Survey of Route Choice Preferences of Commuter Bicyclists

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Monique A. Stinson and Chandra R. Bhat

This survey was originally administered on the World Wide Web using specialized survey software and server space provided by the University of Texas College of Engineering. Please note that some of the formatting has been lost in the process of converting the survey to a *.pdf file – the original survey contained boxes and circles for the respondent to check or type in their answer.

This file is structured as follows. First, definitions of 'major arterial,' 'minor arterial,' and 'residential street' are defined (as they were for the respondents originally taking the survey in 2002). Second, Version 1 of the survey is presented in its entirety. Sections 1, 2, and 4 remained the same for each survey; Section 3 differed for each survey. The final part of this file contains Section 3 from the other eight surveys (there were nine versions of the survey).

Questions? Comments? E-mail mstinson@catsmpo.com.

File created by Monique Stinson on November 13, 2003.

DEFINITIONS of survey route characteristics found in Section 3 of certain surveys (respondents were instructed to click a hyperlink to reach these definitions, if needed):

Major arterial: heavy traffic with speeds >35 mph Minor arterial: moderate traffic with speeds 25-35 mph Residential street: light traffic with speeds <25 mph

A SURVEY OF COMMUTER BICYCLISTS' ROUTE PREFERENCES

SURVEY OUTLINE: First, there will be some questions (Sections 1 and 2) about your commuting habits. Next, there will be a series of questions (Section 3), each presenting you with two possible routes and asking which

route you would choose. Finally, there will be a section (Section 4) asking you for some demographic information.

GENERAL INSTRUCTIONS: Using your mouse, click on the circle or box (or boxes) next to the answer (or answers) that best reflects your situation.

COMPLETION TIME: approximately 10-15 minutes.

CONFIDENTIALITY: The information you provide is confidential and will be used solely for research by Professor Chandra Bhat and Monique Stinson. Individual responses will not be examined for personal information; the research will focus only on groups of respondents.

Note: The terms "WORK" and "SCHOOL" are interchangeable in all of these questions.

Section 1. Please tell us about your bicycling and commuting habits by answering the following questions.

Question 1-1. How much do you agree with the following statement: "I consider myself a bicyclist."

Strongly Agree Agree I don't know Disagree Strongly Disagree

Question 1-2. How much do you agree with the following statement: "I ride a bicycle often."

Strongly Agree Agree I don't know Disagree Strongly Disagree

Question 1-3. In the past six months, have you ridden a bike for any of the following reasons? Please check all that apply. Commuting. Doing errands. Exercise. Visiting friends or family. Other recreation (parades, riding with family, etc.). Racing. Stunt-riding. Question 1-4. How many automobiles does your household own?

0 1 2 3 4 or more

Question 1-5. Which statement best describes your situation?

I bicycle to work regularly (or at least, when I can tolerate the weather).

I have experience in bicycling to work, but currently do not bicycle to work. I am not very experienced in bicycling to work, but I might bicycle to work in the future.

I am not very experienced in bicycling to work, and I am not interested in trying it.

If you are retired or are in between jobs, or if you always work at home, please skip the rest of Sections 1 and 2, and move on to Section 3.

Question 1-6. On the days that you have commuted to work in the past three months, what are some circumstances that have prevented you from riding a bicycle to work every day? Please check all that apply.

Unpleasant weather. Not enough daylight to ride safely. Unsafe neighborhoods. Stolen or broken bike. An injury or illness. Other personal reasons (too busy, too tired, etc). n/a -- I rode a bike to work every day. Other reason (please type into box below).

Other reason:

Question 1-7. How far do you live from your work?

Less than 1 mile 1-3 miles 3-5 miles 5-10 miles 10-20 miles Over 20 miles

Question 1-8. Which of the following is available at your work? Please check all

that apply.

Bike racks. Bicycle lockers, or a safe storage room. Showers. Clothing lockers.

Question 1-9. Do you have flexible work hours? (That is, do you have some freedom in choosing when to arrive at/depart from work?)

Yes No

Question 1-10. What means of travel have you used to get to your current

workplace? Please check all that apply.

Bicycle. Bus. Train. Bus & train (on same commute). Drove by myself. Carpooled/vanpooled. Walked the entire distance. Auto & transit (car to station, then took transit). Bike & transit (bike to station, then took transit). Other.

