METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

TERM EVALUATION PROJECT



2016 BIKE-TO-WORK DAY DRAFT SURVEY RESULTS

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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 2016 regional Bike-to-Work Day event, held in May 2016. This survey was conducted by the Commuter Connections program of the National Capital Region Transportation Planning Board at 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. Data from the survey will be used in the July 2014 – June 2017 Transportation Emission Reduction Measure (TERM) evaluation of the Mass Marketing TERM.

Survey Methodology

The survey was conducted by COG in November 2016, with assistance from LDA Consulting and CIC Research, Inc. The questionnaire was based on that used in the 2013 BTWD survey, with a few minor modifications to update the survey for 2016 and several new questions added to examine riders' experience with the event.

COG e-mailed a survey invitation to the 17,310 commuters who registered for the 2016 event. All event participants registered through the Washington Area Bicyclist Association's web site. The questionnaire was programmed for on-line administration and the email invitation included an Internet website link directly to the survey. A copy of the questionnaire is provided in Appendix A. Of the original mailing, 17,045 were delivered (17,310 minus 265 undeliverable email addresses). COG received 3,537 completed questionnaires, for a response rate of 21%.

Survey Data Collected

The survey collected information about the following:

- · Respondent demographics
- Participation in past Bike-to-Work (BTW) Day 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 commute assistance offered by employers
- Bike use for non-commute trips

Section 2 summarizes results of these survey topics. Each table and figure shows both the percentage responses for the question and the raw number of respondents (e.g., n=__) who answered the question.

Highlights of Findings

- 2016 was the first BTW Day event for 23% of participants.
- 95% of respondents said they were very likely to participate in another Bike-to-Work Day event in the future and 89% of respondents said they were very likely to recommend Bike-to-Work Day events.
- The most common BTW Day information sources were internet (34%) and referrals (21%).
- 86% of participants rode to work at least occasionally before BTW Day; 91% rode to work in the summer after BTW Day, 87% were still riding during the late fall (November 2016).
- Eight percent of participants started riding to work after their first BTW Day event these were new riders. An additional 20% of participants rode before BTW Day, but increased how often they rode to work.
- Respondents who rode to work before BTW Day rode an average of 2.6 days per week. The average frequency increased during the summer after BTW Day to 2.9 days/week. In late fall, the average frequency dropped back to 2.7 days per week.

Section 2 Summary of Results

Characteristics and Demographics of the Sample

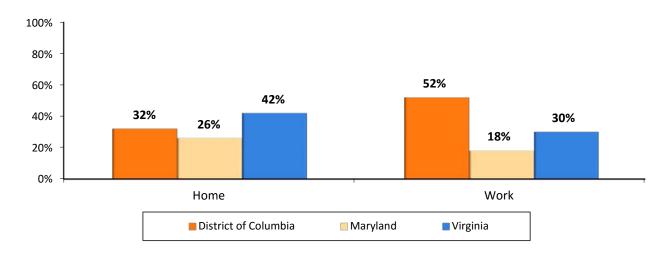
Home and Work Location

About four in ten (42%) 2016 BTW Day survey respondents lived in Virginia (Figure 1). About one-third (32%) lived in the District of Columbia and 26% lived in Maryland. The distribution by work state was considerably different. More than half (52%) of respondents worked in the District of Columbia and three in ten (30%) worked in Virginia. The remaining 18% worked in Maryland.

Figure 1

Home and Work Jurisdictions

(Home n = 3,395, Work n = 3,348)



The top home Maryland and Virginia locations for 2016 BTW Day participants included:

Virginia Home Counties	Percentage	Maryland Home Counties	Percentage
Fairfax County	18%	Montgomery County	20%
Arlington County	13%	Prince George's County	4%
Alexandria City	6%	Frederick County	1%
Loudoun County	4%	Howard County	1%
Prince William County	1%		

Top Home and Work Zip Codes – Participant home and work locations were widely distributed across the region; respondents reported more than 240 home zip codes and over 320 work zip codes. But nine zip codes each accounted for 2% or more of the total participants' home locations. Six of the top residential zip codes were in the District of Columbia: 20001 (3.1% of total participants), 20002 (5.2%), 20003 (2.7%), 20009 (4.1%), 20010 (3.0%), and 20011 (2.8%). The three other notable home zip codes included 20910 in Silver Spring, MD (2.3%) and two Arlington, VA zip codes, 22201 (2.0%) and 22204 (2.2%).

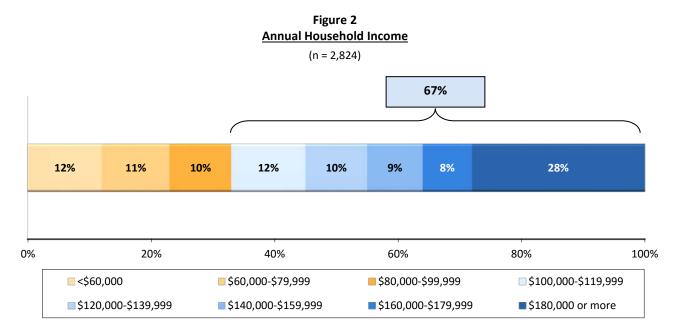
Ten zip codes each accounted for 2% or more of the total participants' work locations. Six of the top work zip codes also were in the District of Columbia: 20001 (4.7% of total participants), 20002 (3.4%), 20005 (2.0%), 20005 (5.2%), 20006 (2.7%), and 20036 (4.5%). Other notable work zip codes included 20892 in Bethesda, MD (2.1%), two Arlington, VA zip codes, 22201 (2.1%) and 22202 (2.3%), and the 22314 zip code in Alexandria, VA (2.1%).

Demographics

The survey asked respondents four demographic questions: sex, income, age, and race/ethnicity. Details of these characteristics are presented below for BTW Day participants.

Sex – Among BTW Day participants, men substantially outnumbered women; 64% of BTWD survey respondents were male and 36% were female. This distribution was not statistically different from that noted in the 2013 BTW Day survey; in that survey, 66% of respondents were male and 34% female. The 2016 BTW Day population differed substantially, however, from the regional commute population. The 2016 State of Commute (SOC) survey found a distribution for the metropolitan Washington region of 51% male and 49% female.

