

# Capital Bikeshare

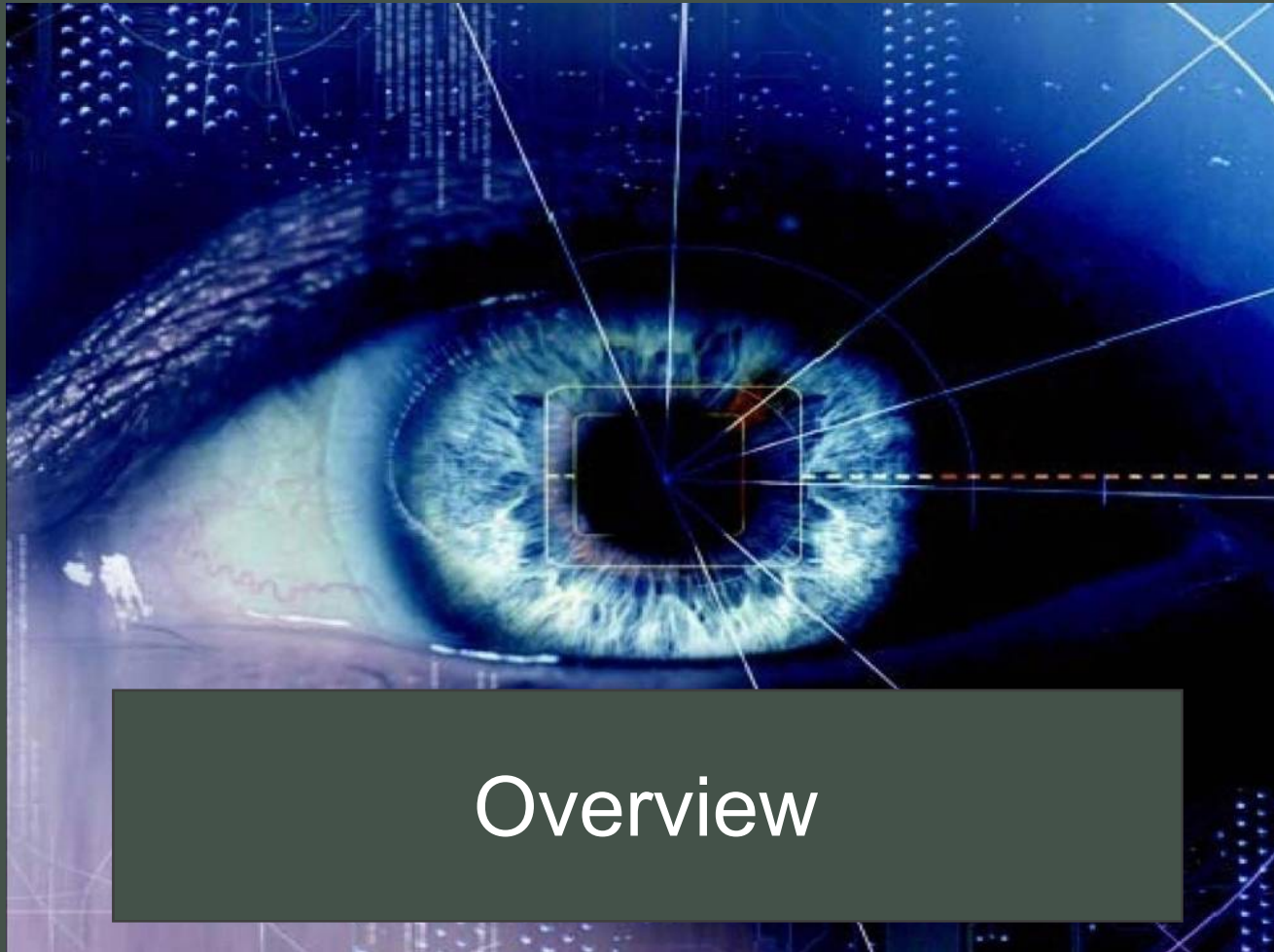
## 2013 Customer Survey

### Highlights of Results



June 18, 2013  
Lori Diggins  
LDA Consulting





# Overview



# Survey Overview



- Purpose of survey – Examine:
  - Characteristics of CB members
  - Characteristics of bikeshare trips
  - Travel changes in response to bikeshare
  - Auto ownership / use changes with bikeshare
  
- Online survey method
  - CB staff sent email invitation to 11,100 registered members (half of total 22,205)
  - Total sample of 3,731 (34% response)
  - Parallel health survey was sent to remaining 11,100 members, with 3,111 completed surveys (28% response)
  - Data from the two surveys were combined for questions that were included on both surveys

## Sample Distribution



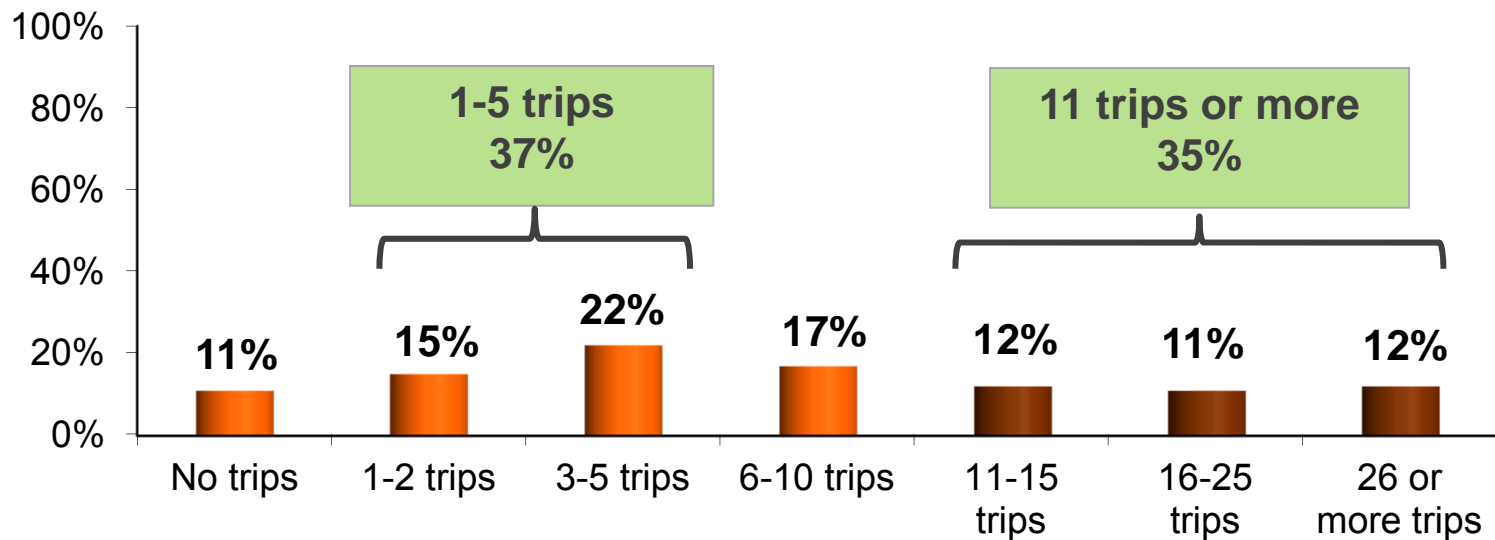
- Compared to all commuters in the DC metro region, CB members are:
  - Considerably younger – 63% under 35
  - More likely to be male – 56%
  - More likely to be White – 80%
  - Very highly educated – 95% have college degrees
  - Slightly less affluent – likely related to young age
  - Less likely to have a vehicle regularly available – 46%



# Typical and Recent Bikeshare Use



Members Averaged 8.6 CB Trips Last Month;  
37% Made 1 to 5 Trips; 35% Made 11 or More  
Use was well distributed across trip frequency categories –  
suggests demand exists for use at many levels

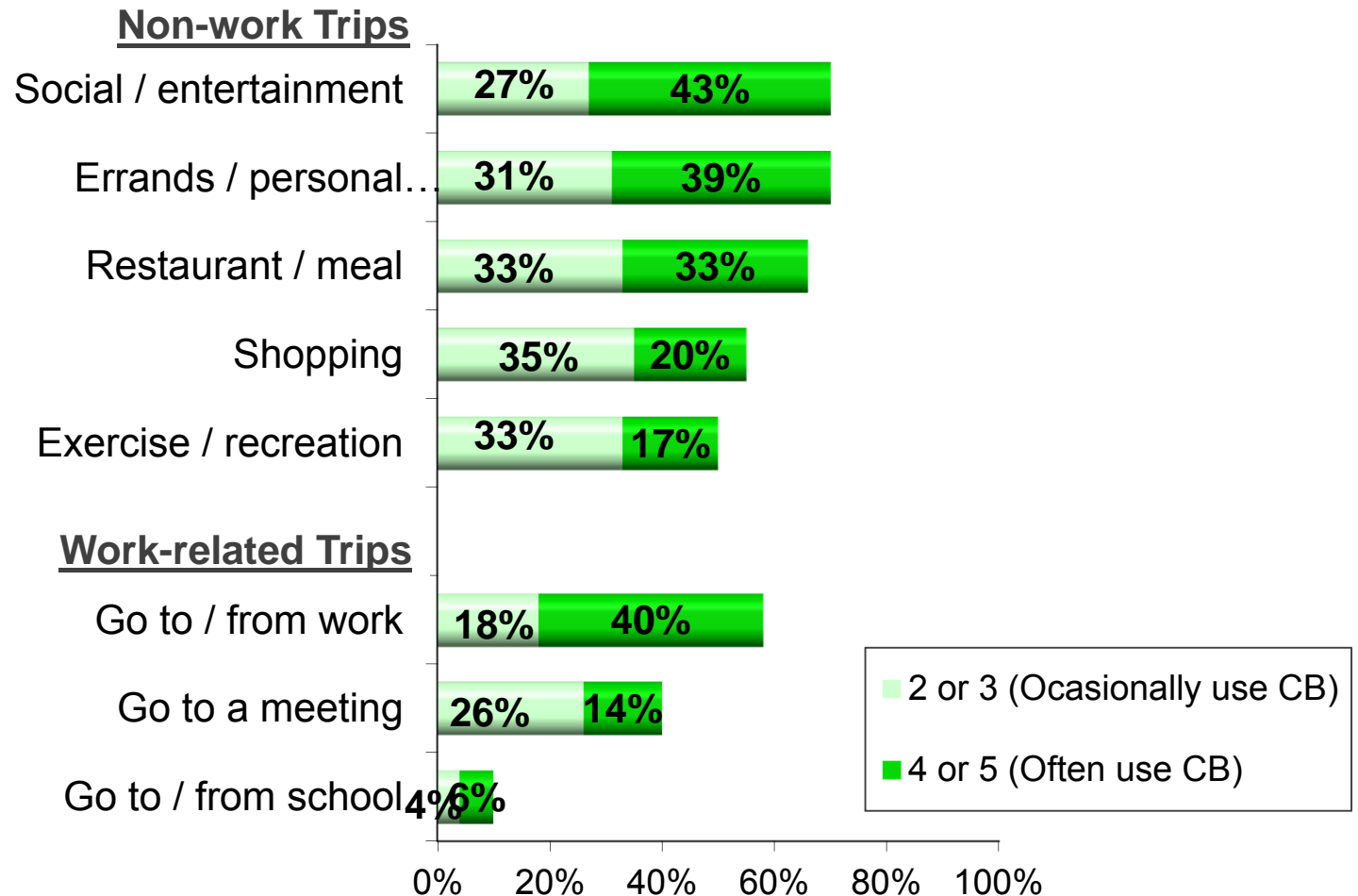


n = 5,979

Q8 In the past month, about how many Capital Bikeshare trips did you make?