Question 1-11. Based on the experiences you checked above, aside from bicycling,

which of these ways usually is the SLOWEST way to get to work? (You will be asked about bicycling later - with Questions 1-11 and 1-12, we are hoping to understand what your other options are.)

Bus. Train. Bus & train. Driving by myself. Carpool/vanpool. Walking the entire distance. Auto & transit.Bike & transit. Other. n/a -- I have not used any of the above. ... how long does it usually take to travel to work this way? less than 10 minutes 10-15 minutes 15-20 minutes 20-25 minutes 25-30 minutes 30-40 minutes 40-50 minutes 50-60 minutes over 60 minutes Question 1-12. Based on the experiences you checked above, aside from bicycling, which of these ways usually is the FASTEST way to get to work? Bus. Train. Bus & train. Driving by myself. Carpool/vanpool. Walking the entire distance. Auto & transit.Bike & transit. Other. n/a -- I have not used any of the above. ... how long does it usually take to travel to work this way? less than 10 minutes

10-15 minutes 15-20 minutes 20-25 minutes 25-30 minutes 30-40 minutes 40-50 minutes 50-60 minutes over 60 minutes

Section 2. This section is only for people who currently commute by bicycle at least occasionally. If you have not used a bicycle to get to work in the past six months, and you don't think you'll use a bicycle to get to work in the next six months, please skip this section and move on to Section 3.

Question 2-1. Compared to other bike commuters, how fast do you usually ride to work?

Very Fast Fast Average Slow Very Slow

If you know your average commuting (by bicycle) speed, please enter it in the space below (in mph):

Question 2-2. Please indicate how long you have been commuting by bicycle on a regular basis.

< 1 year 1-3 years 3-5 years 5-10 years 10-20 years over 20 years

Question 2-3. From March through May, how often do you commute by bicycle to work?

Never About once or twice a month About once a week About 2-3 days per week About 4-5 (or more) days per week

Question 2-4. From June through August, how often do you commute by bicycle to work?

Never About once or twice a month About once a week About 2-3 days per week About 4-5 (or more) days per week **Question 2-5.** From September through November, how often do you commute by bicycle to work?

Never About once or twice a month About once a week About 2-3 days per week About 4-5 (or more) days per week

Question 2-6. From December through February, how often do you commute by bicycle to work?

Never About once or twice a month About once a week About 2-3 days per week About 4-5 (or more) days per week

Question 2-7. How long does it usually take to commute from home to work by bicycle?

less than 10 minutes 10-15 minutes 15-20 minutes 20-25 minutes 25-30 minutes 30-40 minutes 40-50 minutes 50-60 minutes over 60 minutes

Question 2-8. What kind of bicycle do you usually ride to work? (Please indicate

the type of bike that is most similar to the one you ride.)

mountain bike road bike hybrid touring bike cruiser recumbent dirt bike

Question 2-9. How else can you classify your main commuting bike?

single-speed or fixed gear
2-speed or 3-speed
more than 3 speeds

Question 2-10. What are the most important reasons to you for bicycling to work?

From the following list, please pick the most important, the second most important, and the third most important reasons for you to bicycle to work: Fitness/Health concerns Concern for problems related to automobiles Convenience/Speed Avoid driving in congested conditions Avoid relying on public transit Financial reasons Pleasure/Enjoyment Limited auto parking Other (please type in) (Look below to see the space where you enter your answers.)

--which of the above is the MOST important reason to you for riding to work?

Fitness/Health concerns Concern for problems related to automobiles Convenience/Speed Avoid driving in congested conditions Avoid relying on public transit Financial reasons Pleasure/Enjoyment Limited auto parking Other (please type in)

--which of the above is the SECOND MOST important reason to you for riding to work?

Fitness/Health concerns Concern for problems related to automobiles Convenience/Speed Avoid driving in congested conditions Avoid relying on public transit Financial reasons Pleasure/Enjoyment Limited auto parking Other (please type in)

--which of the above is the THIRD MOST important reason to you for riding to work?

Fitness/Health concerns Concern for problems related to automobiles Convenience/Speed Avoid driving in congested conditions Avoid relying on public transit Financial reasons Pleasure/Enjoyment Limited auto parking Other (please type in)

--if you selected "other" for any of the above questions, please type in the reason here:

Question 2-11. Think for a moment about the route that you usually take when you

bicycle to your workplace. Why do you take this route? What do you like about it? Below is a list of some route characteristics. Please tell us what are the most important, the second most important, and the third most important qualities that you like about this route (compared to other routes you could take).

