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OFFICES OF RESEARCH AND DEVELOPMENT
ENVIRONMENTAL DIVISION
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16. Abstract

Appendixes to Final Report FHWA/RD-80/048.

DEPARTMENT OF TRANSPORTATION

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LIBRARY

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APPENDIX A - Tabulations of Survey Results - All Sites

## City of Austin




October 15, 1978

## Dear Resident of Austin:

The City of Austin is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your shopping and personal business trips only. We are interested in your opinion of the transportation services available to you for shopping and personal business trips. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800-328-2933.

Sincerely,


Carole Keeton McClellan Mayor

CKM: cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME FOR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS. PLEASE EXCLUDE ALL MAJOR GROCERY SHCPPING TRIPS.

1. What is the nearest intersection or street address of the place of your most recent shopping or personal business trip from home?

2. A list of specific shopping and oersonal business trip purposes is given below. piease check the one trip purpose that best describes your most recent shopping or personal business trip from home (exclude major grocery shopping trips). (CEECK CNE ONLY)
$33.3 \%($ ) Minor grocery shopping $8.0(\%)$ eat meal $4.3(\%$ other professional (one bag or less)
3.01 ) post office
6.5() bank

130() clothing/shoes
2.51 ) itbrary/museum
2.5( ) laundry/dry cieaner/shce refair
3.0 ( ) hardware/florist/iquor 3.8() medical/dentai 1.8() barber/beauty shop

NO ANSWER: 0 14.5() other
(placse specijy)
3. Other than the above stop, did you make any additional stops on the way to and from your shopping/ personal business destination? (CHECK ONE)
53.4 ( ) none (If you answered NONE, go to question 5.)

200 ( ) one
$10.8(\quad$ two
5.5 ( ) three or more

0,3 . NO ANSWER
4. Did any of the addttional stops between your home and your primary shopping/personal business cestination require you to travel more than one mile out of the way?
108 ( ) Yes
35.5 ( ) No
NO ADDL.STOP/NO ANSWER: 53.7
5. Approximately how far was it directly from your home to your primary shopping/personal business destination (one way)?
7.8() 2 biocks (ty mile or less) 19.3() 2 to 4 miles
22.0 () 3 to 6 biocks ( $\frac{2}{4}$ to $\frac{1}{2}$ mile)
8.0 ( ) 4 to 6 miles
20.5()$\frac{1}{2}$ to 1 mile
4.8() 6 to 10 miles
15.8() 1 to 2 miles
1.5() over 10 miles
0.3 NO ANSWER
6. How many separate parcels, bags or packages were you carrying? (CIECK ONE)
$18.0(\%)$ none
46.6() one
24.31 ) two 10.8()
three or more
0.3 NO ANSWERS
7. How many persons (other than yourself) were with you on this shopoing or personal business trip?
total $\qquad$ (number)

Children 12 years of age and under $\qquad$ (number)
MEAN: 0.7/
MEAN: 0.62
8. Where is this place where you went shopping or on personal business located?
58.81 ) central city
39.0 ( ) suburban NO ANSWER:
2.2
9. Specify the type of area where you went on your shopping/personal business trip. (CRECK ONE)

## $9.8 /(-)$ central business district <br> (downtown metropolitan area)

$24.5 /(23) 3$ neighborhood business district Or shopping center
4.3/i6.5 regional shopping center
$2.3 / 1 / .8$ office park/professional building
$16.3 / 3, g$ college campus
$2.5 /\left(3.0\right.$ other $-\frac{}{\text { (please specify) }}$
$\because \because 3 \because$ NO ANSWER
10. What was the date of this most recent trip? VARIES
(montin(díy)
11. At approximately what time of day did you make this trip to your shopping/personal business destination?
$6.3(1)$ before $7^{9}$ am.
( ) Z (an)
() (
$31,8() 9$ am. to 2 Rim.

12. How did you make the trip to this shopping/personal business destination? (CAECK ORE)
23.3 ( ) walked all the way
55.3 ( ) drove a car
9.01 ) passenger in a car

न.万-1 ; Hus
train, subway
0.3 ( ) motorcycle
5.5 ( ) bicycle

- ( ) moped (motorized bicycle)
0.8 ( ) taxi
0.3 () other
(pizase specify)
- NO ANSWER
$\rightarrow$ 12a. If you used a bus or transit, how did you get to your bus or transit step?
- ( ) bicycle - ( i drove and parked
- ( ) taxi - ( ) passenger in a car
$5.5(1)$ walk
- ( ) other $\qquad$

NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT SHOPPING OR PERSONAL BUSINESS TRIP WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following options were availabie to you on your most recent shopping or personal business trip: CAR (driving ow riding), BUS (or transit), WALK, and BICYCLE. For the above trip, we would like to learn how you feel about each means of transportation. Please give us your ooinion of each means of transportation even ir you never used it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an "x" in the space that best indicates your agrement. with the statements under each means of transportation you are rating.

For examele, consider the following statement for bus:

|  | Strondily Aoree | Adree | Neither Adree Nor Disagree | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I enjoy travelino to my shopoing or personal business destination by bus. | $(1)$ | $(x)$ | () | () | $1)$ | business destination by bus.

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending upon how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you netther agree nor disagree, you would place an "X" in the center box. In the example shown here, an "x" nas been placed in the box under agree, indicating this oerson enjoys traveilina by bus.

Eecause we need to understona how your rating of your shopping or personal business triv varies .rom one means of iransportation to another, we are asking that you go tirrough the list of characteristiss sour times, once ict each manns of travel (waik, bicycle, car, and bus). Although this process migit mopear reectitious, we want to stress that your carefui rainges or aiz the statements on the remt "our yages sere especiaily inportent to the success of inis survey.

Was your most recent shopping or personal business destination located less than 2 miles From your home?
$63.7 \%$ ) Yes

$$
\begin{aligned}
& \text { "A jour answer is TES, please nave the statements } \\
& \text { benin concetring now you would feel about waiting } \\
& \text { to this destination even if you did no walk } \\
& \text { there on your last trip. }
\end{aligned}
$$

1. Walking to this destination is pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands when walking.
3. I can pick up and go anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this shopping/personal business destination is tiring.
5. Walking to my shopping/personal business destination is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenient to walk.
7. I cannot rely on walking to this destination in rainy weather.
8. I can easily carry packages when I walk while I am on a shopping/personal business trip.
9. It is uncomfortable to walk to this destination because of rough and bumpy walking surfaces.
10. I can get to my shopping/personal business destination quickly ween I walk.
11. I worry about being mugged or assaulted when I walk to my shopping/perscnal business destination.
12. I worry about being injured in an accident when I walk to my shopoing/personal business destination.
13. It is relaxing to walk to my shopping/personal business destination.
14. I dislike walking to this shopping/personal business destination because of the many delays at intersections.
15. Walking to this shopoing/personal bus. destination is unsa due to lack of pathways separated from motorized traffic.
16. Walking to this shopping/personal bus. destination is danserous because motorists are inconsiderate of pedestrians.
17. 'When walking to this shopping/personal bus. destination, I worry about perspiring or soiling my clothes.
18. Walking to this shopping/personal business destination gives healthful exercise.
36.31 ) No

If your answer is .iC, Eieace go on to the neat page.

Strongly
Neither Agree Agree Agree Nor Disagree Strongly No
$23.5(\%) 3.41) 18.41) 8.6(13.1()$ -

$5.5(1) 22 d) 165145.0110 .610 .4$ 12.9() 28.8() $33.8) 17.6(5 . \pi) 0.8$ $20.8(146.3(1) 6 . \pi) 23.1(12 . \pi) 0.4$
5.1( ) 32 ( ) $133(133.3(10.2(1)-$
$2.0(15 . \pi) 13.7) 53.3114 .9(10.4$
$6.7(133.3(14.9(34.51)(0.21) 0.2$
$2.7(16.1() 16.9) 44.7(19.2(1) 0.4$
1.2()$(5.3(18.0() 49.81)(5.3(1) 0.4$
14.5() $47.5) 18.4(15.3() 3.91 ; 0.4$

- ( ) 12,51 ) $18.0($ ) 56.4 ) $12,5(1) 0.4$
fe $2.7($ ) $20.8($ ) $14.5(49.5) 12.5(1)-$ 10.6() $28.8) 20.8() 34.5: 5.9()$
3.9() 18.8() $19.2)$ 的 ( ) $11.4(1)-$ 42.4 ) $50.8: 2.7,3 . \pi$ : $0.81: 0.4$


## YOUR RATING OF CAR

When using a car，are you usually a：
ごてした。 car oriver 27.8 （ ）car passenger

$$
\begin{aligned}
& \text { sทorirn or perscnaこ business trio, rate } \\
& \text { the stejements beicu concerning how wow }
\end{aligned}
$$

wound fee avow：driving on this trip．
Dizase answer ait questions below，ever it you co rot our a cur．
－raveling by car to this shopoing／personal business destination（） is pleasant because I can enjoy the scenery and surroundings． 5,8

2．When shooping or on a personal business trip，it is conven－ lent to stoo and do errands when traveling by car．

3．I can Dick wo and 00 anytime I like when ？travel by car on shopping or on personal business trips．

4．Traveling by ear to this shopping／personal business destination is tiring．

5．iraveiting by car to my shopping／oersonal business destination is cerigerous because of the heavy traffic．

6．Weer or a shoocing／oersona？business trip with children， t：is incspevenient to go by car．

7．I cannot rely on traveling by car to this destination in rainy weather．

8．I can easily carry packages when I travel by car while ！am on a shopping̣／personal business trip．

9．It is uncomfortable to travel by car to this shopping／personal business destination because of rough or bumpy road surfaces．

10．I can et to my shopping／personal business destination quickly when I travel by car．

11．：worry about being mugged or assaulted when ：travel by car to my shopping／Dersonal business destination．
12．I worry about being injured in an accident when I trave by car to my shopping／personal business destination．

13．It is relaxing to travel by car to my shopping／personal business destination．

14．I dislike traveling by car to this shopping／personal business destination because of the many delays at intersections．

15．Parking the car at this destination is expensive．

16．After oarking the car，？must walk a long distance when I go to this shopping／personal business destination．
if．I worry about the ear being stolen or vandalized at this destination．

18．：is in inexpensive to buy and operate a car．

19．Parking the car is no trouble when on this shopping／ personal business trip．

| Strongly |
| :---: |
| Acre |

Neither
Gore Nor Disaorge Disacres

35.8
（4．8

$5 \cdot 5$
19.0
（）
22.3
（ ） 30.0
1.5


45,5
（） 2,5
$(1)$
$=3.8$
1.1
0.5
1.8
3.8
1.1
6.8
1.
4.0
，
1.3
（ ）
5.0

1 ）

## YOUR RATING OF BICYCLE

Was your most recent shopping or personal business destination located less than 4 miles from your home?
81.2 ( ) yes

If your answer is res, please rate the statements
beicu concerning hov you would lei about íteuclira
to your shopping er personal business destination,
oven if you don't own a bicycle or diun't mice a
bicycis or your last trip to this destination.

$$
\begin{aligned}
& 18.8 \text { ( ) No } \\
& \text { =f jour tarsier is :x, Eiease go to the } \\
& \text { nest page. }
\end{aligned}
$$



1. Bicycling to this shopping/personal business destination is
pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands, when riding a bicycle.
3. I can pick up and go anytime I like when I ride a bicycle to go shopping or on personal business trips.
4. Riding a bicycle to this shopping/personal business destination is tiring.
5. Riding a bicycle to my shooping/personal business destination is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenient to ride the bicycle.
7. I cannot rely on riding a bicycle to this destination in rainy weather.
8. I can easily carry packages when I ride a bicycle while I an on a shopping/personal business trip.
9. It is uncomfortable to travel to this destination by bicycle because of rough or bumpy riding surfaces.
10. I can get to my shooping/personal business destination quickly, when I ride a bicycle.
11. I worry about being mugged or assaulted when I ride a bicycle to my shopping/personal business destination.
12. I worry about being injured in an accident when I ride a bicycle to my shopping/personal business destination.
13. It is relaxing to ride by bicycle to my shopping/personal business destination.
14. I dislike traveling by bicycle to this shopping/personal bus. destination because of many delays at intersections.
15. Bicycling to this shopping/personal bus. destination is unsafe ( ) due to lack of bike paths separated from motorized traffic. 30,8
16. Going by bicycle to this destination is dangerous because motorists are inconsiderate of bicyclists.
17. when bicycling to this shopping/oersoral business destination I worry about perspiring or soiling my clothes.
18. Riding a bicycle gives healthful exercise.
$\left.24.9^{( }\right) 38.7() 23.7(10.2(20.21) 0.3$
ion. $\left.\left.y^{( }\right) 28.6^{(1)} 23.1^{(1)} 3 \sqrt{1} 16.81\right) 0.3$ $54.8(1)-41.8(2.21)-1) 0.9(10.3$
19. Parking, locking and unlocking my bicycle at this 14.51 ) 41.21 ) 116.9 ) 20.91 ) 7.11 ; 0.2 destination is no trouble.
20. I worry about my bicycle being stolen at this shopping/ personal business destination.
21. It is inexpensive to buy and operate a bicycle.
$9.8,38.2$
$13.51, \sqrt{5} 1$ $551,26.51,18.5(138.7,10.211$ $25.2(142.2(13.2(16.6(1) 2.5(1)$ $37.2(139.1(14.8(14.6(1) 3.7(1)$ $29.8(199.5(16.2() 7.4) 1.81)$ $2.5(1) 13.5(1816() 52.0(123.1) 0.3$ 4.3() $27.1(24.6) 37.9) 5.5(1) 0.6$ $11.1(1) 47.7(13.5(1) 22.5) 4.9(1)$ 0.3 $0.9,8.9() 21.8(, 50.8) 16.9(1) 0.9$ $15.4(141.0() 16.0(121.8(15.5() 0.3$ $8.0(135.4$ ) 255 ( 26.21) 4.6( ) 0.3 $3.4(18.8) 24.3() 45 .(\mathbb{1}) 8.0(10.6$ $26.9112 .01) 17.8(12.2(1) 0.3$ 2.4. ( 23.0 () 12.81 ) $10.2(12.21$

## YOUR RATING OF BUS (or transit)

Is bus service available between your home and this shopping or personal business destination?
$\left.=7.2(7)_{3}\right)$ res

$$
\begin{aligned}
& t=\text { inis des ination by ous even } \hat{j}_{5}^{-5} \text { 上ou dicin't } \\
& \text { choose ous on your last frip. } \\
& \text { ons on you last }
\end{aligned}
$$

42.8 (\%) No

$$
\begin{aligned}
& \text { I: your ansier is :O, Fiease } ₹ 0 \text { on } \\
& \text { to the nexicac. }
\end{aligned}
$$

Neither
Agree Nor Strongly Disagree Disacree
. Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands when traveling by bus.
3. I must schedule my trips in advance when I travel by bus to go shopping or on personal business trips
4. Traveling by bus to this shopping/personal business destination is tiring.
5. Traveling by bus to my shopping/personal business destination - ( ) 5.7()14.8( )60.7( ) 18.81 ) is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenient to take the bus.
7. I cannot rely on taking a bus to this destination in rainy weather.
8. I can easily carry packages when I travel by bus while I am on a shopping/personal busfiness trip.
9. It is uncomfortable to travel to this destination by bus 'ecause of rough or bumpy road surfaces.
10. I can g̈et to my shopping/personal business destination quickly when I travel by bus.
11. I worry about being mugged or assaulted when I travel by bus to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by bus to my shopping/personal business destination.
13. It is relaxing to travel by bus to my shopping/personal business destination.
14. I dislike traveling by bus to this shopping/personal bus. destination because of the many delays at intersections.
15. I must walk a long distance to get to and from the bus when $5.2(1 / 9.21) 17.01145 .57112 .2110 .9$ I go to this shopping/personal business destination.
16. There is generally a long wait invoived when I travel by 17.51 ) 34.11 ) 26.6( ) 19.7( ) 1.7 ( 0.4 bus to this shopping/personal business destination.
17. When traveling by bus to this shopping/personal business $1.3(10.51$ ) 17.51 ) 56.31 )/4.01 0.4 destination I worry about perspiring or solling my clothes.
 business location.

WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPING/ PERSONAL BUSINESS TRIPS.
i. Imagine that orly SUS, Wi 'LK BICYCLE, and CAR (driver or passencer) were available for your most recent shoppincicersona business trip. These alternatives are listed below. Please indicate your preference by placing a "1" next to the alternative you prefer the most, a "2" next $=0$ your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. (If bus service was not available for your shopping/Fersonal business trig, lease rank the three remainirg alternatives.)
$\frac{\text { RANKED } 1}{4.8(1) \text { bus }}$
18.8() walk
13.5 ( ) bicycle
62.2 ( ) car (driver or passenger)

| RANKED 2 |
| ---: |
| 24.5 |
| 20.0 |
| 36.4 |
| 15.5 |
| or passenger) |

$\frac{\text { RANKED } 3}{15.3} \frac{\text { RANEED 4 }}{24.5}$
33.7
34.0

13,3
24.5
12.3
7.0
2. We would like to know how often you use each of the following means of travel for shopping/personal business trips from home. Place an $x$ under your best estimate of the number of days you have used each means of travel during the last 30 days.
bus

| Did loot | $1-5$ | $6-10$ | $11-15$ |  | $16-20$ |
| :---: | :---: | :---: | :---: | :---: | :---: | | More Tan |
| :---: |
| Use |

walk
() 62.3() $16.8(14.3(13.0(11.8() 6.85 .0$
( ) 20.5 ( 124.8() 13.0() $5.8(16.3$ ( 225.6 4.0
drive a car
passenger in car
bicycle
( ) 13.8 ( ) 16.8 ( ) 11.5 ( ) 12.3 ( $112.0(130.8 \quad 2.8$
() $16.8(1) 38.7() 14.3() 10.8() 6.3() 6.8 \quad 6.3$
() 67.5() 10.3() 6.3() 2.5() 2.8() 5.844 .3
other $\qquad$
$(1)-1) 2.3() 0.8() 0.5(10.8() 1.8-$
3. Assume that on your next shopping/personal business trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation preference by placing a "1" next to the alternative you would prefer the most, a "2" next to the one you would prefer second, a "3" next to your third choice, and a "4" next to your least-preferred alternative. Please repeat for each of the price levels (a) through ( $d$ ) below. If bus semrice is rot available for your Shopping/eersonat business trip, Please rank the three remaining atrematives.)


WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DO PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

## 

1. If you were to ride your bicycle to your shooping/personal business destination, what is your best estimate of the time you would spend doing the following?
getting the bicycle to the street $\qquad$ (minutes) riding the bicycle $\qquad$ (minutes)
parking and locking up the bicycle $\qquad$ (minutes) walking from bicycle to destination TOTAL TIME FROM HOME TO DESTINATION
$\qquad$ (minutes)
19.8 (minutes
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.
4.8 (\%) bicycle path (off the street)?
35.1 ( ) bicycle lane (on the street) $\} 3.0$ both
34.8 () neither
$11.8($ don't know Note: $10.5 \%$ of trips were more than 4 miles
3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?
30.0 (\%) none
18.8() less than $1 / 4$ the distance
13.8 ( ) $1 / 4$ to $1 / 2$ the distance
\$0. ( ) 1/2 to $3 / 4$ the distance
8,3 ( ) more than $3 / 4$ of the distance
13.8 ( ) don't know

## ANSWER IF DISTANCE FROM ROME TO SEOPDIMG/PERSONAL BUSINESS DESTINATION IS 2 MILES OR LESS.

4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopping/personal business destination? 20.1 (minutes)
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to your shopping/personal business destination?
48.2() all or almost all the way
$22.0($ ) part of the way
2.O( ) there are none
2.01 ) don't know



getting so the bus stco
waiting for the bus
riding on the jus
walking from jus to destination

TOTAL TIME FROM HOME TO NEJT：IATICN

## 5.1 （minutes

12.6 （minutes）
12.1 （minutes）
（Average values）
4.3 （minutes）
34.1 （minutes）

7．Is it necessary to change buses to travel from jour home to your snooping，personal business destination？

17．2 1\％yes
46.41 ； 10

Bus service not availaldo： $32.3 \%$

## 3．5 Don＇t know

8．Out of ten trips，how often would you expect to have a seat on the bus ail the way from home to your shopping／Dersonal business destination？
8.5 times out az ten
（mean value）

9．What is the one－way bus fare on jour trip from nome to your shopoing／personal business destineticn？
0.17 cents
（mean）
（）don＇$\ddagger$ know

10．If you were to go by car to your snooping／oersonal business destination，what is your best estimate of the time you would spence cong each of the following？


TOTAL TIME FROM LOME TO DESTIIAT：C．N
15.1
（minutes）
ii．＇What is the parking cos：on your tr：from home to your sroeoinç／zersonal business destination？


$$
\begin{aligned}
& \text {-6 ごarミe } \\
& \text { sally charge ill In!lam: Neon } \\
& \begin{array}{l}
\text { ( ) нeeki/ єnarse - (soiiars) } \\
\text { ( ) months! marge - (soliars) }
\end{array}
\end{aligned}
$$

## NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
$60.0(\%)$ Yes
40.O( ) NO (IF "NO", GO TO NEXT PAGE.)
2. Did you ride a bicycle during the last month?

331 , yes ( $40 \%$ did not ride during the year) 27.d ) No (IF "NO", GO TO NEN PAGE.)
3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an " $X$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through " $h$ " below) during the last 30 days.

| Did Not | $1-5$ | $6-10$ | $11-15$ | $16-20$ |
| :--- | :--- | :--- | :--- | :--- |
| Use | Days | Days | Days | Days |

More Than No
20 Days Answer
a. To work 20.81 ( 2.81 1.01 $1.0(1.31) 4.31$ ) 2.0
b. To school $16.7(13.1(12.7(10.41) 1.2(1) 3.5(1)$
c. For personal business $7.5(10.8(1)$
6.5()
$3.3(1.81)$
$2.01)$
113
d. To visit friends $\quad 11.81$ ( 13.81 ) 3.01 ) 201 $0.8(1.31)$
e. To go shopping $11.5 i$ ) 11,31 , 5,31 , 2,31 $0,8(1,01)$
1.0
f. To a recreational activitylo.3) $12.2,5.01,2.31,1.31,2.01$ )
g. Neighborhood riding
$8.3(15,5(4,5(1) 5(1) 0,5(1) 2,3(1)$
h. Long distance riding
24.51
$6.3(10.5(1)$
$0.31)-11$
0.511
( $67 \%$ aid not bicycle during month)
is your selected shooding or personal business destination located less than 4 miles away
from your here?

## 73.0\%.( ) tes

If your ensie is vES, piacee reci jeion.

If your arswer is io, こiease jo or to page 15.

NOW WE WOULD LIKE TC LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Sudpose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicyele paths, (2) reserving street lanes for blcycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lignting.

On most local streets, a yellow strioe is painted near the right-hand side of the road marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycie paths are separated from automobile traffic by a metal guardrail or a grass median. All these Daths and street lanes are smoothly paved for better riding. In addition, high-intensity lights are added along the bikeways to provide excellent vistbility at night. A large number of secure bike lcck-up facilities are provided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made freely available.



```
L上ve are nucitaje :0 %on on your ne=# snop!ing or personal jusinesg trio. (You witi note that jie
```



```
how jou jee! coout bicycie-reizvez immrovemerts.
```


 the preごious paきe．
ie：ther
Aoree Acree jisacree Jisagree Eijacree
？．Bicycling to this sricpping／personal bus．destination would ve $\overline{25!} ; 43 . \overline{6}() 21.81$ ） $4.6(; 0.6()$ pleasant because I could enjoy the scenery and strroundinas．
2．When shopoing or on a personal business trip，it would be $17.3!$ ）53．2，10．9（i／7．3（）1．3！）－ corverient to stop and do errancs wher riding a bicycle
 or shopoing or on Derscnal business trios．
4．Rising a bicycle to this shodping／oersonal business $\quad 26() 20.5!$ ） 16.0()$\leq 13!20.6()-$ ces：ination would be tiring．

6．When on my shopcing／personal business trip with children，I 1.91 ） $12.8(1) 25.6$ ： $41.8(1 \% 9()-$ would find it convenient to ride the bicycle．
7．i could not rely on riding a ticycie in rainy weather． 15.4() 56.41 ） 11.51 ） $14.1($ ） 2.6 （ ）－
 ：ar on a snopoing／personsi business trio．
〔．：t would oe uncomfortable to travel to this destination 1.3() 451$) 9.6(160.3: 1=3.7$ ； 0.6 Ev sicycle because of rougn or bumpy riding surfaces．
10．：coile c̣：to my shopping／personal business destination 15.4() $59.6(1) 0.3() / 4.71$（ -1 ） Gu：skiy when I ride a bicycle．
${ }^{\prime}$＇．：wolld worry about being mugged or assaulted when 1 ride $1.3($ ） 5.1 （ ）／5．4（ ）63．5（ ）／4．7（）－ a zicycle to my shopping／Dersonal business destination．
i2．：wculd worry about being injured in an accident when i 1.91 ）10．31 ）9．01 ；6281 ；16．01 ；－ ride a ticycle to my snovping／personal bus．destination．
i3．$:$ would be relaxing to ride by ticycie to my shopoinal $14.7($ ） 50.6()$/ 6.71) 15.4() 1.3(1)$ zersonal business destination．
12．：would dislike bicycling to this shopping／personai bus． $1.3(1 / 2.8() / 6.0(162.2(1771)$－ destination because of many delays at intersections．
$i \equiv$ ．Bicyc？inc to this shopping／Dersonal bus．destination would be ${ }^{2.6}(, 5.1() 10.3() 48.7!) 31.4!; 1.9$ unsafe due to lack of bike oaths separated from motor traffic．
i6．Sicycling to this shopoing／personal business destination would $\mathbf{L}^{\prime}() 12.2(17.9() 50.7() 13.51$ ） 2.10 be dangerous because motorist are inconsiderate of bikers．
$i 7$ ．When bicycling to this destination，I would worry about cersoiring or soiling my clotnes．
if．Ricing a bicycle would give heaithful exercise．
$1.31 ; 17.9() 14.7() 57.2() 8.3($ ic．E
47.4() 48.1() $2.2(1.3()-1)-$
：c．Da－kinc，iocking and urlocking my bicycle would be rio＝roubie．
2．：weuid worry about my bizvele deine stoien at this srcoeing／bersona！business destination．
$\because: \quad \therefore$ wou：$=$ oe inexpersive ic tuy and operate a bieycle．



YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.
16.0 ( ) car (driver or passenger)
$\begin{aligned} & \text { ness trip to the same destination. } \\ & \text { RANK } 3 \\ & 18.6\end{aligned} \frac{\text { RANK } 4}{4.5}$
$37.2 \quad 21.8$
b. Now assume the same condition as (a) above, except that the price of gasoline has increased to $\$ 1.50$ per gallon (please rank again).
37.2
( ) bicycle with improved facilities
12.8
4.5
3.8
21.2
28.7
( ) walk
27.6
19.9

2,6
7.1
14.1
() bus/transit
16.0
( ) car (driver or passenger)
27.6
21.8
28.2
23.7
3.2
c. Suppose that the bicycle facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon (please rank again).
53.3
28.8
( ) bicycle with improved facilities
9.6 4.5
3.8
( ) walk
17.3
29.5
39.1
16.0
2.6
14.1 ( ) bus/transti
12.2
( ) car (driver or passenger)
14.1
34.6
30.8
4.5
2. If only the alsematives listed below were available for your next 10 shopping or personal business trips, how many of the 10 trips would you make using each alternative? (mirive tine rambler $0_{j}^{*}$ trips in the $b c=$ neat to each alternative. )
2.9 ( ) bicycle with improved facilities
2.3 () walk
0.8 () bus/transit
4.0 ( ) car (driver or passenger)
(10) TOTAL TRIPS
(Mean values)
(IO) Total Trips

## LIVING NEARER TC TRAVEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and higtiway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of employment, shopping, school, and recreation.

Some communities have been desioned with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips san be accommodated witnin a six-block ( $1 / 2$ mile) distance and most work trips are within two miles of home.

Suppose you live or moved to one such community. Sucpose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to all shopping and personal business destinations without having to cross st-eets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is available; and there are no special restrictions on the use of automobiles.

Now, piease turn to the following pages and empress how this compant land-use arrangement voulc affect the way you feei about using WALK, BICYCLE, SUS, or CAR for your shopping or fersoral business trip.

YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.
:. Flease indicate your agreement or aisaçreement with the following statement:

2. Flease indicate your freterence or each of the foilcwing transportation alternatives on your shopping or personal business trip by placing a " 1 " next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement descmibed abcve. (Placse repect the process for each stavemer: (a) througn (i) below.)
a. Assume the living conditions and special transportation facilities describes on the previcus page exist for your next shopping or personal business trip, and assume further that your trip is approximateiy $1 / 2 \mathrm{mile}(5$ blocks) in length. (PZanze nani tine :othowing mears of transportation.

$$
\begin{aligned}
& \text { ( ) walk } \frac{1}{43.0 \quad 39.0 \quad 9.5} 5.0(\text {, bus or transit } \\
& \begin{array}{cccc}
1 & 2 & 3 & 4 \\
\hline 1.0 & 9.0 & 38.5 & 46.0
\end{array} \\
& \text { ( ) bicycle } 38.540 .0 \quad 10.06 .5 \text { ( ) car (driver or passenger) } 16.0 \quad 6.5 \quad 36.0 \quad 37.0
\end{aligned}
$$

b. Now suppose that in addition to the conditions described in (a) above the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank the following mecms of tronsportction.)
( ) walk $46.039 .0 \quad 5.56 .01$ ) bus or transit
( ) bicycle $41.039 .59 .05 .5($ ) car (driver or passenger) $7.5 \quad 7.0 \quad 23.5 \quad 56.5$
c. Assume the conditions descriced in (a) above and assume that in additicn the speed limit was reduced to 15 m.p.h. in the cormunity. (Please rarix the joi?owir.g mecris 0: transportation.)

| ( ) walk 47.0 | 40.0 | 5.54 .51 ) bus or transit | 3.5 | 6.0 | 52.0 | 27.5 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $($ ) bicycle 41.0 | 40.5 | 8.5 | 5.0() car (driver or passenger) | 7.0 | 3.0 | 27.0 | 57.0 |

2. Assume açain cenditions descrioed in (a; abcve but this time assume no farking was available at four snocping or perscral business destination. Ēecse max the

( ; walk $52.538 .0 \quad 3.03 .01$; bus or transit.
( ) bicycle 36.544 .012 .02 .0 ( ) car (driver or passenger:
$5.5 \quad 10.0 \quad 605==$
$3.5 \quad-2.5 \quad 11.5=0$

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORPANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL $8 E$ KEPT CONFIDENTIAL.

1. How old are you? $\left.\frac{28.7}{(50.2 \%} \begin{array}{l}\text { Mean } \\ \text { 2. What is your sex? }(), ~ M a l e\end{array}\right)\left(\begin{array}{l}49.8 \% \\ () \text { Female }\end{array}\right.$
2. How many adults (18 or over), including yourself, are there in your household? 2. 2 Mean.
3. How many minors (under 18) are there in your household? 1.0 Mean

$$
91.2 \% \quad 8.5
$$

5. Do you have a valid driver's license? ( ) Yes ( ) No ANS = 0, $3 \%$
6. How many licensed drivers (including yourself) are there in your household?
7. How many automobiles are there in your household? 1.6 mam
8. Do you own a bicycle? ( $49.5 \%$ yes $\quad 50.5$
9. How many bicycles are there in your household? 1.5 mean
10. What type of structure do you live in?

11. What is your educational background? (CRECK ONE)

| 1.0 ( completed elementary school | 22.3() college or technical school graduate |  |
| :--- | :--- | :--- |
| 1.5() some high school | 17.31 ) some graduate school |  |
| 6.3() high school graduate | $13.31)$ completed graduate degree (s) |  |
| 38.01 ) some college or technical school | 0.3 | NO ANS. |

12. Please indicate your work group below:
44.9 (\% work 5 or more days a week $5.5($ ) work 1-2 days a week
12.0() work $3-4$ days a week 35.8() presently not employed
1.8 NO ANS,
13. What is your occupation? (CHEC: ONE)
29.3 (\% arofessional-technica)
4.5() managerial
10.0() blue collar 4.5() House wife

$$
29.8(\text { ) student } \quad \text { NO } A N \leq,=3.0 \%
$$

2.3 () sales work ar
$10.5($ ) secretarial-clerical-cashier
2.0! ) other $\qquad$
14. How many workers are in your household? 1.6 (mean)
15. Please check the category winch includes your approximate family income before taxes.

$$
\begin{aligned}
& \text { 28,3 (\% s5,000 and under } \\
& \text { 4.0() } \$ 15,001 \text { - } 517,500 \\
& \text { 15.5 () } 55,001-57.500 \\
& 3.8 \text { () } 517,501 \text { - } 520,000 \\
& 12.3 \text { ( ) 57,501 - } 510,000 \\
& \text { 6. } 3 \text { () 520,001-525,000 } \\
& \text { 5.5 () \$10,001-512,500 } \\
& \text { 5.0 () \$12,501-515,000 } \\
& 9.0 \text { () } \$ 25,001-550,000 \\
& 4.5 \text { () Over } 550,000 \\
& 5.8 \text { NO ANSWER }
\end{aligned}
$$

In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.

Is your shopping or personal business destination located less than 2 miles from your home?

```
\(69.5(\%)\) yes
    If joum answer is YES, piease nead beiow.
```

```
30,5 ( ) No
    \(\because\) your nnswer is ic, piecse \(y=~=0\)
    Gave I5.
```


#### Abstract

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TC PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINAIION USING THE NEW FACILITIES.


## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities desigred to increase the comfort and safety of pedestrians. The improvements consist of (l) providing pedestrian pathways, (2) fmsroving sidewalks, (3) providing better lighting, and (4) making traffic signals more pedestrianoriented.

Separate pedestrlanways or walkways are built adjacent to all major roadways. These pathways are separated from automoblle traffic by trees or grass median. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All extsting sfdewalks are repaired to make walking easier. Highintensfty lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches, and pedestrian-oriented stands with flowers, newspapers and refreshments.

Zos are now asked to express your agreement or airsagreement with the following statements ajout waikir. $=0$ jour shocoing or Dersmal ousiness destination, assuming the facility improvements described above are
 is the sare as that used ecriies. The purpose of this last ratirg is to find out how you fee: iscut ine peciestricn-reiated improvements. )

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS





1. nelking to a shopping/personai business destiration would be fleasani because i could enioy the scenery and surroundinos.
2. Wher shooping or on a personal business irip, it would be ecnvenient to stce and co errands when walking.

ミ. I could pick up and go anytime ! like when I weik to go shopping or on personai business trips.
4. Walking to this shopping/personal business destinaticri would be tiring.
5. Walking to my shopping/personal business destination would be dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it would be inconvenient to walk.
7. I could not reiy on walking to this destination in rainy weather.
\&. : could easily carry packages when I walk while: am on a shopping/personal business trip.
9. It would be uncomfortable to walk to this oestination because of rough or bumpy waiking surfaces.
10. I could get to my shopping/personal business destination quickly when I walk.
11. I would worry about being mugged or assauited when I walk io my shopping,'personal business destination.
12. I would worry about being injured in an acciderit when I walk to my shopping/personal business destination.
13. It would be relaxing to walk to my shopping/personai business destination.
14. I would dislike walkino to this destination because of the many delays at intersections.
15. Walking to my destination would be unsafe because of the lack of pathways that are separated from motorized traffic.
16. Waiking to a shopping/personal business destination would be dangerous because rotorists are inconsiderate of peoestrians.
17. When walking to this oestination 1 would worry about perspiring or soiling my clothes.
12. Walking wouic give healtriful exercise.

| Strengly Agree | Aoree | Neither Agree Nor Cisagre: | Disaoree | Strongiy Disaaree |
| :---: | :---: | :---: | :---: | :---: |
| ( ) | 1 ) | ( ) | ( j | ( ) |
| ( ) | ( ) | ( ) | ( ) | 1 |
| ( ) | $1)$ | 1 ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | 1 ; | ( ) | () | ( ) |
| ( ) | ( ) | $($ ) | ( ) | ( ) |
| 1 ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | 1 ; |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | 1 ) | ( ) |
| 1 ; | ( ) | ( ) | ( ) | 1 i |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| 1 ) | ( ) | 1 ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | $1)$ | 1 ) |
| ( ) | 1 ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | () | 1 ! |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | 1 ; | ( ) | 1 ; | 1 ) |

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please incicate your preference for the following alternative means of travel for your nex shopping or personal business trip by placing a "I" nex* to the eiternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a " 4 " nex: to your leas: preferred alternative. Please repeat the process for each statement (a) through (c) below. (I: bus semice is nct cuai=aibe bezweer. jour home ari your shcpping on persona? busiress destirctior, roni the tnree remairirg aitermatives.)
a. Assume the walk facilities are in place. Please rank the following means of travel for

b. Now assume the same condition (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Piecse rank accir.)
37.3

25,2
8.6
27.3
( ) walk with improved facilities
31.7
20.9
40.3
18.0
8.6
25.2
31.0
7.9
2.2
( ) bicycie
15.1
23.0
( ) bus/transit
( ) car (driver or passenger)
to $\$ 3.00$ per galion. (Piecse rark.)
43.8
36.0
9.4
8.6
( ) walk with improved facilities
( ) bicycle

| 39.6 | 9.4 | 5.0 | 22 |
| :---: | :---: | :---: | :---: |
| 37.4 | 14.4 | 10.0 | 5.0 |
| 6.5 | 35.9 | 14.4 | 33.8 |
| 12.2 | 35.3 | 39.6 | 4.3 |

2. If only the alternatives listed below are available for your next ten shopping or personal business trips, how many of the ten trips would you make using each alternative? finive ine rumer $c_{0}^{n}=$ mips in tine $=c=n e=$ to eacis civerncivive.!
2.9 ( ) walk with improved facilities
1.6 ( ) bicycle
$0.8(1)$ busitrarsit
4.6 ( ) car (driver or passenger)
(10) TOTAL TRIPS

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning ( $7-9 \mathrm{a} . \mathrm{m}_{\mathrm{l}}$ ) and evening ( $4-6 \mathrm{p} . \mathrm{m}_{\mathrm{i}}$ ) rush hours. This means thet you would be charged up to a $\$ 2.00$ per day if you operate a motor vehicle during these peak travel Deriods. Billing would be made on a monthly basis using an automated billing process.

YOU HAVE JUST READ AN ASSUMED REGULATION FOR CAR USAGE．IMAGINE THAT THIS SITUATION FOR CAR USAGE EXISTS FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP．

1．Please indicate your agreement or disagreement with the following statements：


2．Please indicate your preference for each of the following transportation alternatives for your next： shopping or personal business trip by placing a＂1＂nest to the alternative you prefer the most，a ＂2＂next to your second most preferred alternative，a＂3＂next to your third most preferred alternative， and a＂4＂under your least preferred alternative．Please repeat this for each of the statements （a）through（c）below．（If bus semoice is not available for this shopping or personal business工官，Eiease rank the remaining three altematives only．）
a．Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect． Please rank the following means of transportation for your next shopping or personal

## 2 nNE 1

23.5 28.5 14.0 32.0 business trip．
（ ）walk
（ ）bicycle
（ ）bus or transit
（ ）car（driver or passenger）

32.5 28.5 19.0 16.5

RANK 3 21.0
25.0 27.0 22.0

| LANE 4 <br> 20.0 | $\left.\begin{array}{cc}\text { NO ANS } \\ 13.5 & 4.0 \\ 12.5 & 27.5 \\ 26.0 & 3.5\end{array}\right]$ |
| :---: | :---: | :---: |

b．Assume that instead of $\$ 2.00$ the congestion fee increased to $\$ 4.00$ per day．（Please rank again．）
（ ）bicycle
29.5 15.0 17.5
21.0
28.0
27.5
10.5

8,0
5.0
27.0

36,0
4.5
c．Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ per gallon．（Please rank．）
（ ）bus or transit
（ ）car（driver or passenger）
（ ）walk
（ ）bicycle
（）bus or transit
（ ）car（driver or passenger）
38,5
18.0
14.0

2,5
30.0
17.0
11.0
18.0
29.0
30.5
10.5
4.5
7.0
41.0

## City of Austin

Founded by Congress. Republic of Texas, 1839
Municipal Buildings. Eighth at Cokrado. PO. Box 1088, Austin. Texas 78767 Telephone $512 / 477$. 6511

October 15, 1978

## Dear Resident of Austin:

The City of Austin is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your school trips only. We are interested in your opinion of the transportation services available to you between your home and your school. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800-328-2933.

Sincerely,


Carole Keeton McClellan Mayor

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TO SCHOOL.

1. what is the nearest intersecition or street address of the place wnere fou go to schcoi?
$\frac{-}{\text { (nearest intersection or street aciress) }}$
2. Approximately how far is it from your home to your school (one way)?
B.5 (\% 2 blocks or less ( $1 / 4$ mile or less) $\quad 13.8$ ( ) 2 to 4 miles 28.8 ( ) 3 to 6 blocks ( $1 / 4$ to $1 / 2 \mathrm{mile}$ ) 10.5 ( ) 4 to 6 miles
24.8 ( ) $1 / 2$ to 1 mile
1.3 ( ) 6 to 10 miles
10.5() 1 to 2 miles
0.3 ( ) over 10 miles
1.5 No ANSWER
3. What was the date of your most recent trip to school?
4. At approximately what time of day did you make this trip to school?
$0.8(\%)$ before $7 \mathrm{a} . \mathrm{m}$.
23.0() $10 \mathrm{a} . \mathrm{m}$. to $2 \mathrm{p} . \mathrm{m}$.
19.8 ( ) 7 a.m. to 8 a.m.
5. 0 ( ) 2 p.m. to 6 p.m.
28.9 ( ) 8 a.m. to 9 a.m.
3.0() after 6 p.m.
17.5() 9 a.m. to 10 a.m.
6. How did you make your most recent trip to school? (CBECK ONE)
36.4 (\%) walked all the way
1.5 ( ) motorcycle
14.8() drove a car
15.0 () bicycle
3.5 ( passenger in a car

- ( ) moped (motorized bicycle)
$28.3-()$ bus
- ( ) taxi
$0.5($ ) other
0.3 NO ANSNER
(please scecnji)

5a. If you used bus or transit, how did you get to your bus or transit stop?

- ( ) bicycle
- ( ) taxi
0.5 ( ) drove and parked
- ( ) passenger in a car
27.8 () walked
- ( ) other $\qquad$

6. How many stops for errands did you make on your trip to and from school? (CEECK ONE)
66.8 ( ) none
16.3 () one
9.8() two
6.3() three or more
0.8 No oinswer
7. Did anyone accompany you on this school trip? (CBECK ONE)
73.4 () I traveled alone
1.5 ( ) I was with two other persons
17.0 ( I was with one other person
7.3 () I was with three or more persons

Imagine that only the following options were available to you on your most recent school irip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For your travel to school we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never used it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an "x" in the space that best indicates your agreement with the statements under each means of transportaticn you are rating.

For example, consider the following statement for bus:

|  | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 enjoy traveling to school by bus. | ( ) | ( X ) | ( ) |  | ( ) |

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending on how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you neither agree nor disagree you would place an " X " in the center box. In the example shown here, an " X " has been placed in the box under "agree", indicating this person enjoys traveling by bus.

Becase ine need to widerstand how your rating of jour trip to scinol veries from one mecns of trangortation to another, we are asking that jow go througit the list of charactaristics four times, once for each mecrs of travel (ixaik, bicycle, car, and tus). Althouch this process might afear repetitious, we want to stress that jour canejut razing of ail the statemerts on the nem four pages यre espectaliy impor=cot :o the success of this sumgy.

Is your school located less than 6 miles from your home？
97．0（ ）Yes 3．0（）No
sonseming how an vouia jzel ajout jicusitirg＝o scrooi

$$
\begin{aligned}
& \text { ッeニ゙ アcge. }
\end{aligned}
$$



Yeither
Strongly Agree Nor Agree Agree Disagres Disagree iisacree

1．Bicycling to school is pleasant because I can enjoy the scenery and surroundings．

2．When biking，it is convenient to stop and do errands on my way to and from school．

3．I can pick up and go anytime I like when I go to school by bicycle．

4．Traveling to school by bicycle is tiring．

5．Ricing a bicycle to school is dangerous because of the heavy traffic．

6．When I ride the bicycle to school．I worry about being late．

7．：cannot rely on riding a bicycle to school in rainy weather．

3．I can easily carry my briefcase or other packages when ！ride the bicycle to school．

9．It is uncomportable to travel to sctiool by bicycle because of rough and bumpy riding surfaces．

10．I can get to school quickly when I go by bicycle．

11．I worry about being mugged or assaulted when I travel to school by bicycle．
12．I worry about being injured in an accident if I ride the bicycle to school．

13．It is relaxing to travel to school by bicycle．

14．I dislike traveling to school by bicycle because of the many stops and delays at each intersection．
5．Riding the bicycle to school is unsafe because of the cf bike paths that are separated from motorized traffic．

16．Going by bicycle to school is dangerous because motorists are inconsiderate of bicyclists．

17．When bicyc！ing to school，I worry about perspiring or soiling my clothes．

18．Riding a bicycle to school gives healthful exercise．

19．Parking，locking and unlocking my bicycle at school is no trouble．

20． 2 iter parking my bicycle， 1 must walk a long distance when ：go to school．

21．：worm about my bicycle deing stolen at school．

22．It is inexpensive to buy and operate a bicycle．
$19.6(149.21)$ 19．1（ ）20．8（1） 1.3 （）

$20.9(1641 \mathrm{i}() 7.7(19.31)$ 2．0（1）
$2.8()$.29.61 ） $20.1(1) 35.4() 12.1()$
23.2() 45.0() 12.6() 15.5() 3.4() 0.3
$1.0(111.9(121.9() \leq 0.8() 14.4()$
035() 56.4() 7.5() 10.8() 1.5() 0.3
4.4() 29.6() $9.0(1) 43.3() 13.4() 0.3$

34() 22.7() 31.2() 37.5() $5.2(1)$
20.1() 48.9() $15.5(13.4() 2.1()$
0.8() 9.3() 18.8() $45.3(125.8(1)$
$12.9(138.8() 16.5(124.5() 7.0()$
$9.3(1) 41.2() 26.5() 18.6(1) 4.1(1) 0.3$
$2.1($ ） $20.1($ ） 32.01 ） 38.61 ） 7.21 1
2．4．2（ ） $24.5($ ） 15.7() 21.4() 3.9() 0.3 $25.01) 41.5() 18.8()^{12.9}() 1.3() 0.5$ 6.2()$^{37.1}(122.2() 29.6() 4.9()$
47.6() 47.2() 3.9() $1.0(1)-(10.3$
16.0() 46.8() 15.5() 18.0() 3.4() 613
.8() 2.6() 10.6()$^{56.9()} 29.11$
11.1() 41.6() 17.8()$=5.8$（ ）$ニ 41$ ：三
$22.2(146.7(1) 5.2() 14.9(1) 10()$

## YOUR RATING OF BUS (or transit)

Is bus service available between your nome and school?

### 88.07, Yes

If your anower is YES, please rate the atatements below concerning how you woull feel about going to scinool by bus, even if you dien't choose bus on jour last scinool trip.
$12.0 \%$ No ( )
If your answer is ro, please go on to the ne=t page.

## Strongly <br> Agree

Neither Agree Nor
Disagree $\begin{aligned} & \text { Strongly } \\ & \text { Disacree }\end{aligned}$
i. Going to school by bus is pleasant because I can enjoy the scenery and surroundings.
2. When traveling by bus, it is inconvenient to stop 26.1 ( ) 49.4 ( ) 8.0 ( ) 11.9 ( ) 4.3 ( ) 0.3 and do errands on my way to and from school.
4.5() 31.8() 32.7() 229() 6.8() 0.3
e17.0 ( ) 48.6 ( ) 12.8 ( ) 18.2 ( ) 2il ( ) 0.3
3. I must schedule my trips in advance when I travel 17.0 ( ) 48.6 ( ) ( ) 18.2 ( ) in ( ) by bus to school.
4. Traveling by bus to school is very tiring.
5. Traveling by bus to school is dangerous because of the heavy traffic.

$$
0.3(1) 2.01) 14.5() 59.3(, 23.01) 0.9
$$

6. When I take the bus to school, I worry about being late.

$$
19.3() 49.7() 15.9() 12.8() 2.0() 0.3
$$

7. I cannot rely on taking a bus to school in rainy weatner.

$$
54() 19.6() 17.6() 44.9() 12.2() 0.3
$$

8. I can easily carry my briefcase or other packages when I go to school by bus.

$$
13.1() \operatorname{lol} .6() 11.6() 11.4() 2.0() 0.3
$$

9. It is uncomfortable to travel to school by

$$
5.1(, 18.8() 21.0(, 48.8() 5.71) 2.6
$$ bus because of rough and bumpy road surfaces.

10. I can get to school quickly, when I take the bus.

$$
2.8() 21.0() 26.4(, 38.4() 10.8() 0.6
$$

11. I worry about beling mugged or assaulted when I go to scriool by bus.

$$
0.3() 2.8(, 11.4(, 53.6() 31.3() 0.6
$$

12. I worry about being injured in an accident if I go to school by bus.
13. It is relaxing to go to school by bus.

$$
2.3() 15.9() 27.3() 42.8() 11.1,6) 0.6
$$

$$
0.9() \leq 7() 11.1() 57.6() 24.1() 0.6
$$

$$
4.3(126.1() 33.7() 27.6() 8.0() 0.3
$$

14. I dislike traveling to school by bus because of $8.5(, 27.31,32.61,29.01) 2.31) 2.3$ the many stops and delays at intersections.
15. I must walk a long distance to get to and from $24() 19.3() 11.6() 51.5() 13.91)$,0.3
the bus when i go to schooi.
16. There is generally a long waft involved when I $15.9(140.2() 20.5() 20.5() 2.31) 0.6$ so to school by bus.
 perspiring or soiling my slothes.
17. It is inexpensive to travel oy bus to scriool. 45.5() $41.5(16.8() 4.8() 1.11) 0.3$

## YOUR RATING OF WALK

is your scnool iocated less shan 3 miles from your nome?

## 76.7 ( ) Yes

If your anower is YES, please rave the siatemenis below concerning how you wouic ieel about walkina to school, ever. if you did not walk on your last schooi teip.

$$
=3.3 \text { No }(1)
$$

If your answer is :10, please go on to the next page.

Strongly<br>Agree

1. Walking to school is pleasarit because I can enjoy 32.21 ) 47.61 ) 13.06 ( 6.21 ) 1.01 ) the scenery and surroundirgs.
2. When walking, it is convenient to stop and do errands on my way to and from school.

$$
16.9() 41.4() 14.7() 22.8(14.2()
$$

3. I Ean pick up and go anytime I like when 24.4() 53.4() 7.2() 12.4() 2.6()

I walk to school.
4. Halking to school is tiring.
4.9() 21.8() 18.6() 41.3() 13.4()
5. Walking to school is dangerous because of the heavy traffic.
6. When I walk. to school, I worry about being late.
4.2() 14.7() 15.3() 50.2() 15.6()
7.8() 28.7() 15.0() 38.1() 10.1()
7. I cannot rely on walking to school in rainy weather.
8. I can easily carry my briefcase or other packages when I walk to school.
9. It is uncomfortable to walk to school because of rough or bumpy walking surfaces.

```
16.0( ) 32.9() 8.8()35.1()}7.2(
```

8.1() 55.1() 12.4() 20.8() 3.6() $2.01) 9.1(14.0() 58.6() 16.31)$
10. I can get to school quickly when I walk. 6.8() $39.5(1819() 26.7(17.8()$
11. I worry about being mugged or assaulted when I walk to school.
12. I worry about being injured in an accident if i walk to school.
$4.61) 13.7(14.0(141.7() 25.71$
$2.9(19.8() 13.4() 47.2() 26.7()$
13. It is relaxing to walk to school.

$$
21.2(141.0() 19.9() 15.6(1) 2.0(1)
$$

14. I dislike walking to school because of the many delays at intersections.
1.0() 7.2() $17.3(162.8() 11.7()$
15. Walking to school is unsafe because of the lack of 7.5() 15.6() 12.1() 48.5() 16.0() pathways that are separated from motorized traffic.
16. Walking to school is dangerous because motorists 10.1() 26.4() 241() 31.6() 7.5() are inconsiderate of pedestrians.

17. Walking to school gives healthfui exercise. $\quad 42.31$ ) 50.31 ) 5.51 ) 1.61$) 0.31$ )

When using a car, are you usually a:
$73.0($ ) car driver? 27.0 ( ) car passenger?

If you are iountiy a car Iriver, even if you did not choose auto for your iast school trie, rate tha statements below concerning how jou would feel about driving to school.

If you are usualtu a car passencer, even if you did not choose auto for your iuss scriool trip. rate the statements beiow concerning how you would feel obout goins to schoci as a cart
passenger.

Please answer ali questions below, even if you do not own acr.


1. Traveling by car to school is pleasant because ! can enjoy the scenery and surroundings.
2. When traveling by car, it is convenient to stop 19.5() 45.11 , $9.5(19.81) 1531) 0.8$ and do errands on my way to and from school.
3. ! can pick uo and go anytime I like when ! travel by car to school.
4. iraveling by car to school is tiring.
17.8() $37.8(14.3() 22.3() 6.5() 1.3$
2.8() 16.3() 19.8() 39.8() 20.0() 1.3
4.0() 26.8() 22.5() 38.4() 6.5() 1.8
7.3() 28.5() 19.8() 34.8() 8.8() 0.8
1.5() 13.0() 15.5() 47.4() 21.8() 0.8
35.3() 54.8() 6.3() 2.5() 0.3() 0.8
5. I can easily carry my briefcase or other packages when I travel by car to school.
6. It is uncomfortable to travel by car to school because of rough or bumpy road surfaces.
7. I can get to school quickly when I travel by car.

$$
18.5() 37.6() 13.0() 21.8(, 8.0() 1.0
$$

11. I worry about being mugged or assaulted when i travel by car to school.

$$
0.3(1.8() 7.5() 47.6() 41.5() 1.3
$$

12. I worry about being injured in an accident

$$
2.8(, 11.3(, 21.3() 46.6 i, 17.0() 1.0
$$ if I travel by car to school.

13. It is relaxing to travel to school by car.

$$
4.8() 24.8() 31.3() 28.5(, 9.8() 0.8
$$

14. i dislike traveling by car to school because of the many delays at intersections.

$$
7.01) 30.3(125.81) 32.1(, 3.8(1.0
$$

15. Parking the car at my school is expensive.

$$
27.8(129.0(16.3(120.8() 481) 13
$$

16. After parking the car, I must walk a long distance when I go to school.

$$
28.8() 38.9(14.0(, 14.5() 2.5() 1.3
$$

17. I worry about the car being stolen or randalized at school.
18. It is inexpensive to ouy and operate a car.
19. Parking the car at school is no trouble.

$$
0.8(15.8(19.8() 53.81) 19.0() 0.8
$$

$$
50(18.0(, 26.0()=9.2(10.5(; 1.3
$$

$$
5.31,7.5(, 7.5() 33.5(, 45.21) 1.0
$$

$$
2.8(14.5(1631) 21.8() 63.31) 1.3
$$

## WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL TO SCHOOL.

1. Imagine that only EUS, WALK, BICYCLE, and CAR (oriver or passenger) were available for your most recent school trip. These alternatives are listed below. Please indicate your preference by placing a "l" next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred al ternative.
Ranked
(If jus service was not available jor your school trip, piease rank ine three remaining altzrnajoives.)

2. We would like to know how often you use each of the following means of travel for school trips from home. Place an "x" under your best estimate of the number of days you have used each means of travel during the last 30 days.

3. Assume that on your next school trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation freference by piacing a "l" next tc the alternative you would prefer the most, a "2" next to the one you would prefer second, a "3" after your third choice, and a " 4 " after your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below.
(If bus service is not avaiiable for your school trip, please rank the remaining three alternctives.)