# Members Use CB Most Often for Non-Work Trips - Social, Errands, Meals are Frequent Uses

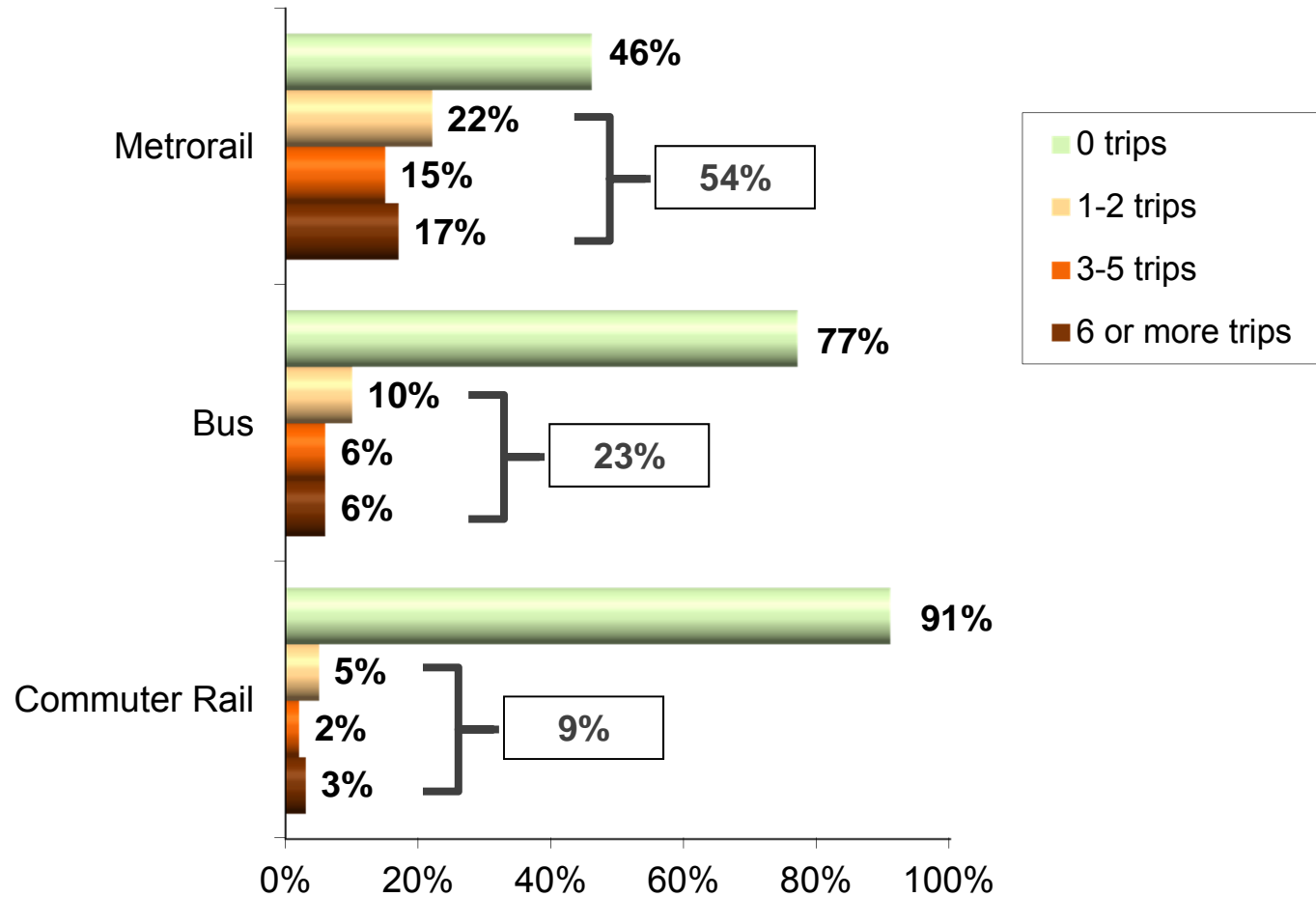
But nearly 6 in 10 members use CB to get to or from work



n = 6,842

Q10 What are the primary trips for which you use Capital Bikeshare? Rate from 1 (never use CB) to 5 (Very often use CB) for this type of trip

# More than Half of Members Used CB at least Once in the Past Month to Access Metrorail



n = 3,731

Q9 Of the Capital Bikeshare trips that you made last month, approximately how many started or ended at the following public transit locations

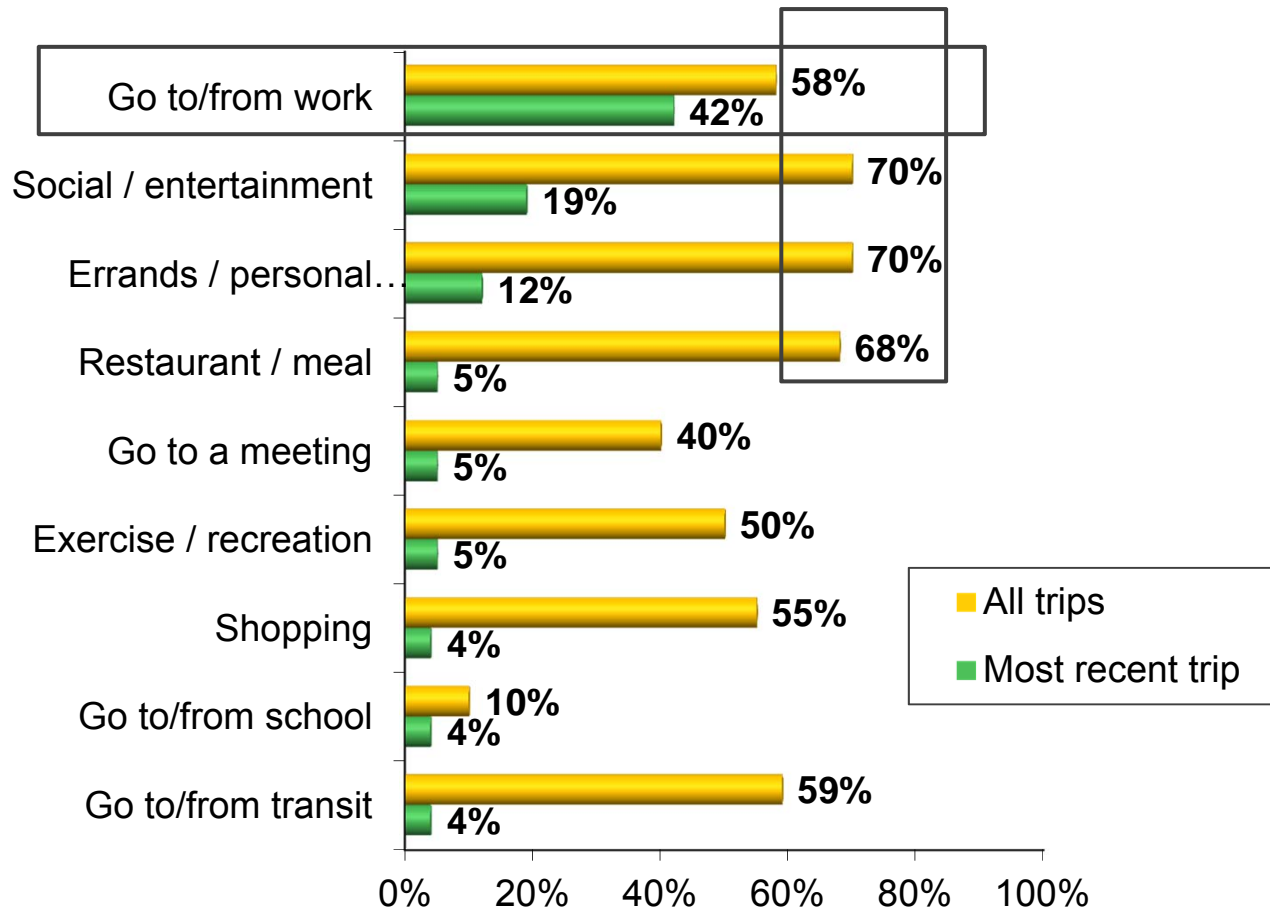




# The Most Common Recent Trip Purpose was to Go to Work, but Work is a Less Common Purpose Overall

This suggests work trips are made more frequently, but are concentrated among a smaller number of members

The “most recent trips” are evenly divided between work-related (51%) and non-work (49%) trips



All trips made  
n = 6,842

Most recent  
trip n = 2,817

Q10 What are the primary trips for which you use Capital Bikeshare?

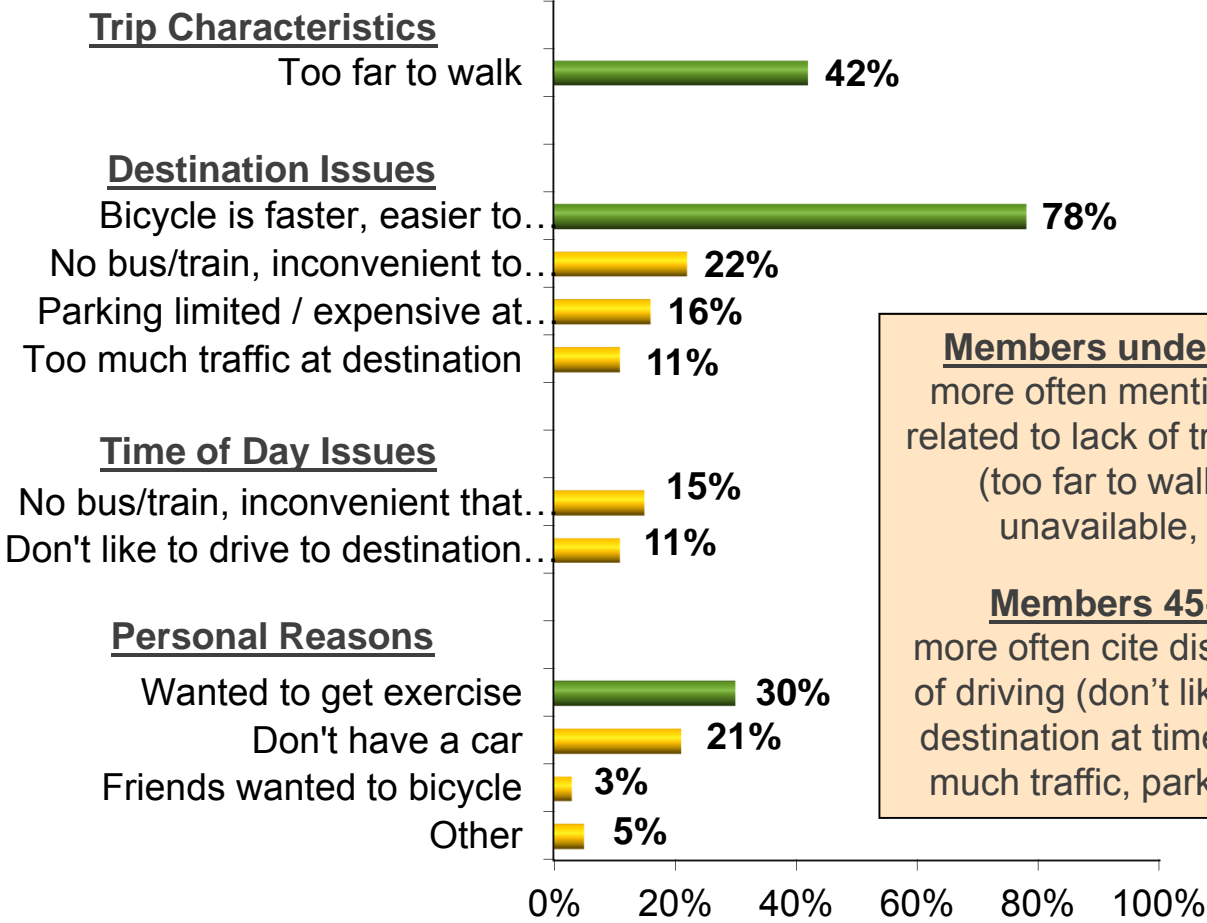
Q11 What was the primary purpose of your MOST RECENT Capital Bikeshare trip?