Good pavement Avoid big uphills Travel time -- I want to get to work quickly Getting a good workout Avoiding stop signs and/or stoplights Safety from motor vehicles Nice scenery Other (please type in) (Look below to see the space where you enter your answers.)

--what is the MOST important characteristic of this route (compared to other routes you could take to work)?

Good pavement Avoids big uphills Travel time -- I want to get to work quickly Getting a good workout Avoiding stop signs and/or stoplights Safety from motor vehicles Nice scenery Other (please type in)

--what is the SECOND MOST important characteristic of this route (compared to other routes you could take to work)?

Good pavement Avoids big uphills Travel time -- I want to get to work quickly Getting a good workout Avoiding stop signs and/or stoplights Safety from motor vehicles Nice scenery Other (please type in)

--what is the THIRD MOST important characteristic of this route (compared to other routes you could take to work)?

Good pavement Avoids big uphills Travel time -- I want to get to work quickly Getting a good workout Avoiding stop signs and/or stoplights Safety from motor vehicles Nice scenery Other (please type in)

--if you selected "other" for any of the above three questions, please type in the characteristic here:

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably choose for bicycling to work.

DEFINITIONS

Continuous: the whole route has a bicycle facility (a bicycle facility can

be either a bike lane, a bike path, or a wide right-hand lane) Discontinuous: 75% of the route has a bicycle facility; on the other 25%, bicyclists must share a narrow (10'-12') lane with automobiles *For more definitions on route characteristics (such as "minor arterial"),

click here.

OTHER FEATURES OF THE FOLLOWING ROUTES:

If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes are exactly the same distance). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)

Route 2

Question 3-1.

Route 1 Minor arterial Minor arterialNon-arterialWide (14') right-hand laneWide (14') right-hand laneContinuousDiscontinuous 1 or 2 red lights

Residential street No red lights

Which route would you choose?

Route 1 Route 2

Question 3-2.

Route 1 Minor arterial Wide (14') right-hand lane Narrow (10'-12') auto lane Continuous*

Route 3 Residential street 1 or 2 red lights 3 or more red lights

*There is no bicycle facility, therefore continuity/discontinuity does not apply to Route 3.

Which route would you choose?

Route 1 Route 3

.....

Question 3-3.

Route 1	Route 4
Minor arterial	Major arterial
Wide (14') right-hand lane	Bike lane
Continuous	Continuous
1 or 2 red lights	1 or 2 red lights

Which route would you choose?

Route 1 Route 4

Question 3-4.

Route 1 Minor arterial Minor arteriai Wide (14') right-hand lane Bike lane Continuous Discontinuous 1 or 2 red lights

Route 5 Minor arterial No red lights

Which route would you choose?

Route 1 Route 5

.....

Route 6

Question 3-5.

Route 1 Minor arterial* Wide (14') right-hand lane Separate path Continuous 1 or 2 red lights

Continuous 3 or more red lights

*Route 6 is an uninterrupted bike path -- i.e., bicyclists only encounter auto traffic when the path crosses roads (at the red lights).

Which route would you choose?

Route 1 Route 6

Question 3-6.

Route 1 Minor arterial Millor arterialWide (14') right-hand laneSeparate pathContinuousDiscontinuous 1 or 2 red lights

Route 7 Minor arterial 3 or more red lights

Which route would you choose?

Route 1 Route 7

Question 3-7.

Route 1	Route 8
Minor arterial	Residential street
Wide (14') right-hand lane	Bike lane
Continuous	Discontinuous
1 or 2 red lights	1 or 2 red lights

Which route would you choose?

Route 1 Route 8

> Section 4. Residence location and demographic information. (Remember, this information is confidential.)

Question 4-1. Which general region of the U.S. do you live in or near?

the Northeast or Alaska the South or Hawaii Southwest Midwest Northwest n/a - I live in another country ... how long have you lived in this region? < 1 year 1-3 years 3-5 years 5-10 years 10-20 years over 20 years

Question 4-2. What kind of area do you live in?

Rural Suburban Urban/Downtown

Question 4-3. What kind of area do you work in?