WE NOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YCU.
PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO SCHOOL BY ANSWERING THE FOLLOWING QUESTIONS:


1. If you were to ride jour beyzle to school, what is ycur best estimate of the time you nouid spend colng eaen of the following?
getting the bicycle to the street $\frac{1.73}{}$ (minutes)
riaing the bicycle
parking and locking vo the bicycle $\frac{12.06}{(m i n u t e s)}$
walking from bicycle to school (minutes)
TOTAL TIME FROM HOME TO SCHOOL
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or ail of your tris from home to school?
3.3 ( bicycle path (off the street) ?
$61.9($ ) bicjele lane (on the street) $\} 3.3 \%$ both
19.5 ( ) neither
10.0 () don't know
3. What portion of your total trip from home to school is served by bicycle paths or bicycle lanes?
16.5 ( ) none
a 6.7 ( ) less than $1 / 4$ the distance
19.5 ( ) 1/4 to $1 / 2$ the distance
10.0 ( ) $1 / 2$ to $3 / 4$ the distance
4. 8 ( ) more than $3 / 4$ of the distance
12.5 () don't know

ANSWER IF DISTANCE ROOH HOME TO SCROOE -S 3 MILES OR LESS
4. If you were to walk to school, what is your best estimate of the time it would take from the moment you left nome to the moment you arrived at school? 20.54 (minutes)
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to school?
56.6: : all or aimost all the way
22.3i) part of the way
0.3() there are none
0.51 ) don't know
6. If you were to take the bus to school, what is your best estimate of the time you would spend doing each of the following?
getting to the uus stop
waiting for the bus
riding on the bus
walking from bus to school $\frac{9.0}{10 \cdot 6}$ (minutes) ajerager fime
TOTAL TIME FROM HOME TO SCHOJL 27,2 (minutes)
7. Is it necessary to change buses to travel from your home to school?

$$
\begin{aligned}
& 6.3() \text { Yes } \\
& 82.9(1) \text { NO } \\
& 0.8
\end{aligned}
$$

8. Out of ten prips, how often would you expect to have a seat on the bus all the way from home to school?

$$
\frac{7.08}{r} \text { times out of ten }
$$

9. What is the one-way bus fare on your trip from home to school?
.02 cents
( ) don't know
10. If you were to go by car to school, what is your best estimate of the time you would spend doing each of the following?
walking to the car
driving or riding
parking the car
walking from car to school $\frac{1.4}{\text { (minutes) }}$
TOTAL TIME FROM HOME TO SCHOOL 22.3 (minutes)
11. What is the parixing cost on your trip from home to school? (CHECK CNE AND SFECIEY TITE COST.)

| 23.3() no charge |  |
| :--- | :--- |
| 10.3() daily charge |  |
| 1.0() weekly charge | (dollars) |
| 24.8() monthly charge | (dollars) |$\quad$ (dollars) $\quad$ ANSWER:17.09\%

2.5 semester
1.3 yearly

NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
65.59\%) Yes
$34.0 \%$ ( ) No ( IE "NO", GO TO NEXT PAGE.)
2. Did you ride a bicycle during the last 30 days?
28.3 () res

273 ( ) Mo (5E "RO", GO TO NEXM PAGE.)
3. We would like to know how often jou use the bicycle for each of the followi:g trip purposes. Place an " $x$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through " $h$ " below) during the last 30 davs.
a. To work $25.8(11.5(1) 1.0(10.81) 1331) 551)$ 2.5
b. To school
$9.0(18.8(1)$
$9.01) 2.5(12.0(12.0(1)$
-
c. For personal business $9.8(13.5() 6.0(1) 2.01) 1.5() 5.01)$ ( 1.5
d. To visit friends $15.5(112.0(13.5() 1.3(12.0(1) 3.8() 0.3$
e. To go shopping $19.0(1 / 1.5() 3.0(1) 1.5(10.8() 2.31) 0.5$
f. To a recreational activity 11.5() 14.0() 5.3() 2.8()$/ .3() 301)$
g. Neighborhooa riding $11.3(16.5(13.8() 3.01) 0.8() 3.01)-$
h. Long distance riding $30.3(16.3() 0.8()-1) 0.5()-1) 0.5$ (over 2 hours)

```
    Is your school located less than 6 milas away from your home?
```

```
\(48.771(\) Yes
```

$48.771($ Yes
If your answer is yES, please read jelow.

```
    If your answer is yES, please read jelow.
```

```
\(1.3 \%\) 1io ( )
```

$1.3 \%$ 1io ( )
If your answer is vo, piease 30 to zaje 1 t.

```
    If your answer is vo, piease 30 to zaje 1 t.
```

> NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO SCHOOL USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The fmprovements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right-hand side of the road, marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for better ride. In addition, high-intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, throughout the school area, these consist of enclosed free storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made available.

You are now asked to express your agreement or disagrement with the following statemer:s about bicuciins to scinooi, assuming the bicycie facility improvements, Jescribed above, fre cuailable to jou on jcur next trip to school. (You will note that the list of statements is the sane as that usec sariter. The propose 0 :' this iast rating is to find out how you feel about the bicycie-related inmovemeris.)



## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SCHOOL TRIP.

1. Please indicate your preference for the following alternative means of travel for your next trip to school by placing a "1" next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a "3" next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. Please repeat the process for each statement, (a) though (c) below. GIf bus service is not available between your home and your school, rank the three remaining alternatives only.)

a. Assume the bicycle facilities are in place. Please rank the following means of travel for your

> next trip to school.
33.376
27.7
17.4
20.5



## LIVING NEARER TO TRAVEL DESTINATIONS

> Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and highway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of employment, shopping, school, and recreation.

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be acconmodated within a six-block ( $1 / 2$ mile) distance and most work and school trips are within two miles.

Supoose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to school without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is available and there are no special restrictions on the use of autonobiles.

Now, please tum to the following pages and express how this sompact land-use arrargenent wouia affect the way you feel about WALK, DICYCLE, 3 US, or CAR for your school trio.

YOU HAVE JUST READ ABOUT AN ASSUMED LAND-USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SCHOOL TRIP.

1. Please indicate your agreement or disagreement with ane following statement::


I would like to live in this type of community. $38.5(145.01,9.51) 50(1) 451) 0.5$
2. Please indicate your preference for each of the following transportation alternatives on your next trip tc school, by placing a "1" next to the alternative you prefer the most, a "2" next to your second mest-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your ieast-preferred alternative, assuring the land-use arrangement described above. Please repeat the process for each statement (a) through (d) below.
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next trip to school, and assume further that your trip to school is approximately one mile away. (PLease rank the following means of transportation.) Ne

b. Now suppose that in addition to the conditions described in (a) above that the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank again.)

## 28.5

54.0
( ) walk
13.0
3.5
c. Assume the conditions described in (a) above and assume that in addition the speed limit is reduced to 15 mph in the community. (Please rank.)

| 7.5 | 2.0 |
| :--- | :--- |
| 4.0 | 2.5 |
| 12.5 | 60 |
| 695 | 2.5 |

( ) bus or transit
98.5
6.5
58.5
16.0
5.0
50.0
$\begin{array}{ll}44.5 & 15.0 \\ 37.5 & 120\end{array}$
10.5

15
( ) bicycle
4.5
2.0
11.5

55
3. 0
19.0 695 3.5
d. Assume again the conditions described in (a) above, but this time assume no parking was available at your sch col. (Fiease rank.)


WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. Hov. old are you? $\frac{24.2 \text { ils (ag oj }}{v}$
2. Winat is your sex? 50.7() Hale $40 \equiv 1$; Female
3. How many adults (18 or over), including yourself, are there in your household?
2.10 .41
4. How many minors (under is) are there in your household? $\qquad$
5. Do you have a valid driver's license?97. $\%$ ( Yes 2.3 ( ) No
E. How many licensed drivers (including yourself) are there in your household?
6. How many automobiles are there in your housencld? 1.71
7. Do you own a bicycle? 56 ( ) Yes 44 () No
8. How many bicycles are there in your housenold? $\qquad$
9. What type of structure do you live in?

10. What is your educational background? (CFECK CNE)

11. How many workers are in your household? 1. 37
12. Please check the category which includes your approximate family income before taxes.


In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.

Wee would like to express our sincere thanks to you for completing this questionnaire.



1．Walking to school would be pleasant tecause $140.3(149.1() 0.1,1.91) 0.61$ ） could enjoy the scenery and surroundings．

2．When walking，it would be convenient to stop and 10.4() 435() 22.1() 23.41$) 0.6()$ do errands on my way to and from school．
 to school．

4．Walking to school would be tiring．
$1.3(18.2() 21.4() 44.9(1) / 3.6(1)$
1.3() 65() 11.0() $55.9(1)=5.3()$ the heavy tra－fic．

6．If I walked to school，I would not worry about being late．
i．I could not rely on walking to school in rainy weather．

8．I could easily carry my briefcase or other packages when I walk to school．

9．It would be uncomfortable to walk to school because of rough or bumpy walking surfaces．

10．I could get to school quickly when I walk．

$$
3.9(141.0(121.4() 28.6(1) 4.51) 0.6
$$ $9.1(139.6() 15.6() 21.8()$ ふ．（ ） $5.8(162.5() 12.3() 18 \%() 6.6()$ 1.3() 4.5() 6.5() 32.4()$\times 2.2()$ 5.4() $49.41) 19.5(19.5(1521)$ 1.9() $11.0(1413(149.5()=27()$ ט．l． when I walk to school．

12．I would worry about being injured in an accident if i walk to school．

13．It would be relaxing to walk to school． 26.6()$=0.7(16.2()=ス() 1 . 玉()$

14．I would dislike walking to school because of the 0.6() 26()$/ 2.3() 64.4()=2.11)$ many delays at intersections．
15．Walking to school would be unsafe because of the lackl． 3()$=5(1)=5()= \pm .0()$ of pathways that are separated from motorized traffic．

16．Waiking to scnool would be dangerous because motorists are inconsiderate of pedestrians．

17．When walking to school，I would worry about perspiring or soiling my cloches．

18．Walking to school would give healthful exercise．
$37.01) 55.9(1) 6.5()-1) 0.61$

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SCHOOL TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next trip to school of placing a "l" next to the alternative you prefer the most, a "2" next to your second nost-preferred alterative, a " 3 " next to your third most-preferred alternative, and a " 4 " next to your least-preferred alternative. Repeat the process for each statement (a) through (c) below. (If jus semite is not available between your home and school, rank the three remaining aitematives only.)
a. Assume the walk facilities are in place. Please rank the following means of travel for your
 next trip to school.
( ) walk with improved facilities 27.9
( ) bicycle
( ) bus/transit
( ) car (driver or passenger)
39.0
19.5
2. 7

$22.1 \quad 9.7$
$32.5=4.0$
$4 \%$ \%
b. Now assume the same condition as (a) above, except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rank again.)
53.3
( ) walk with improved facilities
27.9
11.0
3. 2
4. 6
( ) bicycle
44.2
17.5
6.5
5. 2
28.6
11.7
( ) bus/transit
15.6
44.8
16.2

117
3.4
22.7
59.9
3. 2
c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)
55.3
31.2
9.1
$-2$
( ) walk with improved facilities
318
46.8
13.6
56.5
$1.9 \quad 18.8$
72.9
2. If only the alternatives listed below were available for your next 10 trips to school, how many of the 10 trips would you make using each alternative? Write the number of trips in the bor newt to acer : alternative.)
$24.7=0 / 10$ Irips ( ) walk with improved facilities 4.8
$58.6=4 / 10$ Ties ( ) bicycle
2.3
$68.4=\%$ K Lips ( ) bus/trarisit
1,3
$\begin{aligned} 7 / 0 & =0 / 10 \operatorname{\pi us}\}(\text { ) car (driver or passenger) } \\ 8.4 & =10 / 10,1,\end{aligned}$
$\frac{1.5}{10.8}$

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1.00$ will be charged to the owners of automobiles operating during the morning ( $7-9$ a.m.) and evening ( $4-6$ p.m.) rush hours. This means that you would be charged up to $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

YOU HAVE JUST READ AN ASSUMED FEE ON AUTO USAGE. IMAGINE THAT THIS SITUATION EXISTS FOR YOUR NEXT SCHOOL TRIP.

1. Please indicate your agreement or disagreement with the following statements:

a. I believe that a congestion fee of $12.0(14.0() 12.01) 27.5(1) 34.5()$ two dollars per day is desirable.
b. It would be inexpensive to travel by car 1.5 ( ) 4.5 ( ) 9.01 ) 38.0 ( ) 46.0 ( ) with a congestion fee of two dollars per day.
2. Please indicate your preference for each of the following transportation alternatives for your next trip to school by placing a "1 "next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. Please repeat this for each of the statements (a) through (c) below. (If bus service is not available for your school trip, please rank the three remaining alternatives orin.)

Ranker a. Assume the congestion fee of $\$ 2.00$ per day, described on the preceding page, was in effect.
Please rank the following means of transportation for your next trip to school
37.0
( ) walk
26.5 ( ) bicycle
26.0
$43.0 \quad 24.5 \quad 4.0$

31.5
( ) bus/transit
14.0
39.5
5.5
9.5
4.5
( ) car (driver or passenger) 14.5
19.5
59.0
2.5
b. Assume that instead of $\$ 2.00$, the congestion fee increased to $\$ 4.00$ per day. (Please rank again.)

| 38.0 | $($ ) walk | 27.0 | 17.0 | 15.5 | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27.5 | () bicycle | 49.5 | 18.0 | 3.0 | 2.0 |
| 31.0 | () bus/transit | 15.5 | 40.0 | 4.5 | 9.0 |
| 3.0 | $($ ) car (driver or passenger | 5.5 | 22.5 | 66.5 | 2 |

c. Assume that in addition to the congestion fee of $\$ 2.00$ per day, the price of gasoline increases to $\$ 1.50$ per gallon. (Please rank.)

| 385 | () walk | 27.5 | 17.5 | 14.0 | 2.5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 29.5 | $($ ) bicycle | 49.5 | 160 | 3.0 | 2.0 |
| 28.0 | () bus/transit | 15.5 | 44.0 | 3.5 | 9.0 |
| 3.5 | () car (driver or passenger) | 5.0 | 20.0 | 69.0 | 2.5 |

# City of Columbus <br> MAX D. ANDRESS. MAYOR <br> Columbus, Indiana 48201 

October 15, 1978

Dear Resident of Columbus:
The City of Columbus is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your shopping and personal business trips only. We are interested in your opinion of the transportation services available to you for shopping and personal business trips. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representatvie of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800-328-2933.

Sincerely,


Max D. Andress
Mayor

MDA:cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HCME FCR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS. PLEASE EXCLUDE ALL MAJOR GROCERY SHOPOING TPIPS.

What is the nearest intersection or street address of the fiace $0^{2}$ your mos: resent shopoinc or personal bustness trip from home?
2. A list of specific shopoing and personal business trip purposes is given below. Dease check. the Ene trio ourgose that best descrioes your most recent shorping or personal business trio from rame


$19.8($ ) clothing/shoes 4.01 ) post office $18.3($ ) bank
13.0 ( ) drugs/bookstore $1.5($ ) library/museum $23 i$ ) laundry/ciry clearer/shoe reaa ir
$5.0($ ) hardware/florist/liquor 5.81 ) medicai/dental 3.81 ) Earber/beauty shop NO ANSWER : 0 Il.0( ) other $\qquad$
3. Other than the above stop, did you make any additional stops on the way to and from vour sncpping/ personal business destination? (CäECK CNE)
37.4!) none (İ you answered MC.:E, go to fuestion 5.)
31.5 () one
19.8() two
9.51 ) three or more
1.8 NO ANSWER
4. Cid any of the additional stops between your home and your orimary shopping/personal business destination require you to travel more than one mile out of the way?
17.8 ( ) Yes
42.6 ( ) NO NO ADOTL STOPS/NO ANSHER : 39.2 í
5. Approximately how far was it directly from your home to your primary shoppine/personal business destination (one way)?
5.0 ( ) 2 blocks (i mile or iess)
18.0() 2 to 4 miles
19.5() 3 to 6 blocks ( $\frac{1}{4}$ to $\frac{1}{2}$ mile)
3.0() 4 tc 6 miles
25.9 ( ) $\frac{2}{2}$ to 1 mile
0.5() 6 to $i 0$ miles
23. 81 ) ? to 2 miles
4.0() over 10 miles
0.3 NO ANSWER
6. How many separate parcels, bags or packages were you carrying? (CEECK OVE:
16.3
(\%) none
39.4() one
25.51 ) two
18.3() three or more
0.5 NO ANSWERS
7. How many persons (other than yourself) were with you on this shooting or personal business trip?
total $\qquad$ (number)
MEAN: 1.03

Children 12 years of age and under $\qquad$ (number:
MEAN: 0.97
8. Where is this place where you went shopping or on personal business located?
42.0 ( ) central city
56.5 ( ) suburban
NO ANSWER:
1.5
9. Specify the type of area where you went on your shopping/personal business trip. (CAECK JiVE) $16.8 / 0,(3) \quad \begin{aligned} & \text { central business district } \\ & \text { (downtown metropolitan area) }\end{aligned} 7.5 / 11,3$ ) regional shopping center $13,0 / 40,3) \begin{aligned} & \text { neighborhood business district } 1,0 / 2,8) \text { office park/professional building } \\ & \text { or shopping center }\end{aligned}$ $0.5 / \rightarrow$ ) college campus $3.0 / 1.13)$ other $\qquad$
$0.5 / 0.3 \quad$ NO A25 Wis
10. What was the date of this most recent trip? $\qquad$
ii. At approximately what time of day did you make this trip to your shopping/personal business destination?
$5.8($ ) before 9 am.
() 7 atm. to 8 atm.
$(1)$
M- स.
() 8 atm. to 9 atm.

$$
\text { 3.1.8 ( ) } 2 \text { p.m. to } 6 \text { p.m. }
$$

12.5() after 6 pom.
50.4() $9 \mathrm{a} . \mathrm{m}$. to 40 .
0.3 No Ans.
12. How did you make the trip to this shopping/personal business destination? (CBECK OME)


NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT SHOPPING OR PERSONAL BUSINESS TRIP WHEN COMPLETING THE FOLLOWING SECTION.
:magine that only the following ootions were available to you on your most recent shocping or personal business :rip: CAR (driving or riding), BUS (or transit), WALK, and B:CYCLE. For the above trip, we nuic ifke to learn how you feel about each means of transportation. Please give us your opinion of each means $\mathrm{o}^{\mathrm{E}}$ iransportation even if you never used it.
-he foliowinc pages are labeled with the means of transportation you are asked to rate. Under each iabel you will find a set of statements. Please read each statement and piace an "X" in the scace that best indicates your agreement with the statements under each means of transportation you ars rating.

Eor examole, consider the following statement for bus:

:f you enjoy traveling by bus, you would put an " $x$ " in the box under agree or strongly agree, dedending upon how ruch you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or stronçy sisagree. If you nefther agree nor disagree, you would place an "x" in the center box :n the examele show cere, an "X" has been placed in the box under agree, indicating this zersen enjoys travelina by bus.

Secmuse we reed to uncersiand how your rating of your shopping or fersonai iusiness trip yaries ircm ore
 times, onse ior eccin eears of truvel (waik, bicucle, car, ane bus), itthouch this procese -izit arpem



## YOUR RATING OF CAR

When using a car，are you usually a：
$79.0 \%$ car ariver

$$
\begin{aligned}
& \text { jcu cin not oncose auto or jcim ass } \\
& \text { sroppiref or serscrai Eusiress tric, pate } \\
& \text { the ativements beiou concemine now you } \\
& \text { wowid feei about oniving on tinis trip. }
\end{aligned}
$$

21．0！，car passenger


Please answer all questions below，even if you io not oun a car．

| $\begin{aligned} & \text { Sirongly } \\ & \text { Agree } \end{aligned}$ | Agree | Neither Agree Nor Disacree | Disagrse | Strongly Disacrse | No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \％ 7.8 | $33.0$ | $\frac{1}{3} 8,2$ | $1,15$ | $1,5$ | 1.5 |
| $(1)$ | $(\underset{62,4}{ }$ | $\begin{aligned} & 1 \\ & 50 \end{aligned}$ | $(2,3$ | $\begin{aligned} & (1) \\ & 0,3 \end{aligned}$ | 1.0 |
| $\begin{gathered} 1 \\ 20.5 \end{gathered}$ | ${ }^{\prime} \mathbf{S}_{6}, 9$ | $(5,8$ | $\frac{1}{5}:$ | $1.1$ | ょ，$\%$ |
| $\begin{array}{ll} 1 & 1 \\ 0.8 \end{array}$ | $\begin{aligned} & (1) \\ & 5 \cdot 3 \end{aligned}$ | $(13.5$ | $\begin{aligned} & 1 \quad 1 \\ & 61,6 \end{aligned}$ | $\begin{aligned} & (1) \\ & 17.0 \end{aligned}$ | 1.8 |
| $4.3$ | $\begin{gathered} 1,1 \\ 22,3 \end{gathered}$ | $\begin{gathered} 1 \\ 20.5 \end{gathered}$ | $\begin{gathered} 11 \\ 26.9 \end{gathered}$ | $\begin{aligned} & (1) \\ & 6,3 \end{aligned}$ | 1.0 |
| $\left(\begin{array}{l} 1 \\ 7.3 \end{array}\right.$ | $\begin{gathered} 1 \\ 17.3 \end{gathered}$ | $\begin{aligned} & 1 \\ & 12.8 \end{aligned}$ | $\begin{gathered} 1 . \\ 41.3 \end{gathered}$ | $\begin{aligned} & (1) \\ & 17.8 \end{aligned}$ | 7.5 |
| $\begin{aligned} & 1 \\ & 2,3 \end{aligned}$ | $\begin{aligned} & (1) \\ & 4.0 \end{aligned}$ | $\begin{array}{ll} 1 \\ 50 \end{array}$ | $\left(\frac{1}{59,6}\right.$ | $\begin{gathered} 1 \\ 27,3 \end{gathered}$ | 1.8 |
| $\begin{gathered} (1) \\ 34.8 \end{gathered}$ | $\begin{aligned} & 1.1 \\ & 59.1 \end{aligned}$ | 1 0.8 | $(1)$ | $1.1 .5$ | 1.0 |
| $\begin{aligned} & 1 \\ & 30 \end{aligned}$ | $8.5$ | $\begin{gathered} 1 \quad 1 \\ 17.5 \end{gathered}$ | $\begin{gathered} (1) \\ 54.5 \end{gathered}$ | $\begin{gathered} 11 \\ 15.0 \end{gathered}$ | 1.5 |
| $\begin{gathered} 1 \\ 275 \end{gathered}$ | $\begin{gathered} (1) \\ 62.6 \end{gathered}$ | $\begin{array}{r} 11 \\ 4.8 \end{array}$ | $\begin{aligned} & 1 \\ & 3.0 \end{aligned}$ | $\begin{gathered} 1 \\ 0.1 \\ 3 \end{gathered}$ | 0.3 |
| $\begin{aligned} & 1 \\ & 2.0 \end{aligned}$ | $\begin{aligned} & 1.1 \\ & 4.0 \end{aligned}$ | $\begin{aligned} & 13 \\ & 13.0 \end{aligned}$ | $\left(\begin{array}{l} 1 \\ 56 \end{array}\right.$ | $\left(\begin{array}{l} ( \end{array}\right)$ | 1.3 |
| $\begin{aligned} & 11 \\ & 23 \end{aligned}$ | $\begin{aligned} & (15.0 \end{aligned}$ | $\begin{aligned} & 11 \\ & 24.8 \end{aligned}$ | $\begin{aligned} & (1) \\ & 49 . i \end{aligned}$ | $(7)$ | 1.0 |
| $\begin{aligned} & 1 \\ & 6.8 \end{aligned}$ | $\begin{gathered} (1) \\ -45.1 \end{gathered}$ | （25） 3 | 10 10.3 | $11$ | 1.0 |
| $\begin{aligned} & 11 \\ & 28 \end{aligned}$ | $\begin{gathered} 1.1 \\ 16.8 \end{gathered}$ | $\begin{aligned} & 1.1 \\ & 20.5 \end{aligned}$ | $\begin{aligned} & 11 \\ & 51.1 \end{aligned}$ | $\begin{aligned} & (1) \\ & 8.0 \end{aligned}$ | c． 9 |
| $\begin{aligned} & 1 \\ & 0.8 \end{aligned}$ | $1,1$ | $\begin{aligned} & (1) \\ & 6 \cdot 2 \end{aligned}$ | $\begin{aligned} & (1) \\ & 59.2 \end{aligned}$ | $\begin{aligned} & (1) \\ & 31 \geq \end{aligned}$ | 0.3 |
| （ ） | （ ） | （ ） | （ ） | 1 ） |  |
| 0.8 | 3.3 | 9.3 | 67.8 | 18こ | C． 3 |
| 1 ） | （ ${ }^{1}$ | （1） | （ ） | 1 ） |  |
| 0.3 | 3.5 | 13.5 | $57 . ?$ | 1ミこ | $\therefore \geq$ |
| $\left(\begin{array}{l} 1 \\ 6 . \equiv \end{array}\right.$ | $\begin{aligned} & (12) \\ & 125 \end{aligned}$ | 13 | $\left(\begin{array}{l} (1) \\ 36 \end{array}\right.$ | （ ） － | － |
| （ ） | （ ） |  | （ ） |  |  |
| 12.0 | 62.1 | 143 | 9.3 | c． 3 | 1.5 |

## YOUR RATING OF BICYCLE

Was your most recent shopping or personal business destination located less inar 4 －iies from your home？
Ei.7 : ! yes




Eicyaie on ucun last $\underset{\sim}{\text { ung }}=0$ tris destinatior．
$18 \mathrm{~S}_{1}$ ；No
 ทニニ゙ざさきた．

Neither
Agree Nor Strongly Ne Agree Agree Disacree Disacree Disagree Arse
$6.7(\%) 33.3() 25.7(; 24.8() 8.0!) \quad i .5$ Eicvelinc to this shcoping／personal business destination is pieasant because i car，enjoy the scenery and surroundings．
2．When snooping or on a personai business trio，it is con． $2.81 ; 2721$ ； $10.71,41 \leq 1,801 ; 1.5$ verient to siop and do errands，wnen ricinc a bicycle．
3．I cen pick ud and go anytime I like when I rice a bicycle to oo shopping or on personal business irips．

4．Riding a bicycie to this shodping／personal business destination is tiring．
5．Riding a bicycle to my shopping／personal business destination is dangerous because of the heavy traffic．
6．When on a shopfing／personal business trip with children， it is inconvenient to ride the bicycle．
i．i cannot rely on riding a biçycle to this destination in rainy weather．
8．I can easily carry packages when ！ride a bicyele while I am on a shopping／personal business tric．

9．It is uncomfortable to travel to this des：ination by bicycle because of rough or bumpy riding surfaces．

O．I car get to my shooding／personal business destination ouickly，when I ride a bicycle．
1．I worry about being mugged or assaulted wher I ride a bicycle te my snooping／personal business destination．
2．I worry about being injured in an aceident when I riae a bicycle to my shopping／personal business destination．
2．It is relaxing to ride by bicycle to my shopping／personal business destiriation．

14．I oislike traveling by bicycle to this shodping／oersonal bus．destination because of many deiays at intersections．
1E．Bicyeling to this shopping／personal bus．destination is unsafe 30.9 ） $49.3(12.5(1) 5.2(10.91) 1.2$ due to lack of bike paths separated from．motorized traffic．
15．Going by bicvele to this destination is dangerous because motorists are inconsiderate of bicyclists．
ii．When sicyeling to this shopeirg／personal business destination．3．7（ ）15．6（ ）32．71 ）41．31 ）4．91 ） 1.8 I worry about derspiring or soiling my clothes．
1\＆．F：むing a bicycie gives healtrful exercise．
19．ce－king，locking and urlocking my bicycle at this ces：ration ：s nc troutle．

20．I worry abole my bicycle teing st an at this shoppinc！ personal business cestination．
21．It is inexpensive to buy and operate a bicycle．


## YOUR RATING OF BUS (or transit)

Is bus service avallable between your home and this shopping or personal business destination?

```
54.2(%) Yes
##vum Thsier is TEE, please nave the staverents
```



```
=0 =his destiratior ju jus even :- ycu didin
choose jus or your iast irip.
```

1. Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings.
2. When shodoing or on a cersonal business trip, it is convenient tc stop and cce errands when traveline by bus.
3. I must scheduie my trips in advance when I travel by bus to go shopping or on personal business trips.
4. Traveling by bus to this shopping/personal business destination is tiring.
5. Traveitng by bus to my shooping/personal business destination $1.4(11.1(123.5) 50.6) 11.1$ (2. is dangerous because of the heavy traffic.
6. When on a shooping/personal business trip with children, it is inconvenient to take the bus.
7. I cannot rely on taking a bus to this destination in rainy weather.
8. I can easily carry packages when I travel by bus while I am on a shopping/personai business trip.
9. It is uncomfortable to travel to this destination by bus because of rough or bumfy road surfaces.
10. I can get to my shopping/personal business destination quickly wnen 1 travel by bus.
11. I worry about being mugced or assaulted when I travel by 1.41 ) 8.31 122.11 58.019 .7110 .5 bus to my shopping/oersonal business destination.
12. I worry about being injured in an accident when ! travel $0.9(17.41) 25.31) 56.71) 9.21) 0.5$ by bus to my shopping/perscnal business destination.
 business destination.
13. I dislike traveling by tus to this shopping/personal bus. destination because of the many delays at intersections.
14. I must walk a long distance to get to and from the bus when $7.8(1) 22.6() / 5.7() 48.4() 4.1() / .4$ I go to this shopping/personal business destination.
15. There is generally a long wait involved when I travel by ous to this shopping/personal business destination.
16. When traveling by bus to this shopping/personal business destination I worry about perspiring or soiling my clothes.
i3. $\because$ is inexpensive to travel ty bus to this shopping/personal $8.3(146.51) 26.311 / 6.11) 2.31$ ) 0.5 tusiness :ocaticn.

$$
\begin{aligned}
& 45.8(\%) \text { No }
\end{aligned}
$$

 4.1() $89(11.5() 56.71) 17.5(1.4$ 17.5() 60.4() 11.5() 8.3() $1.4 \vdots) 0.5$ 4.1() $24.0)=3.2() 30.91) 69(10.9$

Ne ither
Agree Nor
Acree Disagree
bies your most recert snoozinç or sersonai business destination located less than 2 miles ＝rar vour rijes？
67.0 （兑）ves


11．Walking to this destination is s？easant because I can enjoy the scenery and surroundincs．

2．Wren shozoing or on a person三l business trid，it is convenient to stop and do errancs khen weiking．

3．I cen oick up and go anytime I like when I walk to go stopeing or on personal business trips．

4．Halking tc this snopping／personel business destination is tiring．

E．hàkiro to my shocoing／personal business destination is deroercus secause of the heavy traffic．

5．Ling－or a shopping／personal business trip witi children， it is inconvenient to walk．

7．：cannot rely or walking to this destination in rainy weather．
3．I car eastly carry packaçes when I walk while I am on a shopping／personal business trip．

G．It is uncomfortable to walk to this destinatior because of rough and bumpy walking surfaces．

3．I can get to my shocoing／personal busiress destination cuickly when I walk．
1．I worry about being mugged or assaulted when I walk to my shopping／personal business destination．

2．I worry about beine injured in an accident when I walk ：o my shopeing／personal business destination．
3．It is relaxing to walk to my shopping／personai tusiness destination．

4．：dislike walking to this shopping／personal business destinatior because of the many delays at irtersections．
5．Waiking to this shopping／persona b bus．destination is unsafe $20.1(1) 36.31,9.31) 26.1(16.3!11.9$ due to lack of pathways separated from motorized traffic．
6．Valk：ng to this shooping／oersonal bus．destination is dan－ serous because motorists are inconsiderate of Dedestrians．
i．for walkinc to this shoovinc／perscnal bus．destination， ：wery abojt perspiring or sciinc my ciotnes．

E．$\because$＇z：kin三 to tnis snczzing／perscnal business destinaticr zives neaitrful exsrcise．
$33,01 \%$ No
Fyoun arswer is in，ziecse so or ：
it．e reat zazt．
$\begin{array}{ll} & \begin{array}{l}\text { Neither } \\ \text { Agree Nor }\end{array} \\ \text { Strongly } \\ \text { Asres Aores } \\ \text { Disagreo }\end{array} \quad \begin{aligned} & \text { Strongly No }\end{aligned}$ $8.2(0 / 2) 36.9,25.4!; 22.9(15.21) 0.1$ 6.3() $\operatorname{co3i}, 14.9!; 33.9) 6.31 ; 0.6$ $11.2(1514) 11.6(19.8() 5.6() 0.4$ $9.3(133.2) 15.3(33.3(1) 8.21) 0.7$ $17.5(140.3) 13.1123 .5) 4.9(10.7$ 20.1() $40.8!) 15.3!+14.9!) 5.2(1$ $2.1(155214.111 .2(3,01) 0.4$ $3.01) 22.9) 13,1(47.6(113.1(10.4$ $(1.61) 18.7(18.3(186.41) 6.3(10.7$
$4.9) 23.9$ ）142！ $164.7(11.9(1) 0.4$
7.11 ）（6．0） $20.5(1) 43.7(11.1(1.1$ $10.8(130.6(18.3() 32.8() 7.1() 0.4$ $6.0(1) 39.6) 20.6(1) 22.0(6.3) 1.5$ $7.1($ ） $22.0(19.4(1) 44.41) 6.7(10.4$
16.01 ） $34.0\left(\right.$ ） $27.2^{\left(17.1^{(1}\right) 3.411 .5}$
2.21 ； $9.71 ; 26.11$ ） $51.6!; 9.7!; 0.7$
$28.7($ ） $59.8 ; 7.11 ; 1.5 ; 2.5 i ; 0.7$

WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPING/ PERSONAL BUSINESS TRIPS.

1. imagine that oniy Eus, HiAL! SICYC: and CAR !driyer or passencer, were avalable for your nost recent shocoing/personal zusiress trin. These alternatives are listed telow. Piease ind"ca:e your preference by olacing a "1" next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. (If bus service was rot availaile :or your
sinopingipersonal business trip, please rank the tircee remaining citerratives.;

2. We would like to know how often you use each of the following means of travel for shopping/personal business trips from home. Place an $X$ under your best estimate of the number of days you have used each means of travel during the last 30 days.

|  | Did not Ijse | $\begin{array}{r} 1-5 \\ \text { Cavs } \\ \hline \end{array}$ | $\begin{array}{r} 6-10 \\ \text { Davs } \\ \hline \end{array}$ | $\begin{aligned} & 11-15 \\ & \text { Days } \\ & \hline \end{aligned}$ | $\begin{gathered} 16-20 \\ \text { Days } \end{gathered}$ | $\begin{gathered} \text { More Ttan } \\ 20 \\ \text { Days } \\ \hline \end{gathered}$ | No ANSNER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| bus | ( 186.9 | ( ) 5.0 | ( ) 0,5 | ( ) 0.3 | ( ) 1.3 | ( ) 1.0 | 5.0 |
| walk | ( 150.7 | ( ) 28.8 | ( ) 8.3 | ( ) 2.3 | ( ) 1.8 | 8() 4.3 | 3.8 |
| drive a car | ()14.5 | ( ) 7.8 | ( ) 10.0 | ( ) 7.3 | ( ) 10.3 | () 47.6 | 2,5 |
| passenger in car | ( ) 30.1 | () 28.3 | ( )/14.3 | ( ) 6.5 | ( ) 6.0 | ( ) 9.3 | 5.5 |
| bicycle | ( ) 8.0 | ( ) 9.8 | ( ) 3,5 | ( ) 0.8 | ( ) 0.8 | ( ) 0.8 | 4.3 |
| other | ( ) - | ( ) 1.0 | () 0,3 | ()$=$ | ( ) 0.3 | () 0.8 | - |

2. Assume that on your next shopping/personal business trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoltne price level, please indicate your transportation preference by placing a " " next to the alternative you would prefer the most, a " 2 " next to the one you would prefer second, a "3" next to your third choice, and a "4" next to your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below. (If bus service is not available for your Sropping/personai business trip, please rank the tincee remaining altermatives.)

| zant <br> 1 |  | $\begin{gathered} (\mathrm{a}) \\ \$ 1.00 \\ \text { Per Sall } \end{gathered}$ |  |  |  | 2 |  | $\begin{aligned} & \text { b) } \\ & 7.5 \end{aligned}$ |  |  | 1 | 2 | $\begin{array}{r} (c) \\ \$ 3.00 \\ \hline \end{array}$ |  |  |  | 2 | $\$ 4$. <br> - | (d) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12.0\% | 23.0 | walk | $($ | ) 18 | 8 | 23.8 | walk |  | ' |  | 28.1 |  | 7,3 walk | ( |  | 30.7 | 30 | . 3 walk |  |  |
| 9.3 | 27.0 | Dicycle | 1 | 115 | . 8 | 25.4 | bicyc |  | 1 |  | ):5.0 |  | 3. $)^{\text {bicycle }}$ | 1 |  | 25.3 | 30, | 8 bic |  |  |
| 8.3 | 27.0 | bus | ( | ) 18 | 3 | 20.5 | bus |  | $($ |  | ) 22.5 |  | 1.3 bus | $($ |  | 21.3 | 1 | . 0 bus |  |  |
| 65.9 | 6.5 | car | 1 | ) 40 | 0,9 | 13.5 | car |  | $($ |  | 17.8 |  | 9.5 car | $($ |  | 16.5 | 6 | .0 car |  | 1 |

WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DO PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

## 

i. If you were to ride your bicycle to your shopoing/personal business destination, what is your best estimate of the time you would spend doing the following?

2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.
2.5 (\% bicycle path (off the street)
$1.3($ ) bicycle lane (on the street)
$65,2($ ) neither Note: $12 \%$ of trips were more
$\left.19.0^{( }\right)$don't know
than 4 miles
3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?
65.3() none
$2,8()$ less than $1 / 4$ the distance
1.5() 1/4 to $1 / 2$ the distance
$0,3() 1 / 2$ to $3 / 4$ the distance
0.8 ( ) more than $3 / 4$ of the distance
17.3() don't know

ANGER - DISTANCE ROM ECME CO SROPPIIG/EERSCMAL BUST.NESE DESTINATION IS 2 HIES OP LESS.
4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopping/personal business destination?

## 22.7 (minutes)

5. Are there adequate sidewalks or pathways you could use to walk on your trip from home tc your shopping/perscnal business destination?
24.31 ; all or almost all the way
35.4() part or the way $14.5 \%$ of trips are mare than 2 riles 23.5 ( ) there are none 2.31 ) don't know

## 

ミ. $\quad$ : fou were to take the gus to your shopoing/jersonal business destination, anat is jour gest estimate of the tire cu would spend doing each of the following?

7. Is it necessary to change buses to travel from your home to your shooping/personai business destination?
$12.3(\%)$ yes
49.61 ) No

Bus service not available: $34.8 \%$ 5.3 Don't know
3. Out of ten trips, how often would you expect: to have a seat on the bus all the way from home to your shopping/personal business destination?

$$
8,6 \text { times out of ten (mean) }
$$

$\equiv$ What is the one-way bus fare on your trip from home to your shopping/personal business destination?

$$
0.26 \text { cents (mean) ( ) don't know }
$$

10. If you were to go by car to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?

11. What is the parking cost on your trio from home to your shopoing/personal business destination?

! ! nc enarge


NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.
i. Did you ride a bi $\%$ le at least once during the past year?
$48.5(\%)$ yes
51.2 ( ) No (IF ":YO", wo To vERY FAGE.)
0.3 Don't know
2. Did you ride a bicycle during the last month?
$24.8($ ) Yes
23.51 ) No ITE", 60 TO NET PAGE.) ( $51.4 \%$ did not ride during the year) 0.3 Doric know
3. de mould like to know how often you use the bicycle for each of the following trip purposes. Place an " $X$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" throw gi " " h " below) during the last 30 days.
a. To work

| Did Not <br> Use | $1-5$ <br> Days | $6-10$ <br> Days | $11-15$ <br> Days | $16-20$ <br> Days | More Than <br> 20 Days | No <br> Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0.5(1)$ | $3.0(1)$ | $-(1)$ | $-1)$ | $0.31)$ | 1.0 |  |

b. To school
$22,3(1)$
c. For personal business
14.a) 6.57)
d. To visit friends
$10.5($ ) 9.31$)$
$3.010 .81)$
$0.8(1) 0.31)$
0.3
e. To go shopping
$15.0(1) 6.3(1.5(1.0() 0.81)$
0.81 )
0.8
f. To a recreational activity 12.8 () $7.0(1) 3.31$ : (1) 0.5!) 0.31: E. 4
g. Neighborhood riding $2.0($ ) 13.3() 5.3() 1.5() $0.5(; 2.3!)$ -
n. $\begin{gathered}\text { Long distance riding } \\ \text { (over } 2 \text { hours) }\end{gathered}$ 19.5 ( ) $3.5(1)-(1) 0.3(1) 0.3(1) 0.8(1) 0.5$
$(75.2 \%$ did not use bicycle during month)

Is your selected shopping or personal business destination located less than 4 miles away from your home?

-i yur anower íc $\because \Xi \Xi$, piecse reai seici.

```
14.5%( No
    If jour inswer is i
    scge IS.
```


# NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES. 

## BICYCLE-RELATED FACILITY IMPROVEMENTS


#### Abstract

Suopose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.


On most local streets, a yellow stripe is painted near the right-hand side of the road marking a lane reserved stricily for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for better riding. In addition, high-intensity lights aro adced along the bikeways to provide excellent visibility at night. A large number of secure tike lock-u facilities are provided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made freely available.

Zou are now asked to emress vour agreement or ïsagreement with the foliowine siatements about bisuciirg


 נ2 $\qquad$


## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTS

Please rate the staternts belou concernirg fow jou would ieet acout bieyclirg so jus



 convenient to stop and do errands when riding a bicycle
 on shopping or on personal business trips.
 destination would be tiring.
5. Riding a bicycle to my shopping/personal business destination ${ }^{5}(123.41,15.2() 49.2 i) \leq 6()$ would be dangerous because of the heavy traffic.
 would find it convenient to ride the bicycle.
7. I could not rely on riding a bicycle in rainy weather. $16.4(, 64.2() 7.61,9.4() 1.81) 0.6$
3. I could easily carry packages when I ride a bicycle while $2.3(19.3(14.6(149.7(12.31) 1.2$ I am on a shopping/personal business trip.
9. It would be uncomfortable to travel to this destination 4.1() 10.51$) 15.81) 62.61) 6.4($ i. . 0.6 by bicycle because of rough or bumpy riding surfaces.
10. I could get to my shopping/personal business destination $8.81,4621$ ) 13.11 ) 2/.6( ) 玉. 51 ) 1.$\}$ quickly when I ride a bicycle.
11. I would worry about being mugged or assaulted when I ride 1.81 , 14.0 ( $26.31,49.71$ ) 7.61 ) 0.6 a bicycle to my shopping/personal business destination.
12. i would worry atout being injured in an accident when I ride a bicycle to my shopping/personal bus. destination
13. It would be relaxing to ride by bicycle to my shopping/ personal business destination.
14. I would dislike bicycling to this shopping/personal bus. 4.11 ) $20.51,24.61,44.91,5.31) 0.6$ destination because of many delays at intersections.
 unsafe due to lack of bike faths separated from motor traffic.
16. Bicycling to this shopping/personal business destination would (, 29.21;18.11 13751)4.1 ( 三5 be dangerous because motorist are inconsiderate of bikers.
 perspiring or soiling my clothes.
18. Riding a bicycle would give healthful exercise.
19. Parking, locking and unlccking my bicycle would be 70 trouble.
22. : would worry about ny bicycie being stolen at this srecoing/personal business destiration.
21. : : rould de inexcensive to $u$ j; anc coerata a bicycle.

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP

1. Please indicate your preference for each of the following alternative means of travel for your next shopping or personal business trip by placing a "l" next to the alternative you prefer most. a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a " 4 " next to your least-preferred alternative. Please repeat the process for each statement (a) throuç (c) below. (If bus service is not cucivicile between your home and your shopping or personal business destination, rank the three remaining alternatives.)
a. Assume the bicycle facilities are in place. Please rank the following means of

2. If only the alternatives listed below were available for your next 10 shopping or personal business trips, how many of the 10 trips would you make using each alternative? firite the number of trips in the boz next to each alternative.)

$$
\begin{aligned}
& 2.3() \text { bicycle with improved facilities } \\
& 1.0(\text { ) walk } \\
& 0.6() \text { bus/transit } \\
& 6.1 \frac{()}{(10)} \text { TOTAL TRIPS (driver or passenger) }
\end{aligned} \quad \text { (Meir values) }
$$

## LIVING NEARER TO TRAVEL DESTINATIONS


#### Abstract

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and nighway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of empioyment, snopping, school, and recreation.


Some communities have been designed with this compact land-use arrangement in mird. Their iayout is such that most shopping and personai business trips can be accommocated within a six-block ( $1 / 2 \mathrm{mile}$ ) distance and most work trips are within two miles oi home.

Suppose you live or moved to one such community. Suppose further that special bicjcie paths and pedestrian pathways are provided so that it is possible to walk or bicycie to all shopping and personal business destinations without having to cross streets that carry heavy motor vehicie traffic; bicycle storing and lock-up facilities are provided in iarge numbers, free of charge, throughout the area; convenient bus service is avaliabie; and there are no special restricitions on the use of automobiles.
:iow, placse tum to the following pages ance express how this compact tana-use armangerer. = wain affect the waj jou jeei about using WALK, EICYCIE, BUS, or CAR for your shorging or gensorai ousiress trip.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agreement or disagreement with the following statement:

2. Please indicate your preference for each of the following transportation alternatives on your shopping or personal business trip by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described above. (Please repeat the process for each statemert (a) through (d) beiow.)
a. Assume the living conditions and special transportation facilities described on the previous page extst for your next shopping or personal business trip, and assume further that your trip is approximately $1 / 2$ mile ( 6 blocks) in length. (Please mank tire following mecns of transportation.)
() walk

b. Now suppose that in addition to the conditions described in (a) above the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank the following means $0_{j}$ -rarseortctior:.)
( ) walk $43.531 .0 \quad 11.5 \mathrm{GO}$ ) bus or transit $\quad 4514.5 \quad 41.0 \quad 24.5$
$\begin{array}{lllllllllll}\text { ( ) bicycle } & 31.0 & 38.0 & 10.5 & 11.5() & \text { ) car (driver or passenger) } & 19.0 & 6.5 & 26.5 & 41.5\end{array}$
c. Assume the conditions described in (a) above and assume that in addftion the speed limit was reduced to $15 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. In the community. (Please rank the following means of transeortazicr.)

d. Assume again conditions described in (a) above but this time assume no parking was available at your shopping or personal business destination. (Fieuse rarik ine

```
    ( ) walk 51.529 .57 .02 .0 ( ) bus or transit
    ( ) bicycle 24.045 .010 .08 .5() car (oriver or passenger)
9.0
3,5
14.563 .0
```

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPOFTAN IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL SE KEPT CONFIDENTIAL.

1. How old are you? $\frac{44.2}{41.8 \%}$ Mean
2. How many adults (18 or over), including yourself, are there in your housenold? $\qquad$
3. How many minors (under 18) are there in your household? 1.2 mean $84.2 \%$
15.8
4. Do you have a valid driver's license? ( ) Yes ( ) No
5. How many licensed drivers (including yourself) are there in your household? 1.9 Man
6. How many automobiles are there in your household? 1.8 Mean
7. Do you own a bicycle? ( ) Yes $\quad \begin{array}{cc}50.2 \% & 49.5 \\ (1) & \text { No ANS }=0.3 \%\end{array}$
8. How many bicycles are there in your household? $\qquad$ mean
9. What type of structure do you live in?

| 79.9 (O single family | -() low-rise apartment (4 to 8 stories) |
| :--- | :--- | :--- |
| 4.0() duplex | -() high-rise apartment (more than 8 stories) |
| 4.8() townhouse |  |
| 8.8() walk-up apartment (3 stories or less) 0.5 No other |  |

11. What is your educational background? (C :EC: Cl:
8.01 ) completed elementary school $10.3(1)$ college or technical school graduate
19.3( ) some high school
33.5() high school graduate
2.3 ( ) some graduate school
18.5 ( ) some college or technical school

5,3 ( ) completed graduate degree (s) 2,8 No ANS.
12. Please indicate your work group below:
$35.3 \%$ work 5 or more days a week 3.51 ) work $3-4$ days a week
2.5 ( ) work 1-2 days a week
52.7 ( ) presently rot employed
6.0 NO. ANS,
13. What is your occupation? (CHECK ONE) 16.5 (oforessional-technical
$4.8 \vdots$ ) managerial
$14.0($.$) blue collar$
22.1 () housewife

2,0 ( $)$ student
43() sales worker
$6.5($ ) secretarial-cierical-casnier
3.5 ( ) other $\qquad$
$21: 3$
14. How many workers are in your household? 1,3 (mean)
15. Please check the category which includes your approximate family income before taxes.

9,3 (96 $\$ 5,000$ and under
$11: 3() \quad \$ 15,001-\$ 17,500$
9.3()$\$ 5,001=\$ 7,500$
$9,3() 57,501-\$ 10,000$
7.8()$\$ 10,001-\$ 12,500$
8.8() $517,501-\$ 20,000$
9.3()$\$ 20.001-\$ 25,000$
$M E A=517,400$
11.3()$\$ 12,501-\$ 15,000$
14.8() $\$ 25,001-\$ 50,000$
0.81 ) Over $\$ 50,000$
8.0 No Ais.

In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
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$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.
is your shopping or fersonal business destination located less than 2 miles from your home?
72.0 彷, les
$\because$ jur mpijer í $\because E S$, piecae reci beiou.
28.0 ( ) No


NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The improvements consist of (1) providing pedestrian pathways,
(2) improving sidewalks, (3) providing better lighting, and (4) making traffic signals more pedestrianoriented.

Separate pedestrianways or walkways are built adjacent to all major roadways. These patinways are separated from automobile traffic by trees or grass median. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. righintensity lignts are added along the pathways to provide excellent visibility at night. Finally, the walkways are ennanced by the presence of water fountains, shade trees, benches, and pedestrian-oriented stanas with flowers, newspapers and refreshments.

You are now asked to empress your agreement on iisagremen with the following stavements about waikins ic jow shoocira or jerscnal business destiration, assuming the faciltty improvements aiescmised anove are

 pedestricn-relajec ifprovemer=3.

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS




```
Fage, even ij゙ you dici not va|゙火 inere or jowr last triz.
```

Strongly

Agree $\quad$\begin{tabular}{l}
Neither <br>
Acree Nor

$\quad$

Strongly <br>
Disaoree

 Disacree 

Disagre
\end{tabular}

1．Walking to a shopping／personal business destination would be pleasant because I could enjoy the scenery and surroundings．

2．When shopoing or on a personal business trip，it would be convenient to stop and do errands wher walking．

3．I couid pick up and go anytime I like when I walk to go shopping or on personal business trips．

4．Wa？king to this shopping，personal business destination would be tiring．

5．Walking to my shopping／personal business destination would be dangerous because of the heavy traffic．

6．When on a shcpping／personal business trip with children， it would be inconvenient to walk．

7．I ccuid not rely on walking to this destination in rainy weatner．

8．：cculd easily carry packages when I walk while I am on a snopoing／personal business trip．

9．It would be uncomfortable to walk to this destination because of rougn or bumpy walking surfaces．

10．I could get to my shopping／personal business destination quickiy when I walk．

11．I would worry about being mugged or assaulted when I walk to my shopping／personal business destination．

12．I would worry about being injured in an accident when I walk to my shopping／personal business destination．

13．It would be relaxing to walk to my shopping／personal business destination．

14．I would dislike walking to this destination because of the many delays at intersections．

15．Walking to my destination would be unsafe because of the lack of pathways that are separated from motorized traffic．

16．＂Walking to a shopping／personal business destination would be dangerous because motorists are inconsiderate of pecestrians．

17．When walking to this destination I would worry about perspiring or soiling my clothes．

18．Walking would sive healthful exercise．

1. Please indicate your preference for the following alternative means of travel for your next shopping or personal business trip by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred altemative. Please repeat the process for each statement (a) through (c) below. (If bus service is not availabls between. your home and your shopping or persoral business destination, rank the three remaining siternatives.)
a. Assume the walk facilities are in place. Please rank the following means of travel for your next shopping or personal business trip.
( ) walk with improved facilities

D. Now assume the same condition (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rarix again.)
38.2
( ) walk with improved facilities
( ) bicycle
() bus/transit
( ) car (driver or passenger)

| 28.5 | 20.8 | 5.6 | 6.9 |
| ---: | ---: | ---: | ---: |
| 34.0 | 25.0 | 13.2 | 11.8 |
| 13.2 | 18.8 | 26.4 | 34.0 |
| 14.6 | 24.3 | 17.4 | 6.9 |

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (F̂lecase rank.)
( ) walk with improved facilities
( ) bicycle
( ) bus/transit
( ) car (driver or passenger)
30.6
37.1
11.8
9.7
12.5
17.4
24.3
34.1

| 2.1 | 5.6 |
| ---: | ---: |
| 11.1 | 10.4 |
| 16.7 | 34.7 |
| 33.3 | 9.7 |

2. If only the alternatives listed below are available for your next ten shopping or personal business trips, how many of the ten trips would you make using each alternative? (irmite ine nimber of twits in the coa next to each alternctive. 1
2.5 () walk with improved facilities
1.0 i 1 bicycle
0.6 () bus/transit
5.9 ( ) car (driver or passenger)
(10) TOTAL TRIPS

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE


#### Abstract

It is decidec that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning ( $7-9 \mathrm{a} . \mathrm{m}$. ) and evening ( $4-6 \mathrm{p} . \mathrm{m}_{\mathrm{s}}$ ) rush hours. This means that you would be charged up to a $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.


Flease tum to ine following page.

YOU HAVE JUST READ AN ASSUMED REGULATION FOR CAR USAGE．IMAGINE THAT THIS SITUATION FOR CAR USAGE EXISTS FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP．
：．Please indicate your agreement or disagreement with the following statements：


2．Please indicate your preference for each of the following transportation alternatives for your next： sharping or persona business trip by placing a＂1＂nest to the alternative you prefer the most，a ＂2＂next to your seccrd most preferred alternative，a＂3＂next to your third most preferred alternative， and a＂द＂under your leas：preferred alternative．Please repeat this for each of the statements
（a）through（c）below．Ifs jus service is not avaititive for this eroppirs on personal business trig，please rani tine remairire inge alterative oritu．）
a．Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect．
Please rank the following means of transportation for your next shopping or personal
15.0 44.0 business trip．
（ ）walk
（）bicycle
（ ）bus or transit
（ ）car（driver or passenger）
－rが坛？

$$
3 / 10
$$

30.0
17.5
11.0
b．Assume that ${ }^{\text {T}}$ instead $\mathrm{cf} \$ 2.00$ the congestion fee increased to 54.00 per cay．（EVecse rant． astir．
c．Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline
$\begin{array}{rr}\text { increases to } 51.50 \text { per gallon．Please rank．；} \\ (\text { ）walk } & 31.0 \\ (\text { ）bicycle } & 34.5 \\ () \text { bus or iransit } & 12.0 \\ \text {（ ）car（siviver or passenger）} & 10.0\end{array}$
$\begin{array}{cc}\text { increases to } 51.50 \text { per galton．} & \text {（Please rank．）} \\ \text {（ ）walk } & 31.0 \\ \text {（ ）bicycle } & 34.5 \\ \text {（）bus or transit } & 14.0 \\ \text {（）car（stiver or passenger）} & 10.0\end{array}$
6.0
13.5 13.5 30.0
 8,0 18.5 18．0 18.0 26.5 22,5
17.0
20.0
（ ）walk
（ ）bicycle
（ ）bus or transit
（ ）car（driver or passenger） 10.0 14.0 32.5
7.0

October 15, 1978

Dear Resident of Columbus:
The City of Columbus is cooperating in a U. S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidentia

This questionnaire is concerned with your work trips only. We are interested in your opinion of the transportation services available to you between your home and your place of work. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800--328-2933.

MDA: sm
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TO WORK．

1．What is the nearest interest intersection or street address of the piace where you work？

2．Where is the place where you work located：No Answer：3．090
$60.3 \%$ ）central city
36.84 ，suburban

3．Specify the type of area where your work place is located．（CUECK OWE）NO ArFEWEr： $0.5 \%$
$16.3 \%$ ) central business district
(downtown of metropolitan area)
$29.37_{0}$ ）industrial district
$25.6 \%$ neighborhood business district or
5．17d ）office park／professional building shopping center
$2.6 \%$ ）regional shopping center
5.39() college campus or school
12.820 other
（please speci幺幺）

4．Approximately how far is it from your home to your work place（one way）？No Hnsiber： 1. is

2,5 id ） 2 blocks or less
$\left(\frac{3}{4}\right.$ mile or less）
$23,5 \%) 2$ to 4 miles
$6.878) \quad 3$ to 6 blocks
$21.0 \%$ ）$\frac{1}{2}$ to 1 mile
$27.7 \%$ ， 1 to 2 miles

5．What was the date of your most recent trip to work？

6．At approximately whit time of day dit you make tris trip to work？／Jotinimier：$C=7$
El：ニi，，betzreian


$12.8 \frac{10}{}$ ； 2 g．m．ts 6 p．m．
$10.3 \%() 8$ a．m．to a．m． ！ $5 \%$ ！after 6 p．m．

$$
2 \leq=(1) \text { o a.m. to } 10 \text { a.m. }
$$

7．How did you make your most recent tric to work？！CEEC？ARE；NO Ansuikr： $0.5 \%$

$$
\begin{aligned}
& 3.8 \text { \% ( ) walked all the way } .39 \text { ! motorcycle } \\
& \text { 6.. } 5 \text { io ( ) drove a car } \\
& 1.370^{\prime} \text { ) ticycle } \\
& \mathrm{G}_{1} \cdot 0 \overline{i v}_{2} \text { ! } \text { ) passenger in a car } \\
& - \text { ( ) moped (mozorized bicycle) } \\
& \text { =. ニ\% \% ; bus } \\
& \text { ב: ( }) \text { taxi } \\
& \text { 2.01) other }
\end{aligned}
$$

7a．If you answered bus，train or subway above，how did you get to your bus or transit stop？


8．Between the time you left home to go to work and the time you returned home，did you make any side trifs that reouired you to travel more than onemile out of your way？NC ARSNES：／， 370
$23.2 \%$ ，yes
$75410(10$

9．Dic anyone accombany you on your last work trip：！CEECR are： 110 rimsmisr： 1.000

玉．う $\ddagger!$ ）was with two other persons

Esy！；i was with three or more oersens

NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT TRIP TO WORK WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following options were availatie to you on your most recent work trip:
CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For your travel to work we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never use it.