# CB was Chosen for Most Recent Trips Primarily Because Bicycle was Faster / Easier to Use

Other common reasons: too far to walk, wanted to get exercise

**Mode used if CB not available:**

- Transit - 44%
- Walk – 38%
- Taxi – 6%
- Personal bike – 5%
- Personal car – 4%

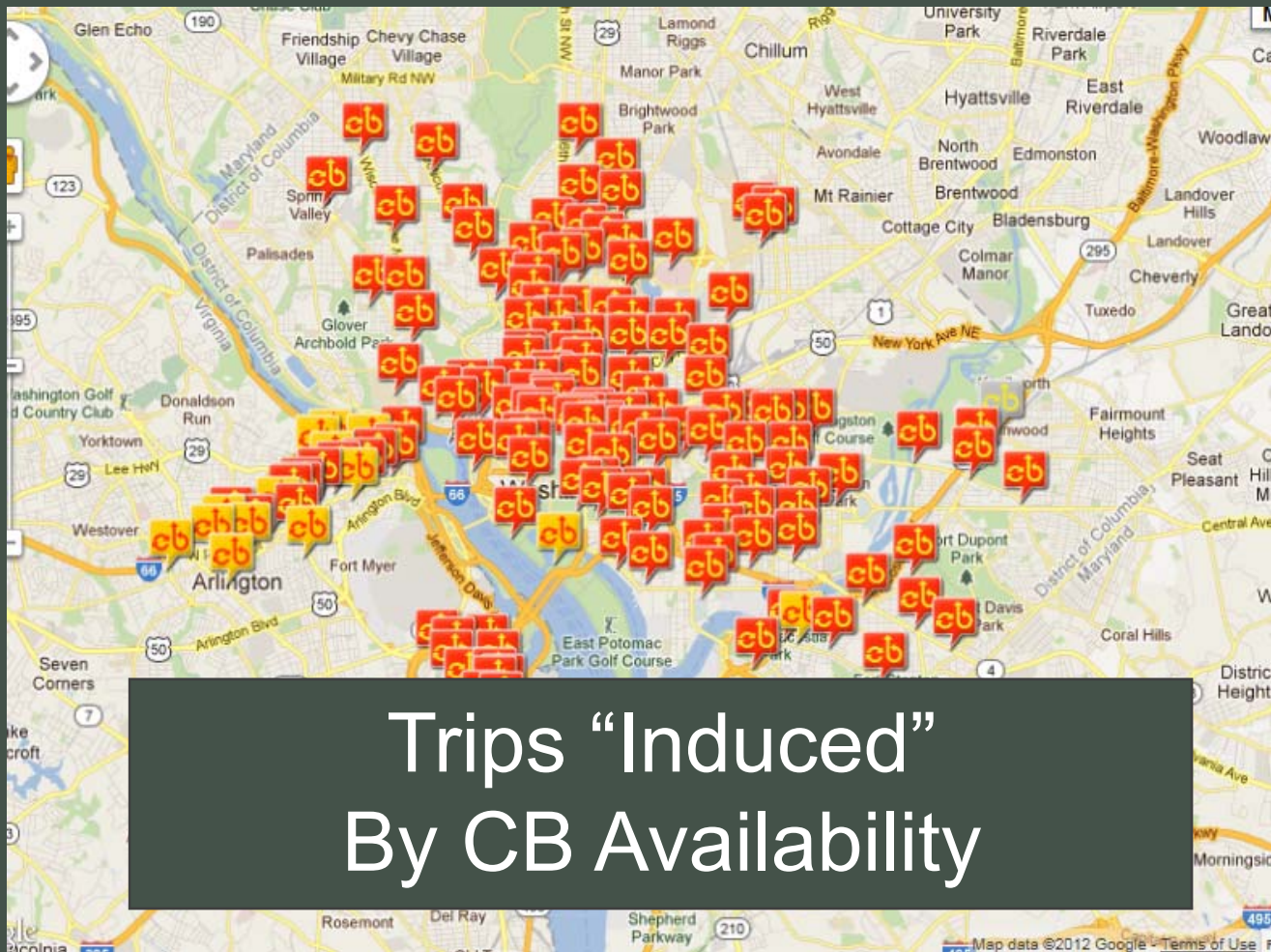


**Members under 35 years**  
 more often mention reasons related to lack of transportation (too far to walk, transit unavailable, no car)

**Members 45+ years**  
 more often cite disadvantages of driving (don't like to drive to destination at time of day, too much traffic, parking limited)

n = 2,813

Q15 For what reasons did you choose Capital Bikeshare for this particular trip, instead of another type of transportation?



Trips "Induced"  
By CB Availability

# 40% of Members Made an Induced Trip in the Past Month - Average of 1.8 Trips

Most induced trips are non-work-related and are distributed in proportion to overall non-work trip use

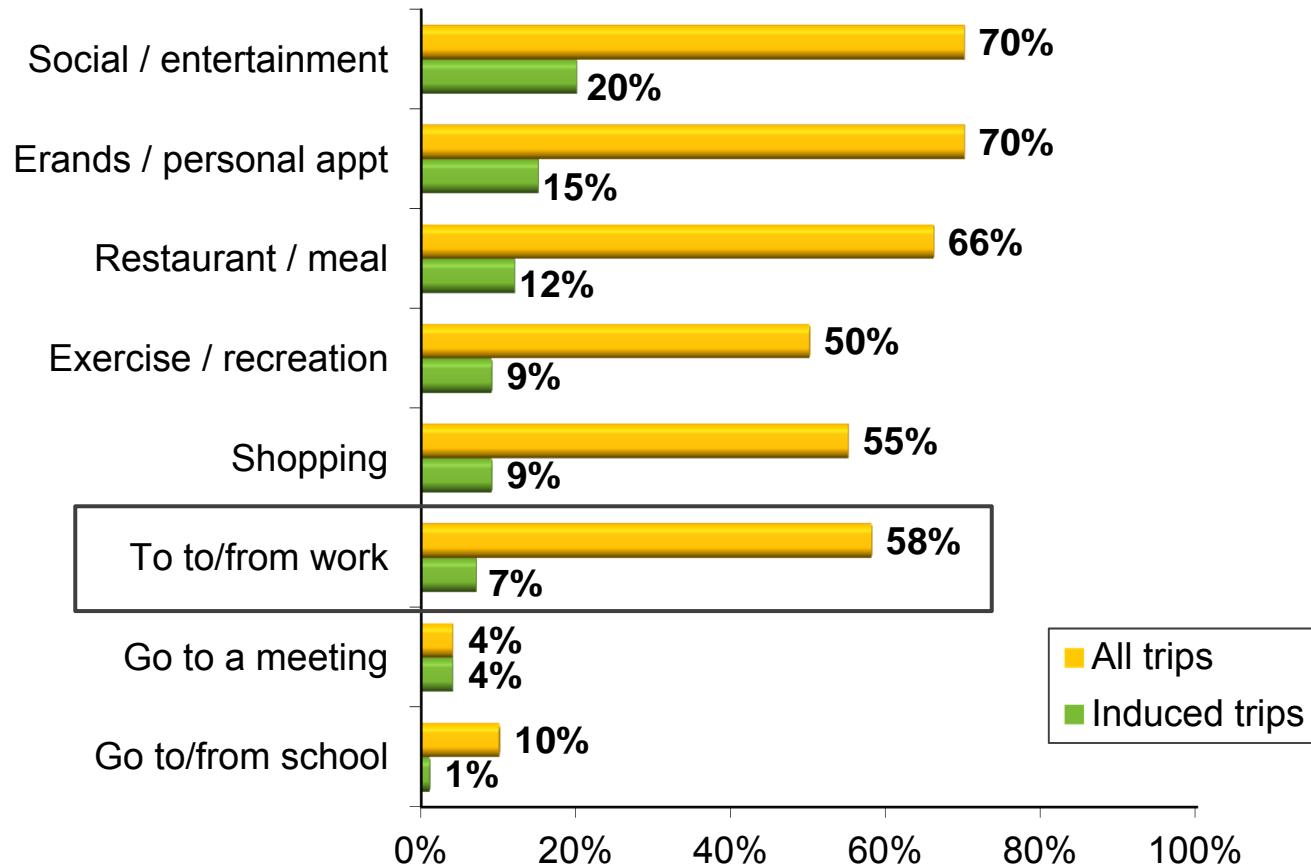
35% made 1-5 induced trips

5% made 11+ induced trips

Induced trips account for 21% of all CB trips

All trips made n = 6,842

Induced trips in past month n = 3,731



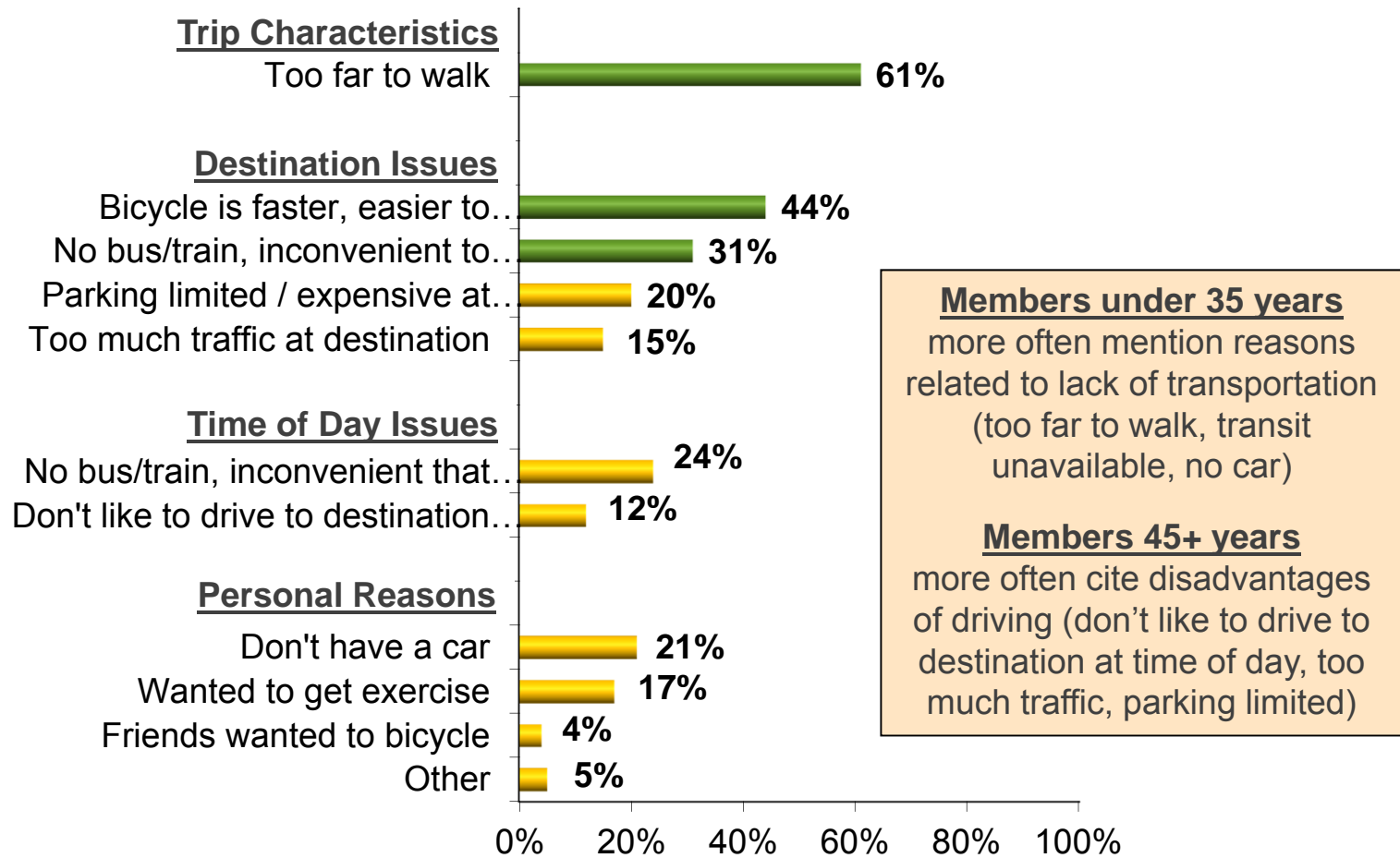
Q10 What are the primary types of trips for which you use Capital Bikeshare?