Rural Suburban Urban/Downtown

Question 4-4. Please indicate if you live within 75 miles of any of the following:

an ocean, sea, or gulf one of the Great Lakes or the Great Salt Lake none of the above

Question 4-5. Are you:

Female Male Decline to answer

Question 4-6. What is your age?

under 18 18-24 25-34 35-44 45-54 55-64 65 and up

Question 4-7. What is your household's total annual income?

less than \$20,000
\$20,000-\$30,000
\$30,000-\$40,000
\$40,000-\$50,000
\$50,000-\$50,000
\$60,000-\$75,000
\$75,000-\$100,000
over \$100,000

Question 4-8. What is your residence's 5-digit zip code?

If you would like to receive information about the results, please enter your e-mail address below. When you are ready to submit the survey, simply click on the "submit" button.

Survey written by Monique A. Stinson and Dr. Chandra R. Bhat, 2002.

Survey 2, Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

NOTES ON THE FOLLOWING ROUTES:

 The quickest possible way to work (by bike) takes 5 minutes.
 If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes have exactly the same pavement quality). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)
 Travel times are approximate. In calculating travel time, it is assumed that you travel slowly on uphills and quickly on downhills, so that you are traveling at a reasonable pace at all times. Therefore, travel time represents the approximate time it will take to complete the route at the average speed of 12 mph. (If your average speed is actually faster or slower, please humor us and pretend it is 12 mph -- the alternative is putting everything in terms of distance, which is a more accurate but less understandable measure.)

Question 3-1. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 2

Question 3-2. Route 1 Parallel parking is permitted Some moderate uphills Route 2 No parking is allowed Some moderate uphills Travel time: 5 minutes You will cross 4 or more major roads

Route 3 Parallel parking is permitted Flat - no hills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 3

Question 3-3. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Route 4 Parallel parking is permitted Some moderate uphills Travel time: 12.5 minutes You will cross no major roads

Travel time: 7.5 minutes

You will cross 4 major roads

Which route would you choose?

Route 1 Route 4

Question 3-4. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 5 Route 5 No parking is allowed Some very steep uphills Travel time: 5 minutes You will cross 1 major road

Question 3-5. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 6 Route 6 Parallel parking is permitted Flat - no hills Travel time: 12.5 minutes You will cross no major roads

Question 3-6. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 7

Question 3-7. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 8

Question 3-8.

Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 9

Question 3-9. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 10 No parking is allowed Some moderate uphills Travel time: 10 minutes You will cross 2 major roads

Route 8 Parallel parking is permitted Some very steep uphills Travel time: 12.5 minutes You will cross no major roads

Route 7

No parking is allowed Some very steep uphills

Travel time: 10 minutes You will cross 3 major roads

Route 9 No parking is allowed Flat - no hills Travel time: 5 minutes You will cross 4 major roads

Route 1

Route 10

Question 3-10. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 11 Route 11 No parking is allowed Flat - no hills Travel time: 10 minutes You will cross 3 major roads

Question 3-11. Route 1 Parallel parking is permitted Some moderate uphills Travel time: 7.5 minutes You will cross 2 major roads

Which route would you choose?

Route 1 Route 12

Survey 3, Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

NOTES ON THE FOLLOWING ROUTES:

1. The quickest possible way to bike to work takes 20 minutes. (This assumes an average speed of 12 mph, which is a typical average commuting speed for bicyclists. If you know that you actually bicycle faster or

Route 12 Parallel parking is permitted Some very steep uphills Travel time: 7.5 minutes You will cross no major roads slower, please humor us - the alternative is using distance, which is a more accurate but less understandable measure.) 2. If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes have exactly the same scenery, the same level of traffic, etc.). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)

3. On-road/Off-road route -- the route is on-road unless specified otherwise.

For descriptions of pavement types, click here.

Question 3-1. Route 1

No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 2

Question 3-2.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 3

Question 3-3.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks) Route 2 Parallel parking is permitted Smooth pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Route 3 (no parking - bike path) Coarse sand riding surface Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Route 4 Parallel parking is permitted Rough pavement Travel time: 20 minutes There is a stop sign every 1/2-mile (about 4 blocks) Which route would you choose?

Route 1 Route 4

Question 3-4.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

/2-mile (about 4 blocks) There is a stop s

Route 6

(no parking - bike path)

Travel time: 20 minutes

Coarse sand riding surface

Which route would you choose?