Income – More than three-quarters (77%) of respondents had household incomes of \$80,000 or more and 67% had incomes of \$100,000 or more (Figure 2). These results were essentially the same as for all regional workers; as noted in the 2016 SOC survey; 75% of regional workers reported household incomes of \$80,000 or more and 67% noted an income of \$100,000 or more.

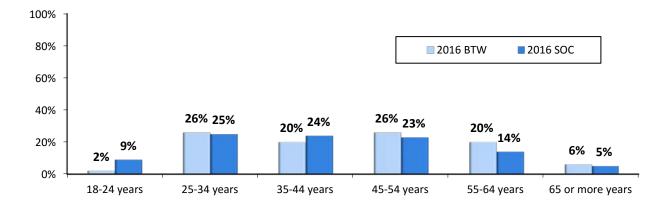


Age – BTW Day participants were distributed across all age brackets (Figure 3). About three in ten (28%) were younger than 35 years old, 20% were between the ages of 35 and 44 years, and 26% were between 45 and 54 years old. Approximately one-quarter (26%) of respondents were 55 years or older. As also illustrated in Figure 3, BTW Day participants were slightly older than workers regionally; 52% of BTW Day participants were 45 years of age or older, compared with 43% of all regional workers.

Figure 3

Respondent Age Distribution – BTW Day Participants vs Regional Workers

(BTW 2016 n = 3,415; SOC 2016 n = 5,682)



Race/Ethnicity – The overwhelming majority (85%) of BTW Day survey respondents were of White/Caucasian racial/ethnic background (Table 1). Approximately equal shares of respondents were members of other racial/ethnic groups: Hispanic (5%), Asian (4%), African-American (4%), and multi-racial/other (2%). The race/ethnicity distribution in 2016 was not statistically different from that in 2013. In 2013, 86% of participants were White/Caucasian and the percentages of all other race/ethnic groups were within 1% of their 2016 shares of the population.

BTW Day participants were disproportionately white, when compared to the overall population of workers in the region, as defined by the 2016 State of Commute Survey. That survey estimated that 45% of regional workers were white. African-Americans were particularly under-represented in the BTWD event; while 23% of all regional workers were African-American, only 4% of BTWD survey respondents were African-American.

Table 1

Race/Ethnicity – BTW Day Participants 2013 and 2016 and 2016 Regional Workers

Ethnic Group	BTWD 2013 (n = 3,836)	BTWD 2016 (n = 3,172)	Region-SOC 2016 (n = 5,584)
White / Caucasian	86%	85%	45%
Hispanic	4%	5%	14%
Asian	4%	4%	13%
Black / African-American	3%	4%	23%
Multi-racial / other	3%	2%	5%

Employment Characteristics

Size and Type of Employer

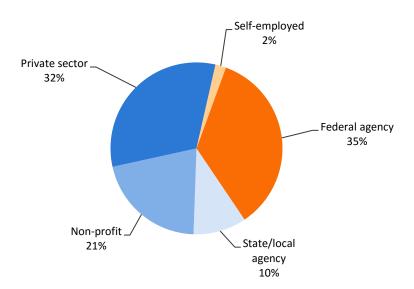
Size – Respondents also were asked for what type of employer they worked and the number of employees at their worksites. A large share of respondents worked for large employers (Table 2). Two-thirds (66%) worked for firms with more than 100 employees; 32% worked for employers that employed 1,000 or more employees.

Table 2 Employer Size (n = 3,363)

Number of Employees	Percentage	Number of Employees	Percentage
1-25	15%	101-250	13%
26-50	9%	251-999	21%
51-100	10%	1,000+	32%

Type – About one-third (35%) of respondents worked for a Federal government agency and another 32% were employed by a private sector employer (Figure 4). Two in ten (21%) respondents worked for non-profit organizations and 10% worked for state or local government agencies. Two percent said they were self-employed.

Figure 4
Employer Type
(n = 3,403)



2016 Bike to Work Day Participation

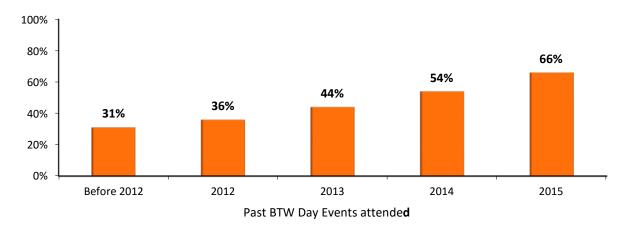
Past Participation in BTW Days

Twenty-three percent of respondents said the 2016 BTWD event was the first they attended. This was a slight drop from the 2013 BTW Day survey, in which 26% reported that year as their first event. The remaining 77% said they had participated in a BTW Day before 2016.

Two-thirds (66%) of respondents had also participated in the 2015 BTW Day event and 54% participated in 2014 (Figure 5). More than four in ten (44%) participated in 2013 and 36% participated in 2012. Three in ten (31%) attended an event prior to 2012.

Figure 5
Past BTW Day Events Attended in Addition to 2016 Event

(n = 3,537, Multiple responses permitted)



Source of Information on 2016 BTW Day

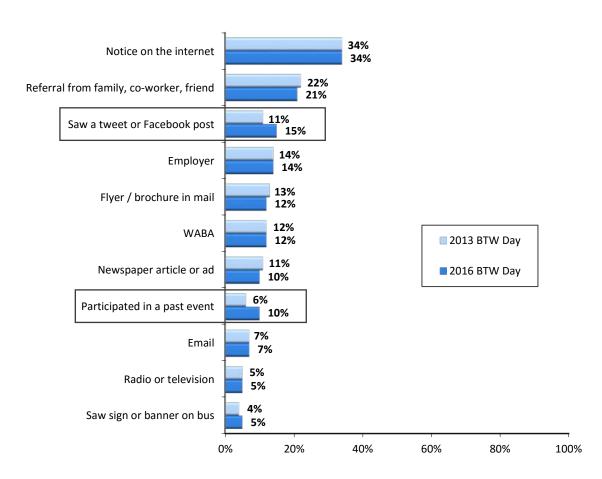
The most common source of information about the 2016 BTW Day was a notice on the Internet, noted by 34% of respondents (Figure 6). This was the same percentage as cited this source in the 2013 survey. About two in ten (21%) respondents said they learned of 2016 BTW Day through a personal referral from a family member, coworker, or friend, essentially the same percentage as gave this response in 2013 (22%).