Q17 In the past month, how many times did you use Capital Bikeshare to make a trip you would not have made if Capital Bikeshare had not been available?

Q18 For what purposes did you make these trips?

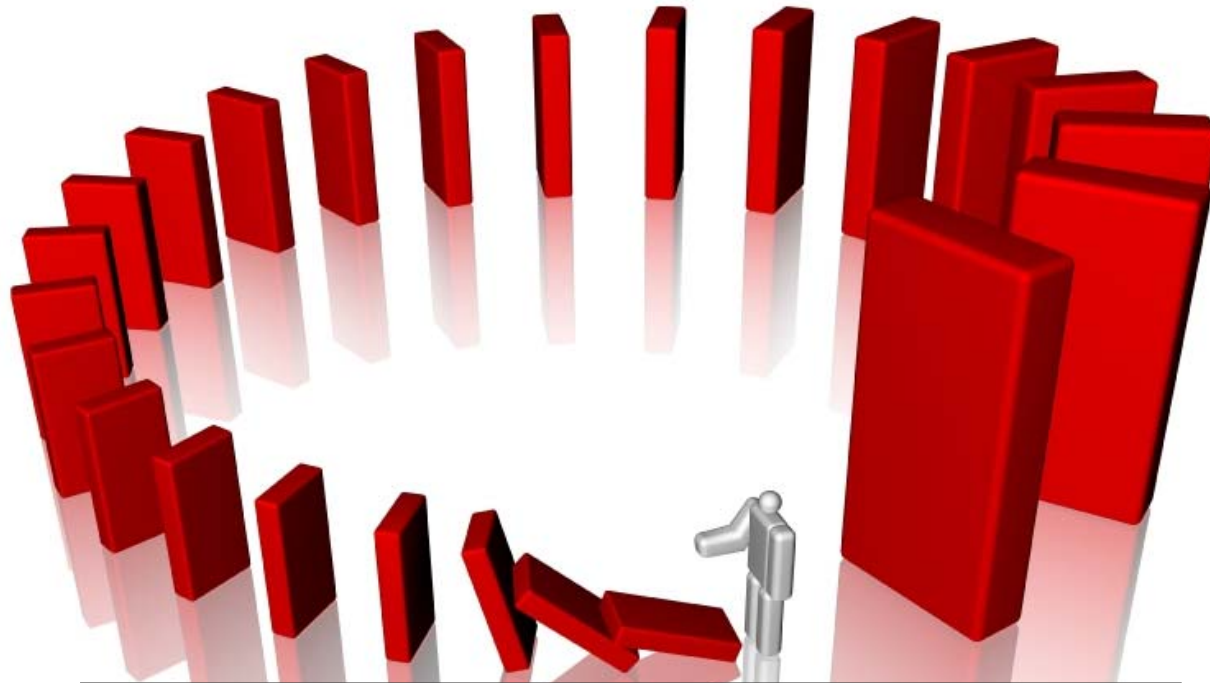
# CB was Used for Most Induced Trips Because the Destination was Too Far to Walk

Suggests members might have substituted trips to distant locations for trips they would have made closer to home



n = 1,430

Q20 Why would you not have made these trips without Capital Bikeshare?

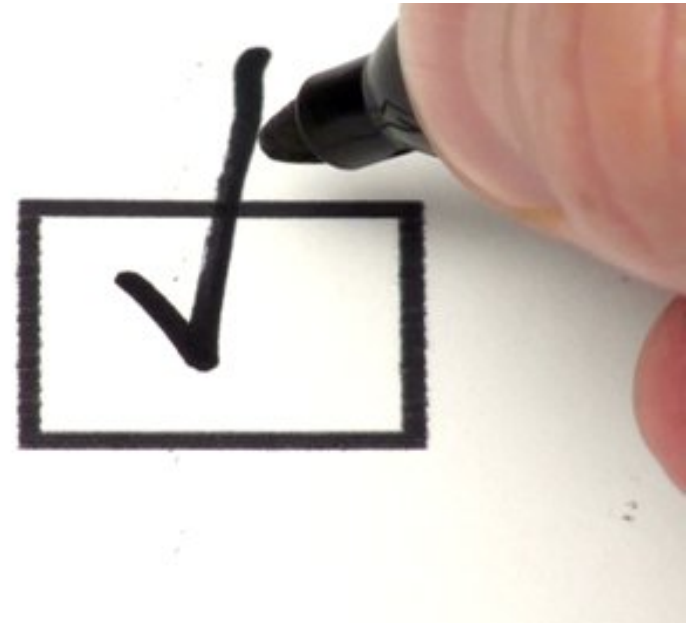


Travel Changes Since  
Joining Capital Bikeshare



## Members were Asked if They Made Changes in Any of Five Aspects of Travel:

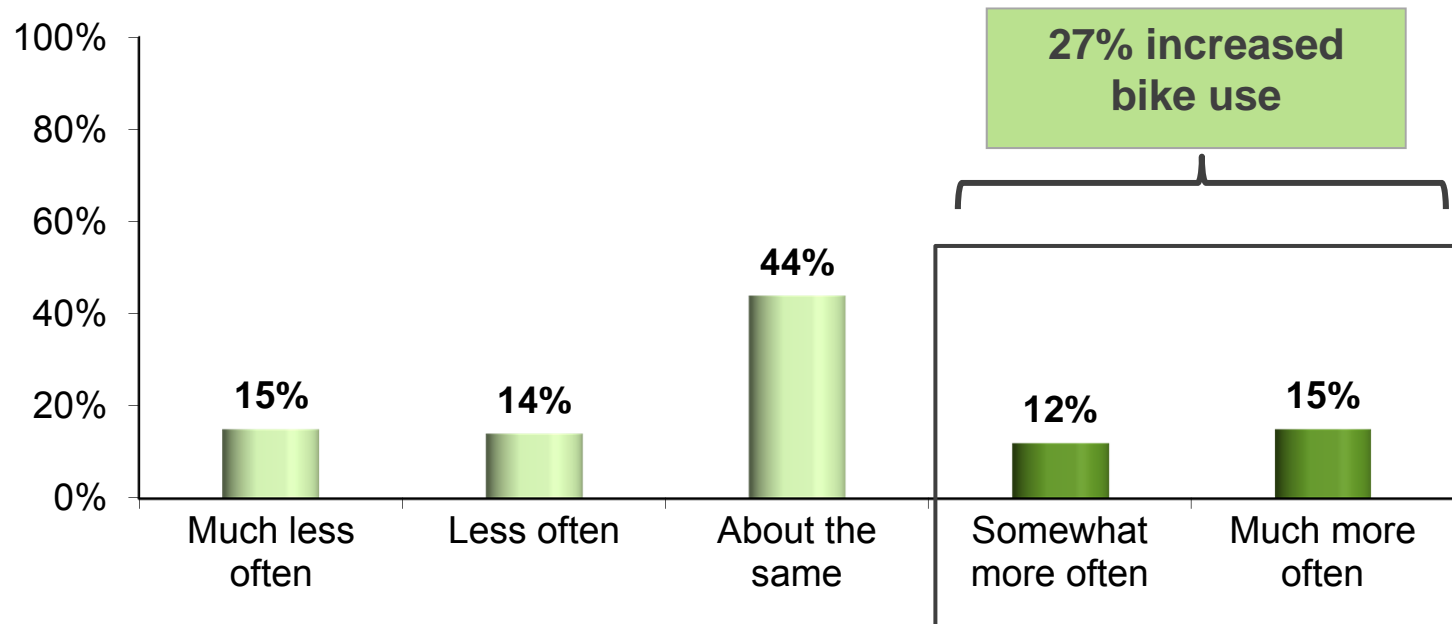
- Bicycle use (any bicycle)
- Use of non-bicycle modes
- Vehicle ownership
- Driving miles
- Commute mode



## 27% of Members Said they Increased their Bicycle Use Since Joining CB

High CB use was reported by members who increased bike use, but also by members who reported biking less often – Suggests they might have shifted bike use from personal bike to CB

n = 2,527



Change in bicycle use since Joining CB

Q25 As a result of your use of Capital Bikeshare, do you use a bicycle (any bicycle) more often, less often, or about the same as before you joined Capital Bikeshare ...?