Route 1 Route 5

Question 3-5.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 6

Question 3-6.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 7 No parking is allowed Rough pavement Travel time: 30 minutes

There is a stop sign every 1/4-mile (about 2 blocks)

There is a stop sign every mile (about 8 blocks)

Route 1 Route 7 Route 5 Parallel parking is permitted Smooth pavement Travel time: 20 minutes There is a stop sign every 1/4-mile (about 2 blocks)

Question 3-7.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 8 Route 8 No parking is allowed Smooth pavement Travel time: 30 minutes There is a stop sign every 1/4-mile (about 2 blocks)

Question 3-8.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 9

Whew! Take a deep breath - you're about halfway done.

Question 3-9.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 10 Route 10 No parking is allowed Rough pavement Travel time: 35 minutes There is a stop sign every mile (about 8 blocks)

Question 3-10.

Route 9 (no parking - bike path) Coarse sand riding surface Travel time: 30 minutes There is a stop sign every 1/2-mile (about 4 blocks) Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks) Route 11 Parallel parking is permitted Smooth pavement Travel time: 35 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 11

Question 3-11.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 12

Question 3-12.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 13

Question 3-13.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks) Route 14 No parking is allowed Smooth pavement Travel time: 25 minutes There is a stop sign every 1/4-mile (about 2 blocks)

Route 13 Parallel parking is permitted Rough pavement Travel time: 25 minutes There is a stop sign every mile (about 8 blocks)

Route 12 (no parking - bike path) Coarse sand riding surface Travel time: 35 minutes There is a stop sign every 1/2-mile (about 4 blocks) Which route would you choose?

Route 1 Route 14

Question 3-14.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 15 Route 15 (no parking - bike path) Coarse sand riding surface Travel time: 20 minutes There is a stop sign every mile (about 8 blocks)

Question 3-15.

Route 1 No parking is allowed Rough pavement Travel time: 25 minutes There is a stop sign every 1/2-mile (about 4 blocks) Route 16 Parallel parking is permitted Rough pavement Travel time: 20 minutes There is a stop sign every mile (about 8 blocks)

Which route would you choose?

Route 1 Route 16

Survey 4(a), Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

There are 11 questions in this section.

DEFINITIONS

Continuous: the whole route has a bicycle facility (that is, the whole route has either a bike lane, a bike path, or a wide right-hand lane) Discontinuous: 75% of the route has a bicycle facility, but for the other 25%, cyclists must share a narrow (10'-12') lane with automobiles *For more definitions (of "arterial" and bicycle facility types), click here.

OTHER FEATURES OF THE FOLLOWING ROUTES:

1. The fastest way to bike to work takes 5 minutes; it is assumed that you bicycle at an average speed of 12 mph, which is a typical speed for commuter cycling.

2. If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes have exactly the same number of left turns, exactly the same scenery, etc.). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 2 Major arterial Wide (14') right-hand lane Discontinuous Travel time: 5 minutes

Which route would you choose?

Route 1 Route 2

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 3 Residential street Bike lane Continuous Travel time: 20 minutes

Which route would you choose?

Route 1 Route 3

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes

Route 4

Separate path Continuous Travel time: 20 minutes *Route 4 has no automobile traffic -- route is off-road.

Which route would you choose?

Route 1

Route 4

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes

* Separate path Continuous Travel time: 10 minutes

Route 5

*Route 5 has no automobile traffic - route is off-road.

Which route would you choose?

Route 1 Route 5

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 6 Residential street Wide (14') right-hand lane Discontinuous Travel time: 20 minutes

Which route would you choose?

Route 1 Route 6

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 7 Major arterial Bike lane Discontinuous Travel time: 10 minutes

Which route would you choose?

Route 1 Route 7

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 8 Major arterial* Separate path* Discontinuous* Travel time: 5 minutes *In other words, 75% of Route 8 is on a separate path, and 25% of it is on a major arterial.

Which route would you choose?

Route 1 Route 8

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 9 Minor arterial Wide (14') right-hand lane Continuous Travel time: 15 minutes

Which route would you choose?

Route 1 Route 9

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes

Which route would you choose?

Route 1 Route 10

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 11 Minor arterial Separate path Discontinuous Travel time: 15 minutes

Which route would you choose?