The following pages are labeled with the means of transportation you are asked to rate. Unider each label you will find a set of statements. Please read each statement and place an "X" in the space that best indicates your agreement with the statements under each means of transportation you are rating.

For examole, consider the following statement for bus:

| Strongly <br> Agree | Agree |  |
| :--- | :--- | :--- |
| $(1)$ | Neither <br> Agree Nor <br> Disagree | Disagree | | Strongly |
| :---: |
| Disagree |

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending on how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you neither agree nor disagree you would place an "X" in the center box. in the example shown here, an "X" has been placed in the box under "agree", indicating this person enjoys traveling by bus.

Secause ie need to uncierstard how your ratire 0 : your trip to work varies from one means 0 : transportation to anotier, we are asking that you go through the ist of characteristics four tires, . once for sach means of travel (walk, bicucle, can, ana zus). Although this process mignt arpecm refetitious, we wat to stress that your carejul ratirg of all the stavements on the nezv four zages

is your work piace located less than 6 miles from your home?

-i joun Gnswer is TEE, Eivase nュさe tree stitements




1. Bicycling to work is pleasant because I can enjoy the scenery and surrcundings.
2. When biking, it is convenient to stop and do eprands on my way to and from work.
3. ! can zick up and go anytime I like when I go to work by bicycle.
$\therefore$ - rave!:ng to work by bicycle is tiring.
4. Riting a bicycle to work is dangerous because of the neavy traffic.
5. When I ride the bicycle to work I worry about being late.
6. ? cannot rely on riding a bicycle to work in rainy weather.
7. : san easily car y my briefcase or other packages when ! ride the bicycle to work.
8. It is uncomfortable to travel to work by bicycle because of rough and bumpy riding surfaces.
9. I car get to work quickly when I go by bicycle.
10. I worry about being mugged or assaulted when I travel to work by bicycle.
11. I worry about being injured in an accident if I ride the bicjcle to work.
12. I\& is relaxing to travei to work by btcycle.
13. I dislike traveling to work by bicycle because of the many stops and delays at intersections.
14. Riding the bicycle to work is unsafe because of the lack of bike paths that are separated irom motorized traffic.
15. Going ty bicycle to work is dangerous because motorists are inconsicerate of bicyclists.
16. When bicycling to work I worry about perspiring or solling my clothes.
17. Riding a bicycle to work gives heal inful exercise.
io. Darking, locking and unlocking my bicycle at work is no trouble.
18. After parking my bicycle I must waik a long distance when I go to work.
19. I worry abou: ry bicycle teing stolen at work.
20. It is inexpensive to buy and ooerate a bicycia.

is aus service avàiabie between your home and work place?
0.19: : yes
Er. $2 \%$ \% no

$$
\begin{aligned}
& \because \because \because \mathrm{Z}
\end{aligned}
$$

?. Going to work by bus is pleasant because I can ency the scenery and surroundings.
 ane so errancies on my way to ane from work.
 trave? by bus to work.
A. Traveling ty bus to work is very tiring.

ミ. Traveling by bus to work is dangerous because of the heavy :-affic.

i. : canto: rely on taking a bus so work in rain wezさrer.
 wren. ! sc io work ty bus.
?. It is uncorfortabie to travel to work by bus 4.39 (, $9.8 \%$, $26.4 \%$, 55.8\% ) 3.9 , $0.6 \%$ because of rough and bumpy road surfaces.
' 0 . ! ear get to work ouickly when I take the bus. $1.290,14.7 \%, 28.2 \%, 44.3 \%, 10.4 \%$, 1.29

 to work by bus.

 many stops and delays at intersections.
is. I must walk a long distance to get io and from the $9.2 \%_{6}, 27.0 \%$, 18.4 .9 , $29.9 \%$, $4.92,1$, .2 bis when: 00 to work.
 work by bus.
i:. her traveling by bus to work I worry about oerspirinc or soiling my clothes.
$\because$ it is inexpensive ic travel ty bus tc work.

$$
\begin{aligned}
& 1.2 \% 1 \text { ) } 5.570(125.2 \%() 61.49 \mathrm{~d}, 5.5 \%() 1.29
\end{aligned}
$$

## YOUR RATING OF WALK

is your work place located less than 3 miles from your nome?

$$
\begin{aligned}
& \text { 70\%i i そes 30\%1 no }
\end{aligned}
$$

$$
\begin{aligned}
& \text { jeicu concerming now join wou-c eet about jaikirg }
\end{aligned}
$$

$$
\begin{aligned}
& \text { rage. }
\end{aligned}
$$

to york even if you itio not waik on your hest work tiris.


 when I walk to work.
9. It is uncomfortable to walk to work because of rough or bumpy walking surfaces.
10. I can get to work quickly when ! walk.
11. I worry abcut being mugged or assaulted when I walk to work.
12. i wor:y about being injured in an accident if I walk to work.

1?. It is relaxing to walk to work.


- 'da"king to work is pleasant because ! can enjoy the scenery and surroundings.

2. Then walking, it is convenient to stop and do errands on my way to and from work.
3. I can pick up and go anycime I like when I walk © work.
4. waiking to work is tiring.
5. dalking to work is dangerous because of the heavy traific.
6. When I walk to work I worry about being late.


## YOUR RATING OF CAR

When usino e car，are you usually a：

2゙i，§o！）car criver？


wsov tríg，maze ine sievemerts beiow cor－
cerrinu row uou wouzz fee？ajcut driving
to worik．

1： $5 \%$（0（ car passenoer？


Elecse answer aiz questions belou，even is you do not owr a con．
？．iravelinç by car to work is pleasant because ！can enjoy the scenery and surroundings．
2．When traveling by car，it is convenien：to stop and do errands on my way to and from work．
 by car to work．
4．Traveling by zar to work is tiring．

5．Traveing ty car to work is dengerous because Ef：

7．I cannot rely on traveling by car to work in rainy $1.8 \%(, 2.0 \%$ ， $4.8 \%$ ， $58.6 \%$ ， $31.8 \%$ ， $1.0 \%$ weather．

 of reugh or bumidy road surfaces．

1．：worry about being mugged or assaulted when I trevei by car to work．
2．：worry about being injured in an accident if I travel by car to work．
3．It is relaxing to trave？by car to werk．
4．I cislike traveling by car to work because of ：ine mańy delays at intersections．
E．Darking the car at riy piace of work is expensive．
E．Lfier oarking the car，I must walk a long distence wrer ：ge to work．
$\therefore$ ：wrer zsout ine car being stolen or vandalized at werk．
E．$::$ ：s irexpersive $=0$ buy and oderate a car．
9．Farking the car at work is no trouble．

| ．29\％ |  | 2．39 | ） | 23.96 | ） | $5 \% 8 \%$ | ； | 34．27\％ | ） | 1.203 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2．301 |  | $130 \%$ | ） | $225 \%$ | ） | 51.291 | ） | 10．32000 | ） | 1.25 |
| $6.59 \%$ |  | 43.29 | ） | $36.5 \%$ | ） | $11.5 \%$ | ） | 0.596 | ） | $\Sigma=2 \%$ |
| 3.291 |  | $14.5 \%$ | $)$ | $258 \%$ | ） | 49．372 | ） | 587 | ） | 13\％ |
| $1.29 \% 1$ | ） | 2．296 | ） | 2.35 | ） | 53． 4 is | ） | $\cdots$ | ） | $\therefore=^{*}$ |
| $\because \square$ |  | く．ごis | ） | $7 \underbrace{3}$ | $)$ | $\therefore \therefore 1 \%$（ | ） | $\therefore \therefore \therefore$ 二is | ） | 3\％： |
| 4is |  | －7 | ） | こ，8＊ | ； | ミごッ | ） | 19 ジ¢ | ） | $2.8=$ |
| 5：3＊） |  | 13？${ }^{\text {c }}$ | ） | に1：${ }^{\text {a }}$ | 1 | こど「边 | ； | ミこ，ご | i | O8\％ |
| $22.5 \%$ |  | S\％i\％ | ） | 似ごす | ） | 7576 | ） | 30 \％ | ） | 0． $8 \%$ |

## WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL TO WORK．



 most－preferred aleeriazive，a＂ 3 ＂nex：to your third most－preferrec alternative，ard a＂ 4 ＂ next to your lessi－creferred alternative．


2．He would like ：a know how ofien you use each of ehe follewing means of travei for work trips frem home．Piace ar．＂y．＂under your bes：estimase of the number of cays you have wsec each msans of trave？during the last 30 tave．


3．Assume that on your next work trip all travel conditions rema ined the same as present excert tra：the price of gasciine increased to one of the price levels incicated below．For eacr gasoline price level，please indicate your iransportation preference by placing a＂1＂next to the alternative you would prefer the most，a＂ 2 ＂next to the one you would prefer second，a ＂ 3 ＂next to your third choice，and a＂4＂next to your least－preferred alternative．Please redeat for each of the price leveis（a）through（d）below．


（c）
（c）


（ ）＝1．50\％＝1．29waik．
$10 シ \%$ ，シ9／5 ticycle（ ）19．0\％，360\％bisycle
7．3\％，21．じ\％Dus
$669 \%, \quad 7.8 \%$ car（ $149.670,11.5 \% \mathrm{car}$
（ ）111．3\％，7． 570 ous

（）今ニ $2 \%, 12.5 \%$ bus（ $1 / 4.8 \%, 12,2 \%$ ，bus


WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU WORK BY ANSWERING THE FOLLOWING QUESTIONS:

## 

1. If you were to ride your bicycle to work, what is your best estimate of the time you would spend doing each of the following?
getting the bicycle to the street
riding the bicycle
2.21 (minutes)
parking and locking up the bicycle
walking from bicycle to school

TOTAL TIME FROM HOME TO WORK
$\qquad$ (minutes) 3.20 (minutes) 1.82 (minutes)
24.81 (minutes)
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to work?
1.0\% ( ) bicycle path (off the street)
$2.5 \%$ ( ) bicycle lane (on the street)
$71.0 \%$ ( ) neither
$12.0 \%$ ( ) don't know
3. What portion of your total trip from home to work is served by bicycle paths or bicycle lanes?
$68.8 \%($ ) none
$3.5 \%_{0}()$ less than $1 / 4$ the distance
$0.87($ ) $1 / 4$ to $1 / 2$ the distance
$\left.0.3 \%_{0}^{( }\right) 1 / 2$ to $3 / 4$ the distance
$0,3 \%$ ( ) more than $3 / 4$ of the distance
12.8\% ( ) don't know

ANSWER FE DISTANCE ROM HOME TO WORK IS 3 MILES OR JESS.
4. If you were to walk to work, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at work? $\qquad$ (minutes)
5. ire there adequate sidewalks or pathways you could use to walk on your trip from nome to work?
19.89() all or almost all the way
$376 \%_{2}()$ part of the way
$17.57_{3}($ ) there are none
1.87.( ) don't know
6. If you were to take the bus to work, what is your best estimate of the time you would spenc doing each of the following?
getting to the bus stop
waiting for the bus
riding on the bus
walking from bus to work
TOTAL TIME FROM HDME TO WORK
7. Is it necessary to change buses to travel from your home to work?

$$
9.0 \%() \text { yes }
$$

$34.4 \%$ ( ) No
5.0\% DCNTT KNOW
8. Out of ten trips, how often wculd you expect to have a seat on the bus all the way from home to work?

$$
8,10 \text { times out of ten }
$$

9. What is the one-way bus fare on your trip from home to work?

$$
28 \text { cents } \quad() \text { don't know }
$$

10. If you were to go by car to work, what is your best estimate of the time you would spend doing each of the following?

| walking to the car <br> driving or riding <br> parking the car <br> walking from car to work$\quad \frac{1.27}{1.29}$ (minutes) |
| :--- |
| (minutes) |
| TOTAL TIME FROM HOME TO WORK |

11. What is the parking cost on your trip from home to work? (CZECK CNE AVD SPECIFy THE COS\%.
( ) no charge
( ) daily charge
.90 (dollars)
( ) week!y charge $\qquad$ (dollars)
( ) monthiy charge
(oollars)
12. Did you ride a bicycle at least once during the past year?
54.370() Yes
$45.8 \%_{8}($ ) No (IE "MO", GO TO TRE NEXM PAGE.)
13. Did you ride a bicycle during the last 30 days? No Answer: $0.3 \%$ बै4.5\% ( ) Yes
29.5\% ( ) NO (IF "NO", GO TO WEX' PAGE.)
14. We would like to know how often you use the bicycle for each of the following trip purposes. Place an " $x^{\text {" }}$ under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through "h") during the last 30 days.

a. To work
b. To school

$$
18.0 \%() 3.5 \%_{0}\left(1.0 \%_{0}() 0.5 \%_{1}, 0.5 \%_{0}\right) 1.0 \%_{3}(1
$$

$21.5 \%() 0.8 \% 1)-0.5 \% 1)-1)-1(1.8 \%$
c. For personal business

d. To visit friends $11.0 \%_{0}\left(19.5 \%_{3}\left(1.8 \%_{0}() 0.5 \%_{2}()-(1) 0.8 \%_{0}\right) 1.0 \%\right.$
e. To go shopping

$$
15.5 \% 1) 6.3 \%(1) 0.8 \%_{0}() 0.8 \%(1) 0.5 \%(10.30
$$

f. To a recreational activity $10.3 \%$ ) $7.5 \%_{0}() 3.5 \%_{0}\left(1.0 \%_{0}(1) 0.3 \%() 0.8 \%_{3}(1.37,1\right.$
g. Neighborhood riding $\left.1.5 \%_{0}(13.5 \%() 4.8 \% 1) 1.8 \%(10.8701) 1.5701\right) 0.8 \% 0$
n. $\begin{aligned} & \text { Long distance riding } \\ & \text { (over } 2 \text { hours) } \\ & \text { ( }\end{aligned}$

```
    Is your work place located less than 6 miles away from your home?
```

```
Q.6.5 % % vos
    13.5%%;10
```



NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO WORK USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Sudacse the cize introduces several improvemerts to bicycle-reiated facilities designed to increase the comfor: anc safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving stree: lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-ud faciities ir many areas, and (E) provicinc tetter lighting.

On mos: local stree:s, a yellow stripe is painted near the right hand side of the road, marking a lane reservec siriciiy for bicycle use. Separate bicylle daths are built adjacent to all major roadways. These Eicycie Deths are separated from automodile eraffic by a metal guardrail or a grass median. All these paths and stres: lanes are smocthly paved for a better ride. In addition, high intensity lights are added along the bikeways : s provite exceilent visibility at night. A large number of secure bike lock-up facilities are provided and, in hioh employment centers, these consist of enclosed free storage lockers manned oy a fuli-time attendant. finaliy, convenient locker, shower and changing facilities are made available.





## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTS




1. Eisycling :o work wouid be pleasant because I coulc enjoy the scenery and surroundings.
2. Wher bikinc, it would te convenient to 5 too and do errands on my way to and from work.
3. I could pick up and go anytime I like when I go to work by bicycle.
4. Traveiing to work by bicycle would de tiring.
5. Riding a bicycle to work would be dangerous because of the heavy traffic.
6. If I rode the bicycle to work, I would worry about being late.
7. I could not rely on riding a ticycle to work in rainy weather.
8. I could easily carry my briefcase or other packages when I ride the bicycle to work.
9. It would te uncomfortable to travel to work by bicycle because of rough ard bumpy surfaces.

1c. I could get to work auickly when I go by bicycle.
11. I would worry about being mugged or assaulted when I iravel to work by bicycle.
12. I would worry about being injured in an accident if i ride the bicycle to work.
is. It would be relaxing to travel to work by bicycle.
14. I would dislike traveling to work by bicycle because of the many stops and delays at intersections.
15. Riding the bicycle to work woulc be unsafe because of $6.9 \%$ ) $15.0 \% 1$ ) $15.6 \%() \leq 3.2 \%_{0}() 8.1 \%() 1.20$
lack of bike oaths that are separated from motor traffic.
16. Going by bicycle to work would be dangerous because $5.8 \% 1$ ) 26.6\%1 ) 22.0\% ( $42.1 \%$ ( $2.9 \% 1) 0.62$ motorists are inconsiderate of bicyclists.
17. When bicyclino to work I would worry atout perspiring $\left.\left.2.39_{0}\left(130.6 \%_{0}() 24.9 \% 1\right) 38.8 \% 1\right) 1.7 \% 1\right) 1.7 \%$ or soilins my clothes.
13. Riding a bicycle to work would oive healthful exercise.
15. Parinine, locking and unlocking my bicycle at work would te no trouble.
33. Gz:er Jarking my bicycie I would have to walk a ior: dis:ance when I go to work.
?:. : woulc.worry about my ticycle being stolen at work.
$28.3 \%() 64.2 \%_{0}(1.0 \% 1) 1.7 \%() 0.6 \%_{2}(1129$ $116 \%(165.3 \%(12.701) 9.270(10.6 \%() 0.6 \%$

- ( $14.0 \%(10.4 \%() 68.8 \%(16.29!) 2.0 \%$

?2. It woulo be inexpensive io buy anc operate a ticycle. $1399(1520 \%(12.7 \%() 16.2701) 42 \%!) 20 \%$

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING．PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP．
i．Jiease incifate your areference for the foliowing aitarnative means of travel for your next trip to work by piacing a＂l＂next to the aiternative you prefer the most，a＂2＂next to your second most preferred aiternative，a＂ 3 ＂next to your third most preferred alternative，and a ＂C＂next to your least preferred alternative．Repeat the process for each statement（a） trrough（c）below．



2．Assume the bicycle facilities are in place．please rank the following means of travel


2．Sudpose that the bicycle facilities are in place and the price of gasoline increased to 53.00 per gatlon．（Eiesse memi．）

$$
\begin{aligned}
& 51.4 \% \\
& 15=\% \\
& \text { の.こ\% } \\
& 120 \% \\
& 15.6 \% \\
& 243 \% \\
& 23.1 \% \\
& \text { 28. } 2 \% \\
& \text { 24.370 } \\
& \text { 2. If only the alternatives listed below were available for your next ten trips to work, how many of } \\
& \text { the ten trins would you mare using oesn alternative? Krize tre rumen co trizs ir the bce nem= }
\end{aligned}
$$



## LIVING NEARER TO TRAVEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the ievels of air pollution, energy consumption, traffic congestion and costly street and hignway expenditures. It has been suggested that in order to reduce these problems people must live nearer to their places of employment, shopping, school and recreation.


#### Abstract

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six block ( $\frac{1}{2}$ mile) distance, and most work trips are within two miles of home.


Supoose you live or moved to one such community. Suppose further that special bicycie paths and pedestrian pathways are provided so that it is possible to walk or bicycle to work without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is available to work places: there are no special restrictions on the use of automobiles.
iow, please tum to the following pages and express how this sompast landi-use arrangement vouit affect the way you feel about using iALK, SICYCIE, SUS or CAP for your york triz.

YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPGRTATION CONDITION．IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT WORK TRIP．

```
ว:ezse indicate your agregmont or disagregment witr, the following statemeri=:
```

|  | Neither <br> Agree Nor | Strongly |
| :--- | :--- | :--- |
| Agres $\quad$ Acres $\quad$ Disacree |  |  |


2．Dlease indicate your preference for each of the followirc transportation alternatives on your next trio tc work，by placing a＂？＂next to the a？ternative you prefer the most，a＂2＂nex：to your secor．c most oreferred alternative，a＂3＂neyt to your third most oreferred alternative， and a＂4＂next to your least preferred alternative，assuming the land－use arranoement described aoove．Please repeat the process for each statement（a）through（d）below．

2．Assume the living conditions and special transportation facilities described on the previous page exist for your next trip to work，and assume further that your trip to work is approx－ imately one mile away．（Flease rent the foiloine mecrs of trarsportation．）
（ ）－walk

| $275 \%$ | $28.0 \%$ | 4 |
| :---: | :---: | :---: |
| $375 \%$ | $17.5 \%$ | $19.5 \%$ |
| $15.5 \%$ | $23.5 \%$ | $40.5 \%$ |
| $13.5 \%$ | $25.0 \%$ | $16.0 \%$ |


|  |
| :---: |
| －ご\％ |
| 4,5 |
| 14． $5 \%$ |
| 4．5\％ |

b．Now suppose that in addition to the conditions described in（a）above，the price of gasoline increased to 51.50 per gallon．（Siense rank again．）

| S20\％ | （ ） | walk | $36.5 \%$ | $17.5 \%$ | $16.5 \%$ | $55 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $40.5 \%$ | （ ） | bicycle | 330\％ | 14．5\％ | $9.0 \%$ |  |
| 15.56 | $($ | bus or transit | ふ．5\％ | 34．5\％ | 29．5\％ | $12.5 \%$ |
| 26．070 | （ ） | car（driver or passenger） | 12．5\％ | 25．5\％ | $31.0 \%$ | く，\％ |

c．Assume the sonditions deseribed in（a）above and assume that in addition，the speed limit wes reduced to 15 mph in the community．（Plecse ranti．）


WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? 38.2 (age) (mean)
2. What is your sex? 5:0 , Male 45:
3. How many adults (18 or over) including yourself are there in your nousehold? $\qquad$ mean
4. How many minors (under 18) are there in your household? $\qquad$
5. Do you have a valid driver's license? $72.7 \%$ ) yes $7.3 \%()$ No
6. How many licensed drivers (including yourself) are there in your household? $\qquad$
7. How many automobiles are there in your household? $\qquad$
8. Do you own a bicycle? $52.5 \%$ ) yes $46.5 \%$ ) No
9. How many bicycles are there in your household? $\qquad$ 1.6
10. What type of structure do you live in? No Answer: 0.30

11. What is your educational background? (CHECK ONE) No A,15wer $2 . \equiv=\%$
5.3\% ( ) completed elementary school 17.0\% ( ) college or technical school graduate
$12.3 \%_{0}($ ) some high school 2.5\%( ) some graduate school
$32.8 \%$ ( ) high school graduate
$5.8 \%_{0}$ ( completed graduate degree (s)
$24.0 \%$ ( ) some college or technical school
12. Please indicate your work group below:

| $90.2 \%$ ) work 5 or more days a week | $2.0 \%($ ) work $1-2$ days a week |
| :--- | :--- |
| $6.8 \%$ ( ) work $3-4$ days a week | $1.0 \%()$ presently unemployed |

13. What is your occupation? (CEECK CNE/ NO Hiswer: $0.3 \%$
26.09 ( ) professional-technical
$11.5 \%$ ( ) managerial
$31.3 \%()$ blue collar
0.3() Student
5.8\% ( ) sales worker
16.09( ) secretarial-clerical-cashier
$8.87 \mathrm{~g}(\mathrm{)}$ other $\qquad$
14. Dces your job require you to dress up? (CEEC. CIIE)
$42.0 \%$ ( ) usually $12.8 \%$ ( ) sometimes $43.9 \%()$ not usually
iミ. How many workers including yourse?f are in your housenold? $\qquad$ 1,7
15. Jlasse cneck the category wnicn includes your aooroximate farily income be"̈ro tixes.

| 4.878 | \$5,000 and under | $9.8 \% \quad(\quad)$ | \$15,001-517,500 |  |
| :---: | :---: | :---: | :---: | :---: |
| 6.8701 | \$5,001-\$7,500 | $9.0 \%$ ( ) | \$17,501-\$20,000 |  |
| $6.8 \%$ ( ) | \$7,501 - \$10,000 | 18.490 ( ) | \$20,001 - \$25,000 | $x: 19,270$ |
| 10.3\% ( ) | \$10,001-\$12,500 | $15,30 \%$ ( | \$25,001-\$50,000 |  |
| $11.0 \%$ ( ) | \$12,501-\$15,000 | $1.5 \%$ () | Over \$50,00C |  |

In the space beiow we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for complering this questionnaire.

Is your work piace located less than 3 miles from your home？

以った（ ）Yes
$\because$ Icur answer is YES，piease read jeicu．

$$
26.0 \% 190 \quad
$$

$\because$ jour ansiar is io，हieasa zo on＝0 Faje 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT． THIS IMPROVEMENT，DESCRIBED BELOW，DOES NOT EXIST NOW．IT CONCERNS IMPROVEMENTS TO PEDESTRIAN－RELATED FACILITIES．AFTER YOU READ THE DESCRIPTION，YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO WORK USING THE NEW FACILITIES．

## PEDESTRIAN－RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian－related facilities designed to increase the camfort and safety of pedestrians．The improvements consist of（1）providing pedestrian pathways，（2）improving sidewalks，＇3）providing better lighting，and（4）making traffic signals more pedestrian－oriented．

Separate pedestrian ways or walkways are built adjacent to all major roadways．These pathways are separated from automobile traffic by trees or grass medians．At all busy street crossings，pedestrians will be able to change traffic lights in their favor．All existing sidewalks are repaired to make walking easier．High intensity lights are added along the pathways to provide excellent visibility at night．Finally，the walkways are enhanced by the presence of water fountains，shade trees，benches and pedestrian－oriented stanas with flowers，newspapers and refreshments．





Please rate the statements below concerning how you would feel about walking to work using the facility improvements described on the previous page, even if you did not walk on your last trip to work.

> | Strongly |
| :--- |
| Agree |

## Neither Agree Nor <br> Agree Disagree

Disagree

1. Walking to work would be pleasant because I could 23.09 ( 49.291 ) $19.6 \%_{0}($ ) $6.8 \%$ ( $1.4 \% 1$ ( enjoy the scenery and surroundings.
2. When walking, it would be convenient to stop and $\left.6.8 \%() 32.4 \%_{0}() / 6.9 \%() 39.8 \%_{0}() 4.1 \% 1\right)-$ do errands on my way to and from work.
3. I could pick up and go anytime I like when I walk $8.8 \%_{0}\left(, 44.5 \%_{0}\left(13.5 \%_{0}() 29.1 \%_{0}() 3.4 \%_{0}(1) 0.7\right.\right.$ i,
to work.
4. Walking to work would be tiring.

$$
5.4 \%() 32.49() 19.6 \%(137.2 \% 1) 4.7 \%(10.7 \%
$$

5. Walking to work would be dangerous because of the $8.1 \%() 15.5 \% 1$ ) $8.1 \%() 59.5 \%) 8.8 \%()$ -
heavy traffic. heavy traffic.
6. If I walked to work I would worry about being
late.
7. I could not rely on walking to work in rainy weather.

$$
\begin{aligned}
& 8.8 \%(129.7 \%(15.5 \%() 41.9 \% 1) 4.1 \% 1)- \\
& 19.6 \%(164.8 \%(15.4 \%() .8 .8 \% 1) 0.7 \% 1) 0.7 \% \\
& 5.4 \%(145.3 \%(12.8 \%(1) 30.4 \% 1) 5.4 \% 1) 0.7 \%
\end{aligned}
$$

8. I could easily carry my briefcase or other packages when I walk to work.
9. It would be uncomfortable to walk to work because $5.4 \%_{0}() 10.1 \%$ ( ) $13.5 \%_{0}\left(159.5 \%_{0}\right.$ ( ) 11.5\% ( ) -
of rough or bumpy walking surfaces.
10. I could get to work quickly when I walk.

$$
4.1 \%(126.4 \% 1 \text { ) } 14.9 \%(147.87 \% 1 \text { ) } 68 \% 1 \text { ) - }
$$

11. I would worry about being mugged or assaulted when I walk to work.

$$
6.1 \%(18.2 \%() 14.9 \%(152.4 \%) 74 \%()-
$$

12. I would worry about being injured in an accident if I walk to work.
13. It would be relaxing to walk to work.

$$
10.1 \%_{0}\left(1 5 1 . 4 \% ( ) 2 0 . 3 \% \left(16.2 \%_{0}(\mathrm{O} 2.09()\right.\right.
$$

14. I would dislike walking to work because of the many $2.0 \%$ ( $11.5 \%(13.5 \%$ ( $164.9 \%$, $8.1 \%$ ( ) -
15. Walking to work would be unsafe because of the lack $6.1 \%() / 5.5 \%() 10.1 \%() 52.1 \%_{0}(14.2 \%() 2.0 \%$
of pathways that are separated from motorized traffic.

16. When walking to work I would worry about perspiring $4.7 \% 1$ ) $25.0 \% 1,20.9 \%_{0}(46.09(1) 3.490$,
or soling my clothes.
17. Walking to work would give healthful exercise.

$$
35.1 \%_{0}(57.4 \%() 5.4 \%() 1.4 \%() 0.7 \% 1)
$$

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next trip to work by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative. Repeat the process for each statement (a) through (c) below. (If bus service is not available between your home and work place, rank the three reriaining alternatives only.)
a. Assume the walk facilities are in place. Please rank the following means of travel for your

b. Now assume the same condition as (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rank again.)

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)

| 35.870 | () walk with improved facilities $38.5 \%$ | 10.890 | $9.4 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$33.8 \%$
( ) bicycle
$32.4 \%$
$16.2 \%$
5.49
$12.2 \%$
$13.5 \%$
( ) bus/transit
$8.1 \%$
$33.0 \%$
$12.8 \%$
$42.6^{\%} \%$
14.29
( ) car (driver or passenger)
$9.5 \%$
37.8\%
28.490
$10.1 \%$
2. If only the alternatives listed below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (Write the number of trips in the box next to each alternative.)
$533 \%_{c}=\%$ TRiPS ( ) walk with improved facilities
1.9
$64.2 \%=\%$ TRIPS ( ) bicycle
1,3
$76.4 \%=0 / 107 R 1 P S()$ bus/transit
(20.9\% = $0 / 0$ tran $2 \%$ ) car (driver or passenger)
$41.3 \%=10 / 10$ trips $(10)$ TOTAL TRIPS

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1.00$ will be assessed to the owners of automobiles operating during the morning ( $7-9$ a.m.) and evening (4-6 p.m.) rush hours. This means that you would be charged up to $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

## YOU HAVE JUST READ AN ASSUMED FEE ON AUTO USAGE．IMAGINE THAT THIS SITUATION EXISTS FOR YOUR NEXT WORK TRIP．

1．Please indicate your agreement or disagreement with the following statements：
 with a congestion fee of two dollars per day．

2．Please indicate your preference for each of the following transportation alternatives for your next trip to work by placing a＂1＂next to the alternative you prefer the most，a＂ 2 ＂next to your second most preferred alternative，＂＂3＂next to your third most preferred alternative，and a＂4＂next to your least preferred alternative．Please repeat this for each of the statements（a）through（d）below． （If bus service is not available for your work trip，please rank the three remaining alternatives below．）
a．Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect．Please rank the following means of transportation for your next trip to work．
$25.0 \%$
$135 \%$
$38.0 \%$
$\frac{12}{29.07}$
36.59
$13.0 \%$
$13.0 \%$
$28.5 \%$

NO
NO

b．Assume that instead of $\$ 2.00$ ，the congestion fee increased to $\$ 4.00$ per day．（Please rank again．）
25．5\％
( ) walk

$$
33.5 \%
$$

$$
22.5 \% \quad 11.0 \%
$$

$$
1.15 \%
$$

$4.5 \%$
$10.5 \%$
$28.5 \%$
$7.5 \%$
$33.0 \%$
（ ）bicycle

$$
37.07
$$

$15.0 \%$
（ ）bus or transit
$18.5 \%$
$32.0 \%$
$8.5 \%$

$$
11.0 \%_{0}
$$

$45.0 \%$
$7.0 \%$
c．Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases
to $\$ 1.50$ per gallon．（Please rank．）
$25.5 \%$（ ）walk
33.0 \％。
（ ）bicycle
14．5\％。（ ）bus or transit
$225 \%$
$34.5 \%$
$37.0 \%$
$11.5 \%$
$7.5 \%$
22.09 $16.0 \%$
10.07 $5.0 \%$
$8.0 \%$
9.00

$$
18.5 \%
$$

$11.0 \%$
$8.5 \%$
d．Assume that the congestion fee of $\$ 2.00$ per day was in effect，and assume further that your employer allowed you to arrive before 7：00 am．and leave before 4：00 p．m．，or to arrive after 9：00 a．m．and leave after 6：00 pom．（Please rank．）


W H. MCNICHOLS. JR. Mayor

## CITY AND COUNTY OF DENVER

DENVER PLANNING OFFICE

October 15, 1978

## Dear Resident of Denver:

The City and County of Denver is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire, Your responses will be kept strictly confidential.

This questionnaire is concerned with your shopping and personal business trips only. We are interested in your opinion of the transportation services available to you for shopping and personal business trips. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800--328-2933.


ALC:cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME FOR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS. PLEASE EXCLUDE ALL MAJOR GROCERY SHOPPING TRIPS.

1. What is the nearest intersection or street address of the place of your most recent shopping or personal business trip from home?
(nearest intersection or street address)

## (city)

2. A list of specific shopping and personal business trip purposes is given below. Please check the one trip purpose that best describes your most recent shopping or personal business trip from home. (exclude major grocery shopping trips). (CAECK ONE ONLY)

$15.5($ ) clothing/shoes 3.51 ) post office $12.3($ ) bank
$7.3($ ) drugs/bookstore $2.3($ ) library/museum 2.5() laundry/dry cleaner/shoe repair
5.01 ) hardware/florist/liquor 8.5 ) medical/dental 4.01 ) barber/beauty shop

NO ANSWER: $0.5 \%$
19.81 ) other
(please specify)
3. Other than the above stop, did you make any additional stops on the way to and from your shopping/ personal business destination? (CHECK ONE)
41.0( ) none (If you answered NONE, go to question 5.)
33.0 ( ) one
$16.5($ ) two
$9.0($ ) three or more
0.5 NO ANSWER
4. Did any of the additional stops between your home and your primary shopping/personal business destination require you to travel more than one mile out of the way?
$15.5($ ) Yes
43.01 ) No
NO ADDTL STOPS/NOANSWER: 41.5
5. Approximately how far was it directly from your home to your primary shopping/personal business destination (one way)?
5.3 ( ) 2 blocks ( $\frac{1}{2}$ mile or less)
21.9 ( ) 2 to 4 miles
14.8() 3 to 6 blocks ( $\frac{1}{4}$ to $k_{2}$ mile)
15.5 () 4 to 5 miles
13.8() 交 to 1 mile
5.3 ( ) 6 to 10 miles
2.8 ( ) over 10 miles
0.3 NO ANSWER
6. How many separate parcels, bags or packages were you carrying? (CRECK ONE)
$21.0(\%)$ none 35.4() one
21.8() two
$21.01)$
three or more 0.8
NO ANSWER
7. How many persons (other than yourself) were with you on this shopping or personal business trip?
total $\qquad$ (nurnber)

Children 12 years of age and under $\qquad$ (number)
MEAN: 0.78
MEAN: 0.79
8. Where is this place where you went shopping or on personal business located?
61.5() central city
36.5 () suburban
No ANSWER: 2,0
9. Specify the type of area where you went on your shopping/personal business trip. (CHECK ONE)
$12.0 /$ ( ) central business district $\begin{gathered}\text { downtown metropolitan area) } \\ \text { (downtional shopping center }\end{gathered}$
$37.0 / 22.3$ neighborhood business district $4.0 / 1.3()$ office park/professional building
$0.8 /(0.3$ college campus
$\left.5.0 / 3.5^{( }\right)$other (please specify)
10. What was the date of this most recent trip? $\qquad$
(month/day)
11. At approximately what time of day did you make this trip to your shopping/personal business destination?
6.3() before atm.
() 7-a+m. to 8-a.m.
() Ban.
58.6 ( ) 9 am. to $\frac{2}{2 a m}^{2} \mathrm{Fm}$

24.8 ( ) 2 p.m. to 6 p.m.
10.3() after 6 p.m.

- No Ans

12. How did you make the trip to this shopping/personal business destination? (CBECK ONE)

| 12.8() walked all the way | - | () motorcycle |
| :--- | :--- | :--- |
| 67.3() drove a car | 2.3() bicycle |  |
| 7.0() passenger in a car | - | () moped (motorized bicycle) |
| $10,0()$ bus | $0,3()$ taxi |  |
| $-1)$ train, subway | $0,3()$ other $]$ |  |

$\begin{array}{lrl}-() \text { bicycle } & 0.8() \text { drove and parked } \\ -() \text { taxi } & -() \text { passenger in a car } \\ 9.3() \text { walk } & -() \text { other } \frac{\text { (please specify) }}{}\end{array}$

Imagine that only the following options were avallable to you on your most recent shopping or personal business trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For the above trip, we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never used it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an " $x$ " in the space that best indicates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:

|  | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I enjoy traveling to my shopping or personal business destination by bus. | ( ) | (x) | ( ) | ( ) | ( ) |

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree', depending upon how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "x" under disagree or strongly disagree. If you neither agree nor disagree, you would place an "x" in the center box. In the example shown here, an "X" has been placed in the box under agree, indicating this person enjoys travelino by bus.

Because we need to understand how your rating of your shopping or personal business trip varies from one means of transportation to another, we are asking that you go through the list of characteristics four times, once for each means of travel (walk, bicucle, car, and bus). Although this process might appear repetitious, we want to stress that your careful ratings of all the statements on the nert four pages are especially important to the success of this ourvey.

## YOUR RATING OF BUS (or transit)

is bus service avallable between your home and this shopping or personal business destination?

### 73.5107 Yes

> If your anower is $Y E S$, please rate the statements below concerning how you would feel about going to this destination by bus even if you didn't choose bus on your last trip.

1. Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands when traveling by bus.
3. I must schedule my trips in advance when I travel by bus to go shopping or on personal business trips.
4. Traveling by bus to this shopping/personal business destination is tiring.
5. Traveling by bus to my shopping/personal business destination/.4( $7.8(1 / 9.41) 55.8(1 / 3.91) 1.7$ is dangerous because of the heavy traffic.
6. then on a shopping/personal business trip with children, $13.6(131.61) 22.81) 24.1() 3.11) 4.8$ it is inconvenient to take the bus.
7. I cannot rely on taking a bus to this destination in rainy weather.
8. I can eastly carry packages when I travel by bus while I am on a shopping/personal business trip.
9. It is uncomfortable to travel to this destination by bus because of rough or bumpy road surfaces.
10. I can get to my shopping/personal business destination quickly when I travel by bus.
11. I worry about being mugged or assaulted when I travel by bus to my shopping/personal business destination.
12. I worry about being injured in an accident when I trave? by bus to my shopping/personal business destination.
13. It is relaxing to travel by bus to my shopping/persona? business destination.
14. I dislike traveling by bus to this shopping/personal bus. destination because of the many delays at intersections.
15. I must walk a long distance to get to and from the bus when 6.1 ( ) 25.51 ) 15.61 ) 45.01 ) 6.1 ( ) 1.7 I go to this shopping/personal business destination.
16. There is generally a long wait involved when I travel by bus to this shopping/personal business destination.
17. When traveling by bus to this shopping/personal business 1.41 ( $6.5(12111$ ) 56.9 )/3.31 ) 1.7 destination I worry about perspiring or soiling my clothes.
18. It is inexpensive to travel by bus to this shopping/personal/9.7()46.9()/6.7()/2.61)2.7()1.4 business location.

## YOUR RATING OF WALK

Was your most recent shopping or personal business destination located less than 2 miles from your home?
50.7 ( ) Yes

If your answer is IES, please rate the statements below concerning how you would feel about walking to this destination even if you did not walk there on your last trip.

1. Walking to this destination is pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands when walking.
3. I can pick up and go anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this shopping/personal business destination is tiring.
5. Walking to my shopping/personal business destination is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenient to walk.
7. I cannot rely on walking to this destination in rainy weather.
8. I can easily carry packages when I walk while I am on a shopping/personal business trip.
9. It is uncomfortable to walk to this destination because of rough and bumpy walking surfaces.
10. I can get to my shopping/personal business destination quickly when I walk.
11. I worry about being mugged or assaulted when I walk to my shopping/personal business destination.
12. I worry about being injured in an accident when I walk to my shopping/personal business destination.
13. It is relaxing to walk to my shopping/personal business destination.
14. I dislike walking to this shopping/personal business destination because of the many delays at intersections.
15. Walking to this shopping/personal bus. destination is unsafe due to lack of pathways separated from motorized traffic.
16. Walking to this shopping/personal bus. destination is dangerous because motorists are inconsiderate of pedestrians.
17. When walking to this shopping/personal bus. destination, I worry about perspiring or soiling my clothes.
18. Walking to this shopping/personal business destination gives healthful exercise.

## 49.3 ( ) No

If your answer is No, please go on to the next page.
Strongly
Agree

Neither Agree Agree Nor
Agree

$$
\begin{aligned}
& 20.2(\% 48.3() 14.3() 15.8() \text { 5 } 9(1) 0.5 \\
& 10.3() 48.8(1) 9.4(124.1() 69) 0.5
\end{aligned}
$$

$$
14.3() 59.1() 8.4) 12.81) 5.4() \quad \text { - }
$$

$$
9.4() 25.1(\text { ) } 16.3()=36.9() / 2.3() \quad \text { - }
$$

$$
3.9() 17.7() / 6.3() 51.3() 10.3() 0.5
$$

$$
12.3,31.1() 29,6() 26,6(1) 3.4^{(1)} 2.0
$$

$$
15.3(148.2(19.9() 23.6() 2.5(10.5
$$

$$
3.4() 33.5() 12.8) 39.0(111.3(1)
$$

$$
1.5() 10.8() / 4.8() 57.6() / 5.3(1) \quad-
$$

$$
6.9() 27.1() 14.8() 37.9)(2.8) 0.5
$$

$$
3.0(112.3() 14.3() 53.8) 16.7(1) 0.5
$$

$$
3.2(111,34) 13.3() 56.6) 15.8() \quad \sim
$$

$$
12.3(191.4) 20.2() 21.8) 4.9(1)=
$$

$$
2.0()(2.3)(5.8) 55 .(1) 14.3() 0.5
$$

$$
6.9() 10.3() 8.9() 60.6()(3.31)
$$

$$
11.3^{(1) 23.2() 18.2() 41.9() 4.9() 0.5}
$$

$$
2.0(1) 4.4() 14.8() 61.6() 17.2()-
$$

$$
31.5(157.2(4.9() 4.4(2.0()
$$

## YOUR RATING OF CAR

When using a car, are you usually a:
84.0 ( ) car driver
16.0 ( ) car passenger

If you are ubually a car driver, even if you did not choose auto for your last shopping or personal business trip, rate the statements below concerning how you
would feel about driving on this trip.
If you are usually a car passenger, even if you did not choose auto for your last shopping or personal business trip, rate the statements below concerning how you $\frac{\text { would feel about going to this destination }}{\text { as a corr passenger. }}$
Please answer all questions below, even if you do not own a car.
Strongly
Agree

1. Traveling by car to this shopping/personal business destination ( ) ( ) is pleasant because I can enjoy the scenery and surroundings.
(5.5)
2. When shopping or on a personal business trip, it is convenient to stop and do errands when traveling by car.
3. I can pick up and go anytime I like when I travel by car on shopping or on personal business trips.
4. Traveling by car to this shopping/personal business destination is tiring.
5. Traveling by car to my shopping/personal business destination is dangerous because of the heavy traffic.
6. Wher or a shopping/personal business trip with children, it is inconvenfent to go by car.
7. I cannot rely on traveling by car to this destination in rainy weather.
8. I can easily carry packages when I travel by car while I am on a shopping/personal business trip.
9. It is uncomfortable to travel by car to this shopping/personal business destination because of rough or bumpy road surfaces.
10. I can get to my shopping/personal business destination quickly when I travel by car.
11. I worry about being mugged or assaulted when I travel by car to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by car to my shopping/personal business destination.
13. It is relaxing to travel by car to my shopping/personal business destination.
14. I dislike traveling by car to this shopping/personal business destination because of the many delays at intersections.
15. Parking the car at this destination is expensive.
16. After parking the car, I must walk a long distance when I go to this shopping/personal business destination.
17. I worry about the car being stolen or vandalized at this destination.
18. It is inexpensive to buy and operate a car.
19. Parking the car is no trouble when on this shopping/ personal business trip.
$(1)$
$3 / .0$
$\left(\begin{array}{l}\text { ) } \\ 34.8\end{array}\right.$
$(1)$
2,3
$(1)$
5,0
20. 

5,0
1.1
0.5
$(1)$
37.3
1,
$(1)$
2,3
1
33.5
1
1


| $(1)$ | 1 |
| :--- | :--- |
| 2.8 | 1 |
| 1 | 1 |

1
1
1
4
1
0
0

| $(1)$ | $(1)$ | $(1)$ | $(1)$ | $(1)$ | 1.3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.3 | 6.0 | 11.0 | 59.4 | 21.0 |  |
| $1)$ | $(1)$ | $(1)$ | $(1)$ | $(1)$ |  |
| 7.0 | 10.8 | 10.3 | 40.8 | 30.3 | 0.8 |
| $1)$ | $(1)$ | $(1)$ | $(1)$ | $1)$ |  |
| 20.0 | 56.6 | 8.3 | 11.8 | 2.8 | 0.5 |

Was your most recent shopping or personal business destination located less than 4 miles from your home?
68.51 ) Yes

If your answer is YES, please rate the statements below concerning how you would feel about breycling to your shopping or personal business destination, even if you don't own a bicycle or didn't ride a sicycle on your last trip to this destination.

$$
31.51 \text { ) No }
$$

If your answer is NO, please go to thie next page.

Strongly
Agree Agree Nor
$7.3(\%) 44.81) 19.0(19.01) 8.4(1.5$
$4.0($ ) $34.0(19.2(133.6(13.1(1.1$
$7.7(48 .(14.6() 23 . d) 5.1(1.1$
$80($ ) 28.5 ( ) 16.8 ) 40.11 ) 5.5 ) 1.1
$26.6($ ) $40.6($ ) $8.8(19.3() 2.9(1.8$
$35.4($ ) $41.9(, 4.9(, 6.2() 4.4() 2.2$
27.7() 53.3() 9.1() $6.6(1.8(1,5$
$3.2(12.41) 9.5(149.9() 23.4(1.5$ $6.6(15.7(121.2() 50.3() 4.7(1.5$ $6.2(1) 40.41) 13.9(129.61) 8.4(11=$ $2.6(1) 10.9(120.8(150.0(14.2() 15$ $13.5(1) 40.4(15.0(123.0(1) 6.4) 1.5$ $6.2(1) 31.7(25.2() 27.0(1) 8.4(1.5$ 4.0() $20.1(26.6() 40.9() 6.9() 1.5$
14. I dislike traveling by bicycle to this shopping/personal bus. destination because of many delays at intersections.
15. Bicycling to this shopping/personal bus. destination is unsafe 27.6 ) 38.7 ( ) $12.4(16.4($ ) 3.3 ( ) 2,2 due to lack of bike paths separated from motorized traffic.
16. Going by bicycle to this destination is dangerous because motorists are inconsiderate of bicyclists.
17. When bicycling to this shopping/personal business destination, 5.5() 12.0() 25.2() 45.9$) 9.9(1.5$
I worry about perspiring or soiling my clothes.
18. Riding a bicycle gives healthful exercise.
19. Parking, locking and unlocking my bicycle at this destination is no trouble.
20. I worry about my bicycle being st an at this shopping/ personal business destination.
21. It is inexpensive to buy and operate a bicycle.
43.1() 48.9() $3.6(1.8() 1.1(1.5$
6.9() $401(16.1() 285() 6.9() 1.5$
13.1() 38.7() $22.6) 21.9(1) 2.2(1.5$
17.5() 47.4() 13.5() 17.2() $2.9(1.5$

WE WOULD LIKE TO KNOW VOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPING/ PERSONAL BUSINESS TRIPS.

1. Imagine that only BUS, WALK BICYCLE, and CAR (driver or passenger) were available for your most recent shopping/personal business trip. These alternatives are listed below. Please indicate your preference by placing a "1" next to the alternative you prefer the most, a " 2 " next to your second most-preferred alternative, a "3" next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. (If bus service was not available for your shopping/personal business trip, please rank the three remaining alternatives.)

2. We would like to know how often you use each of the following means of travel for shopping/personal business trips from home. Place an $X$ under your best estimate of the number of days you have used each means of travel during the last 30 days
bus
walk
drive a car
passenger in car
bicycle
other

3. Assume that on your next shopping/personal business trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation preference by placing a "?" next to the alternative you would prefer the most, a " 2 " next to the one you would prefer second, a "3" next to your third choice, and a " 4 " next to your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below. (If bus service is not available for your Shoffing/personal business trip, please rank the three remaining alternatives.)


WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DO PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

## ANSWER IF DISTANCE FROM HOME TO SHOPPING/PERSONAL BUSINESS DESTINATION IS 4 MILES OR LESS.

1. If you were to ride your bicycle to your shopping/personal business destination, what is your best estimate of the time you would spend doing the following?

2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.
11,3 (\%/d bicycle path (off the street))
$6.0($ ) bicycle lane (on the street)

## 2.8 \% both

Not: $19.5 \%$ percent of trips were more than 4 miles
3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?
44.1 ( ) none
6.8 ( ) less than $1 / 4$ the distance
7.5() $1 / 4$ to $1 / 2$ the distance
4.8 ( ) $1 / 2$ to $3 / 4$ the distance
1.31 ) more than $3 / 4$ of the distance
16.01 ) don't know

ANSWER IF DISTANCE FROM HOME TO SHOPPING/PERSONAL BUSINESS DESTINATION IS 2 MILES OR LESS.
4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopping/personal business destination?

$$
22.7 \text { (minutes) }
$$

5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to your shopping/personal business destination?
55.7 ( ) all or almost all the way
12.0 ( ) part of the way
$0.5($ ) there are none
3.0 () don't know
$28.8 \%$ of trips are more thaw 2 miles
6. If you were to take the bus to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?
getting to the bus stop
waiting for the bus
riding on the bus
walking from bus to destination total time from home to destination
5.2 (minutes)
14.2 (minutes)
16.0 (minutes)
5.7 (minutes)
39.6 (minutes)

## (Averages)

7. Is it necessary to change buses to travel from your home to your shopping/personal business destination?
$34.0(\%)$ Yes
47.21 ) No

## Bus service not available: $15.8 \%$

3.0 Don't know
8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home to your shopping/personal business destination?
$\qquad$ 9.0 times out of ten
(mean)
9. What is the one-way bus fare on your trip from home to your shopping/personal business destination?

$$
0.29 \text { cents (mean) ( ) don't know }
$$

10. If you were to go by car to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?
walking to the car
1.6 (minutes)
9.3 (minutes)
2.4 (minutes)
(mean values)
parking the car
walking from car to destination
2.3 (minutes)

TOTAL TIME FROM HOME TO DESTINATION
15,9 (minutes)
11. What is the parking cost on your trip from home to your shopping/personal business destination? (CHECK ONE AIN SPECIFY THE COST.)
( ) no charge
( ) daily charge 1.16 (dollars) Mean
( ) weekly charge _ _ (dollars)
( ) monthly charge (dollars)

NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
$46,5(\%)$ Yes
53.5 ( ) No (IF "NO", GO TO NEXT PAGE.)
2. Did you ride a bicycle during the last month?
 0.3 Don'f know
3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an " $X$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through " $h$ " below) during the last 30 days.

| Did Not | $1-5$ | $6-10$ | $11-15$ | $16-20$ | More Than No |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Use | Days | Days | Days | Days | 20 Days |

a. To work $20.0(1201) 0.3(10.81) 0.51) 1.01)$

c. For personal business $10.0(10.5(1) 2.0(1.01) \quad 0.8$
d. To visit friends $10.0(11.31) \quad 1.3(1.0 .8(1.51) \quad 1.0(1)$
e. To go shopping $13.0(1.8 .8(1.5() \quad 0(1,0.5$
f. To a recreational activity 7.8 ) 10.51 ) $4.0(1.3(1) 0.3$
g. Neighborhood riding $2,5(13.31) 4.5(1.5(1.5() 25()$
h. Long distance riding 19.51 ) $4.5(1) 0,3(1)-1)-1.01)$ (over 2 hours)
( $73.8 \%$ did not bike during mouth)

Is your selected shopping or personal business destination located less than 4 miles away from your home?

70.01 ) Yes<br>If your anower is IES, please read below.

30.01 ) No

If your answer is NO, please go on to page 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS


#### Abstract

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right-hand side of the road marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for better riding. In addition, high-intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made freely available.


You are now asked to erpress your agreement or disagreement with the following statements about bicucling to $1: \sim$ nen shming on ferscrai buriness destinatior assuming the bicycle facility improvements described above are available to you or. your nert shopping or personal business trip. (You will note that the list of statements is the sume as that used earlier. The purpose of this last rating is to find out how you feel about bicycle-related improvements.)

Please rate the statements below concerning how you would feel about bicycling to your shopping or personal business destination using the facility improvements described on the previous page.

| Strongly |
| :--- |
| Agree |

Neither
Agree Nor
Agree
Disagree Disagree Disagree

1. Bicycling to this shopping/personal bus. destination would be ( ) 47.2() 16.4() 15.7() 2.9() 1.4 pleasant because 1 could enjoy the scenery and surroundings. 16.4
2. When shopping or on a personal business trip, it would be 10.0 ( 150.81 ) 15.01 ( 20.71 ( 2.11 ) 1.4 convenfent to stop and do errands when riding a bicycle
3. I could pick up and go anytime I like when I ride a bicycle ${ }^{12.9}$ ( ) 60.1 ( ) 11.4 ( 112.1 ( ) 2.1 ( ) 1.4 on shopping or on personal business trips.
4. Riding a bicycle to this shopping/personal business 7.9() $25.0(119.31) 38.5() 7.9(1.4$ destination would be tiring.
5. Riding a bicycle to my shopping/per sonal business destination ${ }^{8.6}() 17.1() / 1.4() 49.4() 12.1() 1.4$ would be dangerous because of the heavy traffic.
6. When on my shopping/personal business trip with children, 13.6() $13.6(1) 16.4(145.7(1 / 8.61) 2.1$ would find it convenient to ride the bicycle.
7. I could not rely on riding a bicycle in rainy weather. $20.0(152.9(112.1(12.9(10.7(1.4$
8. I could easily carry packages when I ride a bicycle while
$2.1(13.6(17.9(145.7(19.3() 1.4$ I am on a shopping/personal business trip.
9. It would be uncomfortable to travel to this destination by bicycle because of rough or bumpy riding surfaces.
10. I could get to my shopping/personal business destination quickly when I ride a bicycle.
11. I would worry about being mugged or assaulted when I ride $1.4(11.4() 20.01$ ) $46.5(19.31) 1.4$ a bicycle to my shopping/personal business destination.
12. I would worry about being injured in an accident when I ride a bicycle to my shopping/personal bus. destination.
13. It would be relaxing to ride by bicycle to my shopping/ personal business destination.
14. I would dislike bicycling to this shopping/personal bus. destination because of many delays at intersections.

$$
8.6(120.01) 14.3(147.1() 8.61) 1.4
$$

$$
9.3(143.6() 17.1() 23.6() 5.0() 1.4
$$

$$
2.9(119.3() 22.1(149.3() 5.0(1) .4
$$

15. Bicycling to this shopping/personal bus. destination would be-( $125.0(188(149.91) 6.31$ ) unsafe due to lack of bike paths separated from motor traffic.
16. Bicycling to this shopping/personal business destination would ${ }^{3}(127.9() / 3.6(141.3(15.01) 2.9$ be dangerous because motorist are inconsiderate of bikers.
17. When bicycling to this destination, I would worry about perspiring or solling my clothes.
18. Riding a bicycle would give healthful exercise.
19. Parking, locking and unlocking my bicycle would be no trouble.
20. I would worry about my bicycle being stolen at this shopping/personal business destination.
21. It would be inexpensive to buy and operate a bicycle.


YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next shopping or personal business trip by placing a "1" next to the alternative you prefer most. a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. Please repeat the process for each statement (a) through (c) below. (If bus service is not available between your homs and your shopping or personal business destination, rank the three remaining alternatives.)
e. Assume the bicycle facilities are in place. Please rank the following means of

RANK
32.1
17.1
24.3 19.3 travel for your next shopping or personal business trip to the same destination.
b. Now assume the same condition as (a) above, except that the price of gasoline has
increased to $\$ 1.50$ per gallon (please rank again).
$33.6 \quad 27.9$
( ) bicycle with improved facilities
( ) walk
$\frac{\text { Rank } 3}{23.6}$
36.5
17.9
13.6

| RANK 4 |
| :--- |
| 14.3 |
| 27.9 |
| 30.7 |
| 4.3 |

NO ANS. 7.9
7.1 20.0
15.0
17.1
32.2
44.4
15.1
24.3 13.6

| 19.3 | 12.1 | 7.1 |
| :--- | ---: | ---: |
| 25.0 | 25.7 | 5.7 |
| 21.5 | 20.7 | 19.3 |
| 26.4 | 19.3 | 6.4 |

c. Suppose that the bicycle facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon (please rank again).
26.4
( ) bicycle with improved facilities
10.7
11.4
7.1
32.9
() walk
25.7
() bus/transit 22.9
( ) car (driver or passenger)
31.4
19.3

( ) bicycle with improved facilities
21.4 () bus/transit
( ) car (driver or passenger)
2. If only the alternatives listed below were available for your next 10 shopping or personal business trips, how many of the 10 trips would you make using each alternative? (Write the number of trips in the box nest to each alternative.)
2.2 ( ) bicycle with improved facilities
1.5 () walk
1.0 () bus/transit
(Mean values)
5.4 () car (driver or passenger)
(10) TOTAL TRIPS

## LIVING NEARER TO TRAVEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and highway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of employment, shopping, school, and recreation.