# A Large Share of Members Reduced Car Use, also Use of Transit, Walk, and Taxi;

Indicates likely shifts to bike from all modes

## "Much less" Use

Metrorail – 21%  
 Bus – 19%  
 Walk – 8%  
 Drive car – 30%  
 Taxi – 31%

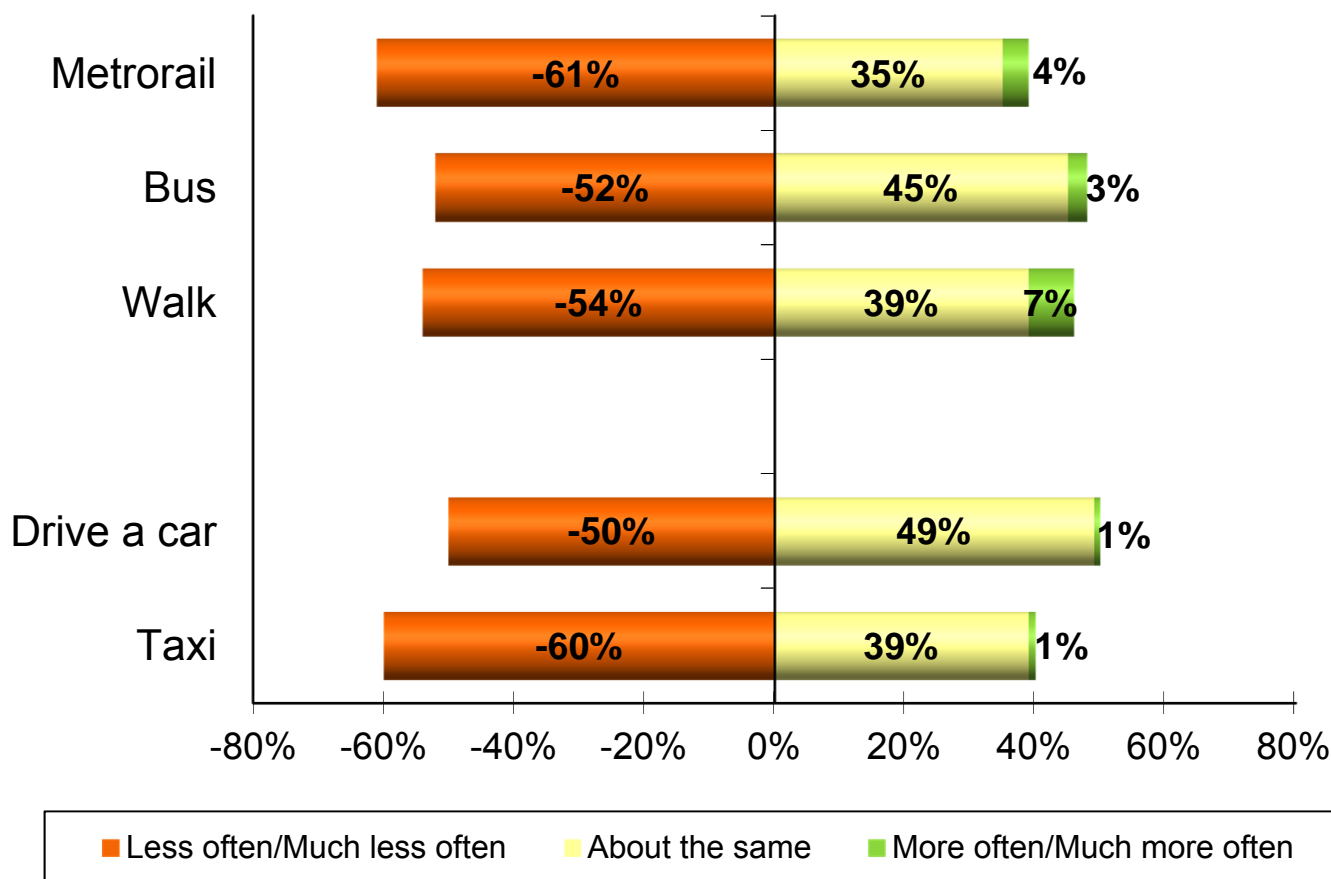
Metrorail  
 n = 2,626

Bus  
 n = 2,671

Walk  
 n = 2,653

Drive a car  
 n = 2,557

Taxi  
 n = 2,607



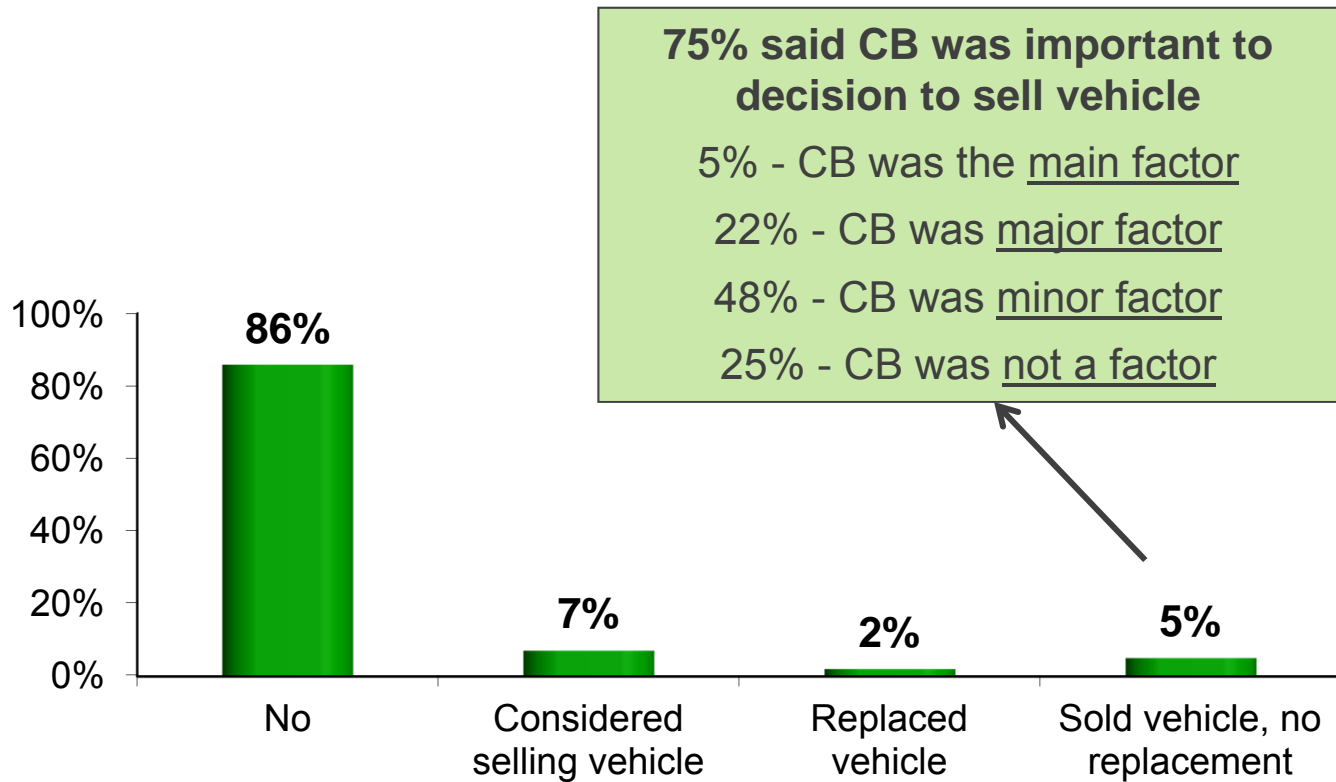
Q25 As a result of your use of Capital Bikeshare, do you use a bicycle (any bicycle) more often, less often, or about the same as before you joined Capital Bikeshare...?

# 5% of Members Reduced their Household Vehicles; 7% Considered Doing So

50% of members who reduced their HH vehicles now are car-free – They eliminated their only vehicle

Sold HH vehicle  
n = 2,926

Factor in decision  
n = 338



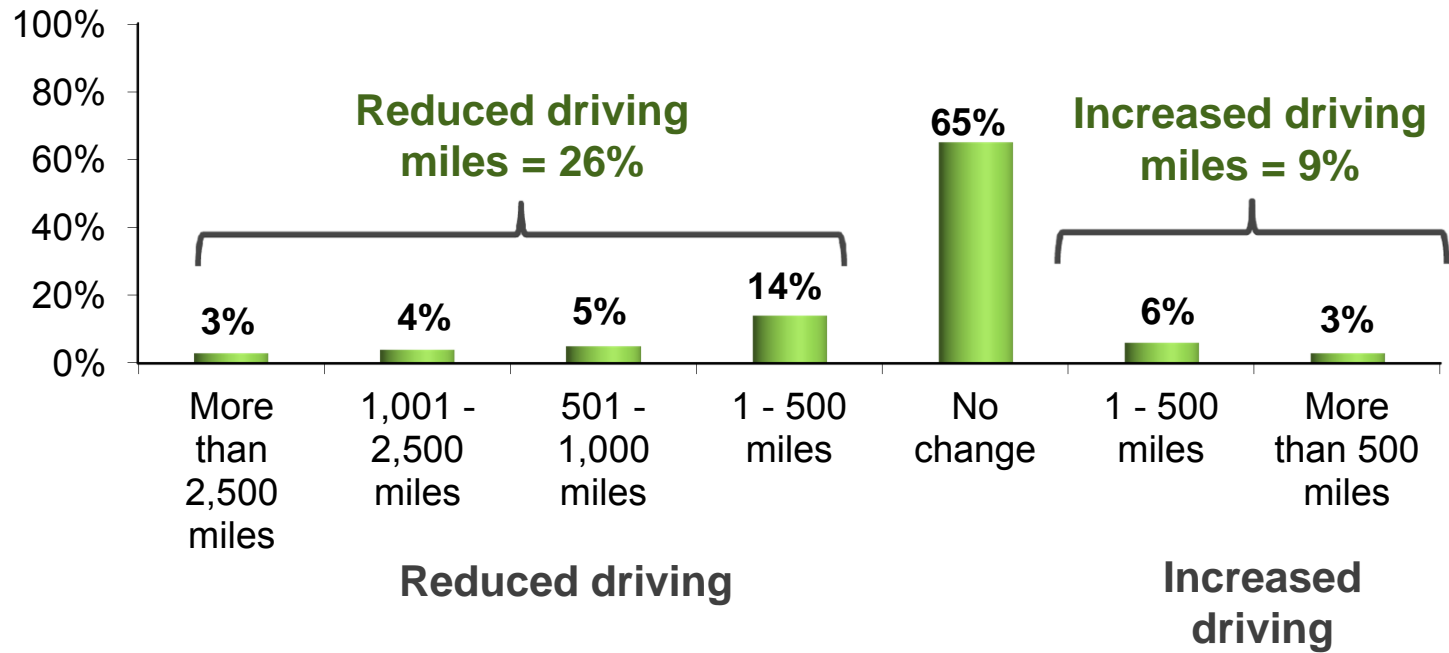
Q31 Since you joined Capital Bikeshare, have you sold a personal household vehicle or considered selling a personal vehicle?

Q32 To what extent did your membership in Capital Bikeshare contribute to your decision to sell or consider selling a personal vehicle?



## 26% of Members Who Reported both Pre-CB and With-CB Mileage Reduced Annual Driving Miles

On average, CB members reduced 198 driving miles per year



- Q27 Approximately how many miles do you drive per month now in the Washington metro region (including miles in vehicles you own, rent, or borrow)?
- Q28 During the year before joining Capital Bikeshare, approximately how many miles per month did you drive on average in the Washington metro region?
- Q29 If you have reduced your driving miles since you joined Capital Bikeshare, to what extent did Capital Bikeshare contribute to the reduction?

n = 2,373

## CB Members Reduce 4.4 Million Driving Miles Per Year Compared with their Pre-CB Mileage

**78%** of members who reduced driving miles said bikeshare was a factor in their decision

Annual miles reduced per member	
Annual driving miles Before CB	1,805
Annual driving miles Since CB	- 1,607
Change in driving miles (each member)	198

Total annual miles reduced	
CB members (Nov 2012)	22,205
Change in driving miles per member	x 198
<b>Total annual driving miles reduced</b>	<b>4.4 million</b>





# Commute Patterns and Commute Changes



# Only 12% of CB Members Drive Alone to Work – Well Below the 65% Regional Average

41% primarily ride transit and 30% primarily bicycle

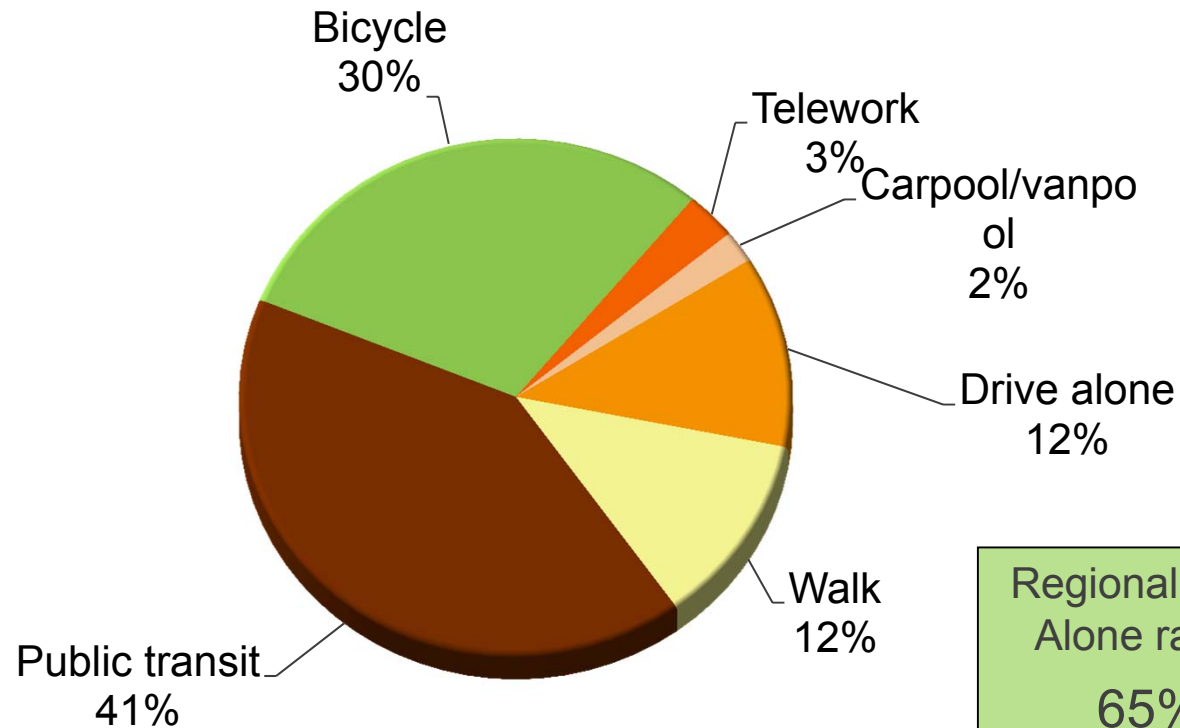
CB members also travel much shorter distances to work

### Average distance

CB = 6.3 mi

Region = 16.5 mi

63% of CB members travel <5 miles to work



n = 4,864

Q35 In a typical week, how many days do you use each of the following types of transportation to get to work? If you use more than one on a single day, report the type you use for the longest distance part of your trip.