Route 1 Route 11

Route 1 Minor arterial Wide (14') right-hand lane Discontinuous Travel time: 10 minutes Route 12 Major arterial Bike lane Continuous Travel time: 5 minutes

Which route would you choose?

Route 10 Minor arterial Bike lane Continuous Travel time: 15 minutes Route 1 Route 12

Survey 4(b), Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

There are 13 questions in this section.

NOTES ON THE FOLLOWING ROUTES:

1. The quickest possible way to work (by bike) takes 25 minutes. We have assumed an average speed of 12 mph, which is a typical speed for bicycle commuting. (If you know your average speed is actually faster or slower, please humor us and pretend it is 12 mph -- the alternative is putting everything in terms of distance, which is a more accurate but less understandable measure.)

2. If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes have exactly the same number of left turns). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)

Definitions on route characteristics - click here.

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 2 Residential street Narrow (10'-12') auto lane Travel time: 40 minutes

Which route would you choose?

Route 1 Route 2 **********

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes

Which route would you choose?

Route 1 Route 3

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 4 Residential street

Wide (14') right-hand lane Travel time: 35 minutes

Travel time: 30 minutes

Route 3

Bike lane

Major arterial

Which route would you choose?

Route 1 Route 4

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 5 Residential street Narrow (10'-12') auto lane Travel time: 25 minutes

Which route would you choose?

Route 1 Route 5

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 6 Major arterial Bike lane Travel time: 35 minutes

Which route would you choose?

Route 1 Route 6

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 7 Residential street Narrow (10'-12') auto lane Travel time: 30 minutes

Which route would you choose?

Route 1 Route 7

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes

Which route would you choose?

Route 1 Route 8

Whew! Take a deep breath - you're about halfway done...

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes

Which route would you choose?

Route 1 Route 9

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 10 Major arterial Wide (14') right-hand lane Travel time: 25 minutes

Narrow (10'-12') auto lane

Travel time: 25 minutes

Which route would you choose?

Route 1 Route 10

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 11 Minor arterial Bike lane Travel time: 35 minutes

Which route would you choose?

Route 1 Route 11 Route 8 Residential street Wide (14') right-hand lane Travel time: 40 minutes

Route 9

Minor arterial

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes

Residential street Narrow (10'-12') auto lane Travel time: 35 minutes

Route 12

Which route would you choose?

Route 1 Route 12

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 13 Major arterial Bike lane Travel time: 40 minutes

Which route would you choose?

Route 1 Route 13

Route 1 Minor arterial Wide (14') right-hand lane Travel time: 30 minutes Route 14 Minor arterial Bike lane Travel time: 40 minutes

Which route would you choose?

Route 1 Route 14

Survey 5(a), Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

There are 8 questions in this section.

NOTE ON THE FOLLOWING ROUTES:

If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes are exactly the same distance). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.) For descriptions of pavement types and bicycle facility types,

such as "separate path," click here.

Route 1 Rough pavement Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) Route 2 Rough pavement Narrow (10'-12') auto lane There is a stop sign every mile (about 8 blocks)

Which route would you choose?

Route 1 Route 2

Route 1	Route 3
Rough pavement	Rough pavement
Wide (14') right-hand lane	Bike lane
There is a stop sign every 1/2-mile (about 4 blocks)	There is a stop sign every 1/4-mile (about 2 blocks)

Which route would you choose?

Route 1 Route 3

Route 1 Rough pavement Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) Route 4 Rough pavement Separate path There is a stop sign every 1/2-mile (about 4 blocks)

Which route would you choose?

Route 1 Route 4

Route 1 Rough pavement Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) Route 5 Smooth pavement Narrow (10'-12') auto lane There is a stop sign every mile (about 8 blocks)

Which route would you choose?

Route 1 Route 5

Route 1 Route 6 Rough pavement Smooth pavement Wide (14') right-hand lane Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) There is a stop sign every 1/4-mile (about 2 blocks) Which route would you choose? Route 1 Route 6 ***** Route 7 Route 1 Smooth pavement Rough pavement Wide (14') right-hand lane Bike lane There is a stop sign every 1/2-mile (about 4 blocks) There is a stop sign every 1/4-mile (about 2 blocks) Which route would you choose? Route 1 Route 7 Route 1 Route 8 Rough pavement Smooth pavement Wide (14') right-hand lane Separate path There is a stop sign every 1/4-mile (about 2 blocks) There is a stop sign every 1/2-mile (about 4 blocks) Which route would you choose? Route 1 Route 8 Route 1 Route 9 Coarse sand riding surface Rough pavement Wide (14') right-hand lane Separate path There is a stop sign every 1/2-mile (about 4 blocks) There is a stop sign every 1/2-mile (about 4 blocks) Which route would you choose? Route 1 Route 9

Survey 5(b), Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

There are 11 questions in this section.