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accomodated within a six-block ( $1 / 2 \mathrm{mfle}$ ) distance and most work trips are within two mfles of home.

Suppose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to all shopping and personal business destinations without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenfent bus service is available; and there are no special restrictions on the use of automoblles.

Now, please turn to the follawing pages and express how this compact land-use arrangement would affect the way you feet about using WALK, BICYCLE, BUS, or CAR for your shopping or personal business trip.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agreement or disagreement with the following statement:
Strongly

Agree \begin{tabular}{c}
Neither <br>
Agree Nor <br>
Disagree

 Disagree 

Strangly NO <br>
Disagree
\end{tabular}

[^0]2. Please indicate your preference for each of the following transportation alternatives on your shopping or personal business trip by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described above. (Please repeat the process for each statement (a) through (d) beZow.)
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next shopping or personal business trip, and assume further that your trip is approximately $1 / 2$ mile ( 6 blocks) in length. (Please rank the following means of transportation.)
( ) walk $\frac{1}{51.0} \quad 26.5 \quad 13.5 \quad 4.5()$ bus or transit
$\frac{1}{3.5} \frac{2}{16.0} 33.0 \quad 32$
( ) bicycle $23.534 .59 .524 .0($ ) car (driver or passenger) $6.0 \quad 14.0 \quad 35.5 \quad 27.0$
b. Now suppose that in addition to the conditions described in (a) above the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank the following means of transportation.)

- ( ) walk $50.030 .09 .04 .5($ ) bus or transit
( ) bicycle 255
33.5 9.0 23.01 ) car (driver or passenger
$12.0 \quad 17.0$
$38.5 \quad 23,0$
$11.0 \quad 10.5$
0.633 .5
37.5
c. Assume the conditions described in (a) above and assume that in addition the speed limit was reduced to $15 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. in the community. (Please rank the following means of transportation.)
( ) waik 51.030 .08 .55 .01 ) bus or transit
( ) bicycle 28.034 .08 .521 .01 ) car (driver or passenger)
$7.0 \quad 19.5$
$39.0 \quad 24.0$
$13.0 \quad 7.5$
34.0
38.0
d. Assume again conditions described in (a) above but this time assume no parking was available at your shopping or personal business destination. (Please rank the follaving means or traneportation.)
( ) walk
$57.027 .08 .03,01$ ) bus or transit
$14.0 \quad 22.0 \quad 49.0 \quad 6.0$
$\left(\begin{array}{llll}() \text { bicycle } 23.538 .011 .017 .51) & \text { car (driver or passenger) } & 4.5 \quad 3.5 \quad 20.0 & 59.5\end{array}\right.$

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? $\frac{45.1}{48.8 \%}$ (age) $\quad 50.9$ Mean
2. How many adults (18 or over), including yourself, are there in your household? $\qquad$ 2.0

Mean
4. How many minors (under 18) are there in your household? $\qquad$ Mean

$$
90.0 \% \quad 9.5
$$

5. Do you have a valid driver's license? ( ) Yes ( ) No NO ANS. $=0.5 \%$
6. How many licensed drivers (including yourself) are there in your household? 1.9 Mean
7. How many automobiles are there in your household? 1.8 mean $47.8 \% \quad 52.2$
8. Do you own a bicycle? ( ) Yes ( ) No
9. How many bicycles are there in your household? $\qquad$ 1.3 mean
10. What type of structure do you live in?

| $82.2(\%$ single family | 0.5() low-rise apartment (4 to 8 stories) |  |
| :--- | ---: | :--- |
| 10.0() duplex | - | () high-rise apartment (more than 8 stories) |
| 1.0() townhouse |  |  |
| 2.5() | 3.3() | other |

11. What is your educational background? (CHECK ONE)
1.3 ( ) completed elementary school
22.0 ( ) college or technical school graduate
10.5 ( ) some high school
8.8 ( ) some graduate school
18.8 ( ) high school graduate
$12,3($ ) completed graduate degree (s)
25.8() some college or technical school
0.5 NO ANS
12. Please indicate your work group below:
29.3 ( ) work 5 or more days a week 3,5( ) work 3-4 days a week
5.8 ( ) work 1-2 days a week
50.4 ( ) presently not employed
11.0 NO ANS.
13. What is your occupation? (CHECK ONE)

## 28.5 (\% professional-technical

4.5() managerial
6.5() blue collar
15.5 ( ) housewife
$5.3(1)$ student NO ANS. $=1,8 \%$
3.0() sales worker
3.3() secretarial-clerical-cashier
5.8() other $\qquad$
25.8
not employed
14. How many workers are in your household? lis (mean)
15. Please check the category which includes your approximate family income before taxes.
9.8 (\% $\$ 5,000$ and under
9.5 ( ) \$5,001-\$7,500
9.8( ) $\$ 7,501-\$ 10,000$
8.01 ) $\$ 10,001-\$ 12,500$
8.5 ( ) \$12.501-\$15,000

$$
\begin{aligned}
& 7.3() \$ 15,001-\$ 17,500 \\
& 8.0() \$ 17,501-\$ 20,000 \\
& 10.5() \$ 20,001-\$ 25,000 \\
& 16.1() \$ 25,001-\$ 50,000 \\
& 1.5(\text { ) } \\
& 11.0 \\
& \text { NO NO ANS SUER }
\end{aligned}
$$

In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS

Please rate the statements belas concerning how you would feel about walking to your shopping or personal business destination using the facility improvements described on the previous page, even if you did not walk there on your last trip.

1. Walking to a shopping/personal business destination would be pleasant because l could enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it would be convenient to stop and do errands when walking.
3. I could pick up and go anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this shopping/personal business destination would be tiring.
5. Walking to my shopping/personal business destination would be dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it would be inconvenient to walk.
7. I could not rely on walking to this destination in rainy weather.
8. I could easily carry packages when I walk while I am on a shopping/personal business trip.
9. It would be uncomfortable to waik to this destination because of rough or bumpy walking surfaces.
10. I could get to my shopping/personal business destination quickly when I walk.
11. I would worry about being mugged or assaulted when I walk to my shopping/personal business destination.
12. I would worry about being injured in an accident when I walk to my shopping/personal business destination.
13. It would be relaxing to walk to my shopping/personal business destination.
14. I would dislike walking to this destination because of the many delays at intersections.
15. Walking to my destination would be unsafe because of the lack of pathways that are separated from motorized traffic.
16. Kalking to a shopping/personal business destination would be dangerous because motorists are inconsiderate of pedestrians.
17. When walking to this destination I would worry about perspiring or soiling my clothes.
18. Walking would give healthful exercise.

| Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) | ( ) | ( ) |

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP

1. Please indicate your preference for the following alternative means of travel for your next shopping or personal business trip by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a " 3 " next to your third most preferred alternative, and a " 4 " next to your least preferred alternative. Please repeat the process for each statement (a) through (c) below. (If bus service is not available between your home and your shopping or personal business destination, rank the three remaining alternatives.)
a. Assume the walk facilities are in place. Please rank the following means of travel for your next shopping or personal business trip.
( ) walk with improved facilities

$\begin{array}{llll}28.8 & 26.2 & 13.1 & 4.9\end{array}$
2.5
56.5
b. Now assume the same condition (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rank again.)
33.6 ( ) walk with improved facilities 30.3
18.9
22.1

25
23.8
4.9
25.4
9.8
28.6
( ) car (driver or passenger)
23,0
23.8
20.5
23.0
27.9
26.2
28.7
5.7 $20.5 \quad 25.4$
29.5 22.1
$\begin{array}{lll}17.2 & 16.4 & 6.6\end{array}$
3.3
c.
c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)
2. If only the alternatives listed below are available for your next ten shopping or personal business trips, how many of the ten trips would you make using each alternative? (Write the number of trips in the box next to each alternative.)
2.6 () walk with improved facilities
$1.4^{(1)}$ bicycle
0.8 () bus/transit
5.2 () car (driver or passenger)
(10) TOTAL TRIPS

Is your shopping or personal business destination located less than 2 miles from your home?
$61.0(\%)$ Yes
If your answer is YES, please read below.
$39.0(\%)$ No
If your answer is NO, please go to page 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related faci?ities designed to increase the comfort and safety of pedestrians. The improvements consist of (1) providing pedestrian pathways, (2) improving sidewaiks, (3) providing better iighting, and (4) making traffic signals more pedestrianoriented.

Separate pedestrianways or walkways are built adjacent to all major roadways. These pathways are separated from automobile traffic by trees or grass median. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. Highintensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches, and pedestrian-oriented stands with flowers, new'spapers and refreshments.

Ycu are rai askec te ergress your agrecment or disagneement with the following statements about walking to Tur shoc: cuciiable := you or. your next shopping or personal business trip. (You will note that the list of statements is the sur as that used earlier. The purpose of this last rating is to find out how you feel about the pedestriar.-netated irrovements.)

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning (7-9 a.m.) and evening (4-6 p.m.) rush hours. This means that you would be charged up to a $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

Please turn to the following page.

## YOU HAVE JUST READ AN ASSUMED REGULATION FOR CAR USAGE. IMAGINE THAT THIS SITUATION FOR CAR USAGE EXISTS FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agreement or disagreement with the following statements:

| Strongly <br> Agree Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree | $\begin{aligned} & \text { No } \\ & \text { 利 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $11.0 \%$ ) /6, ( ) | $0(1)$ | 0.d ) | , 4 | 1.5 |
| 0.5 ( ) 6.5 ) | ( ${ }^{( }$ | 51 ) 3 | , ( ) | 3.0 |

2. Please indicate your preference for each of the following transportation alternatives for your next shopping or personal business trip by placing a " 1 " nest to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" under your least preferred alternative. Please repeat this for each of the statements
(a) through (c) below. (If bus service is not cuailable for this shopping or personal business trir, please rank the remaining three alternatives only.)
a. Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect.

Please rank the following means of transportation for your next shopping or personal

## RANK

20.0
18.0
24.5
35.0
b. Assume that instead of $\$ 2.00$ the congestion fee increased to $\$ 4.00$ per day. (Please rank again.)
21.0
20.0
30.5
25.0
c. Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ per gallon. (Please rank.)

| 22.5 | $(1)$ walk | 24.0 | 28.5 | 15.0 | 10.0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 23.5 | $($ ) bicycle | 26.5 | 19.5 | 20.0 | 10.5 |
| 32.0 | $($ ) bus or transit | 22.0 | 21.5 | 9.0 | 15.5 |
| 19.0 | $($ ) car (driver or passenger) | 19.0 | 19.5 | 36.0 | 6.5 |

DENVER PLANNING OFFICE
W. H. MCNICHOLS. JR.

Mayor

ROOM 400
1445 CLEVELAND PLACE
DENVER, COLORADO 80202
PHONE (303) 575-2736

October 15, 1978

Dear Resident of Denver:
The City and County of Denver is cooperating in a U. S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your work trips only. We are interested in your opinion of the transportation services available to you between your home and your place of work. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800--328-2933.

ALC: sin
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TO WORK.

1. What is the nearest interest intersection or street address of the place where you work?
(newest intersection or street dines)
2. Where is the place where you work located: MO ANSWEK: 1.0 70
$63.3 \%()$ central city
$35.8 \%$ ( suburban
3. Specify the type of area where your work place is located. (CBECK ONE) NO ANSWER: O. 8
$22.5 \%$ ) central business district $\quad 14.8 \%$ ( ) industrial district (downtown of metropolitan area)
$20.5 \%()$ neighborhood business district or $9.8 \%()$ office park/professional building shopping center
$9.8 \%($ college campus or school
17.8 ( ) other $\qquad$

$1.8 \%() \quad 2$ blocks or less 22.109() 2 to 4 miles
4. 270 ( ) 3 to 6 blocks $22.5 \% 0(, 4$ to 6 miles
3.570 c ) to 1 mile
$15.3 \%(\quad 6$ to 10 miles

- 

11.070 ) 1 to 2 miles
$14.8 \%_{0}()$ over 10 miles
5. What was the date of your most recent trip to work?

6. At accroximately what time of day did you make this trip to work? NO HNSWER: C. 5 Io
49.89\% ; before 7 a.m. G.gTis ) 10 am. to 2 pom.
37.371 ) 7 am. to 3 am. $6.8 \% i$ ) $20 . \pi .5050 .7$.
$18.0 \%$ ) 8 a.m. to 9 a.m. $2,3 \%$, after $60 . m$.
$\left.6.37_{0}^{(,}\right) 9 \mathrm{a} . \mathrm{m}$. to $10 \mathrm{a} . \mathrm{m}$.
7. How did you make your most recent trio to work? (CHECK ONE) NO ANKLER:
$4.370($, walked all the way
$1.07 \%$, motorcycle
$73.170($ drove a car $\left.3.8 \%_{0}^{( }\right)$bicycle
S. $5 \sqrt[5]{5}$ ! , passenger in a car

- ( ) moped (motorized bicycle)
$9.870\left[\begin{array}{l}() \text { bus } \\ (1) \text { train or subway }\end{array}\right.$
- ( ) taxi
1.58 ) other

ia. If you answered bus, train or subway above, how did you get to your bus or transit stop?
9.8 () bicycle $\quad$ ( ) drove and parked

8. Between the time you left home to go to work and the time you returned home, did you make any side trips that required you to travel more than one mile out of your way? No friswif. $-\therefore: \therefore$
$30.5 \%$ ( ) yes
$109.070(1)$ no
9. Did anyone accompany you on your last work trip: (CEECK ONE) No thsuier -


NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUŔ MOST RECENT TRIP TO WORK WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following options were avallatle to you on your most recent work trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For your travel to work we would like to iearn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if vou never use it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an " $x$ " in the soace that best indicates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:


If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending on how much you enjoy trave? by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you nefther agree nor disagree you would place an "X" in the center box. In the example shown here, an "X" has been placed in the box under "agree", indicating this person enjoys traveling by bus.

Eeccuse we need to understand how your ratiry of your trip to work varies from one means of transecrtation to cnother, we cre asking that you go through the list of characteristics four times, once for each means of travel (walk, bicycle, car, and bus). Although this process might appear repetitious, we want to stress that your careful rating of all the statements on the nemi four pages are expecialiy importont to the success of this survey.

## YOUR RATING OF BICYCLE

Is your work place iscated less than 6 miles from your home?

I- your rrswer is YES, Fiease rate the $\begin{aligned} & \text { I-atements }\end{aligned}$ beicu concernin nou veu wouta set? cbout bicucin? =o ucri ever: $\because$ you con't our c bicycle, or diarr't ride c insycie or your last trie to work.

1. Bicycling to work is pleasant because I can enjoy the scenery and surroundings.
2. When biking, it is corvenient to stop and do errands on my way to and from work.
3. I can Dick up and go anytime I like when I go to work by bicycle.
4. Traveitre to work by bicycle is tiring.
5. Ridine a sicycle to work is dangerous because of the neavy traffic.
6. When I ride the bicycle to work I worry about being late.
7. I cannot rely on riding a bicycle to work in rainy weather.
8. I can easily carry my briefcase or other packages when I ride the bicycle to work.
9. It is uncomfortable to travel to work by bicycle because of rough and bumpy riding surfaces.
10. I can get to work quickly when I go by bicycle.
11. : worry about being mugged or assaulted when I travel to work by bicycle.
12. I worry about being injured in an accident if I ride the bicycle to work.
13. It is relaxing to travel to work by bicycle.
14. I dislike traveling to work by bicycle because of the many stops and delays at intersections.
15. Riding the bicycle to work is unsafe because of the lack of bike paths that are separated from motorized traffic.
16. Going by bicycie to work is dangerous because motorists are inconsiderate of bicyclists.
17. When bicycling to work I worry about perspiring or solling my clothes.
18. Riding a bicycle to work gives healthful exercise.
19. Perking, locking and unlocking my bicycle at work is no trcuble.
20. After zariking my bicycle I must walk a long distance when I go to work.
21. I worry about my bicycle being stolen at work.
22. It is inexpensive to buy and operate a bicycle.

$$
\begin{aligned}
& 34.5 \% 1 \text {, No } \\
& \text { =. your answer is io, please go or to the } \\
& \text { remi page. }
\end{aligned}
$$

| Strongly Agree Agres | Neither Disaoree | Disagree |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $20.6 \%$ ( 41.3\%) | 12.7\% ) 16 | \% ) 8.0\% | ) | 0.4: |
| 3.8\% ( ) 25.2\% | $17.6 \%$ ) | ) 9.228 | , |  |
| 7.27\% ( $46.57 \%$ | .49\% : 22 | \% ) $6.1 \%$ ( | 1 |  |
| 7.6\% ( $38.2 \%$ | 17\% 13 | ) $42 \%$ ! | ( |  |
| $41.9 \%$ ( 38.9\% () | 7.3\% ) 9.2 | ) $2.3 \%$ | ( ) |  |
| 6.97 ( ) 22.9\% | $22.1 \%$ ) 40.4 | \% ( ) $6.9 \%$ | ( | $0.8 \%$ |


3.19() $22.5 \%$ ( $12.2 \%(44.2 \%$ ) 17.69 )
9.29() $29.8 \%\left(12 \% 4 \%() 33.2 \%() 3491^{(1)}\right.$

6.17( ) $16.0 \%$; $24.0 \%(145.13(18.8 \%$ () $28.6 \%$ ) $35.5 \%(1) 4.17 \%(18.7 \%() 2.7 \% 1) \quad 0.40$ $8.4 \%(126.3 \%() 28.2 \%(27.9 \%$; 9.27 ) $9.2 \%(1225 \%$ ) $25.2 \%$ ) 320\% ( $2.17 \%(1)$ $36.6 \%, 40.6 \%$, $9.97 \%(11.82(1,1 \% 01)$

$10.7 \%() 45.0 \%$ ) $14.17 \%$ ) $21.8 \%$ : $8.4 \%(1)$ 0.87 f ) $3.19 \%(12.2 \%(157.925) 25.6 \%$ ) $0.4 \%$
14.5\% ( $32.49 \%$ 14.19\% (32.5\% ) 6.5\% ()
$25.67 \%$ ) $45.4 \%$ (12.69 ) $9.97(16.5 \%()$

## YOUR RATING OF CAR

natron using a car, are you usually a:
EZ Q. Eric l $^{5}$ ) car driver?
$12.0^{6!} 9$ car passenger?


work Trim, rate the statements below conserrinç in w use worizieei about aivivirs to peri..

If you are usuain a car oassemper even
$\because$ you die rot choose unto for your inst work. rif, rive the statanente ielcu concering now you would feel about going to work as a cir passenger.

Tease answer ait questions below, ever. if you do not our a car.

1. Traveling by car to work is pleasant because I car. enjoy the scenery and surroundings.
2. When traveling by car, it is convenient to stop and do errands on my way to and from work.
3. I can pick up and go anytime I like when I trave by car to work.
4. Traveling by car to work is tiring.
$\begin{array}{ccc}\text { Strongly } & \begin{array}{c}\text { Neither } \\ \text { Agree }\end{array} & \text { Agree } \\ \text { Ais er Nor } \\ \text { Disagree }\end{array}$ Disagree $\begin{aligned} & \text { Strongly } \\ & \text { Disagree }\end{aligned}$ $3.8 \%() 31.8 \%() 31.8 \%() 23.802) 80 \% 10.8 \%$ $29.3 \%(, 54.8 \%$ ) $5.3 \% 6,7.8 \%(101.5 \%) \quad 0.3 \%$ $137.8 \%(, 48.8 \%() 5.576) 5.8 \% 1) 1.8 \%()$ 0.37 3.8\% ( ) $12.3 \%$ ) $20.5 \%$ ) $49.3 \%$ ) $12.8 \%(, 0.3 \%$
5. Traveling by car to work is dangerous because of the heavy traffic. $8.3 \%(, 31.6 \%(, 25.3 \%) 31.0 \%() 2095) 0.8 \%$
6. When ! go by car to work I worry about being late. $-(, 6.8 \%(12.896,64.495) 16.0 \%$ )
7. I cannot rely on traveling by car to work in rainy $1.5 \%$ (, 2.8\%(, 2.5\%, $58.9 \%$, $34.3 \%$, weather.
8. I can easily carry my briefcase or other packages $38.8 \%(, 5 \% .6 \% 1$, $5.3 \%$, $3.3 \%$, $1.0 \%$ ( ) when I travel by car to work.
9. It is uncomfortable to travel by car to work because $0.8 \%$ ( ) $5,0 \%$ ) $13.0 \%$ ) $60.2 \%$ ( $21.0 \%$ ) of rough or bumpy road surfaces.
10. I can get to work quickly when I travel by car. $40.0 \%$ ) $51.4 \% \%$ ) $4.3 \%($ ) $3.8 \%() 0.5 \%$ )
11. I worry about being mugged or assaulted when I travel by car to work.
12. I worry about being injured in an accident if I $4.0 \% 1,17.5 \%, 29.3 \%, 39.6 \%, 2.32,0.3 \%$ trave i by car to work.
13. It is relaxing to travel by car to work. $4.3 \%() 28.8 \%() 36.3 \%$ ) $23.3 \%$ ) $6.5 \%$ ) $0.3 \%$
14. I dislike traveling by car to work because of the many delays at intersections. $4.0 \%() 24.2 \%) 25.3 \%) 46.4 \%(, 4.0 \%(, 0.3 \%$

1E. Parking the car at my place of work is expensive. $7.55(, 11.875$ ) $6.0 \%(127.2 \%$, $\% .0 \%$, $0.5 \%$
16. After parking the car, I must walk a long distance $2.0 \%($ ) $5.8 \%$, $6.3 \%()=2.3 \%() 35.3 \%$ ) $0.3 \%$ when I so to work.
 at work.
18. It is inexpensive to buy and operate a car.
$8.0 \%(10.8 \%(8.0 \%(42.2 \%() 32.5 \%() \quad 0.5 \%$
19. Parking the car at work is no trouble.

$$
\begin{aligned}
& 29.0 \%(, 40.0 \%) 6.0 \%(, 11.0 \%(, 45 \%() 0.5 \% \\
& 123
\end{aligned}
$$

## YOUR RATING OF BUS（or transit）

Is bus service available between your home and work place？
$74.5 \%$（ ）vas 25．5\％！）no





1．Going to work by bus is pleasant because I can enjoy the scenery and surroundings．

If your rower is inc，ごecse gs or to tree neま゙さ page．
 and do errarids on my way to and from work．
 travel ty bus to work．

4．Traveling by bus to work is very tiring．

$$
6.5 \%) 16.8 \% \text { ) } 20.2 \%, 35.6 \%, 11.7 \%() 0.7 \%
$$

5．Traveling by bus to work is dangerous because of $1.0 \%() 2.0 \%,, 16.8 \%, 56.0 \%$ ， $24.2 \%(10 \%$ the heavy traffic．
 late．

7．I cannot rely on taking a bus to work in rainy weather．
8．I can easily carry my briefcase or other packages $7.0 \%$ ， $52.0 \%$ ） $13.8 \%() 2257,4.7 \% 1$ when i 90 to work by bus．

9．It is uncomfortable to travel to work by bus because of rough and bumpy road surfaces．
10．I can get to work quickly when I take the bus． $4.4 \%() 10.4 \%() / 4.17,(41.9 \%$ ， $29.2 \%$
ii．I worry about being mugged or assaulted when I go $3.0 \%$ ） $11.7 \%() / 8.8 \%() 524 \% 1) 14.1 \%()$ to work by bus．
12．I worry about being injured in an accident if I go $1.0 \%() 1.0 \%$ ， $15.4 \%() 61.8 \%(20,5 \%$ to work by bus．
13．It is relaxing to go to work by bus．
$\left.8.1 \%() 27.9 \%() 35.191) 23.2 \%_{0}() 5.77_{6}\right)$

14．I dislike traveling to work by bus because of the $14.49 \%$ ， $33.67,22.5 \%$ ， $26.2 \%$ ， 397 many stops and delays at intersections．
15．I must walk a long distance to get to and from the $8.4 \%$ ， $25.5 \%$ ） $15.47 \%$（ $40.9 \%(10.7 \%$ bus when I go to work．
16．There is generally a long wait involved when I go to． $18 \%(, 44.7 \%, 16.4 \%$ ） $18.5 \%() 2.3 \%()$ work by bus．
iT．When traveling by bus to work I worry about

$$
0.35
$$ perspiring or soiling my clothes．

E．It is inexpensive to travel by bus to work．

$$
\begin{aligned}
& 1.0 \%(\text { ) } 8.4 \%() 20.5 \%(54.0 \%() 15.8 \%() \\
& 12.1 \%\left(\text { ) } 41.7 \% \%_{0}\right) 20.1 \%(20.1 \%(5.7 \%()
\end{aligned}
$$

## YOUR RATING OF WALK

is vour work clace iocated less than 3 miles from your home?

- O: 亿! ) yes





1. halring to work is pleasant because : can enjoy the scenery and surroundings.
2. Winen walkinc. it is convenient to 5 too and do errarios on Ty way to and from work.
3. ! can Dick up and go anytime I like when I walk to work.
4. Walking to work is tiring.
E. hialking to work is dargerous because of the he:vy traffic.

ع. When I walk to work I worry about being late.

ع. I cen easily carry my briefcase or other packages when I walk to work.
9. It is uncomfortable to walk to work because of rough or bumpy walking surfaces.
10. I can get to work quickly when I walk.
11. I worry about being mugged or assaulted when I walk to work.
12. : worry about being injured in an accident if $I$ walk to work.
12. It is relaxing to walk to work.
14. I dislike walking to work because of the many delay's at intersections.
15. Walking to work is unsafe because of the lack of pathways that are separated from motorized traffic.
1€. Walking to work is dangerous because motorists are inconsiderate of pedestrians.
i7. Wher walking to work I worry about perspiring or se:ling my clothes.
$\therefore$ : nalkinc to work gives healthful exercise.
$70.2 \%_{0}()$ no

gage.

Strongly
Neither

 $15.170(, 4 \% 5 \%$, $9.274,=2.0 \%$, $0.0 \%$,
 $4.2 \%$ ( ) 18.5\% ) $17.0 \%$, $48 . \% \%$ ) $10.1 \%$ ) $0 . \%$
 $5.9 \%_{0}(42.9 \%(10.1 \%$ ) $27 . \div \%(10.772) \quad 4.5 \%$
 $7.6 \%$, 16.076 ) $12.6 \%$, $4 \% .5 \%$, 18.576 , $2.5 \%$ $7.6 \%() 21.8 \%() 17.6 \%$ ) 47.216$)=.2 \% 100.5 \%$ $0.8 \%($ ) 13.476 ) $16.8 \%(57.2 \%$ ) $10.1 \%$ ) 1.75 $11.8 \%(, 47.0 \%$ ) $24.4 \%$ ) $12.6 \%$, 3.4. 2.970 $1.7 \%() 10.9 \%() 26.1 \%() 51.37(19.2 \%$ ) $0.8 \%$ $2.5 \%($ ) 18.57 ) $13.470(157.27 d$ ) $7.6 \%($ ) $2.8 \%$ $12.6 \%(, 34.5 \%$, $18.5 \%, 31.17 \%(, 2.5 \%(, 0.8 \%$ $1.7 \%() 28.072$ ) 21.2\% ( 42.07 ( 5.75) $2.8 \%$


1．Imagine that only BUS，＇ARLK，BICYCLE，and GAR（driver or passenger）were availadie for your

 most－preferrei aiternative， 3 ＂き＂next：to your third nost－preferred alternative，and a＂ 4 next ：o your ？east－preferred a？iernative．


$38.4 \%$
Kinked 3
$6.0 \%$
にシ シ
$\qquad$ we＂k
！）bicycle
$9.3 \%$ $34.2 \%$
$12.8 \%$

$11+1$
$74.1 \%$
（）car（driver or passenger）$/ 33 \%$ $35.3 \%$ $39.8 \%$ 43．973
$6.8 \%$
10． 27
4 ！

2．We would like to know how often you use each of the following means of trave？for work trips from home．Place an＂x＂under your bes：estimate of the number of days you have wised each means of travel during the last 30 days．


3．Assume that on your next work trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below．For each： gasoline price level，please indicate your transportation preference by placing a＂l＂next to the alternative you would prefer the most，a＂2＂next to the one you would prefer second，a ＂3＂next to your third choice，and a＂\＆＂next to your least－preferred alternative．Please repeat for each of the price levels（a）through（d）below．
（II onus service is not cuaitabie for your work trip，please rank the three remaining＝ltermatives．
$6.0 \%, 10.5 \%$ wait $\quad(16,0 \% 711.8 \%$ walk
( ) 7.8\% 17.89,walk ( $18.2 \%$, 2.20'walk
$15.8 \%, 37.6 \%$ bus $\quad(123.59,3 \equiv .2 \%$ us $\quad(138.4 \%, 2157$, pus $\quad(139.2 \%=2.9 \%$ bus
$62.1 \% 15.5 \% \mathrm{car} \quad()=1.7 \%, 7.0 \% \mathrm{car} \quad() 254 \% 21.3 \% \mathrm{car} \quad(122.3 \% 19.3 \% \mathrm{car}$

WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU WORK BY ANSWERING THE FOLLOWING QUESTIONS:


1. If you were to ride your bicycle to work, what is your best estimate of the time you would spend doing each of the following?
getting the bicycle to the street $\frac{2.26}{24.33}$ (minutes)
riding the bicycle
parking and locking up the bicycle $\frac{3.41}{1.55}$ (minutes)
walking from bicycle to school
TOTAL TIME FROM HOME TO WORK $\quad 31.06$ (minutes)
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to work?
14.89. ( bicycle path (off the street)
$11.5 \%($ ) bicycle lane (on the street)
29.19\% ( nefther
10.8\% ( ) don't know
6.0\% Both Bike Lane and Peth
3. What portion of your total trip from home to work is served by bicycle paths or bicycle lanes?
$28.6 \%$ ( ) none
$11.59_{0}^{()}$less than $1 / 4$ the distance
4. $3 \%$ ( ) $1 / 4$ to $1 / 2$ the distance
$5.5 \eta_{0}($ ) $1 / 2$ to $3 / 4$ the distance
5. $3 \%$ ( more than $3 / 4$ of the distance
$\left.11.0 \%_{0}^{( }\right)$don't know

ADSHEP IE OISTANCE EROM BOME TO WORK IS 3 MILES OR LESS.
4. If you were to walk to work, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at work?
— (minutes)
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home io work?

```
29.8%( ) all or almost all the way
    6.3%() part of the way
    0.8%% ) there are none
    1.3%( ) don't krow
```

6. If you were to take the bus to work, what is your best estimate of the time you would spend doing each of the following?
getting to the bus step
waiting for the bus
riding on the bus
walking from bus to work
TOTAL TIME FRCM HOME TO WORK
7. Is tt necessary to change buses to travel from your home to work?

$$
\begin{array}{ll}
40.4 \% & (,) \text { yes } \\
34.5 \% & (,) \text { NO } \\
2.3 \% & \text { DONT ENDW }
\end{array}
$$

8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home to work?
7.85 times out of ten
9. What is the one-way bus fare on your trip from home to work?

$$
43 \text { cents }
$$

( ) don't know
10. If you were to go by car to work, what is your best estimate of the time you would spend coing each of the following?
walking to the car
driving or riding
parking the car $\frac{1.37}{1.98}$ (minutes)
(malkinutes)

TOTAL TIME FROM HOME TO WORK | 19.82 |
| :--- |
| (minutes) |

11. What is the parking cost on your trip from home to work? (CEEECK ONE AMD SPECIEY TUE CASE. )

| $78.5 \%_{1}()$ no charge |  |
| :--- | :--- |
| $14.5 \%_{0}()$ daily charge | 1.25 (dollars) |
| $0.8 \%_{0}()$ weekly cnarge | (dollars) |
| $4.3 \%_{1}()$ monthly charge | (dollars) |

## NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
62.821 ) Yes
$37.3 \%_{0}^{()}$No (IF "NO", GO TO TEE NEXT PAGE.)
2. Did you ride a bicycle during the last 30 days?
$36.8 \%_{0}()$ yes
$25.57_{0}($ ) No (IF "NO", GO TO NEXT PAGE.)
3. We wild like to know how often you use the bicycle for each of the following trip purposes. place an "x" under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through "h") during the last 30 days.
a. To work $24.0 \%_{0}$ ) $5.8 \%_{0}\left(2.5 \%_{0}\left(10.8 \%_{0}\left(0.5 \%_{0}(30 \%() 0.3 \%\right.\right.\right.$
b. io school $29.0 \%_{0}\left(12.3 \%_{1}\left(10.3 \%_{0}(1)-10.5 \%_{0}\right) 1.0 \%_{0}\right) 3.8 \%_{0}$
c. For personal business $14.5 \%(17.3 \%() 2.0 \%() 0.3 \%(10.5 \%() 1.5 \%()$ $0.8 \%$
d. To visit friends $16.5 \%_{0}\left(16.8 \%_{1}\left(1.5 \%_{1}\left(10.37_{0}() 0.3 \%_{0}\left(1.0 \%_{0}()\right.\right.\right.\right.$ $0.5 \%$
e. To go shopping $20.3 \%\left(13.5 \%_{0}\left(1.0 \%_{1}(1)-10.5 \%_{0}(0.5 \% 1)\right.\right.$ $1.0 \%$
f. To a recreational activity $8.8 \%$ ) $19.3 \%\left(14.8 \%() 0.8 \%_{0}\left(10.8 \%\left(1.8 \%_{0}() \quad 0.8 \%\right.\right.\right.$
g. Neighborhood riding

n. Long distance riding
$26.8 \%_{6}\left(, 7.0 \%_{0}(10.5 \% 1) 0.3 \%_{0}(1)\right.$
$0.3 \%_{0}\left(10.89_{0}(1)\right.$
1.37

Is jour work place iocated less than 6 miles away from your home?

```
\(64.09(1)\) yes
    \(\because\) youn arsuer is ZES, Eircse reai betcu.
```

```
\(36.0 \%\) ( No
```

```
\(36.0 \%\) ( No
```




NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO WORK USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

SuDoose the city introduces several improvements to bicycle-related facilities designed to increase the comiort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better iighting.

On nos: local streets, a yellow stripe is painted near the right hand side of the road, marking a lane reserved strictly for bicycle use. Separate bicycle paths are bullt adjacent to all major roadways. Tinese bieycle paths are separated from automobile traffic by metai guardrail or a grass median. All these paths and street lanes are smoothly paved for a better ride. In addition, high intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high employment centers, these consist of enclosed free storage lockers manned by a full-time attendant. Finally, conventent locker, shower and changing facilities are made available.

[^1]


1. Bicycling to work would be pleasant because I sould er.joy the scenery and surroundings.
2. When tiking, it would be convenient to stop and do errands on my way to and from work.
3. : could pick lif and go anytime I like when I go ic work by bicycle.
4. Traveling to work by bicycle would be tiring.
5. Riting a bicycle to work would be dengerous because of the heavy traffic.
6. If I rode the bicycle to work, I would worry about being late.
7. i could not rely on riding a bicycle to work in rainy weather.
8. I could easily carry my briefcase or other packages when : ride the bicycle to work.
9. It would be uncomfortable to travel to work by bicycle because of rough and bumpy surfaces.
io. I couid get to work quickly when I go by bicycle.
10. I wouic worry about being mugged or assaulted when I travel to work by bicycle.
11. I would worry about being injured in an accident if I ride the bicycle to work.
i?. It would be relaxing to travel to work by bicycle.
12. I would disiike traveling to work by bicycle because of the many stops and delays at intersections.
13. Riding the bicycle to work would be unsafe because of $4.7 \%() 16.4 \%!$ ( $10.2 \%$ ) $\overline{5} 4.6 \%() 13.3 \%() 0.8 \%$
lack of bike paths that are separated from motor traffic.
14. Going by bicycle to work would be dangerous because motorists are inconsiderate of bicyclists.
15. When bicycling to work I would worry about perspiring or soiling my clothes.
16. Riding á bicycle to work would give healthful exercise.
17. Parking, locking and unlocking my bicycle at work would be no trouble.
18. After parking my bicyc?e : would have to walk a lon stistance when i go to work.
19. I woulo worry about miv bicycle being stoler, at work.


## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.

1. Jiease indicate your preference for the following alternative means of travel for your next trip :c work by placing a "?" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "Э" next to your third most preferred alternative, and a "4" next so your least preferred alternative. Repeat the process for each statement (a) through (c) below.
 G?亡ernatives only.)
a. Assume the bicycle facilities are in place. please rank the following means or travel

b. Now assume the same condition as (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Elease rank again.)

| $35.9 \%$ | () bicycle with improved facilities $30.5 \%$ | $24.2 \%$ | $5.5 \%$ | $3.9 \%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $6.3 \%$ | $($ ) walk | $15.6 \%$ | $27.3 \%$ | $4 \% .9 \%$ | $3.9 \%$ |
| 19.590 | $(1)$ bus/transit | $27.3 \%$ | $22.7 \%$ | $10.2 \%$ | $20.3 \%$ |
| $37.5 \%$ | $(1)$ car (driver or passenger) | $23.4 \%$ | $21.9 \%$ | $15.6 \%$ | $1.6 \%$ |

c. Suppose that the bicycle facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (RIacse rask.)

2. If only the alternatives listed below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (Write the number of tripe in the ecu new= to each. aitemative.
$52.4 \%=0 / 10$ üups ( ) bicycle with improved facilities $79.8 \%=0 / 10$ ensign ; walk
$\therefore \approx=\%=0 / 10$ traps ( ) bus/transit
2 $4.2 \%=0 / 10$ trig. $\frac{1}{7}$ ) car (driver or passençer)
33.6 \% $=$
2.3
0.7
1.8
5.2
10.0
(Means)

## LIVING NEARER TO TRAVEL DESTINATIONS

Many pianners maintain that the use of antomobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion and costly street and highway expanditures. It has been suggested that in order to reduce these probiems people must live nearer to their places of imployment, shopping, school and recreation.

Some communitles have been designed with this comoact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six biock ( $\frac{2}{2}$ mile) distance, and most work trips are within two miles of home.

Suppose you live or moved to one such community. Supoose further that speciai bicvcle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to work withotit having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilfoties are provided in large numbers, free of charge, throughout the area; conventent bus servine is avaflable to work places; there are no specfal restrictions on the use of automobiles.

How, please tum to the following pages and express how this compact lani-use cmanoment woun affect the way you feel about using WALK, BICYCLE, EUS or CAR for your york triv.

YOU HAVE JUST READ ABCUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT WORK TRIP.


$$
\begin{aligned}
& \text { Strongly } \quad \text { Neither } \quad \text { Agree Nor } \quad \text { trongiy } \text { NE } \\
& \text { Acres Ache disagree Disagree Disagree AljsuE }
\end{aligned}
$$

I would ? ike to live ir this type of community. $26.0 \%$ ) $38.5 \%$, $10.59($, $11.0 \%$ ! $5.5 \%$ ! $\dot{0}$. $5 \%$,
2. Please indicate your preference for och of the following transportation alternatives on your
 your second most preferred alternative, z "3" next to your third most preferred alternative, and a " 4 " next to your leas: preferred alternative, assuming the land-use arrangement described above. Please repeat the process for each statement (a) through (d) below.
e. Assume the living conditions and special transportation facilities described on the previous Dace exist for your next trip is work, and assume further that your trip to work is approx-

b. Now suppose that in addition to the conditions described in (a) above, the price of gasoline increased to $\$ 1.50$ per gallon. (Please rani k again.)

|  | $($ ) walk | $36.0 \%$ | $17.0 \%$ | $11.5 \%$ | $3.0 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $40.5 \%$ | () bicycle | $37.0 \%$ | $12.0 \%$ | 6.59 | $4.0 \%$ |
| $12.5 \%$ | () bus or transit | $12.0 \%$ | $45.5 \%$ | $22.5 \%$ | $7.5 \%$ |
| $13.0 \%$ | () car (driver or passenger) | 11.590 | $21.5 \%$ | $52.0 \%$ | $2.0 \%$ |

\&. Assume the conditions described in (a) above and assume that in addition, the speed limit was reduced to 15 mph in the community. (Evease rank.)
$36.5 \%$

> ( ) walk $43.0 \%$.
( ) bicycle
$35.5 \%$
16.09
$9.5 \%$
$2.5 \%$
$38.5 \%$
$9.0 \%$
$5.5 \%$
$4.0 \%$
$9.5 \%$
( ) bus or transit
12.5\%
$48.0 \%$
22.540
$7.5 \%$
$9.5 \%$
(, ) ear (driver or passenger)
$10.0 \%$
$23.0 \%$
55.07
2. $5 \%$
$\therefore$ Assume açar the conctions described in (a) above tut this time, assume no carking was available a: your work place. IEvease rani..:

| $3 y 5 \%$ | i walk |
| :--- | :--- |
| $40.0 \%$ | $($,$) bicycle$ |
| $7.0 \%$ | $($,$) bus or iransit$ |
| $3.0 \%$ | $\vdots$, car (driver or passenger) |

$$
39.57
$$

$39.5 \%$
13.510
$13.590 \quad 609$
$2.5 \%$
$12.5 \% \quad 4.0 \%$
$4.0 \%$
12.510
$57.0 \% \quad 6.0 \%$
$6.5 \%$
3. C\% = $\quad$ ) car (driver or passenger)
$12.0 \% \quad 75.0 \%$
$5.5 \%$

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? (Mean)
2. What is your sex? $50 \%$ ( ) Male $50 \%$ ( ) Female
3. How many adults ( 18 or over) including yourself are there in your household? $\qquad$
4. How many minors (under 18) are there in your household? $\qquad$ 0.5
5. Do you have a valid driver's license? $96.2 \%$ ) Yes $28 \%($ ) No
6. How many licensed drivers (including yourself) are there in your household?

7. How many automobiles are there in your household? $\qquad$
8. Do you own a bicycle?65.29\% ) Yes $34.8 \%$, No
9. How many bicycles are there in your household? $\qquad$
10. What type of structure do you live in?

| $77.9 \%$ ( ) single family | -() low rise apartment ( 4 to 8 stories) |
| :--- | :--- |
| $12.0 \%()$ duplex | -() high rise apartment (more than 8 stories) |
| $1.3 \%()$ townhouse |  |
| 6.87() walk-up apartment (3 stories or less) | $2.0 \%$ other | $6.87_{0}()$ walk-up apartment (3 stories or less)

11. What is your educational background? (CHEC! OVE) No Answer $0.3 \%$
$1.59 \%$ ( completed elementary school $24.0 \%$ ) college or technical school graduate
$4.3 \%$ ( ) some high school
$11.0 \%_{0}^{(~) ~ h i g h ~ s c h o o l ~ g r a d u a t e ~}$
22.17 ( some college or technical school.
12. Please indicate your work group below:
85.59\%) work 5 or more days a week.
$11.5 \%_{0}^{()}$work $3-4$ days a week
13. What is your occupation? (CAECX ONE)
$49.0 \%_{0}($ ) professional-technical
$\left.11.0 \%_{0}^{( }\right)$managerial
$178 \%_{0}^{( }$) blue collar
$5.8 \%($ ) sales worker
2.59( ) work 1-2 days a week
0.59 ( ) presently unemployed
12.890( ) secretarial-clerical-casnier
$3.3 \%($ ) other
$0.3 \%$ STUDENT
14. Does your job require you to dress up? (CHECK ONE) $N=$ Answer: $1.8 \%$ $47.2 \%$ ( ) usually $14.5 \%_{5}$ ! ) sometimes $34.5 \%$ ( ) not usually
15. How many workers including yourself are in your household? $\qquad$
16. Please check the category which includes your approximate family income before taxes. No Answer. 4. ミ-7,


In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.

Is your work place located less than 3 miles from your home?
$31.0 \%$ ) res
-s your onswer is YES, please read below.

$$
69.0 \%: 10 \quad 1 \quad
$$

If jow answer is 110 , tiease 30 on to zage 15 .

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO WORK USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The improvements consist of (1) providing pedestrian pathways, (2) improving sidewalks, (3) providing better lighting, and (4) making traffic signals more pedestrian-oriented.

Separate pedestrian ways or walkways are built adjacent to all major roadways. These pathways are separated from automobile traffic by trees or grass medians. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. High intensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches and pedestrian-oriented stands with flowers, newspapers and refreshments.

You an now askei to express your agrement or disagreement with the foïvoing statements about vaikinz to Norix, assiming the :asiizity introvements described above are available to jou on jour next trip to vorik.
 is to find out now jou jeel about the pedestrion-related introvements.)

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS


 ここちごこどこ こ こ いつni．
Strongly

Agree $\quad$ Agree $\quad$\begin{tabular}{c}
Neither <br>
Agree Vior <br>
Disagree

 Disagree $\quad$

Strongly <br>
Disaoree
\end{tabular}

i．walking to work would be pleasant because 1 could $371 \%$ ， $38.7 \%$ ， $12.9 \%$ ） $8.1 \%$ ）－（ ） 3.2 enjoy the scenery and surrouncings．
2．When waiking，it wouid be convenient to $\operatorname{stop}$ and $4.8 \%$ ） $27.4 \%$ ） $17.7 \%_{0}\left(4 \% 1 \%() 4.8 \%_{0}\right)$（ 2 do errancs on my way to and from work．
j．I could pick up and go anytime l like when I walk to work．

4．Walking to work would be tiring．

$6.5 \%$ ， $25.8 \%$ ） $9.7 \%$ ） $48.3 \%(16.5 \%() 3.2$
5．Walking to work would be dangerous because of the $2.2 \%$ ） $9.7 \%_{0}\left(\right.$ ） $8.1 \%_{0}^{()} 61.3 \%$（ $12.9 \%$ ； 4.8 heavy traffic．
6．If I walked to work I would worfy about being late．

7．i could not rely on walking to work in rainy weather．
8．I could easily carry my briefcase or other $4.8 \%$ ， $32.39 \%$ ， $11.3 \%_{0}(, 42.0 \%, 4.870(4.8$ $8.19 \%) 58.0 \%$ ） $9.7 \%(11.3 \%() 8.1 \%() 4.8$
$8.1 \%() 35.526) 12.99(130.67 \delta 9.77($ ） 3.2 packages when I walk to work．
9．It would be uncomfortable to walk to work because 3．2\％） $4.8 \%_{0}\left(\right.$ ） $9.79 \%$ ） $59.8 \%() 17.7 \%_{0}()$
$4.8^{1}$ of rougn or burtpy walking surfaces．
10．I could get to work quickly when I walk．
$8.196) 24.27\left(19.4 \%_{0}(38.69() 6.59() 3.2\right.$
11．I would worry about being mugged or assaulted $1.6 \%(, 32.3 \%$ ） $16.1 \%(140.3 \%() 6.59() 3.2$ when ！walk to work．
12．I would worry about being injured in an accident i！l walk to work．
12．It would be relaxing to walk to work． $21.0 \%$ ） $42.6 \%(17.7 \%$ ） $11.3 \%($ 2 2．29（） 3.2
12．I would dislike walking to work because of the many－（ $9.7 \%(12.9 \%$ ）6́m．17． $18.1 \%$ ） 3.2 delays at intersections．
15．W＇alking to work would be unsafe because of the lack－（ ）4．8\％（ ）16．178 ）61．4\％（ ）14．5\％（ ） of patmways that are separated from motorized traffic．
15．Walking to work would be dangerous because motorists $4.8 \%$ ， $\left.17.7 \%_{0}^{( }\right), 2.9 \%, 48.5 \%$ ） $12.9 \%$（ ） are inconsiderate of pedestrians．
$\therefore$ ．When walking to work I would worry about perspiring 1.67 （ $29.0 \%$ ） $9.7 \%$（ 500.7 （ $6.5 \%$（） cr soiling my clothes．


YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.
i. Please indicate jour preference for each of the following alternative means of travel for your next trip to work by placing a "l" next to the alternative you prefer the most, a " 2 " next to your second most preferred alternative, a " 3 " next to your third most preferred alternative, and a "4" next to. your least preferred alternative. Repeat the process for each statement (a) through (c) below. If bus semice is not available between your home and work place, rank the throe remaining aitematives anis. 1
a. Assume the walk facilities are in place. Please rank the following means of travel for your

b. Now assume the same condition as (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rani k again.)

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)

2. If only the alternatives listed below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (Write the number of Exits in the boz newt to econ aiternative.)
$532 \%_{0}=\%_{10}$ trips ( ) walk with improved facilities

$$
64.5 \%=0 / 10 \text { trips }) \text { bicycle } \quad 1.3
$$

$$
69.5 \%=\% / 10 \cos (\text { bus/transit }
$$

$$
\left(\begin{array}{l}
21.0 \% \\
3550
\end{array}=6 / 10 \operatorname{trps} \frac{1}{Z}\right) \text { car (driver or passenger) }
$$

$$
35.5 \%=10 / 10 \text { thins }(10) \text { TOTAL TRIPS }
$$

$$
\begin{aligned}
& 2.2 \\
& 1.3 \\
& 1.1 \\
& 5.4 \\
& \hline 10.0
\end{aligned} \quad \text { (Means) }
$$

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order, to reduce congestion and lower fuel usage, a fee of $\$ 1.00$ will be assessed to the owners of automobiles operating during the morning ( $7-9$ a.m.) and evening ( $4-6 \mathrm{p} . \mathrm{m}$. ) rush hours. This means that you would be charged up to $\$ 2.00$ per day if you ope.ate a motor vehicle during these peak travel periods. Bllling would be made on a monthly basis using an automated tilling process.
you have just read an assumed fee on auto usage. imagine that this situation exists FOR YOUR NEXT WORK TRIP.
i. Piease incicate your agreement or disagreement with the foilowing statements:

ᄅ. i believe that a congestion fee of two dollars per aay is desirable.
b. It would be inexpensive to travel by car witr a congestion fee of two dollars per day.

| Strongly Acree | Aoree | Neither Agree Nor Disacree | Disagre | Strongiy Oisagree | $N=$ <br> Ansul= |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15.0\% ( ) | 18.0\% ( | 7.0\% ( ) | 5\% ( ) | \%\% ) | $1.5 \%$ |
| 3,070 ( ) | $40 \%$ ( | 6.590 ( | \%\% $)$ | 596) | 1.0\% |

2. Fiease incisaze your preierence for eacn of the foilowing transoortation alternazives for your next trip to work by placing a "f" next to the alternative you prefer the most, a "2" next to your seconc most preferred alternative, a "3" next to your third most preferred alternative, and a " 4 " next to your ieas: preferred altermative. Please repeat this for each of the statements (a) through (d) below.

3. A.Ssune the congestion fee of 52.00 per day described on the preceding page was in effect. Please

b. Assume that instead of 52.00 , the congestion fee increased to 54.00 per day. (Please ranir. again.)

c. Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoine increases to Si.50 per gallon. (JZease ronk.)

c. issume the the congestion fee oi $\$ 2.00$ per day was in effect, ard assume further that your eri-lover eilowes vou to arrive before 7:00 a.m. and leave before 4:00 0.m., or to arrive after


| 6.570 | ( ) | wal. | $6.5 \%$ |  | 32.5\% | $4: 270$ |  | 8.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10.5\% | ( ) | breycle | $32.5 \%$ |  | 41.07 | $8.5 \%$ |  | 7.59 |
| 14.5\% | ( ) | bus or transi: | $43.0 \%$ |  | 9.5\%, | 14.0\% | B | $19.0 \%_{3}$ |
| $185.5 \%$ | 1 ) | car (driver or passenger) | 12.69 | 141 | 9.5\% | $9.5 \%$ |  | 3.5\% |

##  <br> City of Huntington Beach

October 15, 1978

Dear Resident of Huntington Beach:
The City of Huntington Beach is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your shopping and personal business trips only. We are interested in your opinion of the transportation services available to you for shopping and personal business trips. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800--328-2933.


RS:cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME FOR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS．PLEASE EXCLUDE ALL MAJOR GROCERY SHOPPING TRIPS．

1．What is the nearest intersection or street address of the place of your most recent shopping or personal business trip from home？
（neares：intersection or street aciness）
（ciご）

2．A list of specific shopeing and personal business trip purposes is given below．Please check the one trip purpose that best describes your most recent shodping or personal business trio from home （exclude major grocery shopping trips）．（CREC：CUE CNIZ）No Answer－0．2\％
26.77 .1 ）Minor grocery shopping $7.1 \%_{0}^{( }$）eat meal $2.67_{6}($ ）other professional
$\left.17.5 \eta_{0}^{( }\right)$clothing／shoes $3.22\left(\right.$ ）post office $11.0 \eta_{0}^{(~) ~ b a n k ~}$

3．Other than the above stop，did you make any additional stops on the way to and from your shopping／ personal business destination？（CEECK CNE）No Answer $1.0 \%$
$46.0 \%_{0}($ ）none（If you answered NoNE，go to question 5．）
$29.0 \%$（ ）one
$14.5 \%()$ two
$9.5 \%($ ）three or more

4．Did any of the additional stכps tetween your home and your primary shopping／personal business destination require you to travel more than one mile out of the way？
$22.0 \%$ ，YES $31.0 \eta_{C}(1$ NO NO ADDTL STOPS／NOANSWEE： $47.0 \%$
5．Approximately how far was it directly from your home to your primary shopping／personal business destination（one way）？No Answer．0．3\％
$8.3 \%$（ ） 2 blocks（ $\frac{1}{5}$ mile or less）
$16.8 \%() 2$ to 4 miles
$18.370\left(\right.$ ） 3 to 6 blocks（ $\frac{1}{2}$ to $\frac{1}{2}$ mile）
$\left.3,5 \%_{0}^{( }\right) 4$ to 6 miles
$22.57_{0}^{1}$ ；交 to 1 mile
$1.8 \%_{0}^{(~) ~} 6$ to 10 miles
$23.7 \%_{0}$（ 1 to 2 miles
$4.8 \%()$ over 10 miles

6．Low many separate parcels，bags or packages were you carrying？：NJECK OVIE；

$$
16.5 \%_{0}(\text { none } 38.4 \%() \text { one } 23.8 \%(; \text { two } 21.3 \% 1 \text { three or more }
$$

7．Hew many persons（other than yourself）were ：nth you on this shopping or perscmat business trig？


8．Where is this place where you went shcpoirg or on personal business located？No Hrisuts 2 ． 0 $19.3 \%$（ central city $78.0 \%$ ！suburban

9．Specify the type of area where you went on your shoppingipersonal business trip．（ごEご，2NE；
NO Hrsuer：3．5\％ $0.3 \% \%_{0}$ centra business district $18.570($ recionai shopping center
$70.3 \%()$ neighborhood business district $4.6 \%()$ office park／professional building 0． $8 \%()$ college campus


10．What was the date of this most recent trip？ $\qquad$

11．At approximately what time of day did you make this trip to your shopping／fersonal business destination？
$6.37_{0}()$ before $\frac{9}{7}$ am．
53.470()$\frac{9 \mathrm{am}}{10 \mathrm{man}}$ to $2 \mathrm{p} . \mathrm{m}$ ．
24.590() 2 p．m．to 6 p．m．
$(\rightarrow-2 \rightarrow+2$
$11.8 \%$（ ）after 6 pm．

12．How did you make the trip to this shopping／personal business destination？（CHECK ONE，


12a．If you used a bus or transit，how did you get to your bus or transit stoa？


NOW WE WOULD LIKE YOUR OPINION GF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT SHOPPING OR PERSONAL BUSINESS TRIP WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the foilowing odtions were available to you on your most recent sncoping or personai business trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For the above trip, we would like to learn how you feel about eacn means of transportation. Please give us your obinion of each r.ans of transportation even if you never ysed it.

The following pages are labeled with the means of transportation you are asked to rata. Under each label you will find a set of statements. Please read each statement and olace an " $X$ " in the space that best indicates your agrement with the statements under each means of transoortation you are ratinc.

Eor exar:ile, consider the following statement for bus:

|  | Strongly Aaree | Aoree | Neither Aoree :lor Disagree | Disacree | $\begin{aligned} & \text { Strongly } \\ & \text { Disacree } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I enjoy traveling to my shopping or personal business destination by bus. | ( ) | $(x)$ | ( ) | ( ) | ( ) |

If you enjoy traveling by bus, you would put an "x" in the box under agree or strongly agree, decending upon how much you enjoy travel by bus. If you do not enjoy travel by bus, you would out an "X" under dism agree or strongly disagree. If you neither agree nor disagree, you would place an "X" in the center box. In the example shown here, an " $x$ " has been placed in the box under agree, indicatino this oerson enjoys traveling by bus.
zeccuse we need to urderstaria now your rating of your shopping on cersonci iusiness oriv vories frem one -ears of transEortation to mother, we cre askirg that you go through tre itst of shoricteristies icur




## YOUR RATING OF CAR

When using a car, are you usually a:

Glp.S?, , Ear driver

2.5\% ( ) car passençer


Flacse Bower ait questions scion, even if you so not own a ccu.