Other common sources noted by at least one in ten respondents included: social media outreach such as a tweet or Facebook post (15%), information from an employer (14%), flyer or brochure they received in the mail (12%), outreach by the Washington Area Bicyclist Association (WABA, 12%), or a newspaper article or advertisement (10%). Ten percent said they had participated in a previous BTWD event, so sought registration information themselves. Small percentages of respondents heard about BTW Day from email (7%), radio or television (5%), or a sign/banner on a bus (5%). Social media sources and awareness through past participation grew in importance from 2013 to 2016. Other sources had similar percentages as were noted in 2013.

Figure 6
Sources of Information About Bike to Work Day Event

(2013 BTW n = 4,253, 2016 BTW n = 3,537)

Responses with statistical changes between 2013 and 2016 are indicated



Respondents cited similar sources of BTW Day information regardless of how far they traveled to work and how they traveled on non-bike days. But respondents in some other sub-groups reported different BTW Day sources:

- Employer Size Respondents who worked for large employers were more likely to note hearing about the event from their employer than were respondents who worked for small employers. Two in ten (20%) respondents who worked for employers with 1,000 or more employees mentioned this source, compared with 14% who worked for employers with between 101 and 999 employees, 13% of respondents whose employers had between 51 and 100 employees, and just 8% of those who worked for employers with 50 or fewer employees. BTW Day information sources did not differ substantially by respondents' employer type.
- *First BTWD vs Previous Participant* Respondents who participated in a previous BTW Day were more likely than were new participants to report learning about BTW Day from two sources: Internet (35% of past participants versus 29% of new participants) and WABA (14% of past participants versus 4% of new participants). Conversely, new participants were more likely to cite a referral than were respondents who participated before (30% of new participants versus 18% of previous participants). A higher share of new participants also noted hearing about the event from their employer (21%) than did past participants (12%).

- **Sex** Women cited two sources more often than did men: Referral (27% of women versus 17% of men) and social media/Tweet/Facebook (18% of women versus 13% of men). Men named one source, messages/posts on the Internet, more than did women (38% of men versus 25% of women).
- Age Differences also were notable by age group. Referrals were more common among younger respondents than among older respondents; 27% of respondents who were under 35 years old named this source, compared with 18% of respondents who were 35 or older. Young respondents also named social media sources more often than did older respondents; 23% of respondents who were younger than 35 named social media, compared with just 12% of respondents who were 35 or older. Conversely, WABA was a more common source among older respondents; 14% of respondents who were 35 or older cited WABA as their source, compared with 8% of respondents who were under 35 years old. Older respondents also were more likely to mention having participated in a previous event; 11% of respondents who were 35 or older cited this source, compared with 7% of respondents who were younger than 35.

Respondents' BTW Day Event Experience

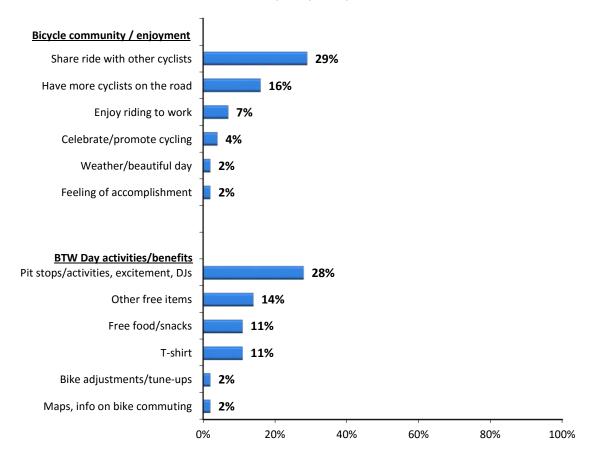
The 2016 survey added several new questions to explore riders' BTWD experience. These questions asked what was respondents' favorite part of the 2016 Bike-to-Work Day event experience, how likely they would be to register for a future event, and how likely they were to recommend Bike-to-Work Day to a friend.

Favorite Part of BTW Day Event – The survey question on respondents' favorite part of the BTWD experience was an open-ended question. Nearly 3,000 respondents provided a response (Figure 7).

Figure 7

<u>Favorite Part of 2016 Bike-to-Work Day Event Experience</u>

(n = 2,996, Multiple responses permitted)



Many respondents mentioned a connection to the bicycling community or enjoyment of bicycling as their favorite part of the event. Nearly three in ten (29%) said they most enjoyed sharing the ride to work with other cyclists. Another 16% mentioned having more cyclists on the road. Seven percent said they enjoyed riding to work and 4% said their favorite part of the event was that it celebrated or promoted cycling. Two percent said they had a personal feeling of accomplishment and 2% mentioned that the weather was beautiful so they enjoyed that particular ride. A sample of quotes related to these experiences includes:

- "The weather and the organization. Great team work."
- "Talking to all the other bikers at the rest stop and fresh air!"
- "Seeing all the other people biking to work and the unique bike configurations."
- "Reporting at the NIH Pit Stop that I have been biking to work since 1959 (56 years)!"
- "It was a great experience to chat with other cyclists. It felt like a Holiday!"
- "Knowing that I was part of a movement toward healthier, greener commuting!"
- "I really love that this has become a multicultural event. Definitely my favorite part!"
- "It reminded me how simple it is to bike and how beneficial it is to the environment and personal health!"
- "Having drivers be more aware of bicyclists."
- "Biking to work with so many other cyclists. Enjoying the freedom of the ride."
- "Being a part of something to help get people active and benefit the environment."