NOTE ON THE FOLLOWING ROUTES:

If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes are exactly the same distance). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.) For more descriptions of bicycle facility types (e.g., "separate

path"), click here.

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Route 2 Narrow (10'-12') auto lane There is a stop sign every 1/2-mile (about 4 blocks) No red lights

Which route would you choose?

Route 1 Route 2

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Route 3 Bike lane There is a stop sign every 1/2-mile (about 4 blocks) 4 red lights

Which route would you choose?

Route 1 Route 3

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Route 4 Separate path There is a stop sign every 1/2-mile (about 4 blocks) 5 red lights Which route would you choose?

Route 1 Route 4

Route 4	
Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Which route would you choose?	****** Route 5 Narrow (10'-12') auto lane There is a stop sign every mile (about 8 blocks) 2 red lights
Route 1 Route 5	
Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Which route would you choose?	****** Route 6 Wide (14') right-hand lane There is a stop sign every mile (about 8 blocks) 5 red lights
Route 1 Route 6	
******	****
Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights	Route 7 Bike lane There is a stop sign every mile (about 8 blocks) 4 red lights
Which route would you choose?	
Route 1 Route 7	

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights	Route 8 Separate path There is a stop sign every mile (about 8 blocks) 5 red lights
Which route would you choose?	
Route 1 Route 8	
***************************************	*****
Route 1	Route 9

There is a stop sign every 1/4-mile (about 2 blocks)

Narrow (10'-12') auto lane

No red lights

Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights

Which route would you choose?

Route 1 Route 9

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Route 10 Wide (14') right-hand lane There is a stop sign every 1/4-mile (about 2 blocks) 1 red light

Which route would you choose?

Route 1

Route 10

Route 1 Wide (14') right-hand lane There is a stop sign every 1/2-mile (about 4 blocks) 3 red lights Route 11 Bike lane There is a stop sign every 1/4-mile (about 2 blocks) 3 red lights

Which route would you choose?

Route 1

Route 11

Route 1	Route 12
Wide (14') right-hand lane	Separate path
There is a stop sign every 1/2-mile (about 4 blocks)	There is a stop sign every 1/4-mile (about 2 blocks)
3 red lights	3 red lights

Which route would you choose?

Route 1 Route 12

Survey 6, Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base alternative. For each question, please tell us which of the two routes you would probably take.

There are 16 questions in this section.

OTHER FEATURES OF THE FOLLOWING ROUTES:

If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes have the same number of stop signs). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.) At some point, you must cross a bridge to get to this imaginary new job. Riding conditions on each bridge are generally different from the rest of the route, therefore each bridge is briefly described. Note on Travel Time: The fastest possible way to bike to work takes 16 minutes. (This assumes a reasonable pace on flat ground, a slow pace uphill and a fast pace downhill, for an average travel speed of 12 mph, which is a typical speed for commuter cycling. If you know that you actually bicycle faster or slower, please humor us.) For

descriptions on street types (e.g., "minor arterial"), click here.

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 2

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Minor arterial Bridge with wide walkway/bikeway, separated from cars by a sturdy barrier Some very steep uphills Travel time: 20 minutes

Route 2

Route 3 Residential street Bridge with narrow sidewalk and narrow auto lanes Some moderate uphills Travel time: 24 minutes

Route 1

Route 3

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 4

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 5

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 6

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 7 Route 4 Residential street Bicyclist/pedestrian bridge (no autos allowed) Some moderate uphills Travel time: 24 minutes

Route 5 Residential street Bridge with wide walkway/bikeway, separated from cars by a sturdy barrier Some very steep uphills Travel time: 24 minutes

Route 6 Major arterial Bridge with narrow sidewalk and narrow auto lanes Flat - no hills Travel time: 20 minutes

Route 7 Minor arterial Bridge with bike lane Flat - no hills Travel time: 24 minutes

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 8

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 9

About halfway done!