### Bike Access Mode?

Of members who reported **bike** change:

37% commute primarily by transit

12% had an observed change to transit

### 2012 Survey

Reported change  
n = 4,864

Observed change  
n = 4,864

## 57% of Members Reported a Commute Change, but Change Was “Observed” for Only 38%

Some changes could have been temporary, but it’s likely some changes were for “access modes” rather than primary modes – bike and walk changes were least likely to be observed

Commute Changes	Reported Change	Observed Change
<b>Any change in commute</b>	<b>57%</b>	<b>38%</b>
- <b>Started bicycling / ride a bike more often</b>	<b>44%</b>	<b>31%</b>
- <b>Started walking / walk more often</b>	<b>13%</b>	<b>7%</b>
- Started riding transit / ride transit more often	11%	9%
- Started teleworking / telework more often	8%	5%
- Started car/vanpooling / CP/VP more often	2%	1%

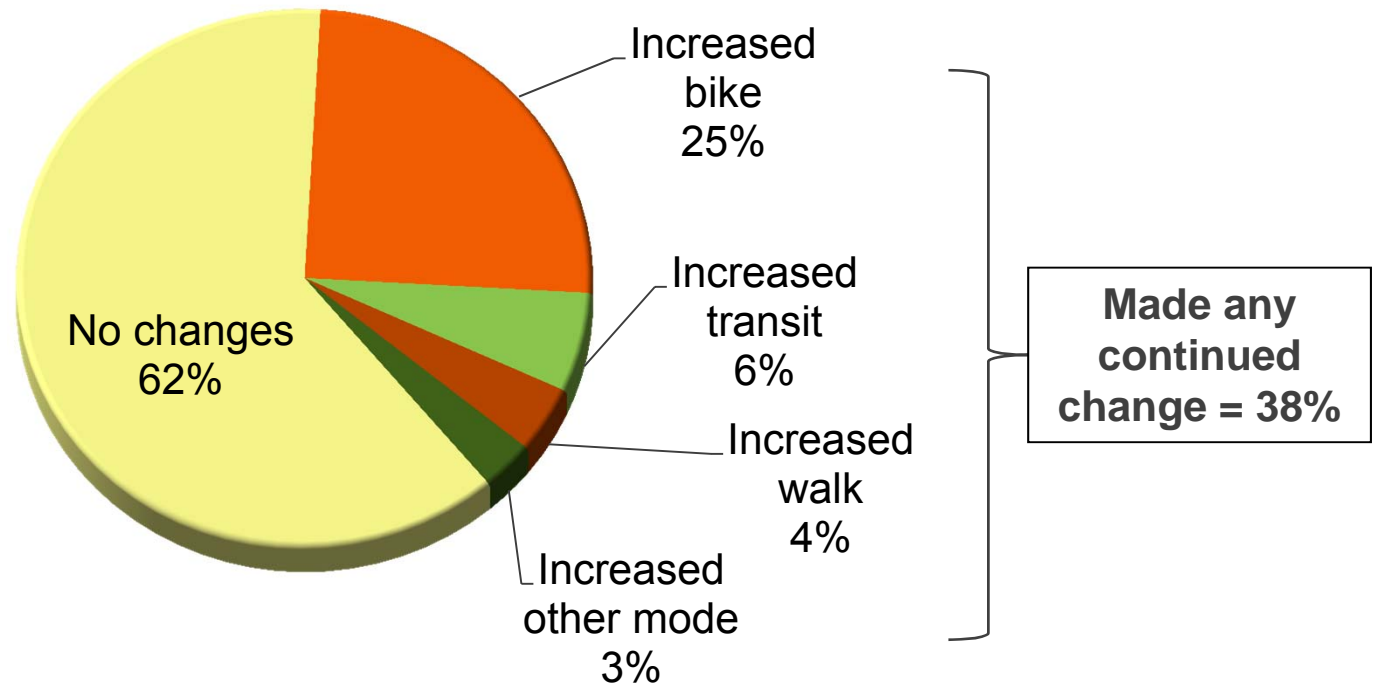
Q36 In the past year, did you make any of the following changes in how you travel TO work?

# Overall 38% of Members Made a Continued Commute Change

## 25% Made their “Most Significant Change” to Bike

### Bike as Access Mode

An additional 6% of members started biking to reach a transit stop

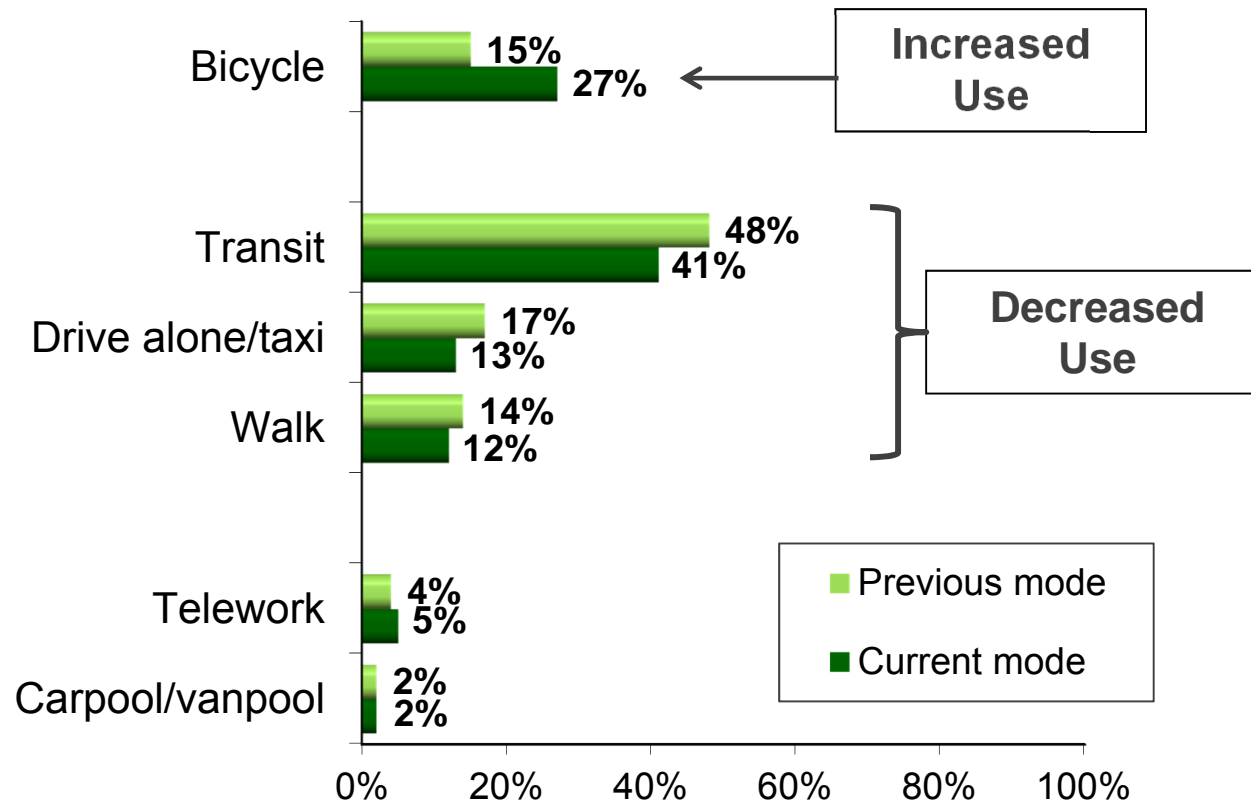


n = 4,864

Q36 In the past year, did you make any of the following changes in how you travel to work?

Q35 In a typical week, how many days do you use each of the following types of transportation to get to work?

## Comparison of Observed Mode Today vs Mode from 1 Year Ago Shows a Net Increase in Bike Use and Net Decrease in Transit, Drive Alone/Taxi, Walking



2012 Survey  
n = 4,864

Q35 In a typical week, how many days do you use each of the following types of transportation to get to work?  
Q37 Before you made this change, how many days in a typical week did you use each of the following types of transportation to get to work?

CB Members Collectively Reduced More than  
**2.1 Million VMT** Annually from Commute Changes –  
 Almost Half of the Total 4.4 VMT Reduced Overall

**Average vehicle trips / VMT reduced per “changer”**

<b>Weekly vehicle trips reduced per “changer”</b> = (1.82 trips before – 0.7 trips now)	<b>1.12 vehicle trips</b>
Average one-way miles per trip	x 4.7 miles
<b>Miles reduced per year per “changer”</b> 1.12 weekly trips x 4.7 miles x 50 weeks	265 miles
Employed CB members (22,205 x 95%)	21,095
Members with commute change (x 38%)	8,016
Miles reduced per year per “changer”	265 miles
<b>Total annual commute VMT reduced</b>	<b>2,124,200</b>





# 63% of Employed Members Used CB at Least Once in the Past Month for a Work-Related Trip and 19% Made 11 or More Work-related Trips

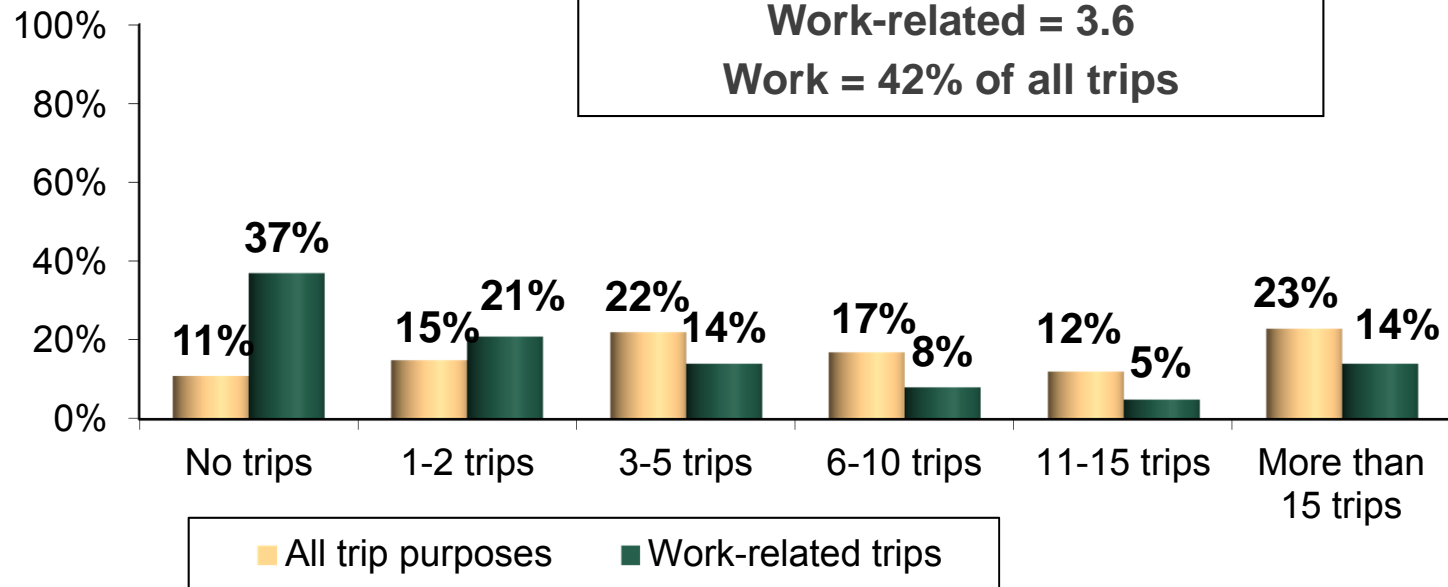
Across all members, work-related trips accounted for about 42% of the total monthly trips

## Average CB Trips Past Month

All purposes = 8.6

Work-related = 3.6

Work = 42% of all trips



2012 Survey  
Trips in Past  
Month

All trip  
purposes  
n = 5,979

Work-related  
trips  
n = 2,814

Q39 In the past month, how many times did you use Capital Bikeshare to go to or from work or to travel to a work-related meeting?