A large share of respondents also mentioned particular activities or tangible benefits that they received from participating. Twenty-eight percent of respondents cited the excitement and activities at pit stops as their favorite part of the event. One in ten mentioned getting free food/snacks (11%), receiving a T-shirt (11%), or receiving other (unspecified) free items. Two percent mentioned receiving a bike tune-up and 2% said getting a bike map or information on bike commuting as their favorite part. A sample of quotes related to these experiences includes:

- "Stopping at my check-in point for the raffle."
- "Exercise before work and happy hour after."
- "Different event every day during a Crystal City Bike-to-Work Week."
- "Pit stops and wearing a costume."
- "The biking, and the party atmosphere, and the lower cost WABA membership."
- "The free bike repair check-up. Also, the discounted WABA membership, bike lights and water bottles. Of course the t-shirt as well."
- "Planning a route and riding to 10 different stops."
- "Having ready access to bicycling information."
- "...Gave me a good experience to head out and try my commute from Del Ray to Union Station."
- "Furnished rest areas, programs, and opportunity to have bike checked out."
- "All of the sponsors that came out and seeing everyone in the community come together!"

Likely to Participate in a Future BTW Day Event and Likely to Recommend BTW Day to Others — The overwhelming majority of respondents said they were likely to participate in another Bike-to-Work Day event in the future; 95% said they were very likely and 4% were somewhat likely to participate again (Figure 8). And nearly all respondents said they were likely to recommend Bike-to-Work Day events to others; 89% were very likely and 10% were somewhat likely.

Likely to recommend

Very likely

(Likely to participate again n = 3,513; Likely to recommend n = 3,501)

95%

89%

80%

40%

20%

1%

4%

1%

Somewhat likely

Figure 8

<u>Likelihood to Participate in a Future BTW Day Event and Likelihood to Recommend BTW Day to Others</u>

Bike Commuting Before and After Bike to Work Day

Likely to participate again

Not likely

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. To gauge both the immediate impact of BTW Day and the longer-term benefit, respondents were next asked about bicycle commuting during two time periods; May through September 2016, immediately after BTW Day, and at the time the survey was conducted, in November 2016.

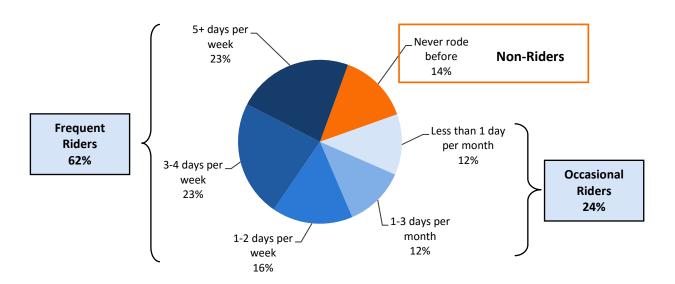
Frequency of Bike Commuting Before Participating in BTW Day

Eighty-six percent of respondents rode to work at least occasionally before they participated in their first BTW Day event (Figure 9). More than six in ten (62%) were frequent riders, riding at least one day per week, 12% rode one to three days per month, and 12% rode occasionally, but less than one day per month. The remaining 14% of respondents said they did not commute by bike before they participated in a BTW Day event.

First-time BTW Day participants were less likely to be riders before the event than were past participants; only 78% of first-time participants rode to work before BTW Day, compared with 89% of past participants.

Figure 9

Frequency of Bike Commuting Before BTW Day
(n = 3,491)



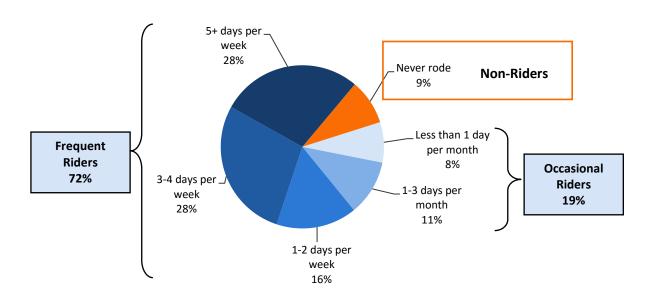
Frequency of Biking During Summer 2016 After BTW Day

Between May and September 2016, after the 2016 BTW Day event, 91% of respondents biked to work at least occasionally, an increase of 5% compared to the 86% who were biking before BTW Day. As shown in Figure 10, the share of respondents who rode frequently also increased; 72% rode at least one day per week in the summer months, 10 percentage points above the 62% who rode this frequently before BTW Day. About two in ten (19%) respondents said they rode occasionally, but less than one day per week. The remaining 9% of respondents said they did not ride at all during the summer.

Figure 10

Frequency of Bike Commuting Summer 2016 (After BTW Day)

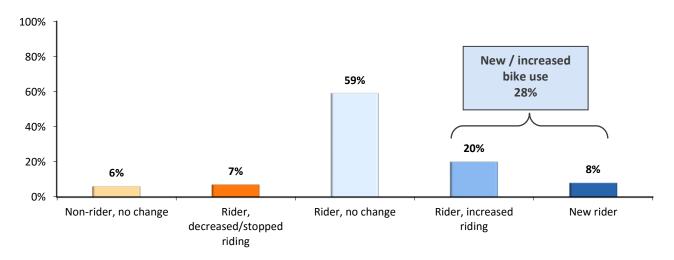
(n = 3,486)



New and Increased Biking During Summer 2016 After BTW Day

A comparison of the biking frequency before BTW Day and during summer 2016 concluded that nearly three in ten respondents either started biking or increased biking (Figure 11). Eight percent of respondents were new riders; they did <u>not</u> commute by bike before their first BTW day event but did ride in the summer after BTW Day. Twenty percent biked to work before the event, but started biking <u>more often</u> after BTW Day.

Figure 11
Changes in Bike Commuting in Summer 2016 After BTW Day
(n = 3,457)



About six in ten (59%) respondents said they biked to work before BTW Day and continued to bike the same number of days per week after the 2016 event; these were "no change" riders. Seven percent of respondents previously rode to work but decreased or stopped their riding during the summer of 2016. The remaining 6% said they did not bike to work before BTW Day and still were not biking in the summer after BTW Day ("no change" non-riders).