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 10

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Bridge with narrow sidewalk and narrow auto lanes Flat - no hills Travel time: 30 minutes

Route 8

Residential street

Route 9 Minor arterial Bicyclist/pedestrian bridge (no autos allowed) Some very steep uphills Travel time: 16 minutes

Route 10 Major arterial Bicyclist/pedestrian bridge (no autos allowed) Some moderate uphills Travel time: 20 minutes

Route 11 Residential street Bridge with bike lane Some moderate uphills Travel time: 30 minutes

Route 1

Route 11

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 12

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 13

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 14

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 15 Route 12 Minor arterial Bicyclist/pedestrian bridge (no autos allowed) Flat - no hills Travel time: 30 minutes

Route 13 Major arterial Bridge with wide walkway/bikeway, separated from cars by a sturdy barrier Some very steep uphills Travel time: 16 minutes

Route 14 Major arterial Bridge with bike lane Some moderate uphills Travel time: 16 minutes

Route 15 Minor arterial Bridge with narrow sidewalk and narrow auto lanes Some very steep uphills Travel time: 16 minutes *********

Route 1 Minor arterial Bridge with bike lane

Some moderate uphills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 16

Route 1 Minor arterial Bridge with bike lane Some moderate uphills Travel time: 20 minutes Route 16 Minor arterial Bridge with wide walkway/bikeway, separated from cars by a sturdy barrier Flat - no hills Travel time: 30 minutes

Route 17 Major arterial Bicyclist/pedestrian bridge (no autos allowed) Flat - no hills Travel time: 20 minutes

Which route would you choose?

Route 1 Route 17

Survey 7, Section 3

This next section presents a series of questions asking you which route you would choose. Please take your time answering these questions -- they are the most important part of the survey. Thank you!

SECTION 3. Imagine that you have just begun a new job, and that you would like to commute by bicycle to this new job. There are many ways to get there, and you are exploring your options. Each question contains a description of some routes you could take to get to this new job. Imagine that the "base alternative" (Route 1) is always an option, and that you mentally compare each new route alternative to this base scenario. For each question, please tell us which of the two routes you would probably take.

There are 10 questions in this section.

OTHER FEATURES OF THE FOLLOWING ROUTES:

If a particular characteristic is not mentioned, assume that it is the same for each route (for example, assume that all routes are exactly the same distance, the same amount of automobile traffic, etc.). Therefore, you are being asked to consider ONLY the characteristics in the questions. (Other versions of the survey contain different characteristics; this helps keep the questions simple.)

Also, in order to get to this imaginary new job, you must cross a bridge. There are four bridges you could take; riding conditions on each

bridge are different from riding conditions on the rest of the route, therefore each bridge is briefly described. For more descriptions of pavement types and facility types (e.g., bike lanes), click here.

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 2

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 3

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 4

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes Route 5 Parallel parking is permitted Smooth pavement Wide (14') right-hand lane Bridge with narrow sidewalk and narrow auto lanes

Route 2 (no parking - route is a bike path) Rough pavement Separate path Bridge with narrow sidewalk and narrow auto lanes

Route 3 Parallel parking is permitted Smooth pavement Wide (14') right-hand lane Bridge with a wide walkway/bikeway, separated from cars by a sturdy barrier

Route 4 Parallel parking is permitted Smooth pavement Bike lane Bridge with bike lane

Which route would you choose?

Route 1 Route 5

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 6

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 7

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 8

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 9

Route 6 Parallel parking is permitted Smooth pavement Narrow (10'-12') auto lane Bridge with bike lane

Route 7 No parking is allowed Rough pavement Wide (14') right-hand lane Bridge with bike lane

Route 8 Parallel parking is permitted Rough pavement Wide (14') right-hand lane Bicyclist/pedestrian bridge (no autos allowed)

Route 9 No parking is allowed Rough pavement Bike lane Bridge with narrow sidewalk and narrow auto lanes Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 10

Route 1 No parking is allowed Smooth pavement Narrow (10'-12') auto lane Bridge with narrow sidewalk and narrow auto lanes Route 10 Parallel parking is permitted Rough pavement Bike lane Bridge with a wide walkway/bikeway, separated from cars by a sturdy barrier

Route 11 (no parking - route is a bike path) Smooth pavement Separate path Bridge with narrow sidewalk and narrow auto lanes

Which route would you choose?

Route 1 Route 11