# 55% of CB Members said their Employers Offer Services to help them Bicycle to Work

They were twice as likely to have bike services as were commuters region-wide and more likely to have services than the average commuters in their work areas

## Bike Services Offered at Work

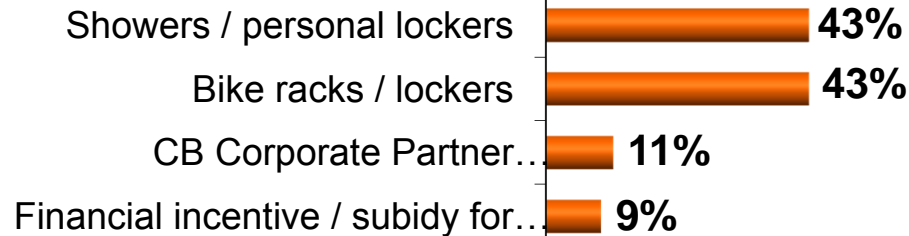
### DC

All SOC – 35%  
CB – 60%

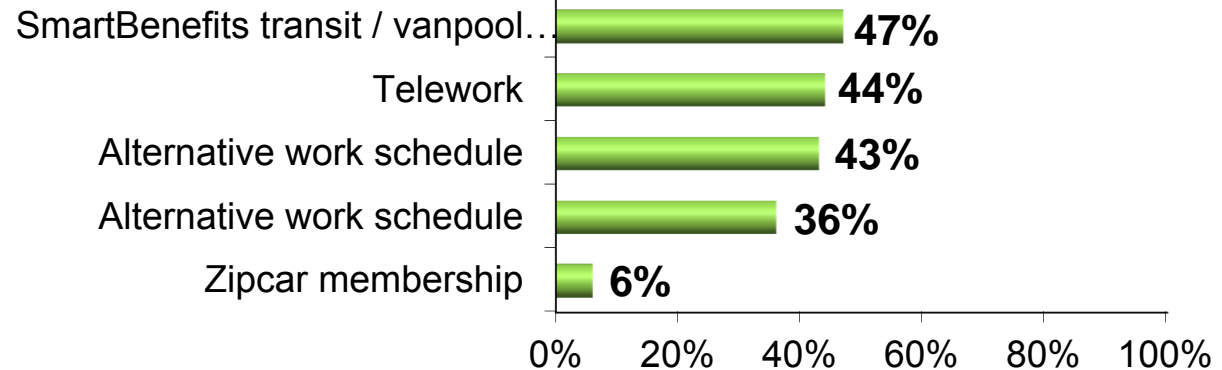
### Arlington

All SOC – 37%  
CB – 60%

## Bicycle-Support Services



## Non-Bicycle Support Services

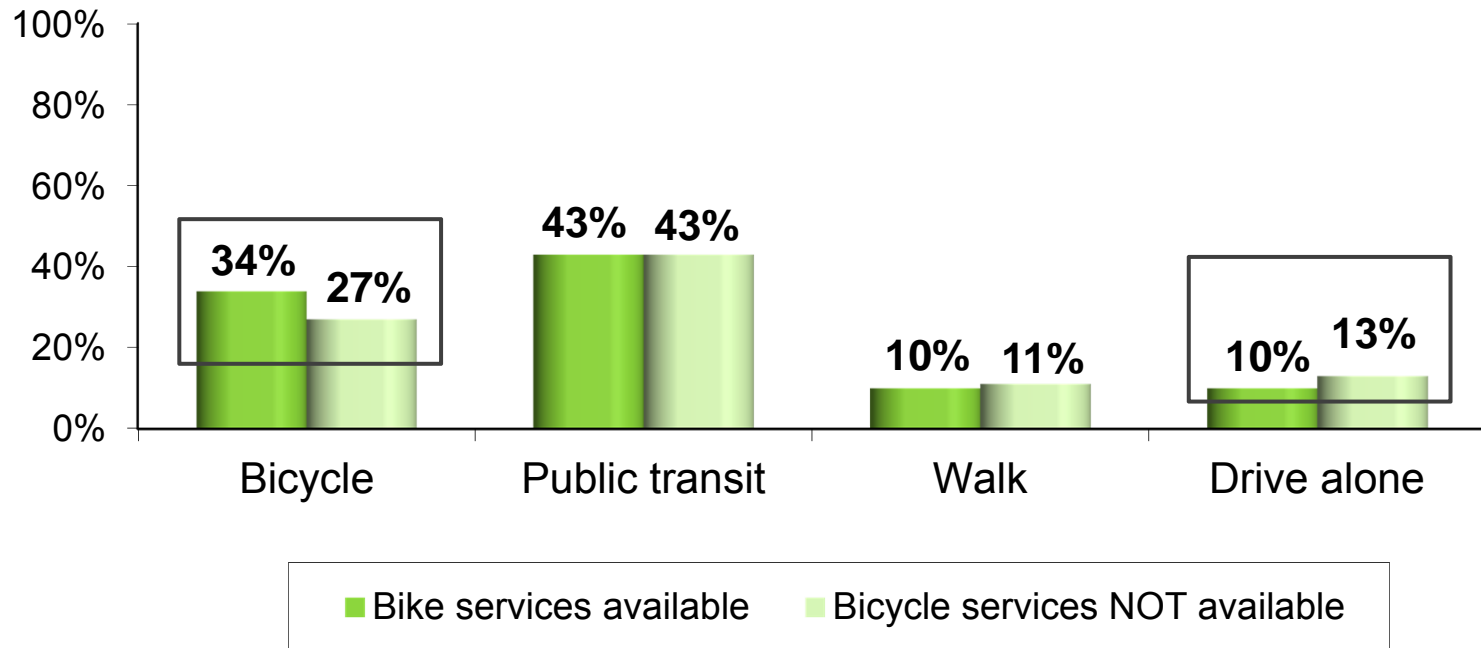


CB Survey  
n = 2,817

2010 SOC  
n = 5,482

Q40 Does your employer offer a Capital Bikeshare Corporate partner Membership?  
Q41 Does your company currently offer any of the following employee benefits?

# CB Members who have Bike Services Use Bike for Commuting More (34%) than do Members without Bike Services (27%)



Bicycle services available  
n = 1,516

Bicycle services not available  
n = 1,145

Q41 Does your company currently offer any of the following employee benefits?

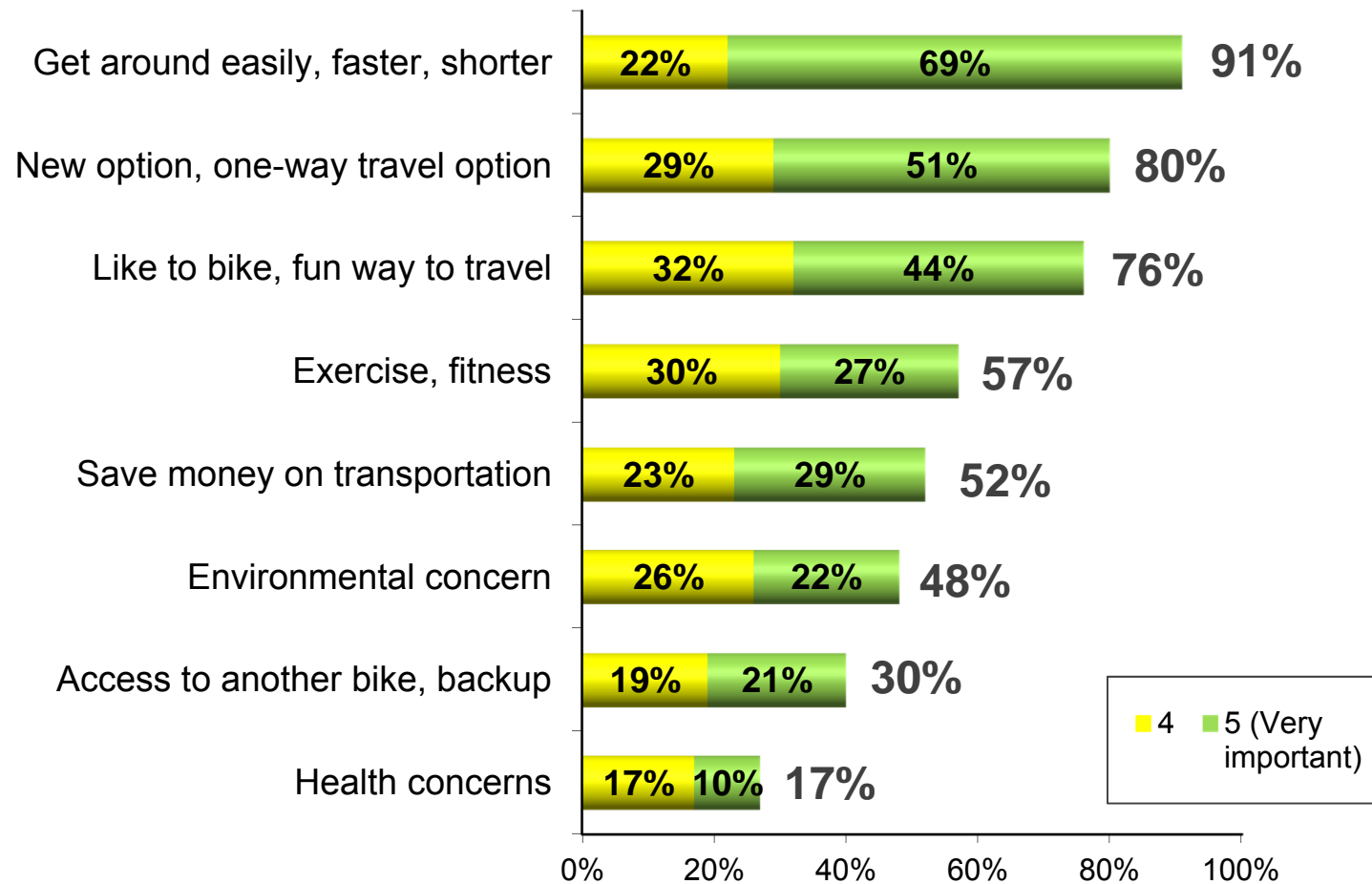
Q35 In a typical week, how many days do you use each of the following types of transportation to get to work?



Motivation and Satisfaction  
with Capital Bikeshare



# Easier/Faster Travel, New/One-way Option, and Like to Bike were Primary Reasons to Join CB; Other reasons – fitness, save money, and help the environment