Average Bike Commute Frequency Before BTW Day and During Summer 2016

Respondents who biked to work before the BTW Day event biked an average of 2.6 days per week (Table 3). Respondents who biked during summer 2016 biked an average of 2.9 days per week, an increase of 0.3 days per week. The analysis also calculated Pre-BTW Day and summer 2016 biking frequency for four groups of respondents: new riders, existing riders who increased their riding frequency, existing riders who decreased riding frequency, and existing riders who made no change in how often they rode. Table 3 also presents these results.

New Riders – Respondents who were new riders rode less frequently after BTW Day (1.4 days per week) than did all riders (2.9 days per week). But their summer frequency represented an increase of 1.4 days per week from not riding at all.

Increased Riding – Respondents who rode before BTW Day and increased their riding rode an average of 3.0 days per week in the summer, an increase of 1.8 days per week over their riding frequency of 1.2 days before BTW Day.

Decreased/Stopped Riding – Some respondents who were biking to work before BTW Day decreased or stopped riding during summer 2016. Their average frequency declined from 2.2 biking days per week to 0.7 days, a drop of 1.5 days per week.

Existing Riders, No Frequency Change – 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 (3.1 days) and during the summer after BTW Day (3.1 days).

Table 3

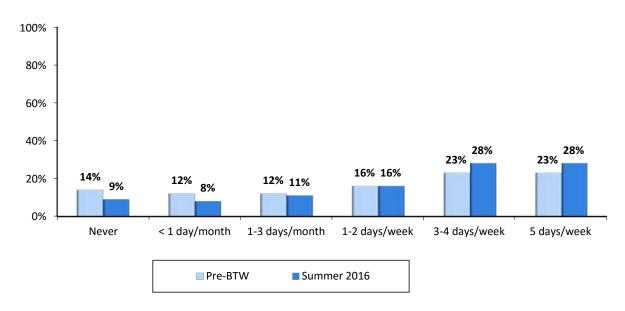
<u>Average Riding Frequency – Before BTW Day and Summer 2016 After BTW Day</u>

	Average Days/Week Riding to Work		
Riding Status	Before BTWD	Summer After BTWD	Change
- All riders (Pre BTWD n = 3,491, summer n = 3,486)	2.6	2.9	+0.3
- New riders after BTWD (n = 266)	0.0	1.4	+1.4
- Existing riders increased frequency (n = 694)	1.2	3.0	+1.8
- Existing riders decreased frequency (n = 229)	2.2	0.7	-1.5
- Existing riders no frequency change (n = 2,062)	3.1	3.1	0.0

The increase in average frequency between the Before BTW Day period and the summer of 2016 was generated by a combination of frequency changes across the four rider groups. As shown in Figure 12, the share of respondents who "never rode" dropped in summer 2016 from 14% to 9%, indicating that some new riders had started biking. But the percentages of riders who biked less than one day per month also fell, while the percentages in the most frequent categories (3 to 4 days per week and 5 or more days per week) both grew. This showed that some of the frequency growth likely was due to previous riders who increased their biking frequency and that the biking of new riders and existing riders who increased riding more than offset the frequency loss by the small share of riders who reduced or stopped riding.

Figure 12
Frequency of Bike Commuting Before BTW Day Events and During Summer 2016

(Pre BTW n = 3,491, Summer 2016 n = 3,486)

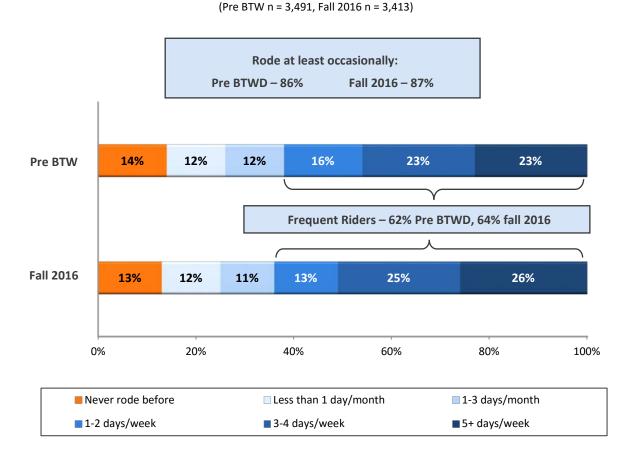


Bike Commuting During Fall 2016

Eighty-seven percent of respondents were still biking to work at least occasionally during the late fall (early-mid November), six months after the 2016 BTW Day event (Figure 13). This was a drop-off from summertime riding, when 91% of respondents were riding, but was essentially equal to the percentage (86%) who biked to work before BTW Day.

More than six in ten (64%) were regular riders in fall 2016, biking to work at least one day per week. About one in ten (11%) rode one to three days per week and 12% rode less than once per month. The remaining 13% said they did not ride to work at all in the fall.

Figure 13
Frequency of Bike Commuting Before BTW Day Events and During Summer 2016



The average biking frequency fell only slightly from the summertime frequency of 2.9 days per week to 2.7 days per week during the late fall (Table 4). 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 (2.7 days per week). But the new riders maintained their summer riding frequency into the fall, while respondents who had been riding before BTW Day decreased their frequency slightly, from 2.9 to 2.7 days per week.

Table 4
Average Riding Frequency – Summer and Fall After BTW Day

Riding Status	Average Days/Week Riding to Work		
	Summer	Fall	Change
- All riders (summer n = 3,486, fall n = 3,413)	2.9	2.7	-0.2
- New riders after BTW Day (n = 266)	1.4	1.4	0.0
- Existing riders (n = 2,985)	2.9	2.7	-0.2

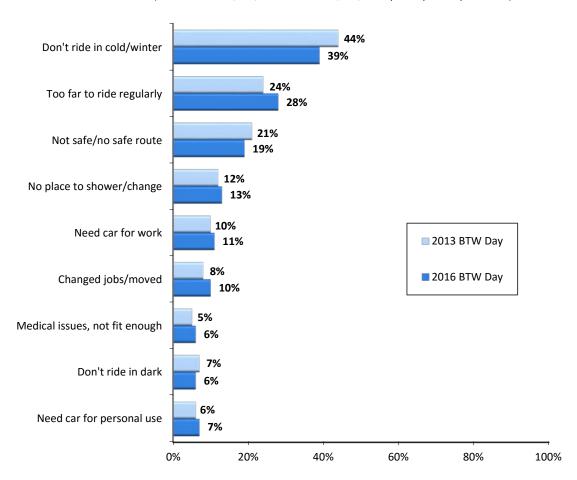
Barriers to Increased Bike Commuting

Respondents who rode to work less than three days per week at the time of the survey (November 2016) were asked why they did not ride or did not ride more often. Results for this question are shown in Figure 14.