Neither
Agree Nor Strongly
Disagree Disagree Disacres
 is pleasant because I can enjoy the scenery and surroundings.
2. When shosping or on a personal business trio, it is convene- $30.02(160.4 \%$ ) $3.3 \%() 4.8 \%(1 / 0 \%$ ( $0.5 \%$ tent to stop and do errands when trave? ing by car.
3. : can Dick up and go anytime I like when I travel by car on shosping or on personal business trips.
4. Traveling by ear to this shopping/oersonal business destination is tiring.
 is dangerous because of the heavy traffic.
6. When on a shopping/Dersonal business trip with children, $75 \%$, $15.0 \%$ ( $12.8 \%(1) 41.4 \%, 221.3 \%$ ) $2.0 \%_{0}^{2}$ it is inconvenient to go by car.
7. i canna: rely on traveling by car to this destination in rainy weather.
8. ! can easily carry packages when ! travel by car while I an on a shopping/personal business trip.
$38.3 \%()=3.495) 289() 3.5 \%) 0.5 \%.(1) 0.5$
$0.8 \%()=300_{0}(13376156.8 \%(125.30 i) 0.8 \%$
Strongly
Agree Acre
$1070($ ) $237 \%(1339(162.6 \%) 30.39,0.5 \%$
$42.89(151.696) 2.0 \% 1) 1.3 \%(1.0 \%(1.3 \%$
 business destination because of rough or bumpy road surfaces.
 Quickly when I travel by car.
il. ? wary about being mugged or assaulted when ! trave! by car to my shopping/personal business destination.

$$
\text { D. } 57_{0}(\text { ) 2.5\% ) 9.570 } 154.4 \% \text { ) } 29.2 \% \text { ) } 0.5 \%
$$ by car to my shopping/personal business destination.

$$
1.37_{0}(12.3 \%() 19.514) 490 \% \text { ) } 165 \% \mathrm{~d} \text { ) } 2.5 \%
$$

1ミ. It is relaxing to travel by car to my shopping/personal $10.5 \%$, $43.7 \%$ ( $34.5 \%$ ) 10.37 , $1.5 \%$, $0.5 \%$ business destination.

1E. Parking the car at this destination is expensive.
I so to this shopping/personal business destination.
iT. : worry about the car being stolen or vandalized at this festination.
18. It is inexpensive to buy and operate a car.
19. Parking the car is no trouble when on this shopping; personal business trip.

$$
\begin{aligned}
& 0.5 \%_{0}\left(1 . 3 7 _ { 0 } \left(4.09() 48.7 \%_{0}(145.0 \% 1) 2.5 \%\right.\right.
\end{aligned}
$$

## YOUR RATING OF BICYCLE

Wes your most recent shopping or personal business destination located less than 4 miles
from your nome？

Z $=00_{i ; 1}^{5}(1)$ Yes



ejer 论 you don＇末 oun a bicyole or dian＇t ricie a
シicucie on jour lest intip to tinis destination．

I．：youm arsier is ich piease go to the neデ fcoge．
 pleasant because I can enjoy tne scenery and surroundings．

2．When shooping or on a personal business trip，it is con－ venient to stop and do errands，when riding a ticycle．

ミ．I can pick uo and go anytime I like when I rioe a bicycie to go shopping or on personal business trios．

4．Riding a bicycle to this shopping／personal business destination is tiring．

5．Riding a ticycle to my shooping／personal business destination is dangercus because of the heavy traffic．
$\epsilon$ ．Wher on a shoping／personal business trip with children， it is irsonvenient to ride the bicycle．
7．I cannet re＇y or．riding a bicycle to this destination in rainy weather．
\＆．I can easily carry packages when I ride a bicycle while ！am on a shopping／personal business trip．

9．It is uncomfortable to travel to this destination by bicycle because of rough or bumpy riding surfaces．

10．I can get to my shopping／personal business destination quicikly，when I ride a bicycle．

11．I worry about being mugged or assaulted when I ride a bicycle to my shopoing／personal business destination．
12．：worry about being injured in an accident when I ride a bicycle to my shopping／personal business destination．

13．It is relaxing to ride by bicycle to my shopping／personal business destination．

16．I dislike traveling by bicycle to this shopping／personal bus．destination because of many delays at intersections．
 due to lack of bike paths separated from motorized traffic．


18．Rising a bicycle gives healthfil exercise．
13．Parkinc，locking and unlooking my ticycle at this destination is ne trouble．
20．I worry about my bicycie being si en at this shopping／ personal business destination．
21．It is inexpensive to buy and operate a bicycle．

## YOUR RATING OF BUS（or transit）

is bus service available between your home and this shopping or personal business destination？
$51.77_{0}()$ yes


1．Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings．

2．When shopping or on a personal business trip，it is con－ venient to stop and do errands when traveling by bus．

3．I must schedu？e my trips in advance when I travel by bus to go shopping or on personal business trips．

4．Traveling by bus to this shooping／personal business destination is tiring．

5．Traveling by bus to my shocping／personal business destination－（ $4.8 \%() \% 17 \%() 591731) 130 \% 1)$ is dangerous because of the heavy traffic．
6．When on a shopping／Dersonal business trip with children， it is inconvenient to take the bus．

7．I cannot rely on taking a bus to this destination in rainy weather．
8．I can easily carry packages when I travel by bus while I am on a shopping／personal business trip．

9．It is uncomiortable to travel to this destination by bus because of rough or bumpy road surfaces．

10．I can get to my shopping／personal business destination quickly when I travel by bus．
i1．I worry about being mugged or assaulted when I travel by bus to my shopping／personai business destination．

12．I worry about being injured in an accident when I travel by bus to my shopping／personal business destination．
ij．It is relaxing to travel by bus to my shooping／personal business destination．

14．I dislike traveling by bus to this shopping／personal bus． destination because of the many delays at intersections．

15．I must waik a long distance to get to and from the bus when ：go ，o this shopping／personal business destination．
16．There is generally a long wait involved when I travel by bus to this shopping／personal business destiration．
17．When traveling by bus to this shopping／personal business destiration ：worry about perspiring or soiling my clothes．
 business location．

$$
48.3 \% \text { ! } 110
$$

```
F% your zrojer is oD, ごease こo on
tci the r.e=u゙ pate.
```



$$
3.470(1 * 9.0 \% \text { ) } 19.32(135=2010.1 \%(1.0 \%
$$

$$
\left.6.59_{0}\left(12.9 \%_{0}() 24.29_{8}\right) 56.97_{0}\right) 14.59(1.20
$$

$$
2.47(14.59(12220) 42.5 \%,(17.49!) 10
$$

$$
1.47 \text { ( } 6.8 \%_{3}(128.5 \%(14 \% .8 \% \text { 15.5\%(1) } 120
$$

$$
2.9 \eta_{0}() 30.4 \eta_{0}\left(132.8 \eta_{2}()=5.6 \%_{0}\right)=6.8 \%_{4}, 2,5
$$

$$
7.2 \% 126.6 \%)=1.77\left(141.17_{0}(124701) 1.0 \%\right.
$$

$$
1209.142 .69(128.59(13.09 .11 .99 .1)
$$

$$
0.5 y_{0}() 4.89_{0}\left(126.17_{5}\right) \leq 4.67!\text { ) } ミ 203 \text { ) }
$$

$$
\begin{aligned}
& 14.07_{3}\left(3 4 . 3 9 _ { 0 } \left(123.27_{0} 124.2751 .97_{0}(12.4\right.\right. \\
& 11.69 .1 \text { ) } 31.4 \% \text { ) } 21.39(\text { ) } 31.490(\text { ) } 2.973(1.40
\end{aligned}
$$

## YOUR RATING OF WALK

Was your mos: recent shopping or personal business destination located less than 2 miles from your home?
$70.2 \%_{0}$; yes
there or your inst trip.

$$
\begin{aligned}
& 29.8 \%(1 \mathrm{No} \\
& \begin{array}{l}
\text { =A four answer is : } \because 0, \text { Eianse so or =0 } \\
\text { the newt page. }
\end{array}
\end{aligned}
$$

1. Walking to this destination is pleasant because I can erjoy inc scenery and surroundings.
2. When shoosing or on a personal business trip, it is convenient to sic: end do errands when walking.
3. I can pick up and go anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this snopping/personal business destination is tiring.
5. Walking :o my shoooing/personel business destination is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenient to walk.
7. I cannot rely on walking to this destination in rainy weather.
8. I can easily tarry packages when I walk while I am on a shopping/personal business trip.
9. It is uncomfortable to walk to this destination because of rough and bumpy walking surfaces.
10. I can get to my shofping/personal business destination quickly when I walk.
11. I worry about being mugged or assaulted when : walk to my shopping/persona business destination.
12. I worry about being injured in an accident when I walk to my shoocing/personal business destination.
13. it is relaxing to walk to my shopping/personal business destination.
14. I disiike walking :c this shopping/personal business destination because of the many delays at intersections.

Agree Nor Disagree

Disagree
$2.8 \%(19.69(115.3 \%) 159.5212 .8 \%()-$
$3.9 \%\left(11.72 \%_{0} 1221 \%_{0}\right) 52.3 \%\left(10.07()^{-}\right.$

Strongly Disagree

$6.8 \%(1366 \%() 44.69(152.09 \%) 9.67(1) 8.4 \%$
$7.5 \%\left(150.8 \%\left(13.9 \%(120.325) 6.4 \%_{0}\left(1.1 \%_{0}\right.\right.\right.$
$10.0 \%_{0}\left(133.1 \eta_{0}\right) 14.9 \%_{0}\left(36.37_{0}()=3.7 \%_{0}\right)-$ $6.09(19.27 \delta) 16.72(148.87(8.99 \delta) 0.470$ $19.6 \%() 341 \%() 17.8 \%(122 \pi 1 \%(36 \%(1.8 \%$ $26.0 \%_{0}\left(149.12_{0}\left(11.49\left(1 / 1.4 \eta_{0}\left(11.4 \%_{0}\left(10.7 ?_{0}\right.\right.\right.\right.\right.$ 2.89() $22.8 \%$ ) $10.37\left(144.596\left(19.2 \%_{6}(0.4 \%\right.\right.$ $1.4 \eta_{0}(5.39(1 / 3.9 \%(163.7 \%) 15.3 \%) 0.42$
 $6.0 \%(14.3 \%$ (20.3\% ( $26.3 \%$ ) $5.7 \%(1) 0.42$ $110.7 \%(163.0 \%$ ( )16.72 ( ) Walking to this shopping/personal bus. destination is ins
due to lack of pathways separated from motorized traffic.
 serous because motorists are inconsiderate of pedestrians.
17. Weer walking to this srodping/Dersonal bus. destination, : worry about perspiring or soiling my clothes.
i $\varepsilon$. Walking $:=$ :nit stcpzing/personal business destination sivas neaitnit exercise.


WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPING／ PERSONAL BUSINESS TRIPS．

 your oreferense by slacins a＂l＂next to the alternative you prefer the most，a＂2＂next ic your second most－preferred alternative，a＂3＂next to your third most－preferred alternative，and a ＂4＂next to your least－preferred alternative．Cs ins service was rot auciinite for your sropingiperscra：zusiress Trio，piece max tres zine remaining aivemnetives．； $* 1$ － $5 \%$
（）wa in
\＃末


 ふン，シーシ。
（ ）bicycle
$4 シ, ~$ \％
2． $5 \%$
14．5\％
3．5\％
－この。
NO
？

2．We would like to know how often you use each of the following means of travel for shecting．ferscnal business trips from home．Place an $X$ under your best estimate of the number of days you nave used each means of travel during the last 30 days．


3．Assume that on your rex：shocping／persenai business trip all travel eenditions remained the same es present except that the price of gasoline increased to one of the price levels indicated below． For each gasoline price level，please indicate your transportation preference by placing a＂l＂ next：to the alternative you would prefer the most，a＂2＂．next to the one you would prefer second， a＂3＂next to your third choice，and a＂4＂next to your least－preferred alternative．Please repeat for each of the price levels（a）through（d）below．（If bus service is rot cuaineiv for yow sroppirg／persors：business Fie，piece rani tins thine remaining civemazives．）

Fame




$i=6 \%$ ， $7.8 \%$ ear（ 150.7 ； $16.5 \mathrm{car} \quad(121.3 \%, 17.3 \% \mathrm{car} \quad(1 / 8.0 \%, 12.50 \mathrm{car} \quad$ ！

WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DO PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

## 

1. If you were to ride your bicycle to your shopping/personal business destination, what is your best estimate of the time you would spend doing the following?

2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.

$$
\left.\begin{array}{l}
1.0 \%() \text { bicycle path (off the street) } \\
61.4 \%() \text { bicycle lane (on the street) }
\end{array}\right\} \begin{aligned}
& 1.3 \% \text { both } \\
& 14.57 \%() \text { neither } \\
& 11.87 \%() \text { don't know } \quad 10 \% \text { of trips are more than } 4 \text { mi e) }
\end{aligned}
$$

3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?
$12.5 \%()$ none
$8.5 \%_{0}^{(~) ~ l e s s ~ t h a n ~} 1 / 4$ the distance
$11.8 \%_{0}($ ) $1 / 4$ to $1 / 2$ the distance
$13.8 \%$ ( ) $1 / 2$ to $3 / 4$ the distance
$27.6 \%_{0}^{1}$ ) more than $3 / 4$ of the distance
$158 \%($ ) don't know

## ANSWER IF DISTANCE FROM HONE TO SZOPPFNG/PERSONAL BUSINESS DESTTVATICM IS 2 MILES OR LESS.

4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopoing/personal business destination?

## 22, 2 (minutes)

5. Are there adequate sidewalks or pathways you colic use to walk on your trip from home to your shopping/personal business destination?
$76.1 \%($ ) all or almost all the way
65 ( ) Dart of the way $15.8 \%$ of trips are more than 2 mine
0.3 () there are none
1.3 ( ) don't know
6. If you were to take the bus to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?

7. is it necessary to change buses to travel from your home to your shopping/personal business destination?
14.0 (\%) Yes
41.9 ( ) No
5.8 Don't know
8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home to jour shopping/personal business destination?
9.2 times out of ten
(mean)
9. What is the one-way bus fare on your trip from home to your shopping/personal business destination?
0.29 cents (mean) ( ) don't know
10. If you were to go by car to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?
walking to the car
driving or riding
parking the car
walking from car to destination
total time from home to destination
$\frac{\frac{1.2}{\frac{6.3}{2.0}} \frac{\text { (minutes) }}{\text { (minutes) }}}{\frac{11.8}{\text { (minutes) }} \text { (minutes) }}$
(Mean values)
11. what is the parking cost on your trip from home to your shooping/personal business destination?

( ) no charge
( ) daily charge $\begin{aligned} & 0.53 \\ & \text { ( }) \text { weekly charge } \\ & \text { ( }) \text { monthly charge }\end{aligned}$ (dollars)
(dollars)

NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.
?. Did you ride a bicycle at least once curing the past year?
61.926 ) Yes
$37.8 \%_{0}^{\circ}()$ No (IF "NO", CO TO ITEN PACE.)
0.3\% DONIT KNOW
2. Did you ride a bicycle during the last month?
40.5\%. ( ) Yes
$(38$ \% did not ride in past year)

* 1.5 \& ( ) No (IE "MO", GO TO VEXE PAGE.)

3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an "X" under your best estimate of the number of days you have used the bicycle for each trip Purpose ("a" through "h" below) during the last 30 days.

d. To visit friends 21.0\%, ( $11.8 \%() 2.5 \%() 1.3 \%() 1.5 \% .1) 2.3 \% 120$
e. To go shopping $22.3 \%(12.3 \%() 2.5 \%() 1.3 \%(1) 1.0 \% .1) 10 \%$

4. Neighborhood riding $5.0(1) 20.8() 5,5() 2,5() 2.21) 4,5()$

( $59.3 \%$ did not bike in last month)
!'s your selected shopping or personal business destination located iess than 4 miles awav from your home?
$86.5 \%$ ( ) Yes
If jour answer is TES, piecse reaci jeicw.
$13.5 \%$ ( ) No
If your criswer is io, piecse go on =0 page 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) oroviding bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right-hand side of the road marking a lane reserved strictly for bicycle use. Separate bicycle paths are bullt adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrall or a grass median. All these paths and street lanes are smoothly paved for better riding. In addition, high-intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are proyided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, conventent locker, shower and changing facilities are made freely avallabie.

You are nos csked to express your agreement or airsagreement with the foilowing statements acout bicuciirs to your sinocoing or jergarel business destination assuming the bicycle ficcility inprovenents descriser above are sucitabie to you on your next shofpirg or persona? business trip. YYou witi nove that tre
 now you seel about bicycle-reiated improverer:ts.)

 the Frevicue ?act.

2. when shodoing or on a personal business trip, it would be $5.8 \%() 39.3 \%() 16.2 \%$ ) 28.52() $7.5 \%$, $2.3 \%$ corivenient to $s t o p$ and do errands when riding a bicycle
3. I couid Dick us and go anytime I like when I ride a bicycte $25 \%$ ) $57.2 \%_{0}$ ( $11.0 \eta_{6}\left(16.8 \eta_{6}\right) 5.8 \%$ ) on shepping or on personel business trips.


6. When on my shopping/personal business trip with children, $16.4 \%$ ( $15.0 \%$ ( ) $12.7 \%() 43.9 \% 1$ ) $19.7 \%$ ( 2.32
would find it convenient to ride the bicycle.
7. I couid not rely on riding a bicycle in rainy weather. 23.12() 59.62() 589() $6.9 \%() 1.7 \%_{0}() 2.9 \%$


10. I could get to my shopping/personal business destination $4.0 \%_{0}\left(47.5 \%_{0}\left(17.3 \%_{0}\right.\right.$ ( $26.0 \%$ ( $2.9 \%_{6}()$ 2.37 quickly wien I ride a bicycle.
11. I would worry about being mugged or assaulted when I ride 2.39( ) 6.9\%1 )19.77. ( ) 59.0\% ( $9.8 \%$, $2.3 \%$ a bicycle to my shopping/personal business destination.
 ride a bicycle to my shopping/Dersonal bus. destination.
13. It would be relaxing to ride by bicycle to my shopping/ personal business destination.
14. I would dislike bicycling to this shopping/personal bus.

$$
52 \% 1
$$

$$
143.421 \text { ) } 22.5 \%\left(21.4 \%_{0}\left(5.8 \%_{0}\right)\right.
$$

$$
1,79
$$ destination because of many delays at intersections.

is. Bicycling to this shopping/personal bus. destination would $3.5 \%_{1}, 12.1 \%_{0}\left(, 9.8 \%_{0}\right) 56.1 \%_{0}() / 1,2 \%$, $2.3 \%$ unsafe due to lack of bike patins separated from motor traffic.
ie. Bicycling to this shopping/personal business destination would $5,8 \%$ be eangerous because motorist are inconsiderate of bikers.
17. When bicycling to this destination, I would werry about $1.7 \%_{0}\left(16.2 \%_{0}\right.$ ) 19.77. $153.2 \%$ ) 7.5\% ( $27 \%$ oerspiring or soiling my clothes.
18. Riding a bicycle would give healthful exercise.

| $38.7 \% 1$ | 153.89 | $14.0 \% 1$ | ) $0.6 \%$ ( | )1220 |  | 1.78 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15.0\% | 162.531 | 111001 | 19.291 | 10.621 |  | 1.77 |
| $7.5 \%$ ! | 116.8\% 1 | ) $2.77 \%$ ( | 153.6\% | 18.770 |  | 1179 |
| 20.271 | 154.492 | 111.6\% | 110.492 | 11.701 |  | 1.7\% |

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next shopping or personal business trip by placing a "I" next to the alternative you prefer most, a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a " 4 " next to your least-preferred alternative. Please repeat the process for each statement (a) through (c) below. (If Jus service is rot available between. your hams and your shopping or personal business destination, rank the three remaining aitamatives.)

Ranked
\#1
a. Assume the bicycle facilities are in place. Please rank the following means of
travel for your next shopping or personal business trip to the same destinatigny ANSWER
9.87
$4.6 \%$
$0.6 \%$
$83.3 \%$
33.5\%
9.87
$5.8 \%$
$49.1 \%$

5ろ. $\%$
$12.7 \%$
$16.2 \%$
15.67
2. If only the altematives listed below were available for your next 10 shopping or personal business trips, how many of the 10 trips would you make using each alternative? forte the number of trips in the box next to each alternative.)
$52.1 \%=\%$ Lips $1.7($ ) bicycle with improved facilities
$57.27=\%$ Tripe 1.16 ) walk
$79.2 \%=\%$ truss
$7.5 \%=0 \%$ trips
0.4 () bus/transit
6.8 ( ) car (driver or passenger) $40 \%=10 / 10$ Tips
(10) TOTAL TRIPS

## LIVING NEARER TO TRAVEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and highway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of employment, shopping, school, and recreation.

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accomodated within a six-biock ( $1 / 2 \mathrm{mlle}$ ) distance and most work trips are within two miles of home.

Sugoose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possibie to walk or bicycle to all shopping and personal business destinations without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, tnroughout the area; convenient bus service is avallable; and there are no special restrictions on the use of automobiles.

1

Iow, please furn to the following pages ance express how this compact lared-use arrangement would ajfect the way you feel about using WALK, BICYCLE, BUS, or CAR fcr your shopping or persoral business trip.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agreement or disagreement with the following statement:

2. Please indicate your preference for each of the following transportation alternatives on your shopping or personal business trip by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred altemative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described above. (Please repear the process for each stctement ( $\alpha$ ) through (d) below.)
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next shopping or personal business trip, and assume further that your trip is approximately $1 / 2$ mile ( 6 blocks) in length. (Please ranix the following means of transportation.)


WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

3. How many adults ( 18 or over), including yourself, are there in your household? 2,3 Mean
4. How many minors (under 18) are there in your househoid? 1.3 Mehu

6. How many licensed drivers (including yourself) are there in your household? 2,4 mean
7. How many automobiles are there in your household? 2,3 mean $63.4 \% \quad 36.3$
8. Do you own a bicycle? ( ) Yes ( ) No
9. How many bicycles are there in your household? 2,2 mean
10. What type of structure do you live in?

11. What is your educational background? (CBECK ONE)
1.5 ( ) completed elementary school 17.8 ( ) college or technical school graduate
II.O ( ) some high school
4.0 ( ) some graduate school
19.3() high school graduate
10.0 () completed graduate degree(s)
35.6 ( ) some college or technical school 0.8 NO ANS.
12. Please indicate your work group below:
32.5 ( \% work 5 or more days a week
$5,0($ ) work 3-4 days a week

5,3 ( ) work $1-2$ days a week
53.9 ( ) presentiy not empioyed
3.3 NO ANS
13. What is your occupation? (CIECK ONE)
4.5() student
26.5 ( O\% professional-technical
3.0() sales worker
$4.8($ ) managerial
5.3 ( ) secretarial-clerical-cashier
8.51 ; blue collar
4.3! ) other $\qquad$
$27.0(7$ housewife
10.0 not employed
14. How many workers are in your household? 1.6 (mean)
15. Please check the category which includes your approximate family income before taxes.
1.5 ( \% $\$ 5,000$ and under
2.01 ) $\$ 5,001=\$ 7,500$
4.3() $\$ 7,501-\$ 10,000$
5.0()$\quad \$ 10,001=\$ 12,500$
6.8()$\$ 12,501-\$ 15,000$
6.3()$\$ 15,001-\$ 17,500$
$12,0() \$ 17,501-\$ 20,000$
$17,8() \$ 20,001-\$ 25,000$
MEAN: $\$ 25,220$
$31.0($ ) $\$ 25,001=\$ 50,000$
2.3( ) over $\$ 50,000$
11.0 NO ANS.

In the space below we would welcome any other comments you would like to make. Enclose additional
pages if you like.
$\qquad$
$\qquad$
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$\qquad$

We would like to express our sincere thank to you for completing this questionnaire.

Is your shopping or personal business destination located less than 2 miles from your home?

If your answer is rES, please read below.

```
26.52. ( ) No
    If your answer is ir, plecse go to
    pace :5.
```


#### Abstract

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.


## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The fmprovements consist of (1) providing pedestrian pathways, (2) improving sidewalks, (3) providing better lighting, and (4) making traffic signals more pedestrianoriented.

Separate pedestrlarmays or walkways are built adjacent to all major roadways. These pathways are separated from automobile traffic by trees or grass medtan. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All extsting sidewalks are repaired to make walking easier. Highintensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches, and pedestrian-oriented stands with flowers, newspapers and refreshments.

You are now asked to express your agreement or disagreement with the foilowing statements about walking io jour shorging or personal business destination, assuming the facility improvements described above are availaile to you on your new shopping or personal business trip. (You wizl note that the list of statements is the same as that used eariier. The purpose of this last rating is to find out how jou fee? nocut the pedestrian-related improvements.)



 weather.
 a snopfing/persorial business trio.
9. It would be uncomfortable to walk to this destination because of rough or bumpy walking surfaces.
 quickiy wnen I walk.
:i. : would worry about being mugged or assaulted when I walk to my sncpping/personal business destination.




 daneerous because motorists are inconsiderate of pedestriars.
$\therefore$. When walking to shis destination I would worry about oerspiring or soiiting my clothes.
: E. 'rizlking weuic cive real thfu? exercise.

$$
\begin{aligned}
& 2.79_{0}\left(1 0 9 7 _ { 0 } ( ) 1 8 . 4 9 _ { 0 } \left(157.87_{0}\left(10.27_{0}\right)-\right.\right. \\
& 37.47_{0}() 55.10() \leq 47_{0}() / 47_{0}\left(1077_{4}-\right.
\end{aligned}
$$

# YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING．PLEASE INDICATE YOUR PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP． 

1．Fiease incicate your preference for the following alternative means of travel for your next snopping or personal business trip by placing a＂l＂next to the alternative you prefer the most，a＂2＂next to your second most preferred alternative，a＂3＂next to your third most preferred aitemative，and a＂ 4 ＂next to your ieast preferred altemative．Please repeat the

 a゙ここのnatives．
a．Assume the waik facilities are in place．Please rank the following means of travei for

b．Now assume the same condition（a）above except that the price of gasoline has increased to $\$ 1.50$ per gallon．（Please rarik agair．）

c．Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon．（Elease rani．．）


2．If only the alternatives listed below are available for your next ten shopping or personal business trips，how many of the ten trips would you make using each alternative？隹mive the



NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATICN CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

it is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning ( $7-9 \mathrm{a} . \mathrm{m}$. ) and evening ( $4-6 \mathrm{p} . \mathrm{m}$. ) rush hours. This means that you would be charged up to a $\$ 2.00$ per day ff you operate a motor vehicle during these peak travel periods. Bllling would be made on a monthly basis using an automated billing process.

## YOU HAVE JUST READ AN ASSUMED REGULATION FOR CAR USAGE．IMAGINE THAT THIS SITUATION

 FOR CAR USAGE EXISTS FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP．1．Please indicate your agreement or disagreement with the following statements：

a．I believe that a congestion fee of two dollars per day is desirable．

$$
4.0 \%_{0}\left(16.0 \%_{0}() 7.5 \eta_{0}()=3.57\right\} \quad 157.5 \% \text { ) } 1.5 \eta_{0}
$$

b．It would be inexpensive to travel by car
with a congestion fee of two dollars per day． $\left.4.570\left(17.0 \%_{0}^{( }\right) 5.5 \%_{0}^{( }\right) 28.59(15159() 3.02$

2．Please indfcate your preference for each of the following transportation alternatives for your next shopping or personal busiress trip by placing a＂l＂nest to the alternative you prefer the most，a ＂2＂next to your second most preferred alternative，a＂3＂next to your third most preferred alternative， and a＂4＂under your least preferred alternative．Please repeat this for each of the statements
（a）through（c）below．（If bus semice is not available for this shopping or personal business trip，please rank the remaining three aiternatives onlu．）
a．Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect．
Please rank the following means of transportation for your next shopping or personal No business trip． 42 H2 44 ANSUER
b．Assume that instead of $\$ 2.00$ the congestion fee increased to $\$ 4.00$ per day．（Plecse rank again．）
c．Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ per gallon．（Please rank．）
10.070
$10.0 \%$
（ ）bicycle
$32.0 \%$
$21.5 \%$
$6.5 \%$
11.07
（ ）bus or transit
$13.5 \%$
$24.0 \%$
$160 \%$
$28.0 \%$
（ ）car（driver or passenger）／0．0\％
$22.0 \%$
37.070
$2.5 \%$

31．5\％
16．5\％
23.0
（ ）walk
$33.0 \%$
30．0\％．
15．0の。
（ ）bus or transit
（ ）car（driver or passenger）
（ ）bicycle 10.5

2107 11．07
21070
$22.5 \%$
24.0 ． $34.2 \%$ $165 \%$

# City of Huntington Beach 

P.O. BOX 180

OFFICE OF THE MAYOR

October 15, 1978

Dear Resident of Huntington Beach:
The City of Huntington Beach is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your work trips only. We are interested in your opinion of the transportation services available to you between your home and your place of work. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: $1--800--328-2933$.


RS:cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TO WORK.

1. What is the nearest interest intersection or street address of the place where you work?
(nearest intersection or street address)
$\frac{(c i z y)}{(l)}$
2. Where is the place where you work located: No Answer: $2.2 \%$
$35.3 \%$ () central city
$62.5 \%$ ( ) suburban
3. Specify the type of area where your work place is located. (CBECK ONE) NO HNSWER; 0.8\%
$8.0 \%$ ( central business district $\begin{aligned} & \text { (downtown of metropolitan area) }\end{aligned} 27.3 \%($ ) industrial district
$22.6 \%() \begin{aligned} & \text { neighborhood business district or } \\ & \text { shopping center }\end{aligned} \quad 12.5 \%$ ( office park/professional building
$4.8 \%($ regional shopping center $11,3 \%$, college campus or school
$10.8(1)$ other
(please specify)
4. Approximately how far is it from your home to your work place (one way)? No Answer: 0.8\%.
$1.8 \%$ ( ) 2 blocks or less
$2.8 \%$ () $\begin{gathered}3 \text { to } 6 \text { blocks } \\ \left(\frac{1}{5} \text { to } \frac{1}{2} \text { mile }\right)\end{gathered}$
$5.8 \%$ ( ) \& to 1 mile
$14.0 \%$ ( ) 6 to 10 miles
$6.5 \%() 1$ to 2 miles
$51.2 \%()$ over 10 miles
5. What was the date of your most recent trip to work?
6. At approximately what time of cay did you make this trip to work? No ANSMER: 0.5\%

$$
\begin{aligned}
& 29.1 \%_{0}() \text { before } 7 \text { a.m. } \\
& 5.3 \%() 10 \mathrm{a} . \mathrm{m} . \text { to } 20 . \mathrm{m} \\
& =8.57,{ }^{3} 7 \text { a.m. to } 8 \text { a.m. } \\
& 18.5 \% \text { ( } 8 \text { a.m. to } 9 \mathrm{a} . \mathrm{m} . \\
& 90 \% \text { ! ) } 2 \text { p.m. to } 5 \text { p.m. } \\
& 3.37 \text { ) after } 6 \text { p.m. } \\
& \text { 5. } 8 \% \text { ( ) } 9 \text { a.m. to } 10 \text { a.m. }
\end{aligned}
$$

7. How did you make your most recent trio to work? (CHECK ore) No Alnsuke: 0.2\%
$18 \%:$, walked all the way
$0.8 \%$ ( motorcycie
84.276 ) drove a car
$0.8 \%$ ( bicycie
8.32() passenger in a car
$0.3 \%()$ moped (motorized bicycle)
$1.3 \%-1$ ) bus

- ( ) taxi
- ( ) train or subway
$2.3 \%$ ) other $\qquad$

7a. If you answered bus, train or subway above, how did you get to your bus or transit stop?

8. Between the time you left home to go to work and the time you returned home, did you make any side trips that required you to travel more than one mile out of your way? No thinswer; $0.5 \%$
$24,3 \%()$ yes
$71.0 \%$ ( ) no
-
9. Did anyone accompany you on your last work trip: (CHECK OIE) No Ansuser: 0.8\%
79.1\% ( ) : traveled aione
$15.0 \%$ ( I was with one other person
$2.8 \%$ ( ) I was with two other persons
2. $3 \%_{0}($ ) I was with three or more persons

NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT TRIP TO WORK WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following options were available to you on your nost recent work trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For your travel to work we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if vou never use it.

The following pages are lateled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an "X" in the space that best indicates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:


If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending on how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you netther agree nor disagree you would place an "X" in the center box. In the example shown here, an "X" has been placed in the box under "agree", indicating this person enjoys traveling by bus.

Because we need to understand how your ratirg of your trip to wro varies from one means of transfortation to another, we are asking that you go through the list of cheracteristics four times, once for eacin means of travel (walk, bicycle, car, and bus). Aithough this process might appear repetitious, we want to stress that your coreful rating of all the statemarts on the nest foun pages are eapecially irportant to the success of this survey.

## YOUR RATING OF BUS (or transit)

Is bus service available between your home and work place?
$41.5 \% 0^{(1) \text { yes }}$
58.5\%( ) no

If jun answer is yES, lease rate the statements seicu concerning row you youlicieei about gcir:E to work ix' bus even if you dinn't choose bus on your last work trip.

1. Going to work by bus is pleasant because I can enjoy the scenery and surroundings.
2. When traveling by bus, it is inconvenient to stop $24.19_{0}() 53.1 \%$, $5.4 \%$ ( ) $\left.10.2 \%() 6.26\right)$ and do errands on my way to and from work.
3. I must schedule my trips in advance when I $28.9 \%$ ( $57.37 \%$ ) $9.02 \%$ ) $4.82(1)$ travel by bus $c o$ work.

 the heavy traffic.

4. I cannot rely on taking a bus to work in rainy $10.8 \%() 23.59() 247 \%() 324 \% \%$ ( $3.67 d)$
weather.
5. I can easily carry my briefcase or other packages $3.6 \%() 55.496) 16.9 \%() .30 .5 \%$ ) $3.6 \%)$ when I go to work by bus.
6. It is uncomfortable to travel to work by bus because of rough and bumpy road surfaces.
7. I can get to work quickly when I take the bus.

$$
\begin{aligned}
& 0.6 \%_{0}\left(6.6 \%_{0}() 24.7 \%() 58.5 \%() 4.6 \%\right. \\
& \left.0.6 \%_{0}() 7.2 \%_{0}() 18.17() 48.8 \%\right) 253 \%
\end{aligned}
$$

11. : worry about being mugeed or assaulted when I go $4.8 \% 1$ ) $13.9 \%$ ( ) $18.7 \%$, $51.2 \%$ ( $11.47 \%$ to work by bus.
12. I worry about being injured in an accident if i go $1.2 \%$, $3.6 \%(2.22 .3 \% 15 \%$ to work by bus.
13. it is relaxing to go to work by bus.
6.62() $34.426)$
$32.5 \%) 20.52(15.47)$
$0.6 \%$
14. Idisilke traveling to work by bus because of the 20.5\% ) $32.5 \%$ ) $17.5 \%() .27 .7 \%(1.8 \%()$ many stops and delays at intersections.
15. I must walk a long distance to get to and from the $157 \%$ ) $33.1 \%$, $20.57127 .17(3.0 \%$, 0.6 bus when I go to work.
16. There is generally a long walt involved when i go 20. $2.7 \%$, $410 \%$ ) $22.9 \%$ ) $11.4 \%$ ( $1.2 \%$, $0.6 \%$ work by bus.
17. When traveling by bus to work I worry about perspiring or soiling my clothes.
18. It is inexpensive to travel by bus to work.

$$
\begin{aligned}
& 3.0 \%(\text { ) } 9.67() 28.3 \% \text { ) } 50.17(18.4 \% \text { ) } 0.6: \\
& 9.6 \%() 42.2 \%(25.9 \%() 18.7 \%(3.6 \%()
\end{aligned}
$$

## YOUR RATING OF WALK

$\therefore$ your work place located less than 3 miles from your home？
（93\％！）yes
$70.27!$ ）no
i ka？king to work is sieasert because I can enjoy the seerery and surroundiriss．

2．Finer walking，it is converient to stop and do er－ares on m $\because$ way tc and from work．
छ．I can oik us and go anytime I like when I walk te work．
c．V＇aikinc to work is tiring．

5．niaiking to work is dangerous because of the heavy traffic．
6．When ！walk te work I worry about being late．
 こニきも．
－．：carnot rely on walking to work in rainy weather
e．：car easily carry my briefcase or other packages when I walk ic work．
Q．：t is uncomfortable to walk to work because of rough or bumpy walking surfaces．
ic．i can $g \not t t$ ：o work ouickly when I walk．
11．I wherry about being mugged or assaulted when： walk ic work．
12．：worry about being injured in an accident if I walk 50 work．
$i \vdots$ ．It is reizxiro to walk to work．
14．：dislike walking to work because of the many delays at intersections．
$i \equiv$ ．Walking to work is unsafe because of the lack of pathways that are separated from motorized traffic．
16．Walking to work is dangerous because motorists are incorisiderate of pedestrians．
－．When walking to work I kory about perspiring or Exiling my cliches．
$\therefore$ Ne！kinミ t＝work gives nealinfii exercise．

Neither
Agree Nor
Agree Nor
Disagree Disagree

| Strongly |
| :--- |
| disagree | $33.7 \%>14.5 \%$

$12.0 \frac{\text { Mure }}{101} \frac{\text { Acres }}{27.470)}$

 $8.4 \%(, 38.6 \%) 14.5 \%(35.7 \%) 48 \%()$ $7.29(19.275) 1457(55.27) 6.5 \%($
 $37.3 \%() 45,9 \%) 10.870(16.0 \% 1)$

 $3.6 \%(1) 7.270(10.47,10.8 \% 1$ $2.4 \% 0(18.1 \%() 14.5 \% 1) 50.5 \%(145 \%()$
 $2.4 \%() 22.9 \%() 12 \equiv 20() 520 \%() 8.4 \%()$ $7.2701) 42.2 \%$ ） $\left.24.1 \%_{i}^{1}\right) 21.7 \%(14.8 \% 1)$

 $9.6 \% 1$ ） $18.1 \%($ ） $20.5 \%(, 49.4 \% 1) 2.4 \% 1)=$ $8.4 \% 1^{(1)} 34.9 \%(18.1 \%() 36.2 \%) 2.4 \%(1)-$ $38.6 \%$ ！ $566 \%$ ） $3.6 \%(1)-(11.2 \%$ ：

## YOUR RATING OF CAR

When using a car, are you usudiiy a:
$91.7 \%$ ( ) car river?

If you are usually a car driver, even
if you did not choose auto for your last
tori trip, rate the statements below con-
cering how you would fee? about driving
to work.

## $8.3 \%!$ car passenger?

If you acre usuaItu a car =assencer, ier. if yous did hot crosse auto =or you -z se work Fin, rate the statements beirw concoming how you would feet about going to work as a car passenger.

Piease crosier all questions beiow, even if you do not own a car.

1. Traveling by car to work is pleasant because

I can enjoy the scenery and surroundings.

3. I can pick up and go anytime I like when I travel $35.3 \%$ (, $53.1 \%$, $30 \%$, $7.3 \%_{0}$ (, $0.5 \%$ ! , $0.8 \%$ by car to work.
4. Traveling by car to work is tiring.
5. Traveling by car to work is dangerous because of the heavy traffic.

6. When I go by car to work I worry about being late. $2.0 \%$, $7.5 \%_{0}\left(13.3 \%\right.$, $55.1 \%_{\alpha}, 21.3 \%$, $0.8 \%$
7. I cannot rely on traveling by car to work in rainy $1.8 \%\left(, 2.8 \%_{0}(, 4.3 \%, 55 \% .8 \%, 30.5 \%\right.$, $0.8 \%$ weather.
8. I can easily carry my briefcase or other packages $36,8 \%(, 57.9 \%$, $3,0 \%$, $0.5 \%, 1.0 \%$, $0.8 \%$ when I travel by car to work.
9. It is uncornfortabie to travel by car to work because $1.3 \%$, $2.0 \%$, $9.0 \%$, $60.2 \%$, 27.0\%,
0.52 of rough or bumpy road surfaces.
10. I can get to work quickly when I travel by car. $30.0 \%$, $51.7 \%_{6}$, $9.5 \%$ ) $58 \%$, $2.5 \%$, $0.5 \%$
11. I worry about being mugged or assaulted when I $0.5 \%() 1.3 \%_{0}$, $\left.6.5 \%() 53.7 \%\right) 370 \%$ ) $1.0 \%_{0}$ travel by car to work.
12. I worry about being injured in an accident if I travel by car to work.
13. It is relaxing to travel by car to work.
14. I dislike traveling by car to work because of the many delays at intersections.
15. Parking the car at my place of work is expensive.
$5.8 \%(18.8 \%() 15.8 \%() 43.5 \%) 15.376) 0.8 \%$ $9.5 \%() 24.5 \%() 24.5 \%) 35.2 \%$ ) $5.8 \%(; 0.5 \%$

Is your work place locミtec iess than E miles from your home？
2.07 ；Yes

二－こ～un arsuer is




1．Bicycling to work is pleasant because I can enjoy the scenery and surroundings．

2．When biking，it is convenient to stop and do errands on my way to and from work．

3．I can cici up anc go anytime I like when I go to mork by bicycle．
6．Traveling to work by bicycie is tiring．

5．Riding a bicycle to work is dangerous because of tine heavy traffic．

6．When I ride the bicycle to work I worry about being late．

7．I cannot rely on riding a bicycle to work in reiny weather．

8．I can easily carry my briefcase or other packaces when！ride the bicycle to work．

9．It is uncomfortable tc travel to work by bicycle because of rough and bumpy riding surfaces．

0．I can get to work quickly when I go by bicycle．

1i．I worry about being mugged or assaulted when I travel to work Dy bicycle．
12．I worry about being injured in an accident if I ride the bicycle to work．

12．I：is relaxing to travel to work by bicycle．

16．I dislike traveling to work by bicycle because of the many stops and delays at intersections．
15．Fiding the bicycle to work is unsafe because of the lack cf bike paths that are separated from motorized traffic．

16．Going by bicycle to work is dangerous because motorists are inconsiderate of ticyclists．

17．When bicyciing to work I worry about perspiring or sofling my clothes．

12．Riding a bicycle so work gives healthful exercise．

19．Farking，lockirig and unlocking my ticyele at work is no trouble．
20．After parking my bicycle ！must walk a long cistance when I go to wory．

21．I worry about my ticycle being stolen zt work．

22．It is inexpensive to buy and operate a bicycle．


$$
10.2 \%\left(29.7 \%\left(21.1 \%_{0}() 36.6 \%\right) 1.6 \%() 0.8 \%\right.
$$

$$
43.0 \%(150.0 \%() 2.3 \%(3.99 \%)-(10.8 \%
$$

$$
2.37 \text { a }, 15.6 \% \text {, } 14.17_{0}\left(48.4 \%_{0}(18.8 \%), 0.8 \%\right.
$$

$$
2.9 \%() 23.4 \% \text { ) } 21.9 \% \text { ) } 44.5 \% \text { ) } 5.5 \%(10.8 \%
$$

$$
3.1 \%(\text { ) } 30.59(18.02 \% \text { ) } 35.931 \text { ) } 11.7 \%(\text { ) } 0.8 \%
$$

$$
6.37 .112 .5 \%() 25.8 \%) 43.770(10.971(0.87
$$

$$
\left.20.5 \%() 35.2 \%) 16.4 \%_{6}(23.4 \%) \text { ) } 3.99 \delta\right) 0.8 \%
$$

$$
1670(\text { ) } 28.9 \%(122.7 \%() 24.3 \%(10.9 \% 11.6 \%
$$

$$
7.0 \%(124.296) 27.39(138.47(2.36)=0.87
$$

$$
22.7 \%() 27.37!) 14.8 \%() 28.1 \%() 6.3 \%() 0.8 \%
$$

$$
21.9 \%(\text { ) } 32.79() 25.8 \%(118.0 \%() 88 \%() \text { a8? }
$$

$$
18.2 \%_{0}(59.0 \%() 16.4 \%(124.2 \%()-(1) 1.6 \%
$$

$$
39.8 \%(, 49.2 \%, 7.8 \% \text {, } 26 \%, 0.8 \%, 0.8 \%
$$

$$
10.2 \%(\text { ) } 56.2 \% \text { ) } 11.7 \%(, 18.0 \% \text { ) } 31 \pi() 6 \% \%
$$

$$
\text { - ( ) } 2.170(7.275) 67.2 \% 121.1 \% \text { ) } 0.87
$$

$$
8.6 \%() 344 \%(125 \%() 34.39() 8.696) 1.67
$$

$$
17.2 \%() 45.3 \%\left(\text { ) } 1 8 . 0 \% \left(15.6 \%_{0}^{(~) ~} 2.3 \%_{0}^{(~) ~} 1.6 \%\right.\right.
$$

$$
\begin{aligned}
& 68.0 \% \text { ) No } \\
& \text { Your ansien is lus, please go or to tire } \\
& \text { rem: ミスミも. }
\end{aligned}
$$

WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL TO 'WORK.

1. Imagine that coly BUS, WALK, BICYCLE, and CAR (driver or passenger) were available for your most recent work trip. These alternatives are listed below. Please indicate your preference by placing a "1" next to the alterative you prefer the most, a "2" next to your second most-preferred alterative, a "3" next to your third most-preferred alternative, arid a. "A" next to your least-preferred alternative.
(If bus service was not available for your work trip, please rani the three remaining altematives.)
If bus service was not available for your work trip, please rani the

| $3.0 \%$ | () walk | ( $8.0 \%$ | $41.7 \%$ |
| ---: | :--- | ---: | ---: |
| $3.8 \%$ | bicycle | $42.6 \%$ | $42.3 \%$ |
| $88.6 \%$ | () car (driver or passenger) $6.3 \%$ | $3.0 \%$ |  |

$x+1.15=D$
$6.8 \%$
$41.7 \%$
$42.3 \%$
$3.0 \%$
$14.3 \%$
$40.8 \%$
$5.3 \%$
$0.8 \%$

323\%
$6.5 \%$
$6.0 \%$
$1.3 \%$
2. He would like to know how often you use each of the following means of travel for work trips from home. Place an "X" under your best estimate of the number of cays you have used each means of travel during the last 30 days.

3. Assume that on your next work trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each. gasoline price level, please indicate your transportation preference by placing a " 1 " next to the alternative you would prefer the most, a "2" next to the one you would prefer second, a "3" next to your third choice, and a "4" next to your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below.
(If bus service is not available for your work trip, please rank the three remaining alternatives.)
Percentages indicate times rock was ranked 1 \#2


$6.8 \%$
$6.8 \%$
$82.2 \% \quad 9.0 \% \mathrm{car} \quad\left(168.9 \% 15.39 \mathrm{car}^{\mathrm{car}} \quad\left(142.721 .0^{\mathrm{car}} \quad(139.918 .5 \mathrm{car} \quad\right.\right.$ ( )

WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU WORK BY ANSWERING THE FOLLOWING QUESTIONS:

ANSWER IE DIETAVEE RC: OCH TO CORY IE E MELEE OR IEEE

1. If you were to ride your bicycle to work, what is your best estimate of the time you would spend doing each of the following?
getting the bicycle to the street

23.07 (minutes)
2.92 (minutes)
$\qquad$ (minutes)

TOTAL TIME FROM HOME TO WORK (minutes)
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to work?
$0.8 \%$ ( 1 bicycle path (off the street)
26.87 .1 ) bicycle lane (on the street)
$5.3 \%$ ( ) neither
7.37 ( ) don't know
$0.3 \%_{0}($ ) both
3. What portion of your total? trip from home to work is served by bicycle paths or bicycle lanes?
4.89 , none
$7.8 \%$ ( ) less than $1 / 4$ the distance
$6.0 \%$ ( ) 1/4 to $1 / 2$ the distance
$5.5 \%() 1 / 2$ to $3 / 4$ the distance
$8.5 \%($ ) more than $3 / 4$ of the distance
$7.8 \%$ ( ) don't know

ANSWER IF DISTANCE FROM HOME TO WORK IS 3 MILES OR LESS.
4. If you were to walk to work, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at work?
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to work?
$17.8 \%()$ all or almost all the way
$5.5 \%($ ) part of the way
$1.8 \eta_{0}($ ) there are none
$1.87 \%$ ( don't know

Is your work place located less than 6 miles away from your home?
$32.5 \%$, res
Is joum cnower is rrs, ylease read beiow.
$67.5 \%()$ No
Is your ariswer is .ro, please go on to ミage is.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO WORK USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for ticycle use, (3) improving road surfaces, (4) installing secure bicjcle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right hand side of the road, marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for a better ride. In addition, high intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high employment centers, these consist of enclosed free storage lackers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made available.

You are now asked to erpress your agreement or disagreement with the foliowing statements about bicuciing to wori, asstming the bicycle facility improvements described above are cuailable to ycu on your nez: work trip. (Iou will note that the list of statements is the scme as that used ecrilier. The purcose of this lest retirg is to sind out how you feel about the bicucis-related improvements.)

## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTS




1. Bicycling to work would be pleasant because : could enjoy the scenery and surroundings.
2. When biking, it would be convenient to stop and do errands on my way to and from work.
j. I cesle Dick up and go anytime I like when I go to work by bicycle.
3. Traveiing te work by bicycle wouid be ifring.
4. Riding a bicycle to work would be dangercus because of the heavy traffic.
5. If I rode the bicy:le to work, I would worry about being late.
6. I could not reiy on riding a bicycle to work in rainy wezther.
7. I could easily carry my briefcase or other packages when I ride the bicyele to work.
8. It would be uncomiortable to travel to work by bicyzle because of rough and bumpy surfaces.
9. : could get to work quickly when I go by bicycle.
10. I would worry about being mugged or assaulted when I travel to work by bicycle.
11. I would worry about being injured in an accident if I ride the bicycle so work.
12. It would be relaxing to travel to work by bicycle.
13. ! would dislike traveling \$o work by bicycle because of the many stops and delays at intersections.
1ミ. Riding the bicycle to work would be unsafe because of $6.2 \%$, $7.7 \%$ (, $15.4 \%$, $56.9 \%$, is i2.3\% ( ) $1.5 \%$ lack of bike peths that are separated from motor traffic.
14. Going by bicycle to work would be dangerous because $7.7 \%$, $20.0 \% 1$ ) $21.5 \% 1$, $43.1 \%$, $7.7 \%$ ) -
motorists are inconsiderate of bicyclists.
 or solling my clothes.
15. Ricing a bicycle to work would give healthfu? exercise.
i9. Parking, locking and urilocking my bicycle at work woule be no trojble.
16. : fter parking my ticycle ! would have to walk a long eistence when I go to work.

2?. : wouid worry about my bicycle being stolen at work.
22. It would se inexpensive to buy and operate a bicycie. $15.4 \%$; $46.2 \%$ ) $13.8 \%$ ! $21.5 \%() 5.9 \%$ ) -

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.
i. Please indicate your preference for the following alternative means of travel for your nex: trip to work by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred aiternative, a " $3^{\circ}$ next to your third most preferred aiternative, and a "4" next to your least preferred aiternative. Repeat the process for each statement (a) through (c) below.

1:. bus sarvice is not cuailable between your home and your place of worik, rank the three remaining alternatives only.1
a. Assume the bicycle facilities are in piace. please rank the following means of travel for your next trip to work.
( ) bicycle with improved facilities
( ) waik
( ) bus/transit

| 2 | 3 | 4 | ANO |
| :---: | :---: | :---: | :---: |
| $55.4 \%$ | $29.2 \%$ | - | ANSER |
| $12.3 \%$ | $44.6 \%$ | $35.4 \%$ | - |
| $21.5 \%$ | $16.9 \%$ | $41.6 \%$ | $20.0 \%$ |
| $10.8 \%$ | $9.2 \%$ | $3.1 \%$ | - |

$76.9 \%$
( ) car (driver or passenger)
$10.8 \%$
$9.2 \%$
$3.1 \%$
b. Now assume the same condition as (a) above except that the price of gasoline has increased No
*)
33.8\%
7.7\%
$9.2 \%$ $46.1 \%$ to $\$ 1.50$ per gallon. (Pleces rank again.)

| 2 | 3 | 4 | A1.5WES |
| :---: | :---: | :---: | :---: |
| $36.9 \%$ | $26.2 \%$ | - | $31 \%$ |
| $21.5 \%$ | $38.5 \%$ | $29.2 \%$ | $3.1 \%$ |
| $15.4 \%$ | $16.9 \%$ | $35.4 \%$ | $23.1 \%$ |
| $23.1 \%$ | $15.4 \%$ | $12.3 \%$ | $3.1 \%$ |

c. Suppose that the bicycle facilities are in place and the price of gasoline increased to $\$ 3.00$
$55.5 \%$
$10.8 \%$
$16.9 \%$
( ) bicycle with improved facilities
() walk
( ) bus/transit
( ) car (driver or passenger)
$23.1 \%$
$15,4 \%$
$12.3 \%$
$3.1 \%$
15.470 per gallon. (Please rionk.)

| ( ) bicyele with improved facilities | $29.2 \%$ | $13.8 \%$ | - | $1.5 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| () walk | $41.6 \%$ | $21.5 \%$ | $24.6 \%$ | $1.5 \%$ |
| ( ) bus/transit | $9.2 \%$ | $18.5 \%$ | $33.9 \%$ | $21.5 \%$ |
| $($ ) car (driver or passenger) | $18.5 \%$ | $44.6 \%$ | $20.0 \%$ | $1.5 \%$ |

2. If oniy the altematives ifsted below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (hroite the number of tries in the bor nex: to each alternative.)
1.4 () bicycle with improved factitities
f.1 ( ) walk
0.6 ( ) bus/transit

609 ( ) car (driver or passenger)
(10) TOTAL TRIPS

## LIVING NEARER TO TRAVEL DESTINATIONS


#### Abstract

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion and costly street and highway expenditures. It has been suggested that in order to reduce these probiems people must live nearer to their places of employment, shopping, school and recreation.


Some communfies have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six block ( $\frac{1}{2}$ mile) distance, and most work trips are within two miles of home.

Suppose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to work without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is avaflable to work places; there are no special restrictions on the use of automobiles.

Now, please tum to the following pages and express how this corfcc: Iorc-use arrangemen= wouth affect the wCy you fesl about using WALK, BICTCEE, BUS or CAR for you vork trie.

YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT WORK TRIP.
i. Jesse indicate your agreement or dfagreement with the following statement:

|  | Neither <br> Agree Nor | Strongly |
| :--- | :--- | :--- |
| Strongly |  |  |
| Acres | Agree | Disagree |

: would like to live in this type of community. $32.5 \%$ ) $33.0 \%$ ) $21.5 \%($ ) $4.5 \%$, $4.0 \%$ ) $3.5 \%$
2. Please indicate your preference for each of the following transportation alternatives or your next trip to work, by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described
above. Please repeat the process for each statement (a) through (d) below.
3. Assume the living conditions and special transportation facilities described on the previous case exist for your next trip to work, and assume further that your trip to work is approx-

b. Now suppose that in addition to the conditions described in (a) above, the price of gasoline

c. Assume the conditions described in (a) above and assume that in addition, the speed limit

## bovid $\# 1$

29.5\%
$4.0 \%$ was reduced to 15 mon in the community. 2
( ) walk
$39.0 \%$
${ }^{4} 3$
$\pm 4$
No
$9.5 \%$
( ) bicycle
$35.0 \%$
$14.0 \%$
$12.0 \%$ THEwS
$12.5 \%$
( ) bus or transit
$10.0 \%$
$9.5 \%$
$2.2 \%$
$6.5 \%$
( ) car (driver or passenger) $8.5 \%$
$40.5 \%$
29.5\%
10.5\%
$27.0 \%$
$45.5 \%$
6.5\%
d. Assume again the conditions described in (a) above but this time, assume no parking was available at your work place. (Prese :mri\%.;

| $36.5 \%$ | () walk | $35.0 \%$ | $16.5 \%$ | $7.0 \%$ | $5.0 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $41.0 \%$ | () bicycle | $43.5 \%$ | $7.5 \%$ | $1.5 \%$ | $6.5 \%$ |
| $13.5 \%$ | () bus or transit | $10.0 \%$ | $53.5 \%$ | 13.57 | $9.5 \%$ |
| $7.5 \%$ | () car (driver or passenger) $4.0 \%$ | $13.5 \%$ | $68.0 \%$ | $7.0 \%$ |  |

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT SONF:CENTIAL.

