits for employees who bicycle to work
  - 8 Other, please describe \_\_\_\_\_
13. Have you ever requested a copy of the Commuter Connections pamphlet “Biking to Work in the Washington Area Guide” from MWCOG?
- 1 Yes
  - 2 No
14. In what zip code is your home? \_\_\_\_\_
15. In what zip code is your workplace? \_\_\_\_\_
16. If you have any suggestions for how we could improve Bike-to-Work Day, please provide them below.
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Thank you for completing this questionnaire. Your responses will be confidential. Please click on the “Submit” button below.

BIKE TO WORK DAY IN 2011 WILL BE HELD ON MAY 20, 2011. PLEASE VISIT THE WEBSITE OF THE WASHINGTON AREA BICYCLIST ASSOCIATION, WWW.WABA.ORG.

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