Figure 14

Barriers to Riding to Work or More Frequent Riding – 2013 and 2016

(2013 BTW n = 2,444, 2016 BTW n = 1,807, Multiple responses permitted)



The top issues were weather, travel distance, and riding safety. Four in ten (39%) said they did not want to ride in inclement or cold/winter weather. Twenty-eight percent of respondents said their commute was too far to ride on a regular basis and 19% said they did not feel safe riding or did not have a safe route. These also were the top three reasons noted by 2013 BTW Day survey respondents.

Other common reasons cited in 2016 were that the respondents did not have a place to shower or change after riding (13%), needed a car for work (11%) or for personal use (7%), moved or changed jobs (10%), didn't want to ride in the dark (6%), or had a medical issue that made it difficult to ride regularly (6%).

Summertime riders who decreased their riding in the fall were more likely to note cold weather as a barrier. Half (51%) of summer riders who decreased riding in the fall mentioned cold weather as a barrier, compared with 36% of summer riders who maintained their summer riding frequency into the fall months.

Commute Patterns on Non-Bike Days

Commute Mode on Non-Bike Days

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. Four in ten (40%) drove alone to work on days they didn't bike (Figure 15). This was the same as the 40% of respondents who used this mode in 2013 on their non-bike days.

The remaining six in ten respondents used another commute alternative on non-bike days; 43% rode a bus or train, 8% walked or ran, 4% carpooled or vanpooled, and 5% primarily teleworked. Two in ten (21%) respondents said they had used Capital Bikeshare during the past year to commute to or from work. This was a significant increase over the 15% who reported using bikeshare to commute in 2013.

(n = 3,455)

Train/bus
43%

Carpool/vanpool
4%

Walk/run
8%

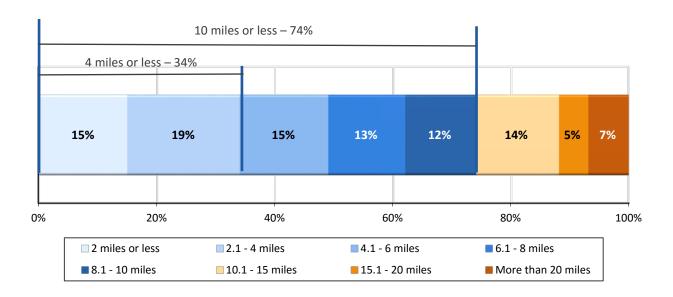
Telework
5%

Figure 15
Non-Bike Days Commute Modes – Respondents who Biked After BTW Day

Travel Distance

BTW Day survey respondents traveled an average of 8.6 miles one-way to work, a considerably shorter distance than the 17.3 mile average one-way distance of all commuters in the Washington metropolitan region (2016 SOC survey). Three in ten (34%) respondents lived within four miles of their work location and 74% lived within ten miles of their work site (Figure 16). Twenty-six percent of respondents commuted more than 10 miles to work.

Figure 16
Commute Distance
(n = 3,277)



Bike Commute Assistance Offered by Employers

Commute Assistance Services

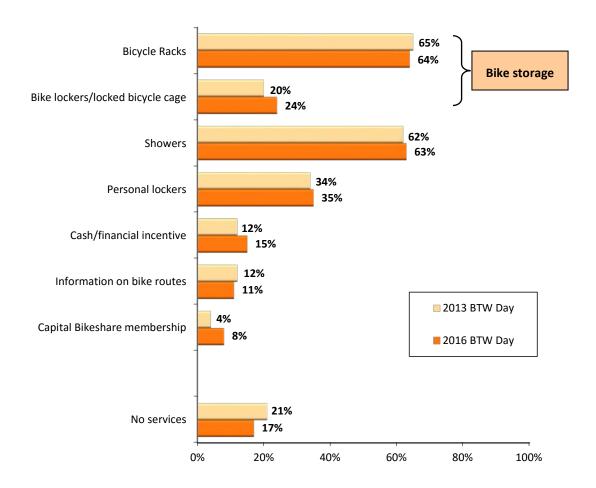
More than eight in ten (83%) respondents said their employers offered some type of commute assistance information, services, or facilities for employees who biked to work. The most common service was bike racks, offered by 64% of employers (Figure 17). One-quarter (24%) said the employer offered a secure 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 (63%) and personal lockers or a locker room (35%). Fifteen percent of respondents said their employers offered a cash or financial incentive for bicyclists and 11% said their employers offered bike route information. Eight percent of respondents reported having access to a Capital Bikeshare membership at work.

Figure 17

<u>Bicycle Commute Assistance Services Offered – 2013 and 2016</u>

(2013 n = 4,149, 2016 n = 3,537) multiple responses permitted



The percentages of employers who offered each service was essentially the same as was observed in the 2013 BTW Day survey, with one notable exception. In 2016, 8% of respondents reported having access to a free or discounted Capital Bikeshare membership. While this was still a small percentage overall, it was double the 4% of employees who had access to this service in 2013.