2. What is your sex? $50 \%$ ( ) Marie $50 \%$ ( ) Female
3. How many adults ( 18 or over) including yourself are there in your housenald? $\qquad$
c. Hew many minors (under is) are there in your household: $\qquad$
j. Do you have a valid driver's license? $929 \%$, yes $i .8 \%$, No dithewer. $0.3 \%$
E. Hen many licensed drivers (inciwéine yourself) are there in your household? 2,4
7. How many autamooiles are there in your household? 2.4
8. Do you own a bicycle? $66.9 \%_{0}$ ) Yes $328 \%$ ) No
o. How many bicycles are there in your household? $\qquad$
10. What type of structure do you live ir? N's Answer: $0.8 \%$
88. $3 \%$ ( ) single family
$0.3 \%$ ( ) low rise apartment (4 to \& stories)
$0.8 \%$ ( ) duplex

- ( ) high rise apartment (more than 8 stories)
$2.3 \%$ ( ) townhouse $4.5 \%$ ( ) other $\qquad$
$3.0 \%$ () walk-up apartment (3 stories or less)

11. What is your educational background? (CEEEK CiNE)
$0.3 \%$ ! ) completed elementary school $19.3 \%$ ( ) college or technical school graduate
$6.5 \%$ ( ) some high school $6.3 \%$ ( ) some graduate school
$19.0 \%$ ! ) high school graduate
9,5\% ( ) completed çraduate degree (s)
$39.1 \%_{0}($ ) some college or technical school
i2. Please indicate your work group below: No Answer: $0.5 \%$
$85.4 \%$ ) work 5 or more days a week
$1.8 \%$ ( ) work $1-2$ days a week

- $11.37_{0}$ ! ) work $3-4$ days a week
$1.0 \%$ ( ) presently unemployed

13. What is your occupation? (CEEC: CIE)

14. Does your job require you to dress up? (ChECK OVE) NO Answer: $1.0 \%$ 50.09 ( ) usually $130 \%$ ) sometimes $36.0 \%$ ( ) not usually
15. How many workers including yourself are in your household? $\qquad$
16. Please check the category which includes your approximate family income before taxes. No truer: $8.3 \%$

$$
\begin{array}{lll}
1.0 \%(.) & \$ 5,000 \text { and under } & 9.0 \%(\text { ) } \$ 15,001-\$ 17,500 \\
1.8 \%(\text { ) } \$ 5,001-\$ 7,500 & 8.5 \%(\text { ) } \$ 17,501-\$ 20,000 & \\
20 \%(\text { ) } \$ 7,501-\$ 10,000 & 18.0 \%(\text { ) } \$ 20,001-\$ 25,000 & \bar{x}: 27,370 \\
3.3 \%(\text { ) } \$ 10,001-\$ 12,500 & \$ 7.6 \%() \$ 25,001-\$ 50,000 & \\
7.0 \%(\text { ) } \$ 12,501-\$ 15,000 & 35 \%(\text { ) } & \\
\hline
\end{array}
$$

In the space below we would welcome any other consents you would like to make. Enclose additional pages if you like.

We would like to express our sincere thanks to you for completing this questionnaire.

Is your work place located less than 3 miles from your home?
$20 . \%$ ( ) Yes
If your onawer is $75 S$, please read belou.
$80.0 \%$ No ( )
is your znswer is in, please go on to pags 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO WORK USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The fmprovenents consist of (1) providing pedestrian pathways, (2) improving sidewalks, (3) providing betier lighting, and (4) meking traffic signals more pedestrian-oriented.

Separate pedestrian ways or walkways are bullt adjacent to all major roadways. These pathways are separated from automobile traffic by trees or grass medians. At all busy street crossings, pedestrians will be able to change traffic lights in thelr favor. All existing sidewalks are repaired to make walking easier. High intensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountalns, shade trees, benches and pedestrian-oriented stands with flowers, newspapers and refreshments.

You are now asked to express your agreenent or disagreement with the following starements about walkira to wori, cssuming the fxcility improvements described above are cuailable to you on your nean trio to work. (You wili note trat the inst of stajements is the sams as that used sariisx. The purpose of this lasi rating is to find out how ycu jeel about the pedesmian-related inprovements.)

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS

Please rate the starements below aonceming how you would fael ascu= yalkirg to work using the facilizy improvements cescribed on the previous page, even if you itc rot waik on your last trip to work.

| Strongly |
| :---: |
| Agree |

1. Walking to work would be pleasant because I could $32.5 \%) 40.0 \%$ ( 17.52 ) 7.5 2/0 2.52 ) enjoy the scenery and surroundings.
2. When walking, it would be convenient to stop and $7.5 \%$ ) $30.0 \%$ ( ) $17.5 \%$ ) $42.5 \%$ ) $5.5 \%$ )
do erranas on my way to and from work.
3. I could pick up and go anytime I like when I walk 2.5\% ) 50.0\% 1 $17.5 \%$, 25.0\%, $50 \%$ ) to work.
4. Walking to work would be tiring.

$$
5.0 \%() 27.5 \%) \text { ) } 30.07 \text { ( } 37.595)-(1-
$$

5. Walking to work would be dangerous because of the heavy traffic.
6. If I walked to work I would worry about being late.
7. i could not rely on walking to work in rainy weather.
8. I could easily carry my briefcase or other packages when I waik to work.

$$
\begin{aligned}
& \text { - ( ) } 10.09 \% \text { ) 22.5\% ) } 55.0 \% \text { ) } 225 \% \text { ) - } \\
& \text { 7.59\% ) 25.07\% ) 20.0\% ( 45.075 ) - ( } 12.5 \%
\end{aligned}
$$

$$
\begin{aligned}
& \text { - ( ) 350\% } 5.0 \%(152.5 \% 1) 7.5 \%() \text { - } \\
& \text { - ( } 122.5 \% \text { ) } 22.5 \% \text { ) } 50.0 \% \text { ( } 2.0 \% \text { ) - } \\
& \text { - ( } 7.5 \%(127.596) 52.596) 12.5 \%()-
\end{aligned}
$$

9. It mould be uncomfortable to walk to work because - ( ) 5.07 () 10.0\% ) 70.0\% ) $15.0 \% \mathrm{f}$ ) of rough or bumpy walking surfaces.
10. I could get to work quickly when I walk. when I waik to work.
11. I mould worry about being injured in an accident if I walk to work.
12. It would be relaxing to walk to work.
$2.5 \%$ ) $10.0 \%$ ) 17.5\% ( $162.5 \%$ ( ) 7.5\% ( ) 12.59 , $42.5 \%$, $15.0 \%$ ) $22.59(\mathrm{~J}, 50 \%(\mathrm{c}, 2.5 \%$
13. 1 would dislike walking to work because of the many - ( ) 5.0\% ( ) 20.0\% ( ) 65.0\% ) 7.5\% ) 2.5\%. delays at intersections.
14. Walking to work would be unsafe because of the lack $2.5 \%$ ) $2.5 \%$ ) $10.0 \%$ ) $67.5 \%$ ) $12.5 \%$ ) 5.0 ? of pathways that are separated from motorized traffic.
15. Walking to work would be dangerous because motorists $10.0 \%$ ) $7.5 \%$ ( $20.0 \%$ ) $55.0 \%$ ( $5.0 \%$ ) $2.5 \%$ are inconsiderate of pedestrians.
16. then walking to work I would worry about perspiring 12.5\% ( ) 42.5\% ) 20.0\% ( ) 25.0\% ( ) ( ) or solifing my clothes.
17. Halking to work would give healthful exercise.

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.

i. Please incicate jour reference for each of =he ficilcwing alternative -ens of :rave? for jour rex: trip to work by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a " 3 " next to your third most preferred alternative, and a " 4 " next to your least preferred alterative. Repeat the process for each statement (a) through (c) below.
 ones.)
a. fissure the walk facilities are in place. Please rank the following means of travel for your

## Ranked / next trip to work.

10.070
( ) walk with improved facilities Ran ked $\qquad$ Exik=0 3 For id $=4$ 츠‥07」 10.0\% ( ) bicycle 50.090 4500 107 Suer $15.0 \%$
$30.0 \%$ 7.5\% 2.570 $47.5 \%$ 77.570
( ) bus/transit
$2.5 \%$
$17.5 \%$
$2.5 \%$
b. Now assume the same condition as (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Riease rank again.)

c. Suppose that the walk facilities are in place and the price of gasoline increased io $\$ 3.00$ per gallon. (Please nark.)

2. :f only the altematives listed below were available for your next ten trips to work, how many of the


$57.5 \%$ O $/ 10+\mathrm{trips}()$ walk with improved facilities 1.7
$67.57 \%$ \% trips ; bicycle
$92.5 \%$ \% 10 trips ( ) bus/transit

(10) TOTAL TRIPS
(Means)
0.4
$\frac{6.9}{10.0}$

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1.00$ will be assessed to the owners of automobiles operating during the morning ( $7-9$ a.m.) and evening ( $4-6$ p.m.) rush hours. This means that you would be charged up to $\$ 2.00$ per day if you operste a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

YOU HAVE JUST READ AN ASSUMED FEE ON AUTO USAGE. IMAGINE THAT THIS SITUATION EXISTS FOR YOUR NEXT WORK TRIP.

1. Please incicata your agreement or disagreement with the following statements:

2. Please indicate your preference for each of the following iransportation alternatives for your next trip to work by placing a "1" next to the altemative you prefer the most, a " 2 " next to yeur second most preferred alternative, a " 3 " rext to your third most preferred alternative, and a "4" next to your least preferred alternative. please repeat this for each of the statements (a) through (d) below.

a. Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect. Please

| Kanked ${ }^{1}$ rank the following means of trans | $\begin{aligned} & \text { tion for you } \\ & \text { nked } \\ & 2 \end{aligned}$ | trip to work. Kanked E3 | Ridiked | $\begin{aligned} & N= \\ & \text { H(JSUE } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $5.0 \%$ (7alk | $11.5 \%$ | 37.0\% | $35.5 \%$ | $11.0 \%^{2}$ |
| $14.0 \%$ () bicycle | 37.5\% | $34.5 \%$ | 4.5\% | $9.5 \%$ |
| 17.0 ing ( ) bus or transit | 25.5\% | $7.5 \%$ | 8.0\% | $42.0 \%$ |
| $61.5 \%_{0}$ ( ) car (driver or passenger) | $16.0 \%$ | $9.5 \%$ | $8.5 \%$ | $4.5 \%$ |

b. Assume that instead of $\$ 2.00$, the congestion fee increased to $\$ 4.00$ per day. (Piease marik agair.)

| $6.5 \%$ | () walk | $15.0 \%$ | $34.0 \%$ | $33.5 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| $19.5 \%$ | () bicycle | $39.5 \%$ | $29.0 \%$ | $11.0 \%$ |
| $23.5 \%()$ bus or trarisit | $19.0 \%$ | $2.5 \%$ | 9.52 |  |
| $47.5 \%$ | () car (driver or passenger) | $16.5 \%$ | $15.5 \%$ | $6.0 \%$ |

c. Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to 51.50 per gallon. (F̌ease rank.)

| to $\$ 1.50$ per gallon. (Fizase rank.) $5.0 \%$ ( ) walk | $16.0 \%$ | 35.0\%. | $32.0 \%$ | 12.02 |
| :---: | :---: | :---: | :---: | :---: |
| 19.07 ( ) bicjucle | 40.090 | $27.5 \%$ | $3.0 \%$ |  |
| $22.0 \%$ ( ) bus or transit | 20.070 | $8.5 \%$ | $7.0 \%$ | 42.59 |
| 50.07 ( ) car (driver or passenger) | 13.070 | 16.5\% | 14.040 | $5.5 ?$ |

1. Assume that the congestion fee of $\$ 2.00$ per day was in effect, and assume further that your employer allowed you to arrive before 7:00 a.m. and leave before 6:00 p.m., or to arrive after 9:00 a.m. arid leave after 6.00 p.m. (マこease maik.)

| $3.0 \%$ ( ) | walk | 7.0\% |  | 40.2070 | 3\%.5\% | 11. 5is |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5.070 ( ) | bicycie | $41.2 \%$ |  | 39.50 | $4.5 \%$ | 12.5\% |
| 6.570 ( ) | bus or transit | 35.57 |  | 7.075 | $9.0 \%$ | $82.0 \%$ |
| $82.5 \%$ ( ) | car (driver or passenger) | $6.5 \%$ | 187 | 2.59 | 5.070 | $3.5 \%$ |

JOHN C. MITKUS, Execurive Direcior
G. CRAIG SCHEITER, Deputy Executive Director

October 15, 1978

Dear Resident of Society Hill and of Rittenhouse:
The City of Philadelphia is cooperating in a U.S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your shopping and personal business trips only. We are interested in your opinion of the transportation services available to you for shopping and personal business trips. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800-328-2933.


JCM: cd
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME FOR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS. PLEASE EXCLUDE ALL MAJOR GROCERY SHOPPING TRIPS.

1. What is the nearest intersection or street address of the place of your most recent shopping or personal business trip from home?
2. A list of specific shooing and personal business trio purposes is given below. Please check the one trip purpose that best describes your most recent shopping or personal business trip from home (exclude major grocery shopping trips). (CEECK OLE ONLY)
24.7 (\%) Minor grocery shopping $7.6(\%)$ eat meal $2.8(\%)$ other professional
$20.6($ ) clothing/shoes $1.3($ ) post office 821$)$ bank
$5.1($ ) drugs/bookstore $2.5($ ) library/museum $2,8()$ laundry/dry cleaner/shoe repair
6.61 ) hardware/florist/9iquor 4.41 ) medical/dental $1.3($ ) barber/beauty shop
( ) other $\qquad$
3. Other than the above stop, did you make any additional stops on the way to and from your shopping/ personal business destination? (CHECK ONE)
38.3 ( ) none (If you answered HoNE, go to question 5.1
28.8 () one
17.4 ( ) two
15.21 ) three or more
0.3 NO ANSWER
4. Did any of the additional stops between your home and your primary shopping/personal business destination require you to travel more than one mile out of the way?
$6.6($ ) Yes
54.8 ( ) NO NO HOOT STDPS/NO ANSWER: $38.6 \%$
5. Approximately how far was it directly from your home to your primary shopping/personal business destination (one way)?
21.5 () 2 blocks ( $\frac{1}{4}$ mile or less)
29.1 () 3 to 6 blocks ( $\frac{1}{3}$ to $\frac{1}{2}$ mile)
21.5()$\frac{1}{2}$ to 1 mile
14.6() to 2 miles
5.7 () 2 to 4 miles
2.2() 4 to 6 miles
1.6 ( ) 6 to 10 miles
2.5() over 10 miles
1.3 NO ANSWER
6. How many separate parcels, bags or packages were you carrying? (CEECK ONE)
$14.9(\%)$ none
38.6() one
28.211 two
$17.7($ ) three or more
0.6 NO ANSNGF
7. How many persons (other than yourself) were with you on this shopping or personal business trip?
total $\qquad$ (number)

Children 12 years of age and under $\qquad$ (number)

$$
\text { MEAN: } 0.58 \text { MEAN: } 0.66
$$

8. Where is this place where you went shopping or on personal business located?
93.7 ( ) central city
9. Specify the type of area where you went on your shopping/personal business trip. (CBECK OUE)
$\left.57.0 /-() \begin{array}{c}\text { central business district } \\ \text { (downtown metropolitan area) }\end{array}\right) / 3 / 1.3$ ( ) regional shopping center
28.5/1.6) neighborhood business district $0.6 /$ ( ) office park/professional building
$2.5 /()$ college campus
$3.2 / 1.9^{(1)}$ other $\qquad$
$1 . 3 \longdiv { 0 }$ NO Answate
10. What was the date of this most recent trip? $\qquad$ $y+x$ Ins (month/day)
11. At approximately what time of day did you make this trip to your shopping/personal business destination?
3,2 () before $\frac{9}{1}$ am.
( ) Z am to \& \& m.
30.1 ( ) 2 p.m. to 6 pom.
() ) B-
$58.5(, 9 \mathrm{am}$, to 2 Pm
7.61 ) after 6 pom.
0.6 No Ans.
12. How did you make the trip to this shopping/personal business destination? (CHECX ONE)


12a. If you used a bus cr transit, how did you get to your bus or transit stop?


# NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MCST RECENT SHOPPING OR PERSONAL BUSINESS TRIP WHEN COMPLETING THE FOLLOWING SECTION. 

Imagine that only the following options were avallable to you on your most recent shopping or personal business trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For the above trip, we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never used it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an " $X$ " in the space that best indfcates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:


If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending upon how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you neither agree nor disagree, you would place an "X" in the center box. In the example shown here, an "X" has been placed in the box under agree, indicating this person enjoys traveling by bus.

Becase we need to understare how your rating of your shopping or personal business trip varies from one mears of transportation to another, we are asking that you go tinough the iist of characteristics foun times, once sor each means of travei (uaik, bicycle, car, and bus). Aithough this process might appear repetitious, we want to stress that your careful ratings of ail the statements on the reaz fioun pages are sspecialzy imporsant to the success of this sumyey.

## YOUR RATING OF WALK

Was your most recent shopping or personal business destination located less than 2 miles from your home?
84.2(\%) yes

If your ansiver is IES, please mats the stciemerts below concernire how wou would seel about walking to this destination susn if you did not watk thare on your last trip.
15.8 ( No

If your answer is vO, please co on tc the next page.


## YOUR RATING OF CAR

When using a car, are you usually a:
$61.7(\%)$ car driver
IN

shcppiry or person= business Trit, rate
the stcemerits belou sorcernir in is : ou
woulz feeq about ävinin or iris sriz.

38,3 ( ) car passenger
I: you are usuaj"ت a ecm zassencen, ever. $\therefore$ you din nct croose cat= Fon sincppirg on perscrai business tiv, reve tre stcienenis $\dot{b} i$ ion concemning nou iou Soult feel about going to tinis eies=ination cs a car passenger.

Plecse onswer all questicns ielow, even is you do not own a sor.

i. iraveling by car to this shopping/Dersonei bustness destination is pleasant because I can enjoy the scenery and surroundings.
2. Wten shooping or on a personal business trip, it is convenfent to stop and do errands when traveling by car.
3. I can oick up and go anytime I like when I travel by car en shopping or on personal business trips.
4. Traveling by car to this shopping/personal business destination is tiring.
5. Traveling by car to my shopping/personal business destination is dangerous because of the heavy traffic.
E. When on a shopping/personal business trip with children, it is inconvenient to go by car.
7. I cannot rely on traveling by car to this destination in reiny weather.
8. I can easily carry packages when I travel by car while I am on a shooping/personal business trio.
9. It is uncomfortable to travel by car to this shopping/personal business destination because of rough or bumpy road surfaces.
10. I can get to my shopping/personal business destination quickly when I travel by car.
11. I worry about beino mugged or assaulted when I travel by car to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by car to my shopping/personal business destination.
13. It is relaxing to travel by car to my shopping/personal business destination.
14. I dislike traveling by car to this shopping/personal business destination because of the many delays at intersections.
15. Parking the car at this destination is expensive.

1̌. After parking the car, I must walk long distance when ige to this sncpping/personal business destination.
17. I worry about the car being stolen or vandalized $a$ : this destination.
18. It is inexpensive to buy and oderate a car.
19. Parking the car is no trouble when on this shopping/ personal business trip.

1
$\begin{array}{cc}(1) & (1) \\ 4.1 \% & 19.3\end{array}$

| 1 | $(1)$ |
| :---: | :---: |
| 7.6 | 21.8 |
| 1 | 1 |
| 12.3 | 42.1 |


| 1 | 1 |
| :--- | :--- |
| 7,0 | 24,4 |


| 1.1 | 11 |
| :---: | :---: |
| 6.6 | 24.9 |
| 1 | 1 |
| 6.6 | 13.3 |


| $()$. | 1 |
| :---: | :---: |
| 6.6 | 13.3 |
| $(1)$ | 1 |


| 1 | 1 |
| :---: | :---: |
| 2.6 | 9.8 |

11
33.2
1,1
30

| $(1)$ | $(1)$ |
| :---: | :---: |
| 12.7 | 24.2 |

$\begin{array}{ll}1 & 1 \\ 0.9 & 1.9\end{array}$
$\begin{array}{ll}1 & 1 \\ 3,2 & 15.2\end{array}$
1
6.3
13.

1 )
16.8
1.1
39.7
$\begin{array}{ll}(1) & (1) \\ 32.9 & 30.7\end{array}$
17
11
$\begin{array}{cc}1 & 21 \\ 7.6 & 15\end{array}$
$\begin{array}{lll}1.6 & 1, & 1 \\ 6.6 & 1,0\end{array}$
$\begin{array}{ccc}(1) & 15 \\ 6.6 & 15\end{array}$

## YOUR RATING OF BICYCLE

Was your most recent shopping or personal business destination located less than 4 miles from your home？

854 （ ）Yes
If your arswer is rec，piease rate tive statements jeiow concerving how you wouic jeei aicui Ejeycting to jow shoppirg or perschal oustneas ciestrraticn， even if you don＇t own a bicyole or ci̇in＇t rice a oicycle on jour iest trip to this destination．

$$
\begin{aligned}
& 14.6 \text { ( ) No } \\
& \text { Is your ansuer is : } 0 \text {, plecse } 50 \text { to fire } \\
& \text { ヘeざ= こage. }
\end{aligned}
$$

Neither Strongly
Agree $\quad \begin{aligned} & \text { Agree } \\ & \text { Agree Nor } \\ & \text { Oisagree }\end{aligned}$ Disagree $\begin{aligned} & \text { Strongly } \\ & \text { Disacree }\end{aligned}$

1．Bicycling to this shopping／personal business destination is 1221 ）23．51 23.71 ） $23.7(10.41) 1.5$ pleasant because I can enjoy the scenery and surroundings．

2．When shopping or on a personal business trip，it is con－ venient to stop and do errands，when riding a bicycle．

3．I can pick up and go anytime I like when I ride a bicycle to go shopping or on personal business trips．

4．Riding a bicycle to this shopping／personal business destination is tiring．

5．Riding a bicycle to my shopping／personal business destination is dangerous because of the heavy traffic．

6．When on a shopping／personal business trip with children， $3.4 .1(138.57,13.31,7.015 .211 .7$
it is inconvenient to ride the bicycle． it is inconvenient to ride the bicycle．

T．I cannot rely on riding a bicycle to this destination in rainy weather．

8．I can easily carry packages when I ride a bicycle $8.1(129.3(12.2(136.0(12.21) 2.2$ $11.9(146.11) 11.2() 20.7() 5.9!) 1.5$ 3.7() 15.6() 17.8() 46.6() $14.31) 1.5$ $32.6(146.41) 9.6() 8.1(12.6(10.7$
whle I am on a shopping／personal business trip．
9．It is unconfortable to travel to this destination by bicycie because of rough or bumpy riding surfaces．

10．I ean get to my shopping／personal business destination quickly，when I ride a bicycle．
11．I worry about being mugged or assaulted when I ride a bicycle to my shopping／personal business destination．

12．I worry about being injured in an accident when I ride a bicycle to my shopping／personal business destination．

13．It is relaxing to ride by bicycle to my shopping／personal business destination．

14．I dislike traveling by bicycle to this shopping／personal bus．destination because of many delays at intersections．
15．Bicycling to this shopping／personal bus．destination is unsafe／f， 37.8110 .41 ，4．1（1．11 0.4 due to lack of bike paths separated from motorized traffic．

16．Going by bicycle to this destination is dangerous because motorists are inconsiderate of bicyclists．
17．When bicycling to this shcpping／personal business destination．4．1（）15．6（） 33.0 ） 36.6() 10.01 ， 0.7 I worry about derspiring or soiling my clothes．
18．Riding a bicycle gives healthful exercise．

$$
\begin{aligned}
& 48.6() 40.7(, 5.9(, 2.2,1.5 i, 1.1 \\
& 5.2(, 21.1(17.9,33.4,32.21 ; 1
\end{aligned}
$$

10．Parking，locking and unlocking my bicycle at this destination is no troubie．

20．I worry about my bicycle being stolen at this shopping／ personal business destination．

21．It is inexpensive to buy and operate a bicycle．
$30.7(137.1() 15.21) 11.5(, 4.4,1.1$
$20.01) 50.4(13.31) 12.6(1) 2.6() 1.1$

## YOUR RATING OF BUS (or transit)

Is bus service available between your home and this shopping or personal business destination?
$77.5 \%$ ) Yes
Y. your arswer is TES, please rate the statements below concerning how you would jeel about goins to this destination sy ous even is" you dian't choose bus on your last taip.

$$
22.5(\%) \quad N o
$$

If your answer is iro, please go on to the nexi page.
Strongiy

Agree \begin{tabular}{l}
Neither <br>
Agree Nor <br>
Disagree

 Disagree 

Strongly <br>
Disagree
\end{tabular}

1. Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it is convenient to stop and do errands when traveling by bus.
3. Inust schedule my trips in advance when I travel by bus to go shopping or on personal business trips.
4. Traveling by bus to this shopping/personal business destination is tiring.
3.3() 26.1() 32.3() 26.1() 11.8() 0.4 $3.7(120.41) 9.01) 48.11) / 7.6(1.2$ 6.1() 26.9() 19.2() 40.1() 6.1() 1.6 $10.2(124.51) 20.4) 39.61) 4.5(10.8$
5. Traveling by tus to my shopping/personal business destination 2.01 ( 6.91 ) 20.8 152.81 ) 15.91 ) 1.6 is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it is inconvenfent to take the bus.
7. I cannot rely on taking a bus to this destination in rainy weather.
8. I can easlly carry packages when I travel by bus while I am on a shopping/personal business trip.
9. It is uncomfortable to travel to this destination by bus because of rough or bumpy road surfaces.
10. I can get to my shopping/personal business destination quickly when I travel by bus.
11. I worry about being mugged or assaulted when I travel by bus to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by bus to my shopping/personal business destination.
13. It is relaxing to travel by bus to my shopping/personal business destination.
14. I dislike traveling by bus to this shopping/personal bus. 12.2() 33.2() $22.4(129.4() 1.2() 1.6$ destination because of the many delays at intersections.
15. I must walk a long distance to get to and from the bus when $2.0(1 / 2.21$ ) $12.7(158.0() / 3.57) / .6$ I go to this shopping/personal business destination.
16. There is generally a long wait involved when I travel by $16.3(138.31) / 7.61)$ Z4.1( 2.91$) 0.8$ bus to this shopping/personal business destination.
17. When traveling by bus to this shopping/personal business $4.1(18.21) 20.81) 152.21,13.511 .2$ destination I worry about perspiring or soiling my clothes.
18. It is inexpensive to travel by bus to this shopping/personal $7.81,42.91) / 4.71)=6.5(16.91) 1.2$ business location.

WE WUULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPINGi PERSONAL BUSINESS TRIPS.

1. Imagine that only EUS, WALK BICYCLE, and CAR (driver or passenger) were available for your most recent snopping/personal business trip. These alternatives are listed belcw. Please indicata your preference by placing a "l" next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a "3" next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. (If bus semrice was not available for your shopping/persorai business trip, plecse mani the tree remaining atterratives.)

2. We would like to know how often you use each of the following means of travel for shopping/personal business trips from home. Place an $X$ under your best estimate of the number of days you have used each means of travel during the last 30 days.

- bus
walk
drive a car
passenger in car
bicycle
other $\qquad$

| $\begin{gathered} \text { Otd not } \\ \text { Use } \end{gathered}$ | $\begin{array}{r} 1-5 \\ \text { Days } \\ \hline \end{array}$ | $\begin{aligned} & 6-10 \\ & \text { Oays } \\ & \hline \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { Days } \\ & \hline \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { Days } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { More Tban } \\ 20 \\ \text { Days } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { NO } \\ & \text { ANSWER } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ( ) .28.5 | ( ) 33.6 | ( )15.8 | ( ) 7,3 | () 4 | ( ) 7.9 | 2.5 |
| ( ) 4.1 | () 10.4 | ( ) 111.7 | ( ) 10.4 | ( ) 11 | ( 44.5 | 2,3 |
| ( ) 33.8 | ( ) 20,3 | ( )13.6 | ( )/0.4 | ( ) 5.1 | ( ) 9.8 | 7.0 |
| ( ) 33.4 | ( ) 41.4 | ( ) 9.8 | ( ) 6.0 | ( ) 1.3 | ( ) 3,2 | 7.9 |
| ( ) 75.7 | ( ) 25 | ( )2,5 | ( ) 22 | ( ) 11, | ( ) 2.5 | 7.3 |
| ( ) - | ( ) 4,4 | ( ) 1.6 | () 0.9 | ( ) 1,3 | ( ) 113 | - |

3. Assume that on your next shopping/personal business trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation preference by placing a " 1 " next to the alternative you would prefer the most, a " 2 " next to the one you would prefer second, a "3" next to your third choice, and a "4" next to your least-preferred alternative. Please repeat
, for each of the price levels (a) through (d) below. (If bus service is not avaitable for your Shopping/personal business trif, please rank the three remaining alternatives.)

| $\begin{gathered} \left(\begin{array}{l} (a) \\ \text { si. } 00 \\ \text { Per Gallo, } \end{array}\right. \end{gathered}$ | cr | 2 | $\begin{gathered} (b) \\ \text { sl.50 } \\ \text { Per Galion } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| walk ( | ( ) 60. | 17.4 | walk |  |
| bicycle ( | ( ) 8.9 | 26.9 | bicycle |  |
| ( | ( )13.9 | 27.8 | bus |  |
| car ( | ( )14.2 | 14.8 | car |  |



WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DO PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

## 

1. If you were to ride your bicycle to your shopping/personal business destination, what is your best estimate of the time you would spend doing the following?

getting the bicycle to the street $\frac{3.8}{\frac{11.0}{(m i n u t e s)}}$| (minutes) |
| :--- |
| riding the bicycle |
| parking and locking up the bicycle $\frac{3.5}{}$ (minutes) |
| walking from bicycle to destination $\frac{2,0}{\text { (minutes) }}$ |
| TOTAL TIME FROM HOME TO DESTINATION |
| 20.5 |
| (minutes |

2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.
$1.3(\%)$ bicycle path (off the street)
2.2 ( ) bicycle lane (on the street)

73:4 () neither
10.41 ) don't know $12.7 \%$ of trips were more than 4 miles
3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?

- 74.7 () none
$2,21)$ less than $1 / 4$ the distance
0.3()$\quad 1 / 4$ to $1 / 2$ the distance
- ( ) $1 / 2$ to $3 / 4$ the distance
0.3 ( ) more than $3 / 4$ of the distance
9.8 ( ) don't know

ANSWER IF DISTANCE FROM HOME TO SEOPPING/PERSONAL BUSINESS DESTINATION IS 2 MILES OR LESS.
4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopping/personal business destination?

$$
16.5 \text { (minutes) }
$$

5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to your shopping/personal business destination?
84.8(\%) all or almost all the way
$1.9($ part of the way 10.8 percent of trips are more than
0.9() there are none 2 miles
$1.6($ ) don't know
6. If you were to take the bus to your shopping/fersonal business destination, what is your best estimate of the time you gould spend booing each of the following?
getting to the bus stop
waiting for the bus
riding on the bus
4.2 (minutes)
 12,2 (minutes)
walking from bus to destination
total time from home to destination

3,1 (minutes)
31.2 (minutes)
(Averages)
7. Is it necessary to change buses to travel from jour home to your snopping/personal business destination?
9.5() Yes
$71.6($ ) No Bus service not available: $18.0 \%$ c. 9 Don't know
8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home to your shopping/personal business destination?
$\qquad$ times out of ten
9. What is the one-way bus fare on your trip from home to your shopping/personal business destination?
0.44 cents (mean)
( ) don't know
10. If you were to go by car to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?
walking to the car
driving or riding
parking the car
walking from car to destination
$\frac{4.3}{9.6}$ (minutes)
(Mean values)

- total time from home to destination

```
    24.9 (minutes)
```

11. What is the parking cost on your trip from home to your shopoing/personal business destination? NECK CHE AND ERECTS RE E COST. I
( ) no charge


NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
$48.7(\%)$ res
51.3 ( ) No (IF "MO", GO TO NEXM PAGE.)
2. Did you ride a bicycle during the last month? 23.41 ) Yes
( $51.3 \%$ cid not ride in past year)
YS.3 ( ) No (IF "MO", wo TO NEXM PAGE.)
3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an "X" under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through " $h$ " below) during the last 30 days.

( $76.6 \%$ did not use bike in last month )
is your selected shopping or personal business destination located less than 4 miles away from your home?
```
86.6 र́ ) Yes
    -s your answer is rIS, Flecse rean iziou.
```

```
\(13.4 \%\) ! No
    If your answer is :!O, please zo on =0
    fage \(\overline{5}\)
```


# NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED SELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEN FACILITIES. 

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Sudpose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The imorovements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

In most local streets, a yellow stripe is painted near the right-hand side of the road marking a lane reserved strictly for bicycle use. Separate bicycle paths are buitt adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these.paths and street lanes are smoothly oaved for better riding. In addition, highointensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made freely available.

You are now asked to press your agreement or disagreement with the soliowing statements about bicuciing to jour sincoring or versoral iusiness zestination assuming the bicycle foccilitu improvements iescribec ajove are cycitable to you on your neat shopeing or personal cusiness trix. (You witi note irce ine
 iow you feei about bicycie-reiated improvenents.)

## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTS

Please rate the s-atementa below concerning how jou would feel about bicyciing to your snopping or fersonal business destination using the facility improvements described on the previous page.
 pleasant because I could enjoy the scenery and surroundings. 21.3\%
2. When shopping or on a personal business trip, it would be $22.1(15.51) 8.8(15.4() 1.51)$ convenient to stop and do errands when riding a bicycle
 on shopping or on personal bustness trips.
4. Riding a bicycle to this shopping/personal business
0.7() 15.4() 31.3()$\leq 0.1() 11.0()$ destination would be tiring.
 would be dangerous because of the heavy traffic.
6. When on my shopping/personal business trip with children, 13.7() $14.0(125.7(141.9() / 2.51) 2$ would find it convenient to ride the bicycle.
7. I could not rely on riding a bicycle in rainy weather.
13.2() 50.9()$/ 5.4() / 7.6() 2.2(1)$
0.7
8. I could eastiy carry peckages when I ride a bicycle while 4.6 ( ) 12.7 ( ) 11.0 ( ) 51.5 (.)/8.57 ) 1.7 I am on a shopping/personal business trip.
9. It would be uncomfortable to travel to this destination by bicycle because of rough or bumpy riding surfaces.
10. I could get to my shopping/personal business destination $4.0(147.51) 17.31) 26.01) 2.9 \mathrm{l}) 2.3$ quickly when I ride a bicycle.
11. I would worry about being mugged or assaulted when I ride 1.51 (14.0 ( 120.61$) 52.91$ ) 10.31 ( 0.7 a bicycle to my shopping/personal business destination.
12. I would worry about being injured in an accident when $11.5(19.1() 23.51) 48.6() 6.61) 0.7$ ride a bicycle to my shopping/personal bus. destination.
13. It would be relaxing to ride by bicycle to my shopping/ $13.2(141.31) 23.51) 19.11$ ( 0.71 (2.2 personal business destination.
14. I would dislike bicycling to this shopping/personal bus. $0.7(19.9(120.61) 49.21) 8.1() 1.5$ destination because of many delays at intersections.
15. Bicycling to this shopping/personal bus. destination would be ${ }^{2.2}$ ( 122.81 ( $14.7(, 41.71) / 6.91$ ( 1.5 unsafa due to lack of bike paths separated from motor traffic.
 be dangerous because motorist are inconsiderate of bikers.
17. When bieycling to this destination, 1 would worry about $1.5(15.4() 22.8(144.9() / 4.7() 0.7$ perspiring or soiling my clothes.
18. Riding a bicycle would give healthful exercise.
19. Parking, locking and unlocking my bicycle would be no trouble.
20. I would worry about my bicycle being stolen at this shopping/personal business destination.
21. It would be inexpensive to buy and operate a bicycle.


YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for each of the following alternative means of trave: for your next shopping or personal business trip by placing a " 1 " next to the alternative you prefer most. a "2" next to your second most-preferred alternative, a "3" next to your third mest-preferred alternative, and a " 4 " next to your least-preferred alternative. Please repeat
 yow home once your shoppes or personal business destination, rani ire three remaining citernatives.)
a. Assume the bicycle facilities are in place. Please rank the following means of
travel for your next shopping or personal business trip to the same destination.

b. Now assume the same condition as (a) above, except that the price of gasoline has increased to $\$ 1.50$ per gallon (please rank again).
( ) car (driver or passenger)
c. Suppose that the bicycle facilities are in place and the price of gasoline increased to 53.00 per gallon (please rank again).
( ) bicycle with improved facilities
11.8
5.1
53.6
11.8
( ) ear (driver or passenger)
57.3
2. If only the alterative listed below were available for your next 10 shopping or personal business trips, how many of the 10 trips would you make using each alternative? barite the n:miser of trips ir the bow newt to each alterative.:
2.6 () bicycle with improved facilities
4.7 ( ) walk
1.3() bus/trensit
(Meir Values)
1.4 ( ) car (driver or passenger)
(10) TOTAL TRIPS

## LIVING NEARER TO TRA'VEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion, and costly street and highway expenditures. It has been suggested that in order to reauce these problems, peofle must live nearer to their places of employment, shopping, school, and recreation.

Some commities have been designed wi=h this compact lano-use arrangement in mind. Their layout is such that most shopping and personai business trips can be accommodated within a six-block ( $1 / 2 \mathrm{mile}$ ) distance and most work trips are within two miles of home.

Suppose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to all snopping anc personal business destinations without having to cross streets that carry heavy motor venicle treffic; bicycle storing and lock-up facilities are provided in larçe numbers, free of charge, throughout the area; convenient bus service is avallable; and there are no special restrictions on the use of automobiles.

Now, plecse turn to the foilairing pages ond emprese how this compact lond-use arrangement woule GJfact the way you seei cbout using WriLk, EICYCIE, BUE, on CAB for your shceping or personai susiness trif.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agrement or disagrement with the following statement:


I would like to live in this type of commity.
$35,0(\%) 40.9() 8.9() 10.8($ ) 2.5()$\quad 1.9$
2. Please indicate your preference for each of the following transportation altematives on your shopping or personal business trip by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described above. (Please repect the process for each statement (a) through (d) below )
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next shopping or personal business trip, and assume further that your trip is approximately $1 / 2$ mile ( 6 blocks) in length. (Flease monk the following mears of transportation.)
( ) walk $\begin{array}{ccccc}1 & 2 & 3 & 4\end{array}$ ( ) bus or transit

| 1 | $\cdot 2$ | 3 | 4 |
| :---: | :---: | :---: | :---: |
| 1.9 | 14.0 | 46.5 | 24.2 |


b. Now suppose that in addition to the conditions described in (a) above the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank the foilowing mecon of transportation.)
( ) walk $71.517 .82 .5 \cdot 0.61$ ) bus or transit
( ) bicycle 19.149 .17 .613 .41 ) car (driver or passenger)
$\begin{array}{lllll}3.8 & 14.0 & 52.9 & 16.6\end{array}$
1.3
7.624 .8
55.5
c. Assume the condtions described in (a) above and assume that in addition the speed limit was reduced to 15 m.p.h. in the communtty. (Please rank the following meors of transportation.)

| $\left(\begin{array}{llllll}\text { ) walk } & 70.8 & 18.5 & 2.5 & 0.6 & \text { ( ) bus or transit }\end{array}\right.$ | 3.2 | 14.6 | 54.9 | 14.6 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ( ) bicycie 19.1 | 49.7 | 7.0 | 12.7 | ( ) car (driver or passenger). | 1.9 | 5.7 | 23.6 | 58.0 |

d. Assume again conditions described in (a) above but this time assume no parking was available at your shopoing or personal business destination. (Plecse ranix ine following mecns or trastortation.)
( ) walk 75.214 .61 .30 .6 ( ) bus or transit $507 \quad 21.0 \quad 59.3 \quad 3.2$
( ) bicycle $14.0 \quad 49.715,30.91$ ) car (driver or passenger) $0.6 \quad 2.5 \quad 11.5 \quad 72.7$

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPOR-
TANS IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU
RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

## Mean

1. How old are you? $\qquad$ (age)
$42.7 \%$ 57.0
2. What is your sex? ( ) Male NO ANS. $0.3 \%$
3. How many adults (18 or over), including yourself, are there in your household? 1,8 $\qquad$ Mean
4. How many minors (under 18) are there in your household? 0.6 Mean

5. How many incensed drivers (including yourself) are there in your household? $\qquad$ mean
6. How many automobiles are there in your household? $\qquad$ mean $46.2 \%$
53.5
7. Do you own a bicycle? ( ) Yes ( ) No NO ANS $=0.3 \%$
8. How many bicycles are there in your household? $\qquad$ 1.1 mean
9. What type of structure do you live in?

| 16.8() single family | 4.7() low-rise apartment (4 to 8 stories) |
| :--- | ---: | :--- |
| 2.8() duplex | 24.1() high-rise apartment (more than 8 stories) |
| 33.9() townhouse |  |
| 17.4() walkup apartment (3 stories or less) 0.3 No ANS. |  |

11. What is your educational background? (CHECK ONE)

12. Please indicate your work group below:

| 50.3() work 5 or more days a week | 7.3() work $1-2$ days a week |  |
| :---: | :---: | :---: |
| 6.6() work $3-4$ days a week | $32.01)$ presently not employed |  |
|  | 3.8 | NO NS. |

13. What is your occupation? (CRECK ORE)
46.3 ( Oo professional-technical
11.7 ( ) managerial
2.8 (') blue collar
8.2 () housewife
7.06 ) student
3.51 : sales worker
4.4() secretarlal-clerical-cashier 5.7() other $\qquad$ 6.6 not employed
14. How many workers are in your household?
15. Please check the category which includes your approximate family income before taxes.
4.7(\% \$5.000 and under $4,4() \$ 5,001-\$ 7,500$
4.1()$\$ 7.501-\$ 10,000$
4.7()$\$ 10,001-\$ 12,500$
5.7()$\$ 12.501-\$ 15,000$
G.0 ( ) \$15,001 - \$17,500
$7.6($ ) $\$ 17,501-\$ 20,000$
10.4 ( ) $\$ 20,001-\$ 25,000$
$27.0^{(1)} \$ 25,001-\$ 50,000$
$16,5()$ over $\$ 50,000$
B.9 NO ANS,

In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.

Is your shopping or personal business destination located less than 2 miles from your home?
84.9 (\%) Yes
If jour answer is IE , please read beiow.
15./() No
If your answer is yo, Elacse go to page is.


#### Abstract

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.


## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to fincrease the comfort and safety of pedestrians. The improvements consist of (1) providing pedestrian pathways, (2) improving sidewalks, (3) providing better lighting, and (4) making traffic signais more pedestrianoriented.

Separate pedestrianways or w'lkways are built adjacent to all major roadways. These pathways are separated from automebile traffic by trees or grass median. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. Highintensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches, and pedestrianooriented stands with flowers, newspapers and refreshments.

Iou are now asked to e=press your agreement or disagreement with the following statements about waikinc to your shoppirg or personal business destination, assuming the facility improvements described above are available to you on your next shopping or fersonal business trip. (You witi note that the list cf statements is the same as that used eariver. The purpose of this last rating is to sind out how you feet acou= the pedestrion-relatec irporovements. I

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS

Please rate the statements below concerning how you would feei asout walkirg to your snopping or personal business destination using the facility improvements cescribed on tiee previous paga, even if you did not walk thers on your last trip.

|  |  | Strongly Agree | Agree | Neither Agree Nor Disagree | Oisagree | Strongly <br> Oisacree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Walking to a shopping/personal business destination would be pleasant because I could enjoy the scenery and surroundings. | ( ) | ( ) | ( ) | ( ) | ( ) |
| 2. | When shooping or on a personal business trio, it would be convenient to stop and do erranos when walking. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | I could pick up and go anytime I like when I walk to go shopping or on personal business trips. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | Walking to this shopping/personal business destination would be tiring. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | Walking to ny shopping/personal business destination would be dangerous because of the heavy traffic. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | When on a shoppling/personal business trip with children, it would be inconvenient to walk. | ( ) | ( ) | ( ) | ( ) | $1)$ |
|  | I could not rely on walking to this destination in rainy weather. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | I could easily carry packages when I walk whlle I am on a shopping/personal business trip. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | It would be uncomfortable to walk to this destination because of rough or bumpy walking surfaces. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | I could get to my shopping/personal business destination quickly when I welk. | $1(1)$ | ( ) | ( ) | ( ) | ( ) |
|  | I would worry about being mugged or assaulted when I walk to my shopping/personal business destination. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | I would worry about being injured in an accident when I walk to my shopping/personal business destination. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | It would be relaxing to walk to my shopping/personal business destination. | ( ) | ( ) | ( ) | 1 : | ( ) |
|  | I would dislike walking to this destination because of the many delays at intersections. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | Walking to my destination would be unsafe because of the lack of pathways that are separated from motorized traffic. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | Walking to a shopping/personal business destination would be dangerous because motorists are inconsiderate of pedestrians. | ( ) | ( ) | ( ) | ( ) | ( ) |
|  | When walking to this destination I would worry about perspiring or solling my clothes. | ( ) | ( ) | ( ) | ( ) |  |
|  | Walking would give heaithful exercise. | ( ) | ( ) | ( ) | ( ) | ( ) |

13. Walking would give heaithful exercise.

## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for the following alternative means of travel for your next shopping or personal business trip by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a " 3 " next to your third most preferred alternative, and a "4" next to your least preferred alternative. Please repeat the process for each statement (a) through (c) below. (If bus service is not available between your home ard your shopping or personal business destination, rank the three remaining alternatives.)
a. Assume the walk facilities are in place. Please rank the following means of travel for
( ) car (driver or passenger) $\begin{array}{llll}28.1 & 30.4 & 23.7 & 11.9\end{array}$
23.0 13.3
 5.9 $\frac{\text { Rank } 4}{1.5} \frac{\text { NO ANS }}{3.0}$ $\begin{array}{llll}30.4 & 22.2 & 31.8 & 5.2\end{array}$
b. Now assume the same condition (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rank again.)

| 76.3 | () walk with improved facilities | 13.3 | 5.2 | 2.2 | 3.0 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 9.6 | $($ ) bicycle | 34.9 | 22.2 | 28.1 | 5.2 |
| 7.4 | $($ ) bus/transit | 32.6 | 34.0 | 14.1 | 11.9 |
| 5.9 | $($ ) car (driver or passenger) | 14.1 | 33.3 | 41.5 | 5.2 |

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (PLease rank.)
( ) walk•with improved facilities
13.3
3.7
0.7
3.0
( ) bicycle
( ) bus/transit
( ) car (driver or passenger)
39.3
22.2

22,2
5.9
34.1
8.1
37.0
31.1 6.9 11.9 5.9
2. If only the alternatives listed below are available for your next ten shopping or personal business trips, how many of the ten trips would you make using each alternative? (Write the number of trips in the box next to each alternative.)
6.3 ( ) walk with improved facilities
0.9 () bicycle
1.3 () bus/transit
1.4 () car (driver or passenger)
(10) TOTAL TRIPS

## YOU HAVE JUST READ AN ASSUMED REGULATION FOR CAR USAGE. IMAGINE THAT THIS SITUATION FOR CAR USAGE EXISTS FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agreement or disagreement with the following statements:

2. Please indicate your preference for each of the following transportation alternatives for your next shopping or personal business trip by placing a "l" nest to the alternative you prefer the most, a " 2 " next to your second most preferred alternative, a " 3 " next to your third most preferred alternative, and a "4" under your least preferred alternative. Please repeat this for each of the statements
(a) through (c) below. (If bus service is not available for this shopping or personal business trip, please rank the remaining three alternatives only.)
a. Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect.

Please rank the following means of transportation for your next shopping or personal business trip.
( ) walk
7.5
13.8
8.8
( ) bicycle
( ) bus or transit
( ) car (driver or passenger)

RANK 2 13.8

32,8
35.2
10.1

| RAN 3 | RANK 4 | NO ANS |
| :---: | :---: | :---: |
| 6.3 | 6.3 |  |
| 26.4 | 20.1 | 13.2 |
| 28.3 | 8.2 | 14.5 |
| 26.4 | 44.6 | 10.1 |

b. Assume that instead of $\$ 2.00$ the congestion fee increased to $\$ 4.00$ per day. (Please rank again.)
13.8
35.8
34.0
8.2
( ) car (driver or passenger)
. Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ per gallon. (Please rank.)
( ) walk
( ) bicycle
( ) bus or transit
( ) car (driver or passenger)
37.8
34.6 6.3
5.0
12.6
13.8
11.3

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AÚTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning (7-9 a.m.) and evening (4-6 p.m.) rush hours. This means that you would be charged up to a $\$ 2.00$ per day if you operate a motor vehicle during these peak travei periods. Billing would be made on a monthly basis using an automated billing process.

Please twon to the following page.

October 15, 1978

Dear Resident of Society Hill and of Rittenhouse:
The City of Philadelphia is cooperating in a U. S. Department of Transportation study aimed at determining what can be done to increase the level of walking and bicycling as means of travel. To accomplish this, a survey is being conducted to find out how you feel about walking and biking. The results of this survey will be helpful to those persons who are responsible for developing walking and bicycling programs and facilities.

Your neighborhood has been carefully chosen along with four other sites across the United States, and your household has been selected at random from among the residents of your area. The number of people being asked to participate is small, so your answers are very important. Please do not put your name on the questionnaire. Your responses will be kept strictly confidential.

This questionnaire is concerned with your work trips only. We are interested in your opinion of the transportation services available to you between your home and your place of work. In addition, some questions about your age, sex, and family size have been included to help us understand how your answers can be related to your community. Although the questionnaire appears long, most people find it interesting to answer the questions. We hope you do, too.

Please take time in the next day or two to answer the questions completely. Your interviewer, a representative of Winona, Inc., will pick up the completed questionnaire and will answer any questions you may have, on the following prearranged date and time:

If you have any questions while filling out the questionnaire, please call this toll free number: 1--800--328-2933.


JCM: sm
Enc.

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TO WORK.

1. What is the nearest interest intersection or street address of the place where you work?
(nearest intersection or street canes)
(city)
2. Where is the place where you work located: No Ahsukr
$85.17_{0}()$ central city
$27 \%_{0}()$ suburban
3. Specify the type of area where your wort place is lorated. (CBECK ORE)
$5 n .370$ ) central business district
$6,32()$ industrial district
$8.6 \%()$ neighborhcod business district or $6.6 \%()$ office park/professional building shocping center
$13.82 \%$ college campus or school
8.681 ) other $\qquad$
4. Approximately how far is it from your home to your work place (one way)? No Answer: $1.1 \%$
$5.4 \%() \quad \begin{aligned} & 2 \text { blocks or less } \\ & \left(\frac{1}{2} \text { mile or less) }\right.\end{aligned}$

$$
9.47 u() 2 \text { to } 4 \text { miles }
$$

14.670 ) $\begin{aligned} & 3 \text { to } 6 \text { blocks } \\ & \text { ( } \frac{1}{2} \text { to } \frac{1 / 2}{} \text { mile) }\end{aligned}$
$77 \%() 4$ to 6 miles
$21.7 \%_{0}()$ to 1 mile
$8.30 \%() 6$ to 10 miles
$23.5 \%_{0}!$ ) 1 to 2 miles
$8.3 \%_{0}()$ over 10 miles
5. What was the date of your most recent trip to work?

## NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT TRIP TO WORK WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following options were avaliable to you on your most recent work trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For your travel to work we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never use it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an "X" in the space that best indicates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:

|  | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | $\begin{aligned} & \text { Strongly } \\ & \text { Oisagree } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I enjoy traveling to work by bus. | ( ) | (x) | ( ) | ( ) | ( ) |

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, depending on how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "X" under disagree or strongly disagree. If you neither agree nor disagree you would place an " $X$ " in the center box. In the example shown here, an "X" has been placed in the box under "agree", Indicating this person enjoys traveling by bus.

Beccuse we need to understand how your rating of your trip to work varies from one means of \#ransportation to another, ws are askirg that you go theough the list of chanscteristics iour times, once for each means of travel (walk, bicycle, car, and bus). Although this process migint appecm repetitious, we want to stress that your careful rating of all the statements on the nezt four pages cre axpecially important to the success of this sumvey.
6. At approximately what time of day did you make this trip to work? No finswer: 4.3\%
$6.6 \%()$ before 7 a.m.
$8.3 \%(10$ a.m. to 2 p.m.
$24.09_{0}$ ! 1.7 a.m. to 8 a.m.
$2.3 \%$ ( ) 2 p.m. to E p.m.
$42.0 \%_{0}$ ( ) $8 \mathrm{a} . \mathrm{m}$. to $9 \mathrm{a.m}$.
$1.4 \%$ ( ) after 6 p.m.
11.170 ( ) $9 \mathrm{a} . \mathrm{m}$. to $10 \mathrm{a} . \mathrm{m}$.
7. How did you make your most recent trip to work? (CEECK ONE) No Ansuler $37 \%$

| $35,4 \%$ ( ) walked all the way | $0.3 \%$ ( ) motorcycle |
| :---: | :---: |
| 24.0\% ( ) drove a car | $43 \%$ ( ) bicycle |
| $5.1 \%^{1}$ ) passenger in a car | 0.3\% ( ) moped (motorized bicyele) |
| $19.7 \%$ - bus | 0.99 ( ) taxi |
| $6.3 \%-()$ train or subway | - ( ) other (please specijy) |

7a. If you answered bus, train or subway above, how did you get to your bus or transit stop?
( ) bicycle
0,391, drove and parked
$0.6 \%_{0}()$ taxi
$0.3 \% \%_{0}$ ) passenger in a car
$24.67_{0}(1)$ walked
0.370 ( other $\qquad$
8. Between the time you left home to go to work and the time you returned home, did you make any side trips that required you to travel more than one mile out of your way?
$19.4 \%$ ( ) yes
$76.9 \%$ ( no
9. Did anyone accompany you on your last work trip: (CHECK ONE) No Arswer: $4.6 \%$

78,39\% ) I traveled alone
$11.7 \%$ ( ) I was with one other person
$3.47_{0}($ ) I was with two other persons
$2.0 \%$ ( ) I was with three or more persens

## YOUR RATING OF WALK

is your work place located less than 3 miles from your home?
$72.02!$, yes
 Delow conceming now ucis wolld feel aiout whiring to work even if you did not wath on your "ast work trif.
28.09\% ) no

If your answer is in, piease 30 on to the nemt paz̃e.
 the scenery and surroundings.
2. When walking, it is convenient to stop and do errands on my way to and from work.
3. I can pick up and go anytime I like when I walk to work.
4. Walking to work is tiring.
5. Maiking to work is dangerous because of the Meavy traffic.
6. When : walk to work I worry about being late.

$$
2.4 \%_{0}\left(15.1 \%_{0}(12.791) 44.0 \%() 24.2 \%() \quad 1.6 \%\right.
$$


8. I can eastly carry my briefcase or other packages $12.7 \%$ ) $52.39 \%$ ) $12.7 \%$ ( ) 17.996 ) $3.2 \%$; $1.2 \%$ when I walk to work.
9. It is uncomfortable to waik to work because of rough or bumpy walking surfaces.
10. I can get to work quickly when I walk.
11. I worry about being mugged or assaulted when I waik to work.
12. I worry about being injured in anraccident if I walk to work.

$$
0.8 \%_{0}\left(1 5 . 2 \% _ { 0 } \left(13.9 \%_{6}\left(53.1 \%_{1}\right) 25.4 \%_{0}(1.6 \%\right.\right.
$$

$$
27.8 \%_{0}\left(1 4 9 . 6 \% _ { 0 } \left(1 0 . 7 \% _ { 6 } \left(19.1 \%_{0}\left(10.8 \%_{0}\right) 20 \%\right.\right.\right.
$$

13. It is relaxing to walk to work. $\quad 27.8 \%_{0}\left(49.6 \%_{0}\left(10.7 \%_{6}\left(19.1 \%_{0}(0.8 \%() 20 \%\right.\right.\right.$
14. I dislike walking to work because of the many $1.6 \%$ ( ) $6.7 \%($ ) $13.1 \%$ ( $5 \% .0 \%() 23.0 \%$ ( $1.6 \%$

15. Walking to work is dangerous because motorists are inconsiderate of pedestrians.
16. When walking to work I worry about perspiring or soiling my ciothes.
17. Walking to work gives healthful exercise.

$$
\begin{aligned}
& 2.8 \%(\text { ) } 8.7 \% \delta) 10.3 \%_{0}\left(\text { ) } 59.1 \% \jmath_{0} 17.9 \% \text { ) } 1.2 \%\right. \\
& 21.87 \text { d } 38.99_{0}\left(1 0 . 7 \% _ { 0 } \left(123.0 \%_{0}\left(4.4 \%_{0}\right) 1.2 \%\right.\right. \\
& 5.2 \%_{0}\left(12.3 \%_{0}\right) 13.9 \%_{0}\left(145.2 \%_{0}\right) 21.0 \%_{1}\left(2.4 \%_{0}\right.
\end{aligned}
$$

$$
\begin{aligned}
& 38.5 \%() 44.5 \%) \cdot 7.1 \%() 7.9 \%() 6.3 \% \text { ) 1.2\% } \\
& 37.7 \%() 38.5 \% \text { ) } 10.79(\text { ) } 10.3 \% \text { ) } 1.67 \text { ( ) } 1.2 \% \\
& \left.2.8 \%() 12.39 \% \text { ( } 9.5 \%_{0}^{()} 44.8 \%() 27.096\right) 1.67 \\
& 2.0 \%_{0}(19.1 \%(12.3 \%) 55.2 \%(19.8 \%() 1.6 \%
\end{aligned}
$$

## YOUR RATING OF CAR

When using a car, are you usuaily a:
$69.4 \%$ : ; car driver?

 ycrik mir, rate the stazements belour consernint hov you wouide seet cbout aniving to wori.
$30.6 \%$ : car passenger?
If you are usua゙in = ann tassergen, even
it you cit $\frac{1}{n o t}$ crocse auso oon yoin iast work trit, rate the staterents below concomine now you wout feez about going to wort as a car passenger.