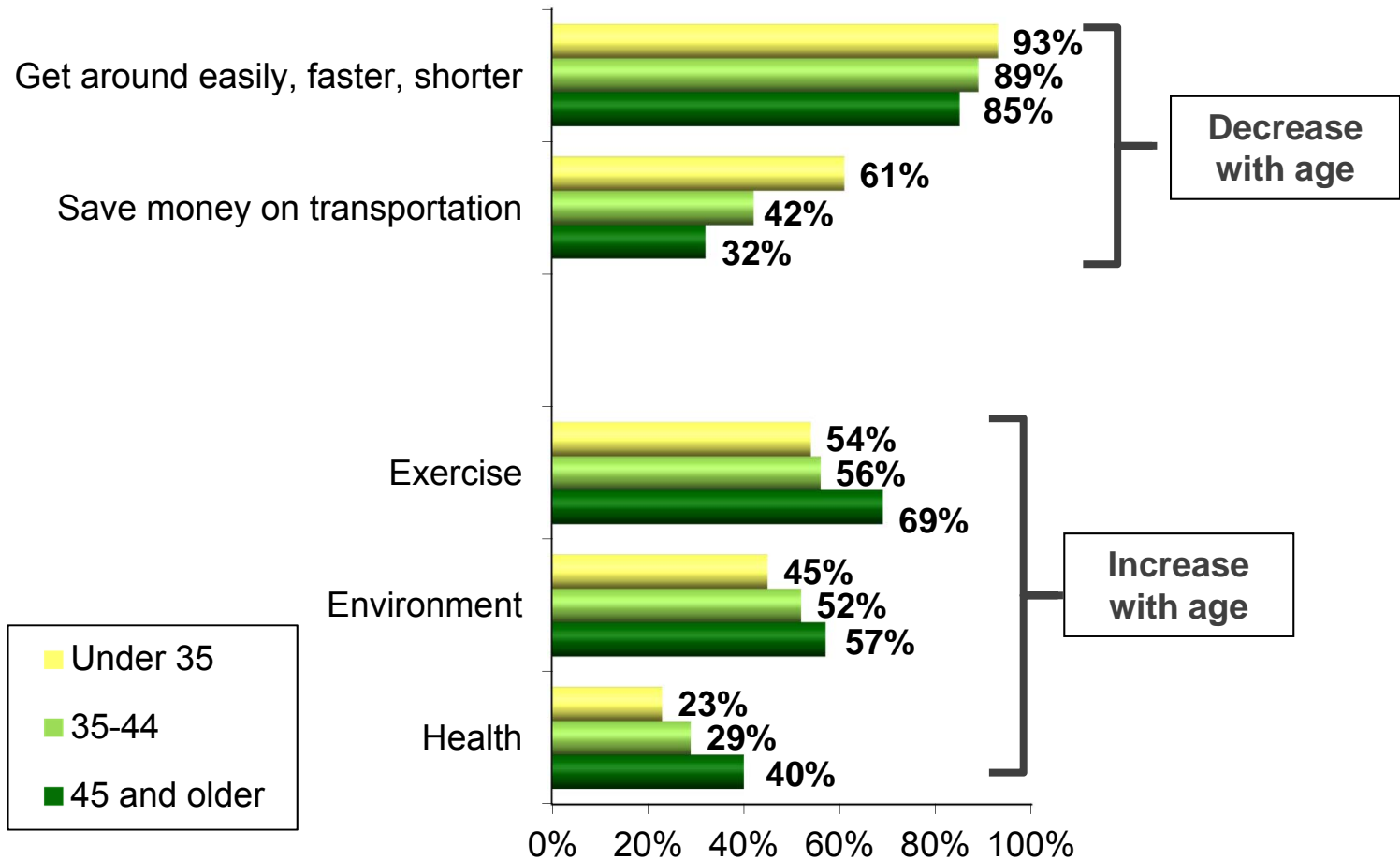


n = 5,588

Q7 What motivated you to join Capital Bikeshare? Rate each reason on 1-5 scale, where 1 means not at all important and 5 means very important.



# Younger Members were Motivated by Ease of Getting Around and Saving Money; Older Members by Exercise, Environment, Health



Under 35  
years  
n = 3,411

35 – 44  
n = 1,067

45 and older  
n = 699

Q7 What motivated you to join Capital Bikeshare? (Percentages giving 4 or 5 (Very important) rating)  
Q52 What is your age?

# CB Members Collectively Save More than \$17.7 Million Annually on Personal Travel Costs

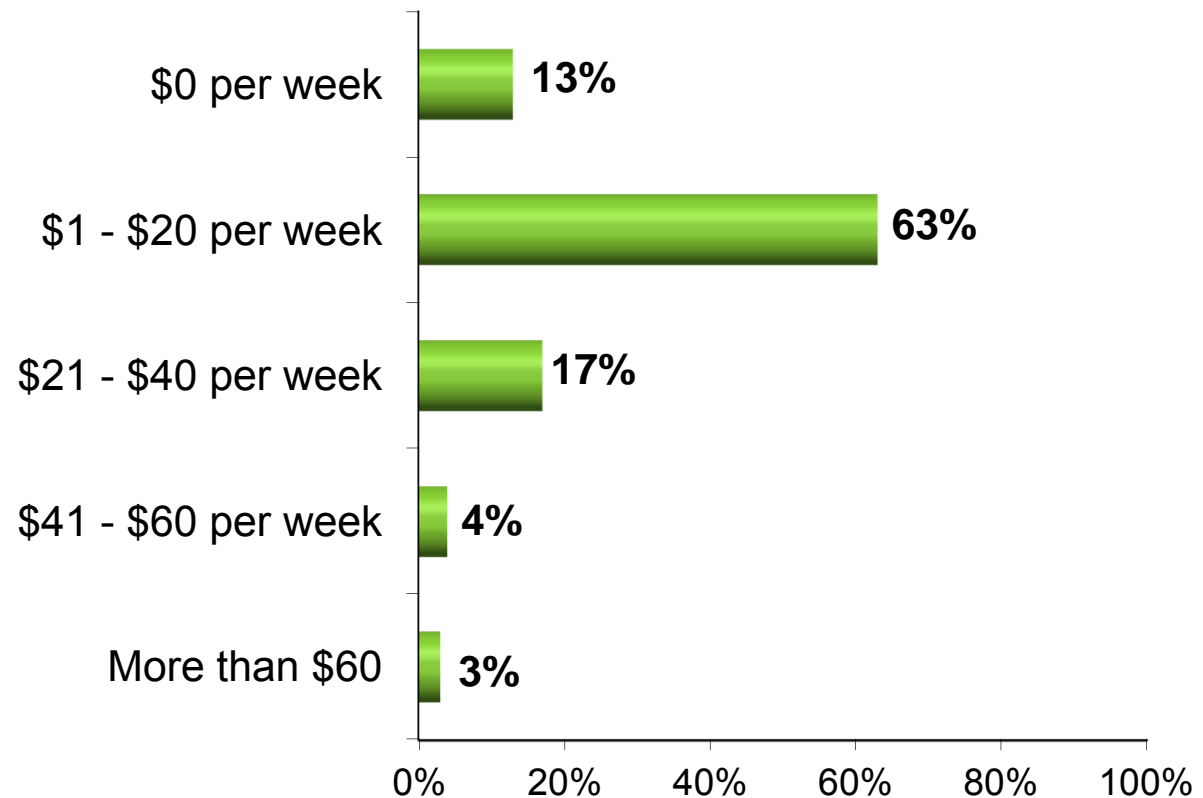
On Average, Members Save \$15.39 per Week = \$800 Per Year

## Annual Personal Travel Cost Saving

\$800 per year  
X

22,205 members  
=

**\$17.7 million**



n = 2,752

Q22 On a weekly basis, how much money do you think Capital Bikeshare saves you on your travel compared with what you were spending before you joined?







## Some Quotes – **What Members Like**

“Freedom!” “Flexibility” “Convenient” “Spontaneous”

“Eco-friendly” “Fun” “Get exercise” “Faster commute”

“Great for one-way or unexpected trips” “Dock it and forget it”

“Flexibility of one-way drop-off”

“Not having to worry about bike parking and theft”

“Nice to have an option to bike rather than walk or drive”

“I use CB when Metro is slow or when I’ve just missed a bus”

“Love to pick it up and go – not have to maintain the bike”

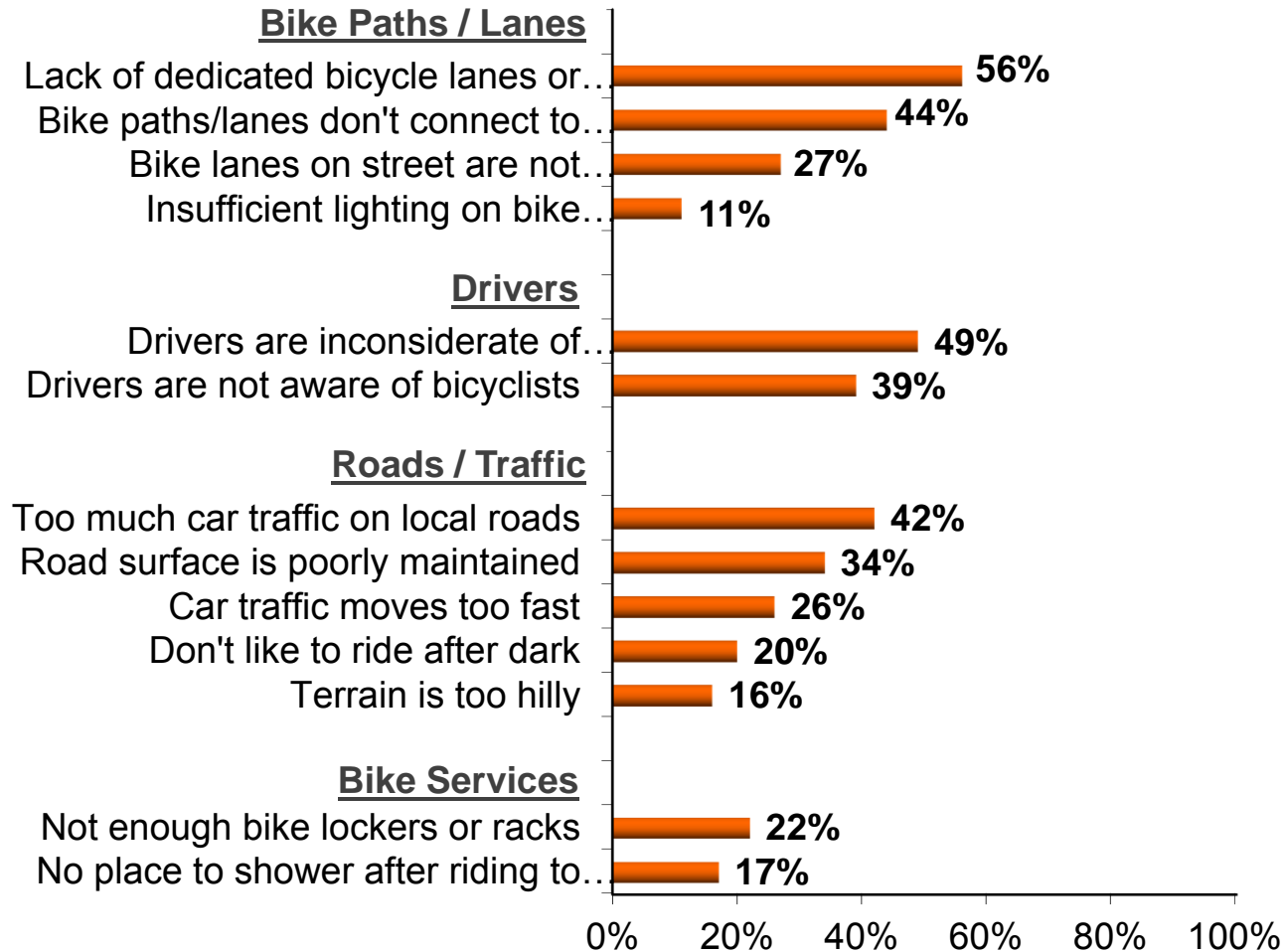
“Riding makes me happy” “Cruising around feeling the wind in my face!” “It adds an element of fun to errands around town”

“Access to areas not served by buses/Metro”

“Reduces 10-minute walk from Metro to my office to 90 seconds”

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# Members Cite Many Issues that are “Significant Barriers” to Bicycling in the DC Region





# Summary of Top Survey Findings



Joan M. Mas 2/2007



## Top Findings – Motivations / Benefits



CB offers multiple benefits to appeal to a variety of user groups:

- Easier, faster travel; access to a wider range of destinations
- CB flexibility of bikeshare builds greater opportunities for one-way “best for the moment” travel choices
- Part of bikeshare’s appeal is that it’s a fun way to travel
- CB enables members to reduce the cost and hassle of car ownership and use – reduce personal travel costs
- Bikeshare offers exercise and health opportunities

## Top Findings – Bikeshare Use

- Bikeshare use is distributed across frequency categories, showing interest for both frequent and occasional use
- 90% of members had used bikeshare trip for a non-work purpose and 58% made a bikeshare trip to/from work
- Overall, most bikeshare trips are for non-work purposes, but 42% of “most recent” trips were to go to / from work
- CB serves an important transit access function – over half of members used CB to access transit in the past month





## Top Findings – Travel Changes



- **27%** of members increased their bike use since joining
- Bikeshare members have shifted some trips to bicycle from other modes – 50% reduced car use, 61%, reduced taxi use, 61% ride Metrorail less often
- **25%** of members reduced driving miles; 5% sold a HH car
- **38%** reduced commute vehicle trips – bike/transit/walk
- Members reduced **4.4 million** annual driving miles since joining CB – half during peak commuting periods



## Questions?

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