Respondents who did not ride after BTW Day or who rode infrequently (less than one time per month) were less likely to report having bicycle support services at work. Only 75% of infrequent riders had bicycle services at work, compared with 86% of respondents who rode at least one day per week (regular riders). Non-riders/infrequent riders also were less likely to mention access to several individual services:

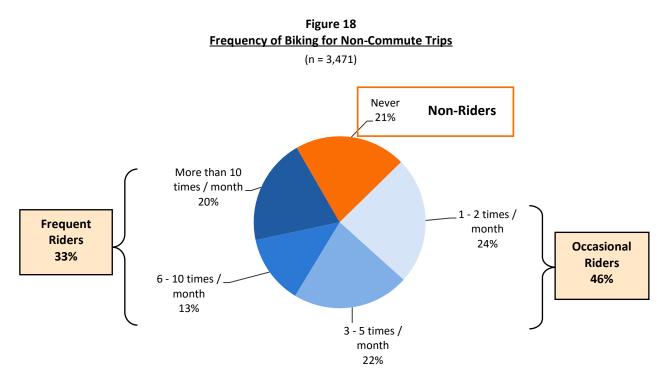
- Bicycle Racks 55% of non-riders/infrequent riders versus 68% of regular riders
- Bicycle Lockers/Locked Bike Cage 19% of non-riders/infrequent riders versus 26% of regular riders
- Personal Lockers/Locker Room 28% of non-riders/infrequent riders versus 38% of regular riders
- Showers On-site 54% of non-riders/infrequent riders versus 67% of regular riders
- Cash/Financial Benefits for Bicyclists 12% of non-riders/infrequent riders versus 17% of regular riders

Requested "Biking to Work in the Washington Area Guide"

Eight percent of 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 92% said they had not requested the guide.

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

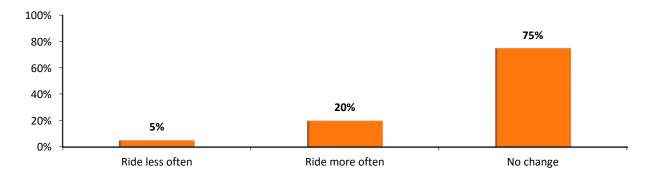
Although the primary focus of the survey was on commuting patterns, respondents also were asked about their use of biking for non-commute trips, such as for errands, shopping, social visits, meetings, or personal appointments. About eight in ten made at least one non-commute trips by bicycle in the past month (Figure 18). Forty-six percent rode a bicycle for a non-commute trip between one and five times in the past month and 33% made at least six non-commute bicycle trips. Two in ten (21%) did not ride a bike for a non-commute trip at all during the past month.



Twenty percent of respondents said they increased how often they biked for non-work trips after BTW Day (Figure 19). Five percent rode less often for non-commute trips after BTW Day. Most (75%) of respondents did not make any changes in their use of biking for non-commute trips.

Figure 19
Changes in Use of Bike for Non-Work Trips After BTW Day

(n = 3,471)



Suggestions to Improve Bike-to-Work Day

Finally, respondents were given an opportunity to offer suggestions for how Bike-to-Work Day could be improved. More than 700 respondents offered open-ended suggestions. About one-quarter of those who wrote comments gave compliments to the organizers. Others common suggestions are grouped below in 4 broad categories: pit stops, incentives, ride assistance, and general event/promotion. Note that the numbers of responses reflect the count of respondents who made each suggestion, rather than the percentage of respondents.

<u>Pit stops</u>	Response Count
 Pit stops earlier/later hours, off-peak hours 	57
 More pit stops, stops at specific locations 	34
 Afternoon/evening pit stops 	22
 More "festivities," games, challenges 	17
 Clearly define pit stop locations 	12
 More signage at pit stops/routes 	11
Other pit stop suggestions	29
Incentives_	
Improve/replace t-shirts with other items	47
More food, healthy food, equal food at all stops	36
Smaller t-shirts/more t-shirts, send t-shirts before rides	38
More prizes, bigger prizes, more frequent raffles	32
Bike tune-ups/repairs, bike gear	15
Other prize/give-away suggestions	15
Ride Assistance	
Provide safe riding tips, routes, safety suggestions	60
Better bike infrastructure, enforcement of traffic laws	51
 Organize/publicize group rides/bike buddies 	21
General Event/Promotion	
Hold events more often, bike week, bike month	75
Advertise more, marketing suggestions	73 34
 More involvement of employers, public agencies/officials 	25
 Outreach to non-riders, kids, non-traditional riders 	23
- Gaticach to hon-macis, mas, non-traditional nacis	23

Pit Stops

Pit stops were a common item for suggestions. Numerous riders made suggestions for earlier or later hours, for pit stops in the afternoon or evening hours, and for pit stops at off-peak/midday hours. Many of these respondents noted that their work hours did not conform to typical rush hour commuting so the pit stops either were not yet open when they rode past or that they arrived as pit stops were closing down. Some respondents who arrived later noted that the food, t-shirts, and other free items often were no longer available.

Another common pit stop suggestion was for more pit stops or pit stops in specific locations, but other respondents recommended the opposite – consolidating smaller pit stops into a single larger pit stop to make the pit stop activities more substantial.

Respondents also mentioned that they had difficulty finding the pit stops, didn't know what activities would be offered at various pit stops, and wanted more "festivities," such as music. Some respondents who visited more than one pit stop commented on inconsistencies in what was offered or provided at various pit stops. These concerns seemed most common among respondents who said they visited suburban stops.

Incentives

Respondents made suggestions about the incentives, services, and free items given away at the event. Suggestions about food focused on offering more food, healthy food, similar food at all pit stops, and other ideas. Respondents particularly mentioned the need to have food available throughout the entire pit stop activity hours. Late arriving riders commented that they missed getting food. Other food-related suggestions included bringing food trucks to pit stops and partnering with local restaurants for afternoon/evening happy hour activities.

Ideas related to T-shirts also were common. Many respondents noted that there were no small or medium t-shirts, or no t-shirts at all, when they arrived at the pit stop. Others recommended that t-shirts be sent to pre-registered riders before the event so they could be sure of receiving one and could wear them to the event. A large number of respondents made comments about the type of shirt (cotton, tech /sport fabric, brighter color) or about items they would prefer to receive in lieu of a t-shirt. One interesting idea was to provide buttons or stickers saying some version of "I rode my bike to work" that respondents could wear all day. Other suggestions related to incentives included having more prizes, bigger-value or "higher-quality" prizes, more frequent raffles, offering bike maintenance and bike gear, and other preferences.

Ride Assistance

A large share of respondents made suggestions related to the riding experience. These included riders who wanted more information on bike safety, safe routes, and other safety-related information. Many riders noted that promoting safety could raise the visibility of biking on local roadways, biking etiquette, and driver-bicyclist interaction, not only on the BTW Day event but for the future as well.