Fiesse nower ait questions jelow, ever. is jou co rot aur a car.
?. iraveling by car to work is pleasant because I car. enjoy the scenery and surroundings.
2. winen traveling by car, it is convenient to stop and de errands on my way to and from work.
3. : can pick up and go anytime I like when I travel כy car to work.

$$
\left.15.4 \%() 41.4 \%_{0}\left(9.4 \%_{0}\right) 20.3 \%() 8.9 \%\right) 4.6 \%
$$

4. Traveling by car to work is tiring.

$$
5.79() 17.4 \%() 17.7 \%() 41.8 \% \text { ( } 1 \equiv 1 \%() 4.3 \vdots
$$

5. ireveling by car to wori is dangerous because of the heavy traffic.

$$
4.97(128.0 \%(23.7 \%() 33.1 \%() 5.4 \% \%) 4 i \%
$$

6. When ! go by car to work I worry about being late. $4.69_{0}\left(, 22.99_{0}\left(17.49_{6}() 40.89_{0}() 9.7 \%() 46\right.\right.$

$$
4.6 \%_{0}\left(2 2 . 9 \% _ { 0 } \left(17.4 \%_{6}() 40.8 \%_{0}() 9.7 \%_{0}() 4.6 \%\right.\right.
$$

7. : canno: rely on traveiing by car to work in rainy $1.4 \%(, 8.0 \%(, 12.9 \% 1) 52.8 \%() 20.0 \%() 4.9 \%$

 of rough or bumpy road surfaces.

1i. : worry about deing mugged or assaulted when I travel by car to work.

$$
1.19(1.4 \%() 8.3 \%() 51.2 \% 1) 334 \%() 46 \%
$$

12. I worry about being injured in an accident if I travel by car to work.

$$
2.3 \%_{0}\left(1 5 . 1 7 _ { 0 } \left(2 2 . 0 7 _ { 0 } \left(150.620() 15.47_{0}() 4.67\right.\right.\right.
$$

13. It is relaxing to travel by car to work.

$$
7.1 \%_{0}\left(\text { ) } 2 1 . 7 \% _ { 0 } \left(1 2 3 4 7 _ { 0 } ( ) 2 6 . 7 \% _ { 0 } \left(160 \%_{3}() 5.1 \%\right.\right.\right.
$$

14. I dislike traveling by car to work because of the many delays at intersections.

$$
11.1 \%_{0}\left(\text { ) } 3 8 . 3 \% _ { 0 } \left(\text { ) } 19.4 \%_{0}(, 22.3 \%(, 4.0 \%() 4.9 \%\right.\right.
$$

15. Perking the car at my place of work is expensive.

$$
33.8 \%() 26.6 \%(1) 5.4 \% 1) 15.7 \%(13170(1) 5.4 \%
$$

 when : go to work.
17. I worry about the car being stolen or vandalized at work.

$$
\left.\left.7.1 \%_{0}\left(32.9 \%_{0}\right) 8.3 \%_{0}\right) 29.1 \%_{0}\right) 17.7 \%_{0}(4.9 \%
$$

18. It is inexpensive to buy and operate a car.

$$
7.7 \%() 69 \%() 3.4 \%() 240 \%(1531 \% 1,4.9 \%
$$

19. Parking the car at work is no trouble.

$$
12.6 \%() 26.0 \%_{0}\left(18.67124 .6 \%_{0}(123.401) 5.49\right.
$$



## YOUR RATING OF BICYCLE

Is your work place located less than 6 miles from your home?

## $78.0 \%$ ) Yes

If your answer is IES, please rate the stataments beiw concerning how you wouta jeel about tiaycing to work even if you con't cim a dicycie, or dian't ride a bicycle on your last trip to work.

1. Bicycling to work is pleasant because I can enjoy the scenery and surroundings.
2. When biking, it is convenient to stop and do errands on my way to and from work.
3. I can pick up and go anytime I like when I go to work by bicycle.
4. Iraveling to work by bicycle is tiring.
5. Riding a bicycle to work is dangerous because of the heavy traffic.
6. Then I ride the bicycle to work I worry about being late.
7. I cannot rely on riding a bicycle to work in rainy weather.
8. I can easily carry my briefcase or other packages when I ride the bicycle to work.
9. It is uncomfortable to travel to work by bicycle because of rough and bumpy riding surfaces.
10. I can get to work quickly when I go by bicycle.
11. I worry about being mugged or assaulted when I travel to work by bicycle.
12. I worry about being injured in an accident if I ride the bicycle to work.
13. It is relaxing to travel to work by bicycle.
14. I disitke traveling to work by bicycle because of the many stops and delays at intersections.
15. Riding the bicycle to work is unsafe because of the lack of bike paths that are separated from motorized traffic.
16. Going by bicycle to work is dangerous because motorists are inconsiderate of bicycilists.
17. When bicyeling to work I worry about perspiring or solling my clothes.
18. Riding a bicycle to work gives heal thful exercise.
19. Parking, locking and unlocking my bicycle at work is no trouble.
20. After parking my bicycle ! must walk a long distance when I go to work.
21. I worry about my bicycle being stolen at work.
22. It is inexpensive to buy and operate a bicycle.

$$
\begin{aligned}
& 22.02 \text { ( } 1 \text { No } \\
& \text { if your answer is io, please go on to the } \\
& \text { next page. }
\end{aligned}
$$



## YOUR RATING OF BUS（or transit）

Is bus service avallabie between your home and work place？
$73.8 \%$（ ）yes
$26.22(1)$ no



 your iast jork smis．

Neither
Agree Nor
Strongly
Strongly
Aaree Agrae
1．Going to work by bus is pleasant because I can enjoy tre scenery and surroundings．
$3.7 \%\left(123.19(25.17) 32.2 d_{0}\right) 13.9711010$
 and do errands on my way to and from work．

3．I must schedule my trips in advance when I iravei by bus to work．

4．Traveling by bus to work is very tiring．
 the heavy sraffic．

7．！cannot rely on taking a bus to work in rainy $6.4 \%() 2317,15.626,44.3 \% 1) 9.276)$
weather．
8．I can easily earry my briefcase or other packages $7.5 \%$（ ） $51 / 7 \% 1 / 1.5 \%(1.7 \%$ when I go to work by bus．

10．I can get to work ouickly when I take the bus．

$$
2.470\left(128.17_{0}\right) 20.3 \%_{0}\left(135.370() 11.97_{2}(12.26\right.
$$

11．I worry about being mugged or assaulted when I go 4．701， $9.5 \%(1 / 2.276,50.3 \% 1 / 662(1.76$ to work by bus．
 to work by bus．

13．It is relaxirig to go to work by bus．
 many stops and delays at intersections．

16．There is generally a long watt involved when I go $46.5 \%$ ， $369 \%() 19.7 \%() 26.490(1.4 \%$
worix by bus．
17．＇ihen traveling by bus to work I worry about derspiring or soiling my clothes．
i9．It is inexpensive to travel by bus to work．


WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL TO WORK.

1. Imagine that only BUS, WALK, BICYCLE, and CAR (driver or passenger) were available for your most recent work trip. These alternatives are listed below. Please indicate your preference by placing a "l" next to the alternative you prefer the most, a "2" next to your secand most-preferred alternative, a "3" next to your third most-preferred alternative, and a. "4" next to your least-preferred al ternative.
(If bus service was not available for your work trip, please rank the three remaining aiternatives.)


- 


2. We would like to know how often you use each of the following means of travel for work trips from home. Place an "X" under your best estimate of the number of days yous have used each means of travel during the last 30 days.

3. Assume that on your next work trip all travel conditions remained the same as present except: that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation preference by placing a "1" next to the alternative you would prefer the most, a "2" next to the one you would prefer second, a " 3 " next to your third choice, and a "4" next to your least-preferred alternative. Please

- repeat for each of the price levels (a) through (d) below.
(If bis service is not available for your work trip, please rani the three remaining aitarncives.)


## Ranked

lIst Ind $\begin{gathered}\text { si.00 } \\ \text { per Gallon 1, } \\ \text { Rat } \\ \text { 2 }\end{gathered}$
(b)
(c)
(d) Per Galton -2 Per Galton $\alpha$ Per Gallon

$10.32,28.3 \%$ bicycle ( ) 10.9\% 31.19 bicycle
$14.0 \%, 31.172$ bus $(1,7.1 \%, 27.5 \%$ us
( ) \%1,4\%, \$2.8\% bicycle ()/2.19, 34.90 bicycle
( )22.0\%,25.278us ( )21,790,23.1 pus
$28.0 \%, 12.0 \%$ car ( $122.6 \%, 304 \% \mathrm{car} \quad\left(13.4 \%, 10.9 \mathrm{car} \quad() / 17.7 \%, 10.9 \%_{0} \mathrm{car}\right.$

WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU WORK BY ANSWERING THE FOLLOWING QUESTIONS:

AMSNEP. TE DISTAMCE EROM BOME TO WORK IS O HIEES OR LESS.

1. If you were to ride your bicycle to work, what is your best estimate of the time you would spend doing each of the following?
getting the bicycle to the street $\frac{3.44}{}$ (minutes)
riding the bicycle
parking and locking up the bicycle $\frac{14.72}{3.92}$ (minutes)
walking from bicycle to school
TOTAL TIME FROM HOME TO WORK
2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to work?
1.1\%0( ) bicycle path (off the street)
$0,3 \% 1$ ) bicycle lane (on the street)
$625 \%($ ) reither
$7.4 \%_{0}()$ don't know
3. What portion of your total trip from home to work is served by bicycle paths or bicycle lanes?
$70.5 \%$ ( ) none
$0.9 \%_{0}()$ less than $1 / 4$ the distance
$0.3 \%$ ( ) $1 / 4$ to $1 / 2$ the distance
$0.9 \%^{(~) ~} 1 / 2$ to $3 / 4$ the distance

- ( ) more than $3 / 4$ of the distance

579( ) don't know

ABSWER IF DISTANCE FROM HOME TO WORK IS 3 MIEES OR LESS.
4. If you were to walk to work, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at work? $\qquad$ (minutes)
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to work? $68,39_{8}($,$) all or almost all the way$
$2.3 \%_{0}($ part of the may
1.17.( ) there are nonz
0.99 ( ) don't know
6. If you were to take the bus to work, what is your best estimate of the time you would spend doing each of the following?
getting to the bus stop $\frac{4.99}{10.25}$ (minutes)
waiting for the bus
riding on the bus
walking from bus to work
TOTAL TIME FROM HOME TO WORK $\frac{1.90}{4.49}$ (minutes)
(minutes)
7. Is it necessary to change buses to travel from your home to work?
$21.7 \%($ ) Yes
$63.7 \%$ ( No
$0.3 \% \quad D O N T$ kNOW
8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home to work?
$\qquad$
6.87 times out of ten
9. What is the one-way bus fare on your trip from home to work?
$\qquad$ cents
( ) don't know
10., If you were to go by car to work, what is your best estimate of the time you would spend doing each of the following?

| walking to the car |
| :--- |
| driving or riding |
| parking the car |
| walking from car to work |
| TOTAL TIME FROM HOME TO WORK |$\frac{2.28}{27.75}$ (minutes)

(minutes)
(minutes)
11. What is the parking cost on your trip from home to work? (CEECK ONE AMD SFECES MEE COST.) $30.3)_{0}(1)$ no charge 45,77. ( ) daily charge $0.3 \%$ ( ) weekly charge $11.4 \%$ ( ) monthly charge
3.48 (collars)

$$
\text { II. } 1 \text { lo } 1 \text { mumbai charge }
$$

$\qquad$ (dollars)
$\qquad$
$\square$ (dollars)

1. Did you'ride a bicycle at least once during the past year? No Answer. $0.3 \%$ $51,1 \%$ () Yes
$48.6 \%_{0}^{()}$( No (IF "MO", GO TO TEE NEXT PAGE.)
2. Did you ride a bicycle during the last 30 days?

$$
\begin{aligned}
& 27.1 \%_{0}() \text { Yes } \\
& 24.0 \%_{0}^{(~) ~ N o ~(I F ~ ": P O ", ~ G O ~ T O ~ N E X S ~ P A G E .) ~}
\end{aligned}
$$

3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an "X" under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through " $h$ ") during the last 30 days.
a. To work

b. To school

$$
22 \%(11 . \% 1)-1)-1) 0.3 \% 1) 1.1 \%(1)
$$

$$
2.6 \%
$$

c. For personal business
$11.1 \%_{0}()^{\prime} 9.17_{0}\left(12.6 \%_{0}() 2.0 \%_{0}\left(1.47_{0}() 0.9 \%_{0}(1)\right.\right.$
d. To visit friends

e. To go shopping
14.075 ) $8.9 \%_{0}\left(1.7 \%_{1}\left(1.1 \%_{0}\left(10.6 \eta_{0}() 0.6 \%()\right.\right.\right.$ $0.3 \%$

g. Neighborhood riding
$3.7 \%\left(13.1 \%_{0}() 4.9 .7_{0}\left(1.4 \%_{0}\left(1.7 \%_{0}\left(1.7 \%_{0}\right.\right.\right.\right.$ 0.67
h. Long distance riding $17,4 \%_{0}\left(, 8.0 \%_{0}\left(, 0.3 \%_{0}\left(, 0.6 \%_{0}\left(10.3 \%_{0}\right) 0.6 \%_{0}\right)\right.\right.$ (over 2 hours)
is your work place located less than 6 miles away from your home?

```
78.8% ( ) Yes
    If your answer is IES, ?`ease read below.
```

```
21.2%( ) No
    If your answer is .1O, piease go on tc paze :3.
```

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPRCVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO WORK USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the cfty introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right hand side of the road, marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for a better ride. In addition, high intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high employment centers, these consist of enclosed free storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made avallable.

You are" now asked to express your agreement cr dieagreement with the following statements aout bicuctirn to work, asswring the bicyste facitity improvements described above are ariairabie to you on your nez: work trip. (Iou wiil note that the list of statements is the same as that used ecrilier. The Turecse of this Last rating is to fince out how you feei acout the bicycib-reicted improvements.)

## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTS




1. Eicycling to work would be pleasant because I could enjoy the scenery and surroundings.
2. When biking, it would be convenient to stop and do errands on my way to and from work.
3. I souid pisk up and go anytime I like when I go to work by bicycle.
4. Traveling to work by bicycle would be tiring.
5. Piding a bicycle to work would be dangerous because of the heavy traffic.
6. If I rode the bicycle to work, I would worry about being late.
7. I could not rely on riding a bicycle to work in rainy weather.
8. I could easily carry my briefcase or other packages when I ride the bicycle to work.
9. It woulc be uncomfortable to travel to work by bicycle because of rough and bumpy surfaces.
10. I could get to work quickly when I go by bicycle.
11. I would worry about being mugged or assaulted when I travel to work by bicycle.
12. I would worry about being injured in an accident if I ride the bicycle to work.
13. It would be relaxing to travel to work by bicycle.
14. I would dislike traveling to work by bicycle because of the many stops and delays at intersections.

15. Going by bicycle to work would be dangerous because motorists are inconsiderate of bicyclists.
16. When bicycling to work I would worry about perspiring 5.39() $28.3 \% 1$ ) $18.4 \%(135.595) 6.6 \% 15.9 \%$ or sciling my clothes.
17. Riding a bicyc?e to work would give healthful exercise.
18. Parking, locking and unlocking my bicyile at work woule be no trouble.
19. Lfter parking my ticycle i would have to walk e long distance when I go to work.
2i. I would worry about my bicycle being stolen at work.
20. It would be inexpensive to buy and operate a bicycle. $25.0 \%$ ) 42. $2 \%$, $9.2 \%$ ( ) $112 \%(, 5.9 \% 1) 5.9 \%$

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP

```
Piease indicate your frefororce ser tre folicwing aiternative means of :ravei for ycur rext
trip to work by placing a "l" next to the aiternative you prefer the most, a "2" next to your
second most preferred alternative, a " }3\mathrm{ " next to your third most proferred alternative, and a
"4" next to your least preferred alternative. Repeat the process for each statement (a)
through (c) below.
```



a. Assume the bicycle facilities are in place. Dlease rank the folicwing means of travei


- C. Suppose that the bicycle factlities are in place and the price of gasoline increased to 53.00 per gallon. (Dlecse pank.)

| 24.372 | $($ | bicycle with improved facilities | 39.5\% | $10.5 \%$ | 14: \% | 112\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $48.6 \%$ | () | walk | $19.1 \%^{\circ}$ | $13.8 \%$ | $9.7 \%$ | 8.6 |
| 14.50 | ( ) | bus/iransit | 19.7\% | 44.79 | 6. $6 \%$ | 1755 |
| $7.2 \%$ | ( ) | car (driver or passenger) | $9.9 \%$ | $17.8 \%$ | $52.6 \%$ | 12.5\% |

2. If only the alternatives listed below were availabie for your next ten trips to work, hew many of

to aaci aiterrative.)

$27.2 \%=0 / 10$ Liups i , walk
$55,1 \% \%=0 / 1$, tives ( ) bus/iransit
$61.6 \%=\%$ ) car (driver or passenger)
$6.6 \%=10 / 10 \%(10)$ TOTAL TRIPS

## LIVING NEARER TO TRAVEL DESTINATIONS

Many planners maintain that the use of automobiles has greatly increased the levels of air pollution, energy consumption, traffic congestion and costly street and highway expenditures. It has been suggested that in order to reduce these problems people must live nearer to their places of employment, shopping, school and recreation.

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six block (ly mile) distance, and most work trips are within two miles of home.

Suppose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to work without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; fonvenient bus service is available to work places; there are no special restrictions on the use of automobiles.

Now, please tum to the following pages and express how this compact iand-use arrangenent wouti affect the vay you feel about using WALK, BICYCLE, 3 US or CAR for your work triv.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT WORK TRIP.

1. Please indicate your ajrsement or disagreement with the following statement:

|  | ileither <br> Agree ion | Strongly |
| :--- | :--- | :--- |
| Strongly |  |  |
| Disagree |  |  |

I would like to live in this type of community. $34.7 \%\left(, 34.7 \%, 11.4 \%_{0}\left(, 7.3 \%() \leq 3 \%_{0}\right.\right.$ (,
2. Please indicate your preference for each of the following transportation alternatives on your next irip to work, by placing a "l" next to the alternative you prefer the most, a "2" next to your second nos: preferred alternative, a "3" next to your third most preferred alternative, and a "\&" next to your least preferred alternative, assuming the lanc-use arrangement described above. Please repeat the precess for each statement (a) through (d) below.
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next trip to work, and assume further that your trip to work is approx-

b. Now suppose that in addition to the conditions described in (a) above, the price of gasoline increased to si. 50 per gallon. (Please rani again.)

c. Assume the conditions described in (a) above and assume that in addition, the speed limit was reduced to 15 mph in the community. (Please rank.)

| $59.5 \%$ | () walk | $19.7 \%$ | $7.8 \%$ | $5.7 \%$ | $7.3 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $22.3 \%$ | () bicycle | $43.6 \%$ | $11.9 \%$ | 12.470 | $9.8 \%$ |
| $7.3 \%$ | () bus or transit | $20.7 \%$ | $50.2 \%$ | 10.970 | $10.9 \%$ |
| $6.7 \%$ | () car (driver or passenger) | $5.2 \%$ | $17.6 \%$ | $58.6 \%$ | $11.9 \%$ |

d. Assume again the conditions described in (a) above but this tire, assume no barking was available at your work place. FIecse naris.


WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? 37.7 (age) (mean)
2. What is your sex? $51.79 \%$ ) Male $48,3 \%$ ) Female
3. How many adults ( 18 or over) including yourself are there in your household? $\qquad$
4. How many minors (under 18) are there in your household? $\qquad$ 0.4
5. Do you have a valid driver's iicense?97.9\% ) Yes 1.821 ) No No Answer 0.3\%
6. How many licensed drivers (including yourself) are there in your household? $\qquad$
7. How many automobiles are there in your household? $\qquad$
8. Do you own a bicycle? $42.6 \%$ ) Yes $56.0 \%$ ) No
9. How many bicycles are there in your household? $\qquad$ 1.0
10. What type of structure do you live in? No Answer $1.4 \%$.

ii. What is your educational background? (CFECK OTE)
$0.3 \%$ ( ) completed elementary school $27.7 \%$ ( ) college or technical school graduate
$1.7 \%_{0}\left(\right.$ ) some high school $11.7 \%_{0}($ ) same graduate school
6.670 ( ) high school graduate $39.7 \%_{0}^{(1)}$ completed graduate degree is)
$10.3 \%$ ! ) some college or technical school
11. Please indicate your work group below: No Answer 2.0?。
$85.270\left(\right.$ ) work 5 or more days a week $1.7 \%_{0}($ ) work 1-2 days a' week
9.49 ( ) work $3-4$ days a week 1.79 ( ) presently unemployed
12. What is your occupation? (CEECK ONE) NO Answer $1.7 \%$

$$
\begin{aligned}
& 64.17_{0}() \text { professional-technical } \\
& 15.7 \%_{0}() \text { managerial } \\
& 1.77_{0}() \text { blue collar }
\end{aligned}
$$

$$
3.4 \eta_{0}() \text { sales worker }
$$

$$
q_{1} 1 q_{0}() \text { secretarial-clerical-cashier }
$$

$$
3.4 \%() \text { other }
$$

$$
0.97 \text { studint }
$$

14. Does your job require you to dress up? (C.EET: Civ) No thensuwr $1.4 \%$ $62.37_{6}()$ usuälly 22.970() sometimes $!\Xi_{0} 472()$ not usually
15. How many workers including yourself are in your nouseholi? $\qquad$
if. Please check the category which includes your zpproximate family income before taxes.
J. $170($ ) \$5,000 and under
$5770($ ) $\$ 95,001-\$ 17,500$
2.0\% ( ) \$5,001-57.50C
$3.7 \%$ ( ) $\$ 7,501-\$ 10,000$
8.97 ( ) $\$ 17,501-\$ 20,000$
$10.0 \%$ ( ) $\$ 20,001-\$ 25,000$
$\bar{x}:$
31.975
$6.3 \%_{0}($ ) $\$ 90,001=\$ 12,500$
$7.42($ ) $\$ 12,501-\$ 15,000$
$30.6 \%_{0}($ ) $\$ 25,001-\$ 50,000$
$18.6 \%_{0}($ ) Over $\$ 50,000$

In the space selow we would welcome any other comments you would like to make. Enclose additional pages if you like.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ -

We would like to express our sincere thanks to you for completing this questionnaire.
is your work place located less than 3 miles from your home?
$3.9 \%$, les
If jow cnsier is ISS, plecse read beiow.

$$
26.170 \mathrm{No}(1)
$$

If your answer is MO, please go on to page 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO WORK USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The improvements consist of (1) providing pedestrian pathways, (2) improving sidewalks, (3) providing better lighting, and (4) making traffic signals more pedestrian-oriented.

Separate pedestrian ways or walkways are bullt adjacent to all major roadways. These pathways are separated from autcmobile traffic by trees or grass medians. At all busy street crossings, pedestrians will be abie to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. High intensity lights are adced along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the presence of water fountains, shade trees, benches and pedestrian-oriented staras with flowers, newspapers and refreshments.

Tou are rov asked $=0$ eipress your agreement or disagrement with the fotiowing statements about walkire to Nori, cssiming the ivaility improvements descriced above are avaitible to you on jour neat tri? to :ork. You witi note that the list of statemerts is the same as that used eariier. The purpose of this iast raviry is to find out ncl ucu seei about the jeciestriun-reiatec introvements.)

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS

tin jucility improvenents descrioed on the previous paje, aidn ij jou iic not vaik on juw
iast trip to wori..
Strangly
Aaree
Neither
Agree Nor

Disagree Disagree | Strongly |
| :--- |
| Disagree |

1. Walking to work would be pleasant because (could $51.7 \%$ ) $41.4 \%\left(\right.$ ) $2.6 \%$ ) $0.9 \%$ ( ) $67 \%$ ( ) $1.72_{0}$ enjoy the scenery and surrounaings.
2. When walking, it would be convenient to stop and $37.9 \%$, $45.8 \%$ ( $10.3 \%$ ( $3.4 \% 1$, $-(1.6$ do errands on my way to and from work.
3. I could pick up and go anytime I like when I walk $32.8 \%$ ) $50.89 \%$, $7.5 \% 1$ ) 4.3\% ( ) , ( $2.6:$ to work.
4. Walking to work would te tiring. $\quad 3.4 \%_{0}\left(, 2.6 \%\right.$, $9.5 \%_{0}\left(, 48.3 \%_{0}() 33.6 \%\right.$, 2.6\%
5. Walking to work would be dangerous because of the $1.7 \%()-() 5.27() 63.0 \%() 28.49() 1.7 \%$ heavy traffic.
6. If I walked to work I would worry about being late.
7. : could not rely on walking to work in rainy weather.
8. I could easily carry my briafcase or other
packages when I walk to work.
$3.49_{0}\left(9.5 \%_{0}(13.820) 51.891\right) 19.82_{0}(1.72$
$\left.6.9 \%_{0}\left(31.0 \%_{6}\right) 38.878\right) 7.82_{0}\left(1.7 \%_{0}\left(1.7 \eta_{0}\right.\right.$
$12.970(53.493,2.87(22.47(0.9 \%(12.6 \%$
9. It would be uncomfortable to walk to work because $1.790(1.7 \%() 3.42() 58.79() 31.9 \%() 2.6 \%$
of rough or bumpy walking surfaces.
10. I could get to work quickly when I walk.

$$
19.8 \%_{0}\left(4 4 . 8 \% \left(7 . 8 \% _ { 0 } \left(2 0 . 7 \% _ { 0 } \left(4.3 \%_{0}() 2.6 \%\right.\right.\right.\right.
$$

11. I would worry about being mugged or assaulted $3.4 \%_{0}\left(, 4.3 \%_{0}\left(6.9 \%() 63.0 \%\left(18.1 \%_{0}(4.3 \%\right.\right.\right.$ when I walk to work.

12. It would be relaxing to walk to work.

$$
\left.37.9 \%_{0}\left(146.6 \%_{0}\right) 7.8 \%_{0}\right) 3.47_{0}\left(0.9 \%_{1}, 3.4 \%\right.
$$

14. I would dislike walking to work because of the many $0.9 \%$ ( ) $2.6 \%(, 10.3 \%$ ( $158.6 \%$ ) $25.0 \%() 2.62$ delays at intersections.
15. Walking to work would be unsafe because of the lack $0.9 \%_{0}\left(\right.$ ) $0.9 \eta_{6}\left(, 5.2 \%_{6}() 57.6 \eta_{0}() 32.8 \%_{0}\right) 2.67_{3}$ of pathways that are separated from motorized traffic.
16. Walking to work would be dangerous because motorists $0.9 \%$, $9.5 \%$ ( ) 12.49. ( $52.52(131.67 .12 .670$
are inconsiderate of pedestrians.

17. Walking to work would give healthful exercise. $47.5 \%$, $42.2 \%$ ( 4.32 ( $2.6 \%(1)-(1)=$

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.

1. Please indicate jour preference for each of the following diternative means of travel for jour hex: trip to work by placing a "1" next to the alternative you prefer the most, a "2" next to you. second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative. Repeat the process for each statement (a) through (c) below.
 orin. .
a. Assume the walk facilities are in place. Please rank the following means of travel for your

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please nark.)

2. If only the alternatives listed below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (nimive the number oj vies in ire boz mean =0 axon

$15.5 \%=\frac{0}{10}$ tires ; walk with improved facilities $\quad 5.9$
$68.170=\%$ tinges ( ) bicycle
$55.8 \%=\%$ This! bus/transit
$59.490=\%$ trips $\frac{1}{2}$ ) car (driver or passenger)
$5.5 \%=10 / 1011 \sqrt{(10)}$ TOTAL TRIPS

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1.00$ will be assessed to the owners of automobiles operating during the morning (7-9 a.m.) and evening (4-6 p.m.) rush hours. This means that you would be charged up to $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

## YOU HAVE JUST READ AN ASSUMED FEE ON AUTO USAGE．IMAGINE THAT THIS SITUATION EXISTS FOR YOUR NEXT WORK TRIP．

1．Please incicate four agreement or disaçeeren：with the foliowing stataments：

 dollars per day is cesirable．
b．It would be inexpensive to travel by car $1.3 \%$（ 13.87 （ ） 10.890 ）35．7\％！）42．7\％（ ） $5.7 \%$ ． with a congestion fee of two collars per day．

2．Please indicate your preference for each of the following transportation alternatives for your nex： trip to work by placing a＂1＂next to the aiternative you prefer the most，a＂2＂next to your second most prefarred alternative，a＂ 3 ＂next to your third most preferred altarnative，and a＂4＂next to jour least preferred alternative．Please repeat this for each of the statements（a）through（d）oelow． （：二 sus semice is not ajaivaile sor jour work vrin，please rank the three remaining altematives jeicu．，
a．Assume the congestion fee of $\$ 2.00$ per day described on the preceding page wis in effect．Please Rorky 1 ／rank the following means of transportation for your nex trig，to work．

| 46．5\％ |  | walk | 18．5\％ | 10．290 | 17．3\％ | 7．6\％ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8.990 |  | bicycle | $31.8 \%$ | 33.890 | $16.6 \%$ | 8.9 \％ |
| $\times 1.070$ |  | bus or transit | 34．5\％ | 24．2\％ | 7.270 | $=7 \%$ |
| $19.7 \%$ |  | car（driver or | 2．3\％ | $21.7 \%$ | 42，7\％ | 2，\％\％ |

b．Assume that instead of $\$ 2.00$ ，the congestion fee increased to $\$ 4.00$ per day．（OLease ranik again．）

| $46.5 \%$ | （ ） | walk | 19.17 | $10.2 \%$ | 15．9\％ | 8． $3 \%$ ， |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | （ ） | bicycle | 36.37 | 31.87 | 11.57 | 10.27 |
| 10.27 .1 36.890 | （ ） | bus or transit | 26．8\％ | 29．2\％ | 3，8\％ | 13.423 |
|  | $($ | car（driver or | 9.670 | $17.2 \%$ | 51．5\％ | $7.6 \%$ |

c．Assume that in acdition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ oer galion．（こうecse rank．）
$46.6 \%$（ ）walk $19.790 \quad 8.9 \% \quad 17.2 \% \quad 7.6: 3$
$12,7 \%$（ ）bicycle
33.170
$33.8 \%$
11590
？．in
$31.89 \quad 29.7 \%_{0} \quad 5.190 \quad 12.7 \%$
1．72．（ ）bus or transit
15．370（ ）car（driver or passenger）
$7.5 \%$
17.89
49.79
9.65,
d．Assume that the congestion fee of $\$ 2.20$ per day was in effect，and assume further that four
employer aliowed you to arrive before 7：00 a．m．and leave before 4：00 2．m．，or to arrive after于：00 a．m．and leave aiter 5：00 p．m．PPlease rani．；

ご仿（ ）walk
10．270（ ）bicycie

$$
\begin{aligned}
& 16.670 \\
& 28.7-3 \\
& 40.267 .
\end{aligned}
$$

$$
10.27, \quad 19.7 \%
$$

$$
\text { E6. } 372
$$

$15.907_{3}$

$$
\alpha 1.7 \%
$$

$10.8 \%$
$14.67_{0}()$ bus or transit
25.5 （ ）car（driver or passenger）
$7.67 \%$

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME FOR THE PURPOSE OF SHOPPING OR PERSONAL BUSINESS. PLEASE EXCLUDE ALL MAJOR GROCERY SHOPPING TRIPS.
? What is the nearest intersection or street address of the place of your most recsnt shopoing or Dersonal business irip from home?
(nearest intersection or street aadress)
(city)
2. A list of specific shocping and personal business trip purposes is given below. Please check the one trip puroose that best describes your most recent shopping or personal business trip from home (exclude major grocery shopping trips). (CAECK CIE ONLE)

| 26.7 (\%) | Minor grocery shopping (one bag or less) | 7.1 (\%) | eat meal | $2.61 \%)$ | other professional |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $17.51)$ | clothing/shoes | 3.21 ) | post office | 11.01 ) | bank |
| 8.91 ) | drugs/bookstore | 1.91 ) | 1 ibrary/museum | $2.21)$ | laundry/dry cleaner/shoe repair |
| $5.21)$ | hardware/florist/liquor | 5.47 ) | medical/dental | 2.81 ) | barber/beauty shoo |
|  | NO ANSWER: | $2 \%$ |  | 16.31 ) | other (please soecif y) |

3. Other than the above stop, did you make any additional stops on the way to and from your shopping/ personal business destination? (CAECK.ONE)
43.5( ) none (IF you answared NONE, go to question 5.)
30.5 ( ) one
15.7() two
9.51 ) three or more
0.8 NO ANSWER
4. Did any of the additional stoos between your home and your primary shopping/personal business destination require you to travel more than one mile out of the way?
14.91 ) res
40.8 ( ) NO NO AODTL STOPS/NO ANEWER: 44
5. Approximateiy how far was it directly from your home to your primary shopping/personal business

- destination (one way)?
9.0 ( ) 2 blocks (t mile or less) 16.9 () 2 to 4 miles
20.4 () 3 to 6 blocks ( $\frac{h}{4}$ to $\frac{k}{2}$ mile)
6.6 () 4 to 6 miles
20.9()$\frac{1}{2}$ to 1 mile
2.8 ( ) 6 to 10 miles
19.9 () 1 to 2 miles
3.1() over 10 miles
0.4 NO ANSWER

6. How many separate parcels, bags or packages were you carrying? (SHECK OIE;
/7.4 (\%) none
$39.9($ ) one $24.5($ ) two
17.81 ) three or more
0.4 NO ANSWER
7. How many persons (other than yourself) were with you on this shopping or personal business trip? total $\qquad$ (number)

Children 12 years of age and under $\qquad$ (number)
MEAN: 0.80
Metal : 0.29
8. Where is this place where you went shopping or on personal business located?
53.3 () central city
44.6() suburban
HO ATM ER: 2,0
9. Specify the type of area where you went on your shopping/personal business trip. (CRECK OIF)

$23.1 \%\left(\begin{array}{l}\text { ( }\end{array}\right)$ neighborhood business district $\left.2,1 / 1,7^{( }\right)$office park/professional building
$4.1 / 1.0$ ( college campus
$27 / 2.7$ ) other
$0.4 / 0.4$ No ANSWER
io. What was the date of this most recent trip? $\qquad$ (month/day)
11. At approximately what time of day did you make this trip to your shopping/personal business destination?
5.6() before $\not \subset$ am.
) 16 व.
( ) 7-2.f .to
31.9 ( ) 2 pom. to 6 pom.
( ) 路
12.1() after 6 pom.
50.2() $9 \mathrm{a.m}$. to 10 pm
0.2 no Ans
12. How did you make the trip to this shopping/personal business destination? (CAECK ONE)
20.6 ( ) walked all the way
0.2 () motorcycle
59.3 ( ) drove a car
2.7 ( ) bicycle
9.2 () passenger in a car
0.3 ( ) moped (motorized bicycie)
5,4( ) bus
0.6 ( ) taxi
$0.5($ ) train, subway
0.6 () other $\qquad$
0.1 NO ANSWER

12a. If you used a bus or transit, how did you get to your bus or transit stop?
0.1() bicycle
0.2 ( ) drove and parked

- ( ) taxi
- ( ) passenger in a car
6.2 () walk
$0.1(1)$ other $\qquad$


# NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOUR MOST RECENT SHOPPING OR PERSONAL BUSINESS TRIP WHEN COMPLETING THE FOLLOWING SECTION. 

Imagine that only the following options were avallable to you on your most recent shopping or persona? business trip: CAR (driving or riding), BUS (or transit), WALK, and BICYCLE. For the above trip, we would like to learn how you feel about each means of transportation. Please give us your opinion of each means of transportation even if you never used it.

The following pages are labeled with the means of transportation you are asked to rate. Under each label you will find a set of statements. Please read each statement and place an "X" in the space that best indicates your agreement with the statements under each means of transportation you are rating.

For example, consider the following statement for bus:

|  | Strongly Agree | Aaree | Neither Adree Nor Disagree | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I enjoy traveling to my shopping or personal business destination by bus. | 1 ) | $(\mathrm{x})$ | ( ) | 1 ) | 1 ) |

If you enjoy traveling by bus, you would put an "X" in the box under agree or strongly agree, deperiding upon how much you enjoy travel by bus. If you do not enjoy travel by bus, you would put an "x" under disagree or strongly disagree. If you neither agree nor disagree, you wouid place an " $X$ " in the center box. In the examole shown here, an "X" has been placed in the box under agree, indicating this berson enjoys traveling by bus.

[^2]
## YOUR RATING OF BUS (op transit)

Is bus service available between your home and this shopping or personal business destination?


1. Going to this destination by bus is pleasant because I can enjoy the scenery and surroundings.
2. Wher shopping or on a personal business trip, it is convenient to stop and do errands when traveling by bus.
3. I must schedule my trips in advance when I travel by bus to go shopping or on personal business trips.
4. Traveling by bus to this shopping/personal business destination is tiring.
5. Traveling by bus to my shopping/personal business destination $1.0(1) 7.3(120.01) 55.7() / 4.61) 1.4$ is dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, 10.9 ( ) 31.3 ( 125.81 )25.21)3.91)2.9 it is inconvenient to take the bus.
7. I cannot rely on taking a bus to this destination in rainy weather.
8. I can easily carry packages when I travel by bus while I an on a shopping/personal business trip.
9. It is uncomfortable to travel to this destination by bus because of rough or bumoy road surfaces.
10. I can get to my shopping/personal business destination quickly when I travel by bus.
11. I worry about being mugged or assaulted when I travel by bus to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by bus to my shopping/personal business destination.
13. It is relaxing to travel by bus to my shopping/personal business destination.
14. I dislike traveling by bus to this shopping/personal bus. destination because of the many delays at intersections.
15. I must walk a long distance to get to and from the bus when 5.6() 21.24$) / 6.4() 47.7() 7.8() 1.3$ I go to this shopping/personal business destination.
16. There is generally a long wait involved when I travei by $15.7(140.3(122.4() / 8.5() 2.21) 0.9$ bus to this shopping/personal business destination.
17. When traveling by bus to this shopping/personal business $1.6(17.5(122.31) 54.6(13.01) 1.0$ destination I worry about perspiring or soiling my clothes.
18. It is inexpensive to travel by bus to this shopping/personal $12.1(148.71) 18.31) / 501$ ) 2.8! ; 1.1 business location.

## YOUR RATING OF WALK

Was your most recent shopping or personal business destination located less than 2 miles from your home?
$66.4($ ) Yes

$$
\begin{aligned}
& \text { Fo ucim answer is es, please rave the sociemerts }
\end{aligned}
$$

$=\mathrm{t}$ this ciestiration even if you cit not wa
there or your last trio.

1. Walking to this destination is pleasant because l can enjoy the scenery and surroundings.
2. When shopping or on a persona business trip, it :s convenient to stop and do errands when walking.
3. I can pick up and so anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this shoppirg/personal business destination is tiring.
5. Walking to my shopping/personal business destination is dangerous because of the heavy traffic.
6. When on a shopding/oersonal business trip with children, it is inconvenient to walk.
7. I cannot rely on walking to this destination in rainy weather.
8. I can easily carry packages when I walk while I am on a shopping/personal business trip.
Q. It is uncomfortable to walk to this destination because of rough and bumpy walking surfaces.
9. I can get to my shopping/personal business destination quickly when I walk.
10. I worry about being mugged or assaulted when I walk to my shopring/personal business destination.
11. I worry about being injured in an accident when I walk tc my shodeing/persoñl business destination.
jj. It is relaxing to walk to my shopoing/personal business destination.
12. I dislike walking to this shopping/personal business destination because of the many delays at intersections.
13. Walking to this shopping/personal bus. destination is unsafe due, to lack of pathways separated from motorized traffic.
14. Walking to this shodping/personal bus. destination is danserous because motorists are inconsiderate of pedestrians.
15. Sher waikinc to this shoppinc/personal bus. destination, I worry about: perspiring or soiling my clothes.

1E. k'elking to this shopping/eersonal business destination gives healthful exercise.
33.61 ) No

$$
\begin{aligned}
& \text { If ucun ar.swen is ix, そiecse sc on }=c \\
& \text { the rem et page. }
\end{aligned}
$$


17.4() $46.4(10.4 i) 19.9 i ; 5.6 i ; 0.3$
$21.31) 51.1(1$
9.01 )
$14 . K) 4.1(1$
0.4
$7.9125 .0(14.9(129.8(12.2) 0.2$
$7.3(1) 22.3(15.9(43.2) 10.8 i, 0.5$ $14.1(, 31.5() 245!22.2(5.41) 2.3$
$10.2(145,81) 8.1(122.21) 4.2(10,5$
$4.6(1) 33,12.6(137.4(11.6(1) 0.3$
$3.8(11.7(14.3(55.7) 14.1) 0.4$ $9.0(1) 32.1(14.4(33.8(10.5(1) 0.2$ $4.2(13.3(16.7(49.4) / 5.9(10.5$ $4.0(14.91) 16,2150,6 ; 14,110.2$ $12.0(1) 44.5120 .0118 .51) 4.4110 .6$ $3.0(12.7(17.9(53.4112 .7(1) 0.3$ $6.7(15.8(10.4) 52.5) 14.1(1) 0.5$ 10.21 ) 26.11 ) $21.11)$ 355 $6.61 ; 0.5$ $2.6(19.9(18.4) 54.2(14.6() 0.3$ $37.21 ; 52.81$ ) 5.9i) $2.41 ; 1.3 i ; 0.4$

## YOUR RATING OF CAR

When using a car, are you usually a:
77.7 ( ) car driver

22,31 ) car passenger
Is you cre usuaitu a cer iniver, ever i:
ycu こind ret Thoose auto jor ycur las
shopping or persoral business trio, rate
the statements below concerning how you
would feel about driving on this Erip.
Please answer ail questions below, ever: ij you do not own a cer.
Strongly
Agree is pleasant because I can enjoy the scenery and surroundings. $5,3 \%$
2. When shopoing or on a personal business irip, it is convenient to stop and do errands when traveling by car.
3. I can pick up and go anytime I like when I travel by car on shopping or on personal business trips.
4. Traveling by car to this shopping/personal business destination is tiring.
5. Traveling by car to my shopping/personal business destination is dangerous because of the heavy traffic.
6. When on shopping/personal business trip with children, it is inconvenient to go by car.
7. i carnot rely on traveling by car to this destination in ratny weather.
8. I can easily carry packages when I travel by car while I am on a shopping/personal business trip.
9. It is uncomfortable to travel by car to this shopping/personal business destination because of rough or bumpy road surfaces.
10. I can get to my shopping/personal business destination ouickly when I travel by car.
11. I worry about being mugged or assaulted when I travel by car to my shopping/personal business destination.
12. I worry about being injured in an accident when I travel by car to my shopping/personal business destination.
13. It is relaxing to travel by car to my shopping/personal business destination.
14. I dislike traveling by car to this shopping/personal business destination because of the many delays at intersections.
15. Parking the car at this destination is expensive.
16. After parking the car, I must walk a long distance when I go to this shopping/personal business destination.
17. I worry about the car being stolen or vandalized at this destination.
18. It is inexpensive to buy and operate a car.
19. Parking the car is no trouble when on this shopping/ personal business trip.

## Agree

Neither
Agree Nor Disagree Disagree

Strongly Disagree

No

## YOUR RATING OF BICYCLE

hies your most recent snovoino or cersonal business destination leaded less thar 6 mites from your home?

## PC. $2 \%$ yes






```
#izcie or %cur iast motr to this destinaticr.
```


i. Sicyciing to this shopping/personal business destination is Dieasant because I can enjoy the scenery and surroundings.
2. When shopeing or on a personal business trip, it is convenient to stoic ard ac errands, where riding a bicycle.
¿. : Ear Dick up and go anytime I like where : ride a bicycle tc go shopping or on personal business trips.
$\therefore$ Riding a bicycle to this shopping/personal business destination is tiring.
5. Ricing a bicycle to my shomping/persanal business destination is dangerous because of the heavy traffic.
6. When on a shcpping/personal business trip with children, it is inconvenient to ride the bicycle.
-. : carrot rely on riding a bicycle to this destination in rainy weaner.

ع. I can easily carry packages when I ride a bicycle white I am on 2 shopping/personel business trip.
c. It is uncomfortable to travel to this destination by bicycle because of rough or bumpy riding surfaces.
iC. I can get to my shopping/personal business destination quickly, when I ride a bicycle.
il. I worry about being mugged or assaulted when I ride a bicycle to ry shcfoirg/personal business destination.
i2. I worry about being injured in an accident when I ride a tizycle to my shopping/personal business destination.
13. It is relaxing to ride by bicycle to my shopping/personal business destination.
14. I dis? ike traveling by bicycle to this shopping/personal bus. destination because of many delays at intersections.

Strongly
 $9 . \overline{6(1)} 25 . \overline{63.7(1)} 22.0 .91 .2$
 8.31 ; 47.61 ) 13.6()$=3.01$ ) $6.3(1$ 1.2 6.2() $25.8(19.5() 29.4) 7.9(; 1.2$ 26.6() 43.7() $11.11) 14.5(12.81 ; 1.3$ 36.3: ) $37.9(110.61 ; 8.0(; 5.7() 1.5$ 30.9() 52.4() $7.516 .7!) 1.9(11.1$ $2.5(13.4()(0.5) 47,4(24.7) 1.0$ 5.9() 20.2() $23.4143 .3(16.2(1) 1.0$ $7.7(1) 42.7() 15.61) 26 . \sqrt{1}() 6 . \sqrt{1} ; 1.0$ $2.5(1) 10.7(121.2() 50.8() 13.5(1) 1.3$ 16.1( ) 41.5T) 15.6i) $21.2(14.8(10.8$ 5.6() 31.0() 25.1() 29.4 ) $7.7(1) 1.2$ 4.6() $21.3(127.3() \equiv 9.3()=5(1) 1.3$
 due tc lack of bike sates separated from, motorized traffic.
16. Going by bicycle to this destination is dangerous $25.51) 3731) 20.61) 12.31) 2.21) 1.5$

ts. Ricing a bicycle gives healinful exercise.
19. Parking, ?locking and urlockince my bicycle at this destination is no trouble.
20. i worry about my bicycle being st' an at this shopping/ personal business destination.
21. It is inexpensive to buy and operate a bicycle.

 16.2()$\geq 3.4() 19.5(1 \geq 141)=.5(: i .1$ 17.6()$\leq 0.1(147(1 / 4.1(; 25) 1.0$

WE WOULD LIKE TO KNOW YCUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL FOR SHOPPING/ PERSONAL BUSINESS TRIPS.

1. Imagine that only BUS, WALK BICYCLE, and CAR (driver or passenger) were avaliable for your most recent shopping/perscnal business trip. These alternatives are listed below. Please indicate your preference by olacing a "1" next to the alternative you prefer the most, a "2" next to your second most-preferred alternative, a " 3 " next to your third most-preferred alternative, and a "4" next to your least-preferred alternative. (If ous service was not available for your shopping/persoral business trip, please rank the thees remaining aiternaitives.)

| RANKE | 1 | RANKEO 2 | FANKED 3 | RANKED 4 | NO ANSWFP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4.51 | bus | 28.9 | 15.7 | 24.4 | 26.5 |
| 18.21 | walk | 21.3 | 34.3 | 21.2 | 5.0 |
| 6.81 | bicycle | 33.0 | 32.5 | 21.4 | 6.3 |
| 69.11 | car (dri | senger) ${ }^{\text {( }} 8$ | 11.4 | 5.1 | 2,6 |

2. We would like to know how often you use each of the following means of travel for shopping/personai business trips from home. Place an $X$ under your best estimate of the number of days you have used each means of travel during the last 30 days.

3. Assume that on your next shopping/personal business trip all travel condftions remained the same as presen: except that the price of gasoline increased to one of the price levels indicated below. For each gasoline frice level, please indicate your transportation preference by placing a " next to the alternative you would prefer the most, a " 2 " next to the one you would prefer second, a "3" next to your third choice, and a "4" next to your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below. (if bus service is not avcilable for your Shopping/personal business trit, please rank the three remairing alterratives.)


WE WOULD LIKE TO KNOW MORE ABOUT THE TRANSPORTATION SERVICE AVAILABLE TO YOU. PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU SHOP OR DC PERSONAL BUSINESS BY ANSWERING THE FOLLOWING QUESTIONS:

i. If you were to ride your bicycle to your shopping/personal business destination, what is your best estimate of the time you would spend doing the following?

2. Is there a bicycle path or marked bicycle lane which you could use to bicycle on part or all of your trip from home to your shopping/personal business destination.
$4.3(\%)$ bicycle path (off the street)
22.1 ( ) bicycle lane (on the street) $\} 1.5 \% 60$ th
$45.31)$ neither
13.9() don't know
$12.9 \%$ of trips were more than 4 miles
3. What portion of your total trip from home to your shopping/personal business destination is served by bicycle paths or bicycle lanes?
44.2() none
8.0() less than $1 / 4$ the distance
7.3() $1 / 4$ to $1 / 2$ the distance
4.9 ( ) 1/2 to $3 / 4$ the distance
8.0() more than $3 / 4$ of the distance
14.7 ( ) don't know

ANSWER IE DISTANCE FROM HOME TO SHOPPING/PERSONAL BUSINESS DESTINATION IS 2 MILES OR LESS.
4. If you were to walk to shopping/personal business, what is your best estimate of the time it would take from the moment you left home to the moment you arrived at shopping/personal business destination
$\qquad$ (minutes)
5. Are there adequate sidewalks or pathways you could use to walk on your trip from home to your shopping/personal business destination?
56.7 ( ) all or almost all the way
16.2 ( part of the way $19.5 \%$ of trips are more than 2 miles $5.6($ ) there are none $2.01)$ don't know
6. If you were to take the bus to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?

7. Is it necessary to change buses to travel from your home to your shopping/personal business destination?
17.7 (\%) Yes
50.21 ) No

3,8 Don't know
8. Out of ten trips, how often would you expect to have a seat on the bus all the way from home
to your shopping/personal business destination?
$\qquad$ times out of ten
8.5

Bus service not available: $28.3 \%$
(mean)
9. What is the one-way bus fare on your trip from home to your shopping/personal business destination?
0.31 cents
(mean)
( ) don't know
10. If you were to go by car to your shopping/personal business destination, what is your best estimate of the time you would spend doing each of the following?
walking to the car
driving or riding
parking the car
walking from car to destination
TOTAL TIME FROM HOPE TO DESTINATION

(minutes)
8.0 (minutes)
3.1 (minutes)
2.5 (minutes)
15.8 (minutes)

11. What is the parking cost on your trip from home to your shopping/personal business destination? (CYEC: ONE AND SPECIFY THE COST.)
( ) no charge
( ) daily charge 1.90 (dollars) (Mean)
( ) weekly charge (dollars)
( ) monthly charge (dollars)

NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.

1. Did you ride a bicycle at least once during the past year?
53.31 ) Yes
46.61 ) No (IF "MO". GO TO NEXT EAGE.)
0.1 Don't know
2. Did you ride a bicycle during the last month?
29.8() Yes
23.4 ( ) , (IF "MO", GO TO NEX PAGE.) 46.7 did not ride during the year $)$
0.1 Dent know
3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an "X" under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through "h" below) during the last 30 days.

| Did Not | $1-5$ | $6-10$ | $11-15$ | $16-20$ | More Than NO |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Use | $\underline{\text { Days }}$ | Days | Days | $\underline{\text { Days }}$ | $\underline{20 \text { Days }}$ ANSWE |


(70.2\% did not ride bicade in last month)

Is your selected shopping or personal business destination located less than 4 miles away from your home?

$$
\begin{aligned}
& 81.17_{0} \text { ( ) Yes } \\
& \text { If your answer is TES, please read below. }
\end{aligned}
$$

18991 ) No
If your answer is iN, plaase go on to page 15.

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyci1sts. The improvements consist of (1) providing bicycle paths, (2) reserving street lanes for bicycle use, (3) improving road surfaces, (4) instalifing secure bicycle lock-up facilities in many areas, and (5) providing better iighting.

On most local streets, a yellow stripe is painted near the right-hand side of the road marking a lane reserved strictly for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by a metal guardrail or a grass median. All these paths and street lanes are smoothly paved for better riding. In addition, high-intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high activity areas, these consist of enclosed storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made freely available.

You are now asked to ewpress your agreement or disagreement with the foliowing statements about bicucting
to your shovoina or sersonal business destination assuming the bicycle facility improvements described above are available to you on ycus newt shcpping or personal business trip. (You will note that the list of statemerts is the same as that used eartier. The purpose of this iast rating is to "ind out now youn feel about bicycig-related inproverents. I

## YOUR RATING OF BICYCL E WITH FACILITY IMAPROVEMENTS




 Dleasant because I couid enjoy the scenery and surroundings. 16.5
2. When shopoing or on a personal business trip, it would be $12.2(148.51) 14.0() 21.1!) 3.21$ ! 1.0 convenient to stop and do errands when riding a bicycle
 on shoping or on personai business trios.
 destination would be tiring.
 would be dangerous because of the heavy traffic.
6. When on my shooding/personal business trip with crildren, $14.3(1 / 4.8(1) / 8.9(143.9() / 6.61) 1.5$ would find it convenient to ride the bicycle.
7. : could not rely on riding a bicycie in rainy weather. 17.8() $57.1(10.2(11.91) 1.81$ ) 1.2
 : am on a shopping/personal business trip.
 by bicyc?e because of rough or butidy riding surfaces.
10. I couid cet to my shopping/personal business destination $10.3(152.1() 14.6() / 9.3() 2.4() 1.3$ quickly when I rice a bicycle.
11. I would worry about being mugged or essaulted when I ride 1.7 ( $110.2(120.51$ ( 5451 ) 12.11 ( 1.0 a bicycle to my shopping/persoral business destination.
 ride a bicycle to ry shopoingipersonal bus. destination.
$i j$ : $:$ woulc be relaxing to ride by bicycie to my shopping/ $9.8(145.5(120.51) 19.6(131111.5$ personal business destination.
 des=ination because of mary delays at intersections.
 unsafe due to lack of bike paths separated from motor traffic.
16. Bicycing to this shopping/personal business destination woild ()22.2()18.8(142.0i) 8.5 () 2.1 be dangercus because motorist are inconsiderate of bikers.
17. When bicyciing to this destination, I would worry about 2.31 ) 14.8 ( $122.6(150.1(19.01) 1.2$ perspiring or soiling my clothes.
18. Riding a bicycle would give heaithful exercise.
? $\therefore$. Derving, iccking and unioskirg my bicysle would be r.o troutle.
20. : would worry abol: my bicycie being stoien at this smosping'personal business cestination.
¿1. It vioulc de inexpensive to buy and oderate a bicjcle.
41.2() $51.31) 4.6() 0.9(1) 6.8(1) 2$




YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next shopping or personal business trip by placing a "l" next to the alternative you prefer most, a "2" next to your second most-preferred alternative, a "3" next to your third most-preferred aitemative, and a " 4 " next to your least-preferred aiternative. Please repeat the process for each statement (a) through (c) below. (If bus service is not available between your hom ard your shopping or personal business destination, rank the three remaining alternatives. .
a. Assume the blcycle facilities are in place. Please rank the following means of

Rowk 1 Rawk 2 travel for your next shopping or personal business trip to the same destination.

c. Suppose that the bicycie facilities are in place and the price of gasoline increased to $\$ 3.00$ per galion (please rank again).

| 47.5 | 27.1 | () bicycie with improved facilities | 10.1 | 9.9 | 5.4 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| 23.6 | 37.5 | () waik | 20.1 | 13.3 | 5.5 |
| 15.5 | 16.2 | () bus/tpansit | 28.2 | 13.8 | 26.3 |
| 10.8 | 12.6 | () car (driver or passenger) | 34.3 | 35.7 | 6.6 |

2. If only the altematives listed below were avaliable for your next 10 shopping or personal business trips, now many of the 10 trips would you make using each alternative? (Writa the number of trips in the bow newt to eacin altermative. )
2.3 ( ) bicycle with improved facilities
2.0() weik
0.8 () bus/transit
4.9 () car (driver or passenger)
(10) TOTAL TRIPS

## LIVING NEARER TO TRAVEL DESTINATIONS

Many planners maintain that the use of autcmobiles has greatly increased the ieveis of air pollution, energy consumption, traffic congestion, and costly street and higiway expenditures. It has been suggested that in order to reduce these problems, people must live nearer to their places of employment, shopping, school, and recreation.

Some communities have been designed with this compact land-dse arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six-block (l/2 mile) distance and most work trips are within two miles of home.

Suppose you live or moved to one such cammity. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to all shcoping and personal business destinations without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is available; and there are no special restrictions on the use of automeblles.