Some riders also made suggestions for improvements to bike infrastructure, such as development of more bike paths/trails and lighting and maintenance of bike trails, and for advocacy for local governments to develop bike infrastructure. Included in this category also were suggestions for road closures on BTW Day to enhance biking safety and encourage new and inexperienced riders. Another suggestion to help new riders was to organize and publicize opportunities for group rides from pit stop locations for riders who were traveling in the same direction. Experienced riders also noted this suggestion because they simply enjoyed riding with others.

General Event/Promotion

A popular comment in the general event/promotion category was to hold BTW Day more than once per year and/or to extend the event to a full week or month. Many wanted a fall event in addition to the spring event. Some respondents also noted that they would like to see more advertising of the event, both to potential riders and to drivers to help them understand and be watchful of bicyclists during the event. Respondents made suggestions also to engage employers and public officials more in the event and in bicycling generally. Finally, some respondents made suggestions to conduct outreach to non-riders, children, and to commuters who were not in the traditional mold of a bicycle commuter.

Appendix A – Survey Questionnaire

Bike-to-Work Day Survey – 2016 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 Rike-to-Work Day events held in the

Was	hington	DC metropolitan region. Please take a few minutes to answer and submit this brief questionnaire. If estions, call us at (800) 745-RIDE. Thanks for your help.				
1	How did you hear about the 2016 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	Saw a Tweet or a Facebook post				
	99	Other				
1a	1a What was your favorite part of the 2016 Bike to Work Day event experience?					
1b	Bike-to-Work Day is an annual event. How likely are you to register for a future Bike-to-Work Day event?					
	1	Not likely				
	2	Somewhat likely				
	3	Very likely				
	9	Not sure				
1c	How	How likely are you to recommend Bike-to-Work Day to a friend?				
	1	Not likely				
	2	Somewhat likely				
	3	Very likely				
	9	Not sure				
2	Was 2016 the first year you participated in the Bike-to-Work Day event?					
	1	Yes				
	2	No, I also participated in (check all that apply):				
		2015				
		2014				
		2013				
		2012				
		Event before 2012				

3	On a	verage, how often did you ride your bicycle to work <u>before</u> your first Bike-to-Work Day event?
	1	Never rode my bike to work 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
4		verage, how often did you ride your bicycle to work during May – September, 2016, <u>after</u> the 2016 to-Work Day event?
	1	Never rode my bike to work during May-September 2016
	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
5	How	often do you bicycle to work <u>now</u> ?
	1	Never ride my bike to work 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 Q7)
	6	5 days per week (SKIP TO Q7)
	7	Other
6	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
7		ays you do not ride your bicycle, how do you <u>usually</u> commute to work? (If you use more than one nod, 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

8	How ——	How many miles do you travel from home to work (one-way)? miles				
9	such	In the past month, how many times did you ride your bicycle for a trip other than getting to or from work, such as trips for errands, shopping, social visits, meetings, or personal appointments? (Please also exclude trips you made SOLELY for exercise/recreation)				
	1	Never				
	2	1 – 2 times				
	3	3 – 5 times				
	4	6 – 10 times				
	5	More than 10 times				
	9	Don't know				
10	-	ou ride your bicycle for non-commute trips more often, less often, or about same as before you first cipated in a Bike-to-Work Day event? (Please check ONLY ONE)				
	1	Ride more often for non-commute trips				
	2	Ride less often for non-commute trips				
	3	Ride about the same - did not change how often I ride for non-commute trips				
	9	Don't know				
11	Have	Have you used Capital Bikeshare to commute to or from work within the past 12 months?				
	1	Yes				
	2	No				
12		your employer offer any of the following commute assistance information or services to employees 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	Capital Bikeshare Membership				
	9	Other, please describe				
13	Have	you ever requested a copy of the Commuter Connections pamphlet "Biking to Work in the Washington				
	Area	Guide" from the Metropolitan Washington Council of Governments?				
	1	Yes				
	2	No				

DEMOGRAPHICS

Finally, the following questions are for classification purposes only. They will not be used to identify you in any way and this information will not be disclosed for any individual who responds to the survey.

14	Abou	t how many employees work at your worksite?
	1	1 – 25
	2	26 – 50
	3	51 – 100
	4	101 – 250
	5	251 – 999
	6	1,000 or more
	9	Prefer not to answer
15	What	type of employer do you work for?
	1	Federal agency
	2	State, or local government agency
	3	Non-profit organization/association
	4	Private sector employer
	5	Self-employed
	6	Other (SPECIFY)
	9	Prefer not to answer
16	In wh	nat zip code is your workplace?
17	In wh	nat zip code is your home?
18	Whic	h of the following groups includes your age?
	1	under 18
	2	18 – 24
	3	25 – 34
	4	35 – 44
	5	45 – 54
	6	55 – 64
	7	65 or older
	9	Prefer not to answer
19	Do yo	ou consider yourself to be Latino, Hispanic, or Spanish?
	1	Yes
	2	No
	9	Prefer not to answer

20		n one of the following best describes your racial background (Please select ONLY ONE response)
	1	White
	2	Black or African-American
	3	American Indian or Alaska Native
	4	Asian
	5	Native Hawaiian or Other Pacific Islander
	6	Other (SPECIFY)
	9	Prefer not to answer
21	Pleas	e indicate the category that best represents your household's total annual income.
	1	less than \$20,000
	2	\$20,000 - \$29,999
	3	\$30,000 - \$39,999
	4	\$40,000 - \$59,999
	5	\$60,000 - \$79,999
	6	\$80,000 - \$99,999
	7	\$100,000 - \$119,999
	8	\$120,000 - \$139,999
	9	\$140,000 - \$159,999
	10	\$160,000 - \$179,999
	11	\$180,000 or more
	19	Prefer not to answer
22	Are y	ou female or male?
	1	Female
	2	Male
	3	Prefer not to answer
23	If you	have any suggestions for how we could improve Bike-to-Work Day, please provide them below.
		or completing this questionnaire. Your responses will be confidential. Please click on the "Submit"

Bike-to-Work Day in 2017 will be held on May 19, 2017. Please visit the event website at www.biketowork-metrodc.org.