Now, plecse turn to the foliaving pages and ewrress how this compace lond-use armangemen woule affect the way you feel about using WALK, BICYCLE, BUS, or CAR for your shopping or perscra: business trip.

## YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your agrement or disagreement with the following statement:
 I would like to live in this $28.8(\%) 41.4() 15.3() 6.2(1) 4.2() \quad 4.1$
type of cormunity. type of community.
2. Please indicate your preference for each of the following transportation alternatives on your shopping or personal business trip by placing a " 1 " next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred aiternative, and a "4" next to your least preferred alternative, assuming the land-use arrangement described above. (Please repeat the process for each statemert (a) through (d) below.)
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next shopping or personal business trip, and assume further that your trip is approximately $1 / 2$ mile (6 blocks) in length. (Plecse rank the following mecons of trarsportcrion.)
( ) walk $\frac{1}{44.3} 29.413 .2 \quad 6.4()$ bus or transit

( ) bicycle 28.9 $37.311 .2 \mathrm{L4.01}$ ) car (driver or passenger) $20.411 .0 \quad 32.0 \quad 29.8$
b. Now suppose that in addition to the conditions described in (a) above the price of gasoline increased to $\$ 1.50$ per gallon. PPlease rank the following means of transportation.)
( ) walk
45.9
$6.6 \quad 13.7 \quad 43.3$
23.8
( ) bicycle $32.7 \quad 35.99 .6 \quad 13.11$ ) car (driver or passenger) $11.9 \quad 9.1 \quad 28.1 \quad 43.3$
c. Assume the conditions described in (a) above and assume that in addition the speed limit was reduced to 15 m.p.h. in the comunity. (Please rank the following means of transportation.)

d. Assume again condftions described in (a) above but this time assume no parking was avallable at your shopping or personal business destination. (Please ranix $=\dot{R}$ :ollawing means or trcisportation.)

$$
\begin{aligned}
& \text { ( ) walk } 53.629 .76 .72 .8 \text { ( ) bus or transit } \\
& \text { ( ) bicycie } 28.140 .912 .08 .8() \text { car (driver or passenger) } \\
& 10.0 \quad 10.23446 .3 \\
& 5.2 \\
& 3.3 \quad 15.266 .0
\end{aligned}
$$

WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTINT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY. AS YOU RECALL, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? $\qquad$ Mean
$46.5 \% \quad 53,4$
2. What is your sex? ( ) Male , ) Female

NO ANS. $=0.1 \%$
3. How many adults ( 18 or over), including yourself, are there in your household? 2.1 Mean
4. How many minors (under 18) are there in your household? $\qquad$ Mean
88,9 \%
10.8
5. Do you have a valid driver's license? (,) Yes $\quad(1,0$ No no ANs. $=0,3 \%$
6. How many licensed drivers (including yourself) are there in your household? 2.0 mean
7. How many automobiles are there in your household? 1,7 man

$$
51.6 \%
$$

8. Do you own a bicycle? ( ) Yes ( ) No

NO ANS $=0.3 \%$
9. How many bicycles are there in your household? $\qquad$ mean
10. What type of structure do you litre in?

11. What is your educational background? (CTECK CIE)

12. Please indicate your work group below:
37.9 ( ) work 5 or more days a week
6.1() work $3-4$ days a week
5.2 ( ) work 1-2 days a week
45.6 ( ) presently not employed
5.2 NO ANS
13. What is your occupation? (CBECK CNE)

## 28.6 ( \% professional-technical 5.7 () managerial

9.9 () Student

NO Ans $=4.1 \%$ 3.2() sales worker
6.1 ( ) secretarial-clerical-cashier
8.61 ) blue collar
15.9 ( ) housewife
$4.2(1)$ other $\qquad$ 13.7 not employed
14. How many workers are in your household? 1. 4 (mean)
15. Please check the category which includes your approximate family income before taxes.
11.0 ( $/ \$ 5,000$ and under
7.01 ) $\$ 15,001=\$ 17,500$

8, 3 ( ) $\$ 5,001-57,500$
8,01 ) $\$ 17,501-\$ 20,000$
8,1() $\$ 7,501-\$ 10,000$
10.91 ) $\$ 20,001-\$ 25,000$

Mean: $\$ 20,590$
6.3()$\$ 10,001-\$ 12,500$
19.4()$\$ 25,001-\$ 50,000$
7.5()$\$ 12,501-\$ 15,000$
4.6( ) Over $\$ 50,000$
8.9 NO ANS.

In the space below we would welcome any other comments you would like to make. Enclose additional? pages if you like.
$\qquad$
$\qquad$
$\qquad$
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$\qquad$
$\qquad$

We would like to express our sincere thanks to you for completing this questionnaire.

Is your shopping or personal business destination located less than 2 miles from your home?

## 71.6 (\%) Yes

is your answer is TES, Elecse read below.
28.41 ) No

If your answer is 1 HO , piease so $=0$
page 15 .

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO YOUR SHOPPING OR PERSONAL BUSINESS DESTINATION USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The improvements consist or (1) providing pedestrian pathways, (2) improving sidewaiks, (3) providing better lighting, and (4) making traffic signals more pedestrianoriented.

Separate pedestrianways or walkways are built adjacent to all major roadways. These pathways are separated fram automobile traffic by trees or grass median. At all busy street crossings, pedestrians will be able to change traffic lights in their favor. All existing sidewalks are repaired to make walking easier. Hignintensity lights are added along the pathways to provide excellent visibility at night. Finally, the walkways are enhanced by the preserce of water fountains, shade trees, benches, and pedestrian-criented stands with flowers, newspapers and refreshments.

You are sow asked to express your agreement or disagreement with the following stctementa about walkirg to your shovpins or jersonal business destination, assuming the facility improvements cescmibed above are avaiiable to jou on your neze enopping or persoral business trip. (You will note that the ist cy stajements is the same as tha: wed ecriver. The purpose of tinis last rating is to sind out how icu fee? accu: the pecies:rian-related improvenents.)

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS

Please rate the statements belcs concerning has you woula seel about waiking to your shoppinc or personal business destinction using the facilitu improvemerts descrioed on the previcus Eages, even if you dici not walk thers on your last trip.


1. Walking to a shopping/personal business destination would be pleasant because I could enjoy the scenery and surroundings.
2. When shopping or on a personal business trip, it would be convenient to stop and do errands when walking.
3. I cculd pick up and go anytime I like when I walk to go shopping or on personal business trips.
4. Walking to this shopping/personal business destination would be tiring.
5. Walking to my shopping/personal business destination would be dangerous because of the heavy traffic.
6. When on a shopping/personal business trip with children, it would be inconvenient to walk.
7. I could not rely on walking to this destination in rainy weather.
8. I could easily carry packages when I walk while I am on a shopping/personal business trip.
9. It would be uncomfortable to walk to this destination because of rough or bumpy walking surfaces.
10. I could get to my shopping/personal business destination quickly when I walk.
11. I would worry about being mugged or assauited when I walk to my shopping/personal business destination.
12. I would worry about being injured in an accident when I walk to my shopping/personal business destination.
13. It would be relaxing to walk to my shopping/personal business destination.
14. I would dislike walking to this destination because of the many delays at intersections.
15. Walking to my destination would be unsafe because of the lack of pathways that are separated from motorized traffic.
16. Walking to a shopping/personal business destination would be dangerous because motorists are inconsiderate of pedestrians.
17. When walking to this destination I would worry about perspiring or soiling my clothes.
18. Walking would give healthful exercise.

YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR PREFERENCES BELOW FOR YOUR NEXT SHOPPING OR PERSONAL BUSINESS TRIP.

1. Please indicate your preference for the following alternative means of travel for your next shopping or personal business trip by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alterative, and a "4" next to your least preferred alterative. Please repeat the process for each statement (a) through (c) below. (If bus semice is not availaib between your home and your shopping or personal business destination, rank the three remaining aivernatives.)
a. Assume the walk facilities are in place. Please rank the following means of travel for

LANE 1
33.6
10.3
2.9 ( ) bus/transit
52.1 ( ) car (driver or passenger)

RANK 2 RANK 3 RANK 4
28.7
33.0
17.3
15.4
25.9
29.3
19.2
19.7
7.6
21.3 34.3
9.6
b. Now assume the same condition (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (Please rank again.)

| 41.9 | ( ) walk with improved facilities | 28.1 | 19.4 | 6.8 | 3.8 |
| ---: | :--- | :---: | :---: | :---: | :---: |
| 20.4 | ( ) bicycle | 32.4 | 23.9 | 16.9 | 6.4 |
| 8.0 | () bus/transit | 17.9 | 23.0 | 24.6 | 26.5 |
| 28.3 | ( ) car (driver or passenger) | 15.9 | 27.5 | 23.9 | 4.4 |

6. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)
( ) walk with improved facilities
( ) bus/transit
10.6
32.6
12.2
6.3
( ) car (driver or passenger)
7. If only the alternatives ifsted below are available for your next ten shopping or personal business trips, how many of the ten trips would you make using each alterative? (write the number of trips in the bow newt to each alternative.)
3.2 () walk with improved facilities
1.2 ( ) bicycle

08
( ) bus/transit
4.8 ( ) car (driver or passenger)
(10) TOTAL TRIPS

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATION CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

It is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ 1$ will be assessed to the owners of automobiles operating during the morning ( $7-9 \mathrm{a} . \mathrm{m}$. ) and evening ( $4-6$ p.m.) rush hours. This means that you would be charged up to a $\$ 2.00$ per day if you operate a motor vehicle during these peak travel periods. Billing would be made on a monthly basis using an automated billing process.

1. Please indicate your agreement or disagreement with the following statements:
a. I believe that a congestion fee of two dollars per day is desirable.
b. It would be inexpensive to travel by car with a congestion fee of two dollars per day.

2. Please indicate your preference for each of the following transportation alternatives for your next shopping or personal business trip by placing a "l" nest to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" under your least preferred alternative. Please repeat this for each of the statements (a) through (c) below. (If bus service is not available for this shopping or personal business trip, please rank the remaining three alternatives only.l
a. Assume the congestion fee of $\$ 2.00$ per day described on the preceding page was in effect. Please rank the following means of transportation for your next shopping or personal business trip.
( ) walk
( ) bicycle
( ) bus or transit
( ) car (driver or passenger)
RANK 2 RANK 3
27.4
21.8
29.1
24.8
21.6
13.7
22.1
21.1
16.6
32.1
b. Assume that instead of $\$ 2.00$ the congestion fee increased to $\$ 4.00$ per day. (Please rank
b. Assume t $\begin{aligned} \text { again.) }\end{aligned}$
33.7
22.7
22.4
18.4
( ) walk
( ) bicycle
() bus or transit
( ) car (driver or passenger)

| 28.4 | 19.8 |
| :--- | :--- |
| 31.6 | 21.9 |
| 19.1 | 24.0 |

$10 \cdot 6$
7.5
12.3
23.5
37.7
13.3

Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases to $\$ 1.50$ per gallon. (Please rank.)
33.4
24.3
21.8
17.7
) walk
( ) bicycle
( ) bus or transit
( ) car (driver or passenger)
28.6
31.6
19.9
$11 \cdot 6$
20.1
20.5
24.2
24.5
10.3
13.3

10,3
10.4
23.7
$38.3 \quad 7.9$

WE WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOUR MOST RECENT TRIP FROM HOME TC WORK.

1. What is the nearest interest intersection or street address of the place where you work?
2. Where is the place where you work located: No Answer: 2.8\%
$60.2 \%_{0}()$ centre city
$37.0 \%$ ( ) suburban
3. Specify the type of area where your work place is located. (CIECK CNE;
$23.4 \%_{0}$ ( ) central business district $/ 9.8 \%$ ) industrial district (downtown of metropolitan area)
$19.6 \%$ ( ) neighborhood business district or $8.6 \%($ office park/professional building
$2.8 \%()$ regional shopping center
$9.8 \%$ ( ) college campus or school
$12.6 \%$ ( ) other
$\frac{\text { (please secco: }}{}$
4. Approximately how far is it from your home to your work place (one way)? No Answer: 0.89,

$$
\begin{aligned}
& \text { 2.8\% ( ) } 2 \text { blocks or less } \begin{array}{c}
\left(\frac{1}{2}\right. \text { mile or less) }
\end{array} \quad 17.2 \%_{0}() 2 \text { to } 4 \text { miles }
\end{aligned}
$$

$$
\begin{aligned}
& 12.7 \%_{0}() \frac{k}{2} \text { to } 1 \text { mile } \quad 10.6 \%_{0}() 6 \text { to } 10 \text { miles } \\
& 17.0 \%_{0}() \text { ito } 2 \text { miles } \\
& \left.20.3 \%_{0}^{( }\right) \text {over } 10 \text { miles }
\end{aligned}
$$

5. What was the date of your most recent trip to work?
m.onth/ciay
6. At approximately what time of day did you make this trip to work? No Answėr - $1 . \nmid \%$
20.9? ( ! before 7 a.m.
$\left.6.3 \eta_{0}^{( }\right) 10$ a.m. to 2 p.m.
31.270 () 7 a.m. to 8 a.m.
5.9.0( ) 2 p.m. to 6 p.m.
21.5\% ( ) 8 a.m. to 9 a.m.
$7.9 \%$ ( ) after 6 p.m.

$$
\text { ( ) } 9 \text { a.m. to } 10 \text { a.m. }
$$

7. How did you make your most recent trio to work? (CHECK ONE) No Answeer $1.0 \%$.
10.5701 ) walked all the way
67.470() drove a car $7.3 \%$ ( passenger in a car


$$
0.67_{0}(\text { ) motorcycle }
$$

$$
2.59_{0}(\text { ) bicycle }
$$

$$
0.1 \eta_{0}(\text { ) moped (motorized bicycle) }
$$

0.37.1 ) taxi
1.57d , other $\qquad$

7a. If you answered bus, train or subway above, how did you get to your bus or transit stop?

8. Between the time you left home to 90 to work and the time you returned home, did you make any side trips that recuired you to travel more than one mile out of your way?
25.57. ( ) yes
$73.1 \%$ ( ) no
9. Did anyone accompany you on your last work trip: (CREC: ONE) No Answee 1.590
29.8\% ( ) I traveled alone
2.870 ( ) I was with two other Dersons
$14,07_{0}$, I was with one other person

$$
1.99_{0}(\text { ) I was with three or more persons }
$$

NOW WE WOULD LIKE YOUR OPINION OF DIFFERENT MEANS OF TRAVEL. PLEASE CONSIDER YOU'A MOST RECENT TRIP TO WORK WHEN COMPLETING THE FOLLOWING SECTION.

Imagine that only the following eotions were avaliatie to you on your nest recen: work tric: CAR (driving or riding), BLS (or transit), WALK, and BICYCLE. For your travel to work we would like to learn how you feel about each neans of transportation. Please give us your ooinicn of eacn means of transportation even if you never use it.

The :ollowing pages are labeled with the means of transportation ycu are asked to rate. Under each latel you will find a set of statements. Please read each statement and place an "X" in the space that best indfcates your agreement with the statements under each means of transportation you are rating.
for example, consicer the following statement for bus:


If you enjoy traveling by bus, you would put an "X" in the box under agree or strongiy agree, depending on how much you enjoy travei by bus. If you do not enjoy travel by bus, you would put an "X" under Ifsagree or strongly disagree. If you netther agree nor disagree you would place an " $X$ " in the center box. In the example shown here, an "x" has been placed in the box under "agree", indicating this person enjoys traveling by bus.

```
Secmuse we reec to urakrstanz how youn ratirg of youm trip to work yaries from one mears #%
```



```
crce :or each tecrs of traje? (witi, bicycle, corn, whit bus). Although this yrocess misit mFean
```



```
~ne 2Feciali: important tc the suceess of this sumyey.
```

Is your work place located iess than 6 miles from your home?





1. Bicy:ifng to work is pleasant because i can enjoy the scenery and surroundings.
2. When biking, it is convenient to stop and do errands on my way to and from work.
3. : can cick up and go anytime I like when I go to wort by Dicycie.
4. iraveiinc to work by bicycle is tiring.
5. Riding a bicycle to work is dangerous because of the heavy traffic.
6. When I ride the bicycle to work I worry about being late.
7. I cannot reiy on riding a bicycle to work in rainy weather.
8. I car easily carry my briefcase or other packages when ! rice the bicycle to work.
9. It is uncomfortable to travel to work by bicycle because of rough and bumpy riding surfaces.
10. I can get to work quickly when I go by bicycle.
11. I worry about being mugged or assaulted when I travel to work by bicycle.
12. I worry about being injured in an accident if I ride the bicycle to work.
13. It is relaxing to travel $=0$ work by bicycle.
14. I cisiike traveling to work by bicycle because of the many stops and delays at intersections.
15. Riding the tieycle to work is unsafe because of the lack of bike paths that are separated from motorized traffic.
16. Going by bicycle to work is dangerous because me:orists are inconsiderate of bicyclists.
i7. When bicyciing to work i worry about perspiring or soilling my clothes.
ie. Piding a bicycie $\mathbf{i}$ o work gives heal thful exercise.
17. Parking, locking and uniocking my bicycle at work is no :rouble.
18. After parking my ticycie : must walk a long distance when ! go to work
19. I worry about my bicycle being stolen at work.
20. It is inexpensive to buy and operate a bicycle.

if. $2 \pi \times \pi / 1 /$



$32.5 \%(142.49!; 4.925$; $115 \%$ ( $12.0 \%(1.7 \%$



8.24. ) 3j.7\% ) 23.67 ( $31.77(4.37(1.5 \%$
$6.1 \%_{1}() 35.390\left(120.9 \%_{0}() 28.9 \%_{0}\right) 7.17_{1}\left(1.7 \%_{1}\right.$
$4.6 \%_{3}\left(13.6 \%_{0}\left(22.0 \%_{0}() 46.8 \%_{0}(11.3 \% 1) 1.7 \%_{0}\right.\right.$
$\left.19.3 \%_{0}\right) 39.6 \%\left(166 \%_{0}(14.7 \%(3.0 \%(118 \%\right.$
$5.2 \%) 2 \% .5 \%() 26.37(159.5 \%(8.470(12.1 \%$
$6.9 \%$ ) $28.79!$ ) 26.3\% ( $33.4 \%\left(12.9 \%\left(18 \%_{0}\right.\right.$
35.47() 42.190() $8.97\left(10.390\left(1.6 \%_{0}(117 \%\right.\right.$
$\left.92.1 \%_{0}^{( }\right) 40.4 \%() 15.8 \%() 8.8 \%(10.8 \%() 1.79 \%$
$13.3 \%_{0}\left(136.77_{0}\left(21.5 \eta_{0}\left(124.3 \%_{0}() 2.3 \eta_{0}(19 \%\right.\right.\right.$
$36.3 \%() 53.875)=.4 \%(1.6 \%(10.7 \% 1,2.2 \%$
$9.9 \%_{0}(144.0 \%() 13.5 \%(123.891 ; 2.09,118 \%$
$0.9 \%$ ( ) 2.40 ( ) 13.276 ( $58842021.6 \%() 2.0 \%$
14.061 ( 3426 ( $1 / 4.2 \%(128.890(7.0 \%() 1.8 \%$
$19.7 \%()+7.7 \%() 127 \%() 12.9 \%() 4.2 \%(1 / 8 \%$
is gus service avetlabie oftweer your home and work place？
$=\pi \leq \%$ ！，yes

$$
40.5 \%() \text { no }
$$






reニ゙さ page.

Neither
$\begin{aligned} & \text { Strongly } \\ & \text { Agree }\end{aligned}$ Agree $\begin{aligned} & \text { Agree Nor } \\ & \text { Disagree }\end{aligned}$
Stronaiv
1．Going to work by bus is pleasant because I can $5.6 \%() 34.9 \%$ ） $29.0 \%$ ） $22.3 \%$ ； $72 \%$ ） $1.0 \%$ er．joy the scenery and surroundings．
 and do errands on ry way to and from work．
¿．I mist schedule $r y^{\prime}$ trios in advance when ！
 trave！by bus to work．

4．Traveling by bus to work is very tiring．

$$
5.6 \%_{0}\left(1 6 . 4 \% _ { 6 } ( ) 2 6 . 1 \% _ { 0 } \left(4 1 . 9 \% _ { 0 } \left(9.2 \%_{0}()\right.\right.\right.
$$

$0.8 \%$
 $0.7 \%$

E．When ：take the bus to work I worry about being 13.991 （ $40.6 \%$（ $17.7 \%$（ $123.9 \%$（ ）3．4\％（）
late．
$0.5 \%$

7．！cannot rely on takinç a bus to work in rainy weainer．
$7.30 \%$（20．6\％） $20.490\left(43.791 ; 7.5 \%_{0}(\right.$
$=5 \%$
8．I can easily carry my briefcase or other packages $6.3 \%\left(153.2 \%\left(114.1 \%_{6}\left(121.1 \%_{0}\right) 45 \%(10.5 \%\right.\right.$ when ！oo to work by bus．

〔．It is uncomfortable to travel to work by bus because of rough and bumpy road surfaces．

$$
\left.\left.\left.3.5 \%_{0}\right) 13.2 \%_{0}\right) 23.4 \%_{0}\right) 51.4 \%_{0}\left(7 . 8 \eta _ { 6 } \left(0.7 \%_{0}\right.\right.
$$

10．I can get to work quickly when I take the bus． 2.57 ） $16.37_{0}\left(19.3 \%_{0}\left(44.47_{0}\left(196 ?_{0}\right)\right.\right.$ $0.5 \%$

11．I worry about being mugged or assaulted when ！go 3．4\％（ $10.3 \%(16.9 \% 1) 54.5 \%() / 4.1 \%$（ $0.8 \%$ to work by bus．
 te work by bus．
i3．It is relaxing to go to work by bus．

$$
5.4 \%_{0}\left(\text { ) } 2 7 . 1 \% _ { 0 } \left(33.0 \%_{0}\left(127.2 \%_{0}\right) 6.8 \%_{5}() 0.5 \%_{0}\right.\right.
$$

14．：dislike traveling to work by bus because of the 13.89 （ $37.2 \%_{0}\left(19.7 \%_{0}(126.170(12.5 \%\right.$（ ） $2.7 \%$ mary stops and delays $a$ intersections．
15．I must walk a long distance te get to and from the 80\％）22．29，）14．97．（ $43.59(10.57$（） 2．9\％ bus when I oo to work．
16．There is generally a lone wait involved when I so to $15 \% 1$ ， $40.3 \% 1,21.5 \% 1 ; 20.0 \%$ ） $2.4 \%$ ， $1,2.7 \%$ work by bus．
17．When traveitinc by bus to work ！worry about perspiring or soiling $\pi y$ clothes．
＇$\because$ ．It is inexpensive ic trave？by bus $: 0$ work．


Is your work place located less than 3 miles from your home？
$47.4 \pi_{1}$ ；yes

$$
52.6 \mathrm{k} \quad(1) \mathrm{no}
$$

$$
\begin{aligned}
& \because \text { :ism miser is ES, please rate the staternents } \\
& \text { seiou sorceming hos icu ichivice a about walking } \\
& \text { to work ever is you ain not walk or your last } \\
& \text { - erik trio. }
\end{aligned}
$$

If your answer is ．10，please oo on＝0 tine remit page．

Strongly
Agree Agree

Neither
Agree Nor

| Agree Nor |
| :--- |
| Disagree $\quad \begin{array}{l}\text { Strongly }\end{array}$ |

No $23.2 \%$（ ） $41.7 \%_{0}\left(\right.$ ） $17.8 \%_{0}(13.1 \%() 3.1 \%() 0.8 \%$ $16.870($ ） 32.475 ） $11.770($ ） $32.970($ 7．17， $1.1 \%$ $18.0 \%_{0}\left(\right.$ ） $41.2 \%_{0}\left(13.6 \%() 21.4 \%_{0}() 5.091\right) 0.2 \%$ $6.17_{0}() 26.2 \%() 14.4 \%() 37.6 \%(14.6 \%() 1.1 \%$ $7.6 \%_{0}() 21.970\left(15.0 \%_{0}() 43.7 \% 1\right) 10.6 \%() 1.0 \%$ $8.2 \%_{0}\left(\right.$ ） $27.27_{0}\left(15.17_{0}() 37.27_{0}\left(11.30_{1}() 1.0 \%\right.\right.$ 1．ごった 0,87 when I walk to work．

9．It is uncomfortable to walk to work because of rough or bumpy walking surfaces．

10．I can get to work quickly when I walk．

11．I worry about being mugged or assaulted when I walk to work．

12．I worry about being injured in an accident if I walk to work．

13．It is relaxing to walk to work．

14．I dislike walking to work because of the many delays at intersections．

15．Walking to work is unsafe because of the lack pathways that are separated from motorized traffic．
16．Walking to work is dangerous because motorists are inconsiderate of pedestrians．

17．When walking to work I worry about perspiring or soiling my clothes．
18．Walking to work gives healthful exercise．

$$
\begin{aligned}
& 12.470(129.37 \text { ( } 22.19!\text { ) } 30.6731 \text { 4.89.j } 0.3 \% \\
& 4.7 \%_{0}\left(1 2 2 . 8 \% _ { 0 } \left(1 9 . 8 \% _ { 0 } \left(44.7 \%_{0}() 7.5 \%_{0}() 1.27\right.\right.\right. \\
& 42.2 \%_{0}() 48.7 \eta_{0}() 5.2 \%_{0}(11.1 \% \text { ( ) 1.0\% ( ) 0. }
\end{aligned}
$$

'When using a car, are you uskialiv a:
$84.6 \%($, car driser?

:ork trip, rate the atctements below con-
axming ncu icu iouid jeel abou= ariviry to work.
15.'to ( ) car passenger?

> if you tre usuaije a ame nassenger, ever
> if you iid not s.nocse auto "cr jcur list
> :ork trio, rate the smiterrents betow concaming incw vou vorld feel abcut going to Dorx as a prossenger.

ETecass answer all questicns iclow, even if you do rot cun a car.

1. Traveling by car to 'work is pleasant because ! can enjoy the scenery and surroundings.
2. When traveling by car, it is convenient to stop ard do errands on my way to and from work.

3. Traveling by car to work is tiring.
4. iraveling by car to work is dengerous because of the heavy traffic.
5. When I go by car t.0 work I worry about being late. 2.0\%() 99\%() 13.0\%()5i.29() $16.3 / 5()$
 weather.
6. I can easily carry my briefcase or other packages $35.2 \%$ ) $55.6 \%$ ) $4.0 \%(), 2.6$ when I travel by car to work.
 of rough or bumpy road surfaces.

 travel by car to work.

$$
3.09_{0}\left(14.6 \%_{0}() \approx 5.1901\right) 42.77_{0}(12.170(1.5
$$

12. I worry about being injured in an accident if I travel by car to work.
13. It is relaxing to travel by car to work.

$$
6.3 \%_{3}() 30.7 \%() 33.77\left(121.0 \%_{0}() 6.4 \%_{0}\right) 1.93
$$

14. I dislike traveling by car to work because of the many delays at intersections.

$$
5.17_{0}(122.52,3() 24.270() 40.79,1) 5.82,61
$$



 3t work.
18. It is thexpensive io buy and operate a car.
19. Parking the car at work is no troubie.


## WE WOULD LIKE TO KNOW YOUR PREFERENCES FOR VARIOUS MEANS OF TRAVEL TO WORK.

 most recent work trip. These alternatives are listed belch, Please incioz:e your preference
 mosi-preferred alternative, a "3" next to your third most-preferred alternative, and a "4" next: to your ieast-preferred alternative.

2. We would like to know how often you use each of the following means of travel for work trips from home. Place an "x." under your best estimate of the number of days you have used each means of travel during the last 30 days.

3. Assume that on your next work trip all travel conditions remained the same as present except that the price of gasoline increased to one of the price levels indicated below. For each gasoline price level, please indicate your transportation preference by placing a "9" next to the alternative you would prefer the most, a "2" next to the one you would prefer second, a " 3 " next to your third choice, and a "4" next to your least-preferred alternative. Please repeat for each of the price levels (a) through (d) below.

RH:JKED

$14.8 \% ; 12.1 \%$ no ilk
() 19.4; 17.7\%walk (;19.9; 19.9 \%walk
$10.1 \%$, $32.2 \%$ bicycle ! 114.3 ; 3 a. $=$ bicycle
$13.8 \% ; 32.3 \%$ bus
( ) 16.6; $=7.6$ pus
( ) 22.6; 32.0货icycle
( )24.4, 23.7 bicycle ()
$60.9 \%$; $10.5 \%$ car ( $149.1 ; 12.9$ car ( $129.3 ; 16.9 \% \mathrm{car}$ ( 24.7 ;14.17car ()

WE WOULD LIKE TO KNOW MORE ABOUT THE TR ANSPORTATION SERVICE AVAILABLE TO YOU PLEASE DESCRIBE THE SERVICE FOR TRIPS FROM HOME TO THE PLACE WHERE YOU WORK $B^{\prime}:$ ANSWERING THE FOLLOWING QUESTIONS:

i. If you were to ride your bicycle to work, what is your best estimate of the time you would spend doing each of the following?
getting the bicjcie to the street $\frac{2.54}{19.51}$ (minutes)
riding the bicycle
parking and rocking up the bicycle $\frac{3.40}{1.71}$ (minutes)
(malking from bicycle to school
TOTAL TIME FROM HOME TO WORK
(minutes)
2. Is there a bicycle path or marked bicjcle lane which you could use to bicycle on part or all of your trip from home to work?

4, s\%o( ) bicycle patn (off the street)
$10.6 \%$ ( ) bicycle lane (on the street)
42.97 ( ) neither
9.4\% ( ) don't know
1.67 () PDTH
3. What portion of your total trip from home to work is served by bicycle paths or bicycle lanes?
$42.47!$ ) none
$6.17_{0}()$ less than $1 / 4$ the distance
5.27 ( ) $1 / 4$ to $1 / 2$ the distance
2.19! ) $1 / 2$ to $3 / 4$ the distance
$2.89($ ) more than $3 / 4$ of the distance
$9.49 \%$ don't know

ABSNER Z =TEAAYCE EDCH ROME TC NCR: IS 3 YITES OR IESS.
4. If you were to walk to work, what is your best estimate of the time it would take from the monent you left home to the moment you arrived at work? (minutes)
5. Are there adequat? sidewalks or pathways you could use to walk on your tris frem home so work 32.8\% ( ) ail or almost all the way

$$
13.3 \overbrace{0}() \text { part of the way }
$$

5.49 d ) there are none
$1.4 \%$ ( ) don't know

## 

6. If you were to take the gus to work, what is your bes: estimate or the the fou would send doing each of the following?

| getting to the bus stop |  |
| :--- | :--- |
| waiting for the bus |  |
| riding on the bus |  |
| walking from bus to work | $\frac{18.10}{5.98}$ (minutes) |
| TOTAL TIME FROM HORAE TO WORK | 40.36 (minutes) |

7. Is it necessary to change buses to travel from your home to work?

$$
\begin{aligned}
& 24.37,() \text { Yes } \\
& 37.57_{0}() \text { No }
\end{aligned}
$$

8. Cut of ten trips, now often would you expect to have a seat on the bus all the way from home to work?
7.80 times out of ten
9. What is the one-way bus fare on your trip from home to work?
$\qquad$ () don't know
10. If you were to go by car to work, what is your best estimate of the time you would spend doing each of the following?

| walking to the car |  |
| :--- | :--- |
| driving or riding |  |
| parking the car |  |
| walking from car to work | $\frac{1,90}{14,93}$ (minutes) |
| TOTAL TIME FROM HOME TO WORK | $\frac{2,53}{2,43}$ (minutes) |
|  |  |


73.0\% ( ) no charge
$\left.14.9 \%_{0}^{( }\right)$daily charge

2.570 ( weekly charge
_ (collars)
$4 \% \%_{6}$ ) monthly charge $\square$

NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.
i. Did you ride a bicycle at least once during the past year? No Answer 0.17 57.27\% ( ) res
42.670( ) No (IE "NO", 60 TO THE NEXM PAGE,)
2. Did you ride a bicycle during the last 30 days? No tinsuter 0.370

צi0.125! ) Yes
26.87, ( ) No (IE NYO", GO MO NEX 2AGE.)
3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an " $x$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through "n") during the last 30 days.
a. To work
$21.4 \%_{0}\left(, 4.5 \%_{0}\left(1.4 \%_{0}\left(, 0.7 \eta_{0}(, 0.670() 1.475) \quad 0.2 \%\right.\right.\right.$
b. To school

c. For personal business $\left.14.3 \%_{0}() 11.5 \%_{0}() 2.1 \%_{0}() 0.6 \%_{0}() 0.5 \%_{0}() 0.7 \%_{1}\right) 0.5 \%$

e. To go shopping
$17.6 \%_{0}\left(9.2 \%_{0}\left(1.42_{6}()\right.\right.$
$0.67_{0}\left(, 0.39_{3}(1) 0.47_{0}^{1}\right)$
$0.6 ?$

g. Neighborhood riding

$$
\left.3.2 \%_{6}\right) 16.67_{6}\left(5 . 7 9 0 \left(1 . 7 0 _ { 0 } \left(1 . 1 7 _ { 0 } \left(1.59_{0}(100\right.\right.\right.\right.
$$

h. Long distance riding
$22.47_{6}() 5.8 \%_{0}($ $; 0.4701$ $0.3 \%_{0} 1$ 0.2961 $0.30!(1$

Is your work piace located less than 6 miles away from your home?

```
\(65.3 \%(\) res
    If your answer is ves, piease reci beiou.
```

```
\(34.7 \%\) ( \(\quad\) No
    If your answer is NO, piecse so on ic =2ze in.
```

NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO BICYCLE-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT BICYCLING TO WORK USING THE NEW FACILITIES.

## BICYCLE-RELATED FACILITY IMPROVEMENTS

Suppose the city introduces several improvements to bicycle-related facilities designed to increase the comfort and safety of cyclists. The improvements consist of (1) providing bicycle paths, (2) reserving street lenes for bicycle use, (3) improving road surfaces, (4) installing secure bicycle lock-up facilities in many areas, and (5) providing better lighting.

On most local streets, a yellow stripe is painted near the right hand side of the road, marking a lane reserved strictiy for bicycle use. Separate bicycle paths are built adjacent to all major roadways. These bicycle paths are separated from automobile traffic by metal guardrail or a grass median. All these paths and street lanes are smoothly paved for a better ride. In addition, high intensity lights are added along the bikeways to provide excellent visibility at night. A large number of secure bike lock-up facilities are provided and, in high employment centers, these consist of enclosed free storage lockers manned by a full-time attendant. Finally, convenient locker, shower and changing facilities are made available.

Zou =re now asked to express your agreement or disagreement with the fo:twing strtements about bicucting =0 wort, asswing the bicycle facility incrovements ciescribec ascue are araiiaible $=0$ you on your nem: ucrik trip. (You witi note that the list of statements is the same as that usea earlier. The purpose of this last rating is to finci out how you. sel aËout the bicycle-rehateci irprovenents.!

## YOUR RATING OF BICYCLE WITH FACILITY IMPROVEMENTE




1. Eicycling so work wouid be dieasant bezause i could enjoy the scenery and surroundings.
2. When tiking, it would be convenient to stop and do errands on my way to and from work.
3. I sculd rick up ard go anytine I like when I go to work by bicycie.
4. Friveinc to work by bicycie woule be tirins.
5. Ricirg a bicy:le to work would be dengerous because of the heavy traffi..
6. If I rode the bicycle to work, I would worry about being láve.
i. I could not rely an ricing a ticycle to work in rainy weatner.
e. I could easily carry my briefcase or other packages wren i rice the bicycle to work.
©. It would be uncomfortatle tc travel to work oy ticucle because of rough and bumpy surfaces.
7. I could get to work ouickly when I go by ticyele.
i1. I would worry about being mugged or essaulted when I travel to work by bicycie.
8. I would werry about teing injured in an accident if ! ride the bicycle to work.
9. It would be relaxing to travel to work by oisycle.
 of the many stops and deiays at intersections.
 lack of tike pains that are sedarated from motor traffic.
10. Going by bicycle to work wou?d be dangerous because $7.3 \%($ ) $25.1 \%$, $15.8 \%() 41.8 \%() 7.9 \% 1$ ) 2.1\% rotorists are inconsiderate of bicyclists.
 or soiling my clothes.
is. Riding a bicycle to work would give healthful exercise.
i引. earking, locking and unlockirç ry bicycie at work wo:ld be no troupie.

2C. jiter oarking my oicyzle : would heve to walk a iong distance when! go to work.
21. I would worry about $\pi y$ bicycie benges stolen at work.


YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR BICYCLING．PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP．

1．Please indicate your preference for the following alternative means of travel for jour next trip to work by placing a＂1＂next to the alternative you prefer the most，a＂2＂next to jour second most preferred alternative，a＂ $3^{\circ}$ next to your init most preferred alternative，and a ＂ 4 ＂next to your least preferred alternative．Repeat the process for each statement（a） trirough（c）below．
 altematives on iv．；
a．Assume the bicycle facilities are in place．please rank the following means of travel


6．Now assume the same condition as（a）above except that the price of gasoline has increased to $\$ 1.50$ per gallon．（Tease mani ascii．）
$31.5 \%$
$19.9 \%$
11.870 34．47。
（ ）bicycle with improved facilities
34.37019 .590
$8.7 \%$

| （ ）bicycle with improved facilities | $34.3 \%$ | $19.5 \%$ | $8.7 \%$ | 0 |
| :--- | :--- | :--- | :--- | :--- |
| （ ）walk | $19.5 \%$ | $27.3 \%$ | $26.4 \%$ | $6.9 \%$ |
| （ ）bus／transit | $21.4 \%$ | $24.8 \%$ | $18.3 \%$ | $23.7 \%$ |
| （ ）car（driver or passenger） | $17.4 \%$ | 20.870 | $21.4 \%$ | $5.0 \%$ |

c．Suppose that the bicycle facilities are in place and the price of gasoline increased to 53.00 per gallon．（Please rank．）
$42.7 \%$ $230 \%$ $16.0 \%$ $15.6 \%$

| $13.9 \%_{0}$ | $7.5 \%$ |
| :--- | :--- |
| $22.2 \%$ | $=0.7 \%$ |
| $27.6 \%$ | $13.7 \%$ |
| $28.4 \%$ | $32.9 \%$ |

（ ）bicycle with improved facilities $29.7 \%$
13.92
$\approx 2.7 \%$
（ ）walk
$27.5 \%$
19.17
$27.6 \%$
$13.7 \eta_{0}$
$2 \Xi, 6$
（ ）car（driver or passenger）
16.27
28.470
6.9

2．If only the alternatives listed below were available for your next ten trips to work，new many of
 to each ニitemażジン．）
$56.17_{2}=\%$ Tinges
bicycle with improved facilities
2.0
60．8 $7 \%=0 / 10$ İipes（）walk
$71.2 \%=\%$ Lings（）bus／transit
1.9
a $9.270=\%$ car（driver or passenger）
1.1
5.0
$32.1 \%=10 / 10^{\circ}$
（10）TOTAL TR：PS
$272 \quad \overline{10.0}$

## LIVING NEARER TO TRAVEL DESTINATIONS


#### Abstract

Many planners maintain that the use of automobiles has greatly increased the levels of air collution, energy consumption, traffic conge'stion and costly street and highway expenditures. It has been suggested that in order to reduce these problems people must ive nearer to the ir places of employment, shopping, school and recreation.


#### Abstract

Some communities have been designed with this compact land-use arrangement in mind. Their layout is such that most shopping and personal business trips can be accommodated within a six block (ts mile) distance, and most work trips are within two miles of home.


Suppose you live or moved to one such community. Suppose further that special bicycle paths and pedestrian pathways are provided so that it is possible to walk or bicycle to work without having to cross streets that carry heavy motor vehicle traffic; bicycle storing and lock-up facilities are provided in large numbers, free of charge, throughout the area; convenient bus service is available to work places; there are no special restrictions on the use of automobiles.

```
Now, please tum to the following pages and a=press how this compac# lanz゙-use arrangement woun.
Gffeet the way you fBei abcut using wALK, BICTCIE, SUS or CAR for your yere trin.
```

YOU HAVE JUST READ ABOUT AN ASSUMED LAND USE AND TRANSPORTATION CONDITION. IMAGINE THAT THIS CONDITION EXISTS ON YOUR NEXT WORK TRIP.

1. Please :indicate your agreement or disagreement with the following statement:

|  | Neither <br> Agree Jor |
| :--- | :--- |
| Strongly |  |
| Agree Agree | Strongly |

I would like to live in this type of community. $28.9 \%$ ( ) $36.3 \%$ ) $18.5 \%$ ( $17.9701 ; 4.57 \mathrm{~g}$, 3.5
2. Please indicate your preference for each of the following transportation alternatives on jour next trip to work, by placing a "l" next to the alternative you prefer the most, a " 2 " next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative, assuming the land-11se arrangement described above. Please repeat the process for each statement (a) through (d) below.
a. Assume the living conditions and special transportation facilities described on the previous page exist for your next trip to work, and assume further that your trip to work is approximately one mile away. (Please rank the solzowing means of mensortetion.;
$34.3 \%$ () walk
33.2\%
( ) bicycle
$29.3 \% \quad 16.89$

$\frac{1}{34,3 \%} \quad$ imately one mile
$37.0 \% \quad 14.0 \% \quad 9.1 \%$
$35.7 \% \quad 30.17$
$6.2 \%$
$10.5 \%$
( ) bus or transit
16.17
$25.9 \% \quad 35.5 \%$
5.7だ,
b. Now suppose that in addition to the conditions described in (a) above, the price of gasoline increased to $\$ 1.50$ per gallon. (Please rank aegir.)

| $35.0 \%$ | () walk | $32.5 \%$ | $15.1 \%$ | $12.0 \%$ | 5.470 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| $37.0 \%$ | $($ ) bicycle | $35.9 \%$ | $13.4 \%$ | $2.6 \%$ | $6.1 \%_{0}$ |
| $10.6 \%$ | $($ ) bus or transit | $14.6 \%$ | $42.4 \%$ | $21.9 \%$ | $12.5 \%$ |
| 15.370 | () car (driver or passenger) | $10.0 \%$ | $21.3 \%$ | $47.3 \%$ | $6.1 \%$ |

c. Assume the conditions described in (a) above and assume that in addition, the speed imit was reduced to 15 mph in the community. (piece ark.)

| $40.0 \%$ | $($ ) walk | $35.0 \%$ | $12.5 \%$ | $9.0 \%$ | $3.5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $38.2 \%$ | $($ ) bicycle | $38.0 \%$ | $10.7 \%$ | $7.2 \%$ | $5.9 \%$ |
| $8.7 \%$ | () bus or transit | $13.6 \%$ | $42.9 \%$ | $24.17 \%$ | $10.7 \%$ |
| $14.2 \%$ | () ) car (driver or passenger) | $8.6 \%$ | $24.0 \%$ | $47.07 \%$ | $6.2 \%$ |

d. Assure again the conditions described in (a) above but this time, assume no parking was available at your. work place. please rank.:


WE WOULD LIKE TO ASK YOU SEVERAL IMPORTANT FACTS ABOUT YOURSELF. THESE ARE IMPORTANT IN PROJECTING YOUR VIEWS TO THE TOTAL POPULATION OF YOUR COMMUNITY, YOUR ANSWERS WILL NOT BE IDENTIFIED WITH YOUR NAME AND ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How old are you? 37.2 (age) mean
2. What is your sex? $51.7 \%$ ( Male $4 \% .3 \%$ ( ) Female
3. How many adults ( 18 or over) including yourself are there in your household? $\qquad$
4. How many minors (under 18) are there in your household? 0.8
5. Do you have a valid driver's license?93.89\% ) Yes $58 \%($ ) No
6. How many licensed drivers (including yourself) are there in your household?

7. How many automobiles are there in your household? $\qquad$ .8
8. Do you own a bicycle?57.3\% ) Yes $42.1 \%_{0}($ ) No
9. How many bicycles are there in your household? $\qquad$
10. What type of structure do you live in? No Answer- $0.6 \%$

11. What is your educational background? (C.gECX ONE)

| $1.9 \%_{0}($ ) completed elementary school | $21.8 \%_{0}($ ) college or technical school -graduate |
| :--- | :--- | :--- |
| $6.3 \%($ ) some high school | $7.77_{0}($ ) some graduate school |
| $17.7 \%_{0}($ ) high school graduate | $17.0 \%_{0}($ ) completed graduate degree (s) |

$27.0 \%$ ( ) some college or technical school
12. Please indicate your work group below: Wo -Answer - 0.6)
86.79() work 5 or more days a week $2.0 \%$ ( ) work 1.2 days a week
$9.7 \%$ ( ) work $3-4$ days a week 1.091 ) presently unemployed
13. What is your occupation? (CRECK ONE) No Answer $0.5 \%$
$44.67_{0}($ ) professional-technical
$11.7 \%_{0}()$ managerial
17.67. ( ) blue collar
6.37. ( ) sales worker
14.2\% () secretarial-clerical-cashier
4.6? () other
$0.5 \%$ STuDENT Toizase spectiot
14. Does your job recuire you to dress up? (CEEC: C. TE) No.thewer $1.4 \%$ $50.599^{i}$ ) usually $15.57($ sometimes $32.670($ not usually
15. How many workers including yourself are in your housenold? $\qquad$ 1.8
16. Please check the category which includes your approximate family income before taxes. No Answer 6.1 io


In the space below we would welcome any other comments you would like to make. Enclose additional pages if you like.
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We would like to express our sincere thanks to you for completing this questionnaire.

Is jour work piace located less than ¿ miies Erニm jour nome?

```
42.1 Yes
=1.7% 110 (
```



NCW WE WOULD LIKE TO LEARN YOUR REACTIONS TO A NEW TRANSPORTATION IMPROVEMENT. THIS IMPROVEMENT, DESCRIBED BELOW, DOES NOT EXIST NOW. IT CONCERNS IMPROVEMENTS TO PEDESTRIAN-RELATED FACILITIES. AFTER YOU READ THE DESCRIPTION, YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT WALKING TO WORK USING THE NEW FACILITIES.

## PEDESTRIAN-RELATED FACILITY IMPROVEMENTS

Supocse the city introduces several improvements to pedestrian-related facilities designed to increase the comfort and safety of pedestrians. The improvements consist of (i) provicing pedestrian pathways, (2) improving sidewalr.s, (3) providing better lighting, and (4) making traffic sionals more pedestrian-oriented.

Separate pecestrian ways or walkways are built acjacent io all major roadways. These pathways are separated from automobile traffic by trees or grass medians. At all busy street crossings, pedestrians will be abie to cnange traffic lights in their favor. All existing sidewalks are repaired to make walking easier. High intensity ligrits are added along the pathways to provice excellent visibility at night. Finally, the waikways are enhanced by the presance of water fountains, snade trees, benches and pedestrian-oriented stands with flowers, newspapers and refreshments.





NOW WE WOULD LIKE TO ASK SEVERAL QUESTIONS CONCERNING YOUR BICYCLING ACTIVITIES.
i. Did you ride a bicjcie at least once during the past year?

```
( ) Yes
( ) No (IF "YO", GO TO TEE NEXT PAGE.)
```

2. Did you ride a bicycle during the last 30 days?
```
( ) Yes
( ) No (ES "MC", GO CO IEX: PAGE.)
```

3. We would like to know how often you use the bicycle for each of the following trip purposes. Place an " $x$ " under your best estimate of the number of days you have used the bicycle for each trip purpose ("a" through "h") during the last 30 days.
a. To work
b. To school
c. For personal business
d. io visit friends
e. To jo shopping
f. To a recreational activity
4. Neignborhood riding
h. Long distance riding (over 2 hours)

## YOUR RATING OF WALK WITH FACILITY IMPROVEMENTS




Strongly
Rgree



4. Walking to work would be tiring. $\quad 4.9 \%_{0}\left(121.3 \%_{0}\left(15.8 \%_{0}\right) 42.7 \%() 13.7 \% 1\right) 1.63$
5. Walking to work would be dangerous because of the $4.4 \%_{0}\left(, 9.0 \%() 8.7 \%_{0}\left(160.4 \%_{0}(1) 6.19 \%\right.\right.$ ( $1.4 \%$
heavy traffic.
6. If I waiked to work : would worry about being $6.3 \%() 23.2 \%(144.8 \%(145.4$ 分 $) 8.7 \%$ ( $) 1.6$ ?
i. : calle not reiy on walking to work in rainy $15.3 \%_{0}\left(152.0 \%() 8.7 \%_{0}^{(1)} 18.2 \%\right.$ ) $4.1 \%$ ( $1.6 \%$


10. I couid get to work quickly when I walk. $\quad 9.3 \%_{0}\left(131.4 \%_{0}\left(14.2 \%_{0}\left(138.0 \%_{0}\right) 5.79\left(1.4 \%_{0}\right.\right.\right.$

1:. I woule worry about being mugged or assaulted $\quad 3.8 \%(115.0 \%$ ( $13.9 \%$ ( walk to work. $154.2 \%() 11.2 \%$, $1.9 \%$

13. It would de reiexing to walk to work. $\quad 21.0 \%_{0}(147.6 \%() 15.3 \% 112.0 \%$ : $2.27(1.9 \%$
14. i would aislike walking to work because of the many $1.1 \%_{0}() 7.79_{6}\left(13.17_{6}() 63.1 \%_{6}() 13.4 \eta_{6}\right) \quad 1.6 \%$
15. Walking to work would be unsafe because of the lack $2.0 \%$ ) $2.7 \%_{0}(, 9.6 \%$ ( $) 57.1 \%$ ( $19.9 \%$, $2.7 \%$
i6. Walking to work would te canoerous because motorists $3.8 \%$ ) $164 \%$ ( $13.1 \%$ ( $152.8 \%, 1 / 20 \%(1.9 \%$
are inconsiderate of pedestrians.



## YOU HAVE JUST RATED TRANSPORTATION IMPROVEMENTS FOR WALKING. PLEASE INDICATE YOUR TRANSPORTATION PREFERENCES BELOW FOR YOUR NEXT WORK TRIP.

1. Please indicate your preference for each of the following alternative means of travel for your next trip co work, by placing a "1" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a "4" next to your least preferred alternative. Repeat the process for each statement (a) through (c) below.
(Is bus service is not available between your home and work place, rank the three remaining alternatives only.)

## Ranked

a. Assume the walk facilities are in place. Please rank the following means of travel for your

* 1
$30.0 \%$ next trip to work. Plea
9.87
( ) bicycle
$35.0 \%$
$30.9 \%$
15.87
$7.4 \%$
$4.6 \%$
( ) bus/transit
$23.8 \%$
13.17
28.170
$3.5 \%$
$52.7 \%$
( ) car (driver or passenger)
$8.2 \%$
$21.3 \%$
$13.4 \%$

20. 47,
$4.4 ?$
b. Now assume the same condition as (a) above except that the price of gasoline has increased to $\$ 1.50$ per gallon. (please rank again.)

c. Suppose that the walk facilities are in place and the price of gasoline increased to $\$ 3.00$ per gallon. (Please rank.)

21. If only the alternatives listed below were available for your next ten trips to work, how many of the ten trips would you make using each alternative? (Write the number of trips in the box mean to each aitamative.)


NOW WE WOULD LIKE TO LEARN YOUR REACTIONS TO AN ASSUMED REGULATICN CONCERNING AUTOMOBILES. AFTER YOU READ THE DESCRIPTION, YOU WILL BE ASKED TO ANSWER A FEW QUESTIONS ABOUT YOUR PREFERENCE FOR ALTERNATIVE MEANS OF TRANSPORTATION.

## AUTO CONGESTION FEE

$\therefore$ is decided that in order to reduce congestion and lower fuel usage, a fee of $\$ i .00$ will be assessea
t: the owners of automobiles operating during the morning ( $7-9 \mathrm{a} . \mathrm{m}$. ) and evening ( $4-\bar{\delta}$ p.m.) rush hours.
This reans that you would be charged up to $\$ 2.00$ per day if you operate a motor vehicie during these
feak travel periods. Blliling would be made on a monthly basis using an automated bilining process.


YOU HAVE JUST READ AN ASSUMED FEE ON AUTO USAGE. IMAGINE THAT THIS SITUATION EXISTS FOR YOUR NEXT WORK TRIP.
i. Please indicate jour agreement or disagreement with the following statements:
. I believe that a congestion fee of two dollars per day is desirable.
b. it would be inexpensive to travel by car with a congestion fee of two dollars per day.
2. Please indicate your preference for each of the following transportation alternatives for your next trio to work by placing a "l" next to the alternative you prefer the most, a "2" next to your second most preferred alternative, a "3" next to your third most preferred alternative, and a " 1 " next to your least preferred alternative. Please repeat this for each of the statements (a) through (d) below.

a. Assume the congestion fee of 52.00 per day described on the preceding page was in effect. ?lease Fl rank the following means of transportation for your next trip work.

b. Assume that instead of $\$ 2.00$, the congestion fee increased to $\$ 4.00$ per day. (Please rani. again.)
$14.9 \%$
$210 \%$
a $5.6 \%$
$30.0 \%$
$20.7 \%$
25.0\%
$=7.6 \%$
$25.8 \%$
8.03
() bicycle
$37.2 \%$
$\begin{array}{ll}20.7 \% & 16.2 \% \\ 13.3 \% & 21.0 \%\end{array}$
$5.5 \%$
7.7\%
( ) bus or transit
( ) car (driver or passenger)
$7.3 \%$
30.27,

2? ? 9
63\%
6. Assume that in addition to the congestion fee of $\$ 2.00$ per day the price of gasoline increases
to $\$ 1.50$ per gallon. (?lease rank.)
$19.7 \%$ () walk
2187
( ) bicycle
$21.5 \%$
24.67
$\therefore 5.39$
$8.9 \%$
$24, c^{\circ}$
( ) bus or transit
35.99。
27.5\%
5.97,
$8.9 \%$
$24.0 \%$
( ) car (Driver or passenger)
$21.9 \% \quad 16.2 \%$
$7.7 \%$ $30.2 \%$
$30.6 \%$
$12.2 \%$
$21.470 \quad 28.87$,
$2.4 \%$
d. Assume that the congestion, fee of $\$ 2.00$ per day was in effect, and assume further that your employer allowed you to arrive before $7: 00 \mathrm{a} . \mathrm{m}$. and leave before 4:00 p.m., or to arrive after 9:00 a.m. and leave after 6:00 pom. (Flecse rank.)


## FIGURE B-1

AUSTIN
MODE CHOICE VS. FUEL PRICE

Figure B-2
COLUMBUS
MODE CHOICE vS. FUEL PRICE

FIGURE B-4

PIHLADELPIIIA
MODF choice vs. FUEL PRICE

MODE CHOICE vs. FUFI PRICE


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\begin{aligned}
& \text { Total (4 Cities) } \\
& \text { MODE CHOICE vs. FUEL PRICE }
\end{aligned}
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PIGULIE: B-7
NUSTIN
MODE CHOICF vS. FUEL PRICE
(


FIGURE B-1O
HUNTINGION BEACII
MODE CHOICE vS. FUEL PRICE.

FIGURE B-11
P'IIILADELPHIA
MODE CIIOICE vs. FUEL Price

ic Modal
Preference
907
Total (5 Cities)
MODE CHOICE vs. FUEL PRICI

Shopping/Personal Business
figure b-12

FICURE :B-13
AUSTIN
IMPROVED PEDESTRIAN FACILITIES
lus increased fuel prices
Shopping/PERSONAL BUSINESS

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LUS INCREASED FUEL PRICES．．．．Shopping／Personal Business
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IMPROVED PEDESTRIAN FACILITIES
PLUS INCREASED FUEL PRICES Shopping／Personal Business

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FIGURE H-19 PLUS INCREASED FUEL PRICES
FIGURE B-20


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Philadelphia
IMproved Bicycle facilities
Plus increased fuel Prices
PLUS INCREASED FIJEL PRICES



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FIGURE B－33
Shopping／Personal Business


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\end{aligned}
$$ CNVEIRRND SICEUFLEX TIRING DANGER LATEHORY RAINRELY PCKAGES

$$
-0.15846
$$

$$
\begin{array}{r}
0.35073 \\
0.75309
\end{array}
$$ FACTOR

$$
\begin{aligned}
& \text { EIGENVALUE } \\
& 5.00794 \\
& 1.66772 \\
& 0.78095
\end{aligned}
$$ FACTOIL


VARIMAX ROTATEA FACTOR PIATRIX

$$
\begin{aligned}
& m \\
& \begin{array}{r}
-0.07006 \\
-0.03507 \\
-0.06416 \\
0.21509 \\
0.02625 \\
0.19470 \\
11.15597 \\
-0.07971 \\
0.11712 \\
-0.06160 \\
0.12473 \\
0.04209 \\
-0.07833 \\
0.02525 \\
0.111500 \\
0.61222 \\
0.31347 \\
0.17156 \\
-0.77280
\end{array}
\end{aligned}
$$

PCT
46.7
62.0
76.6
$\qquad$





## IT-D aTGVI <br> Factor Matrix for Car:

n




VARIMAX ROTATED FACTOR MATIIX 09 9. 0 02 6
0
0
6
0
0
0
1 N
0
$\sim$
-1
0
0 0
0
0
K
0
0 $-0.06630$
 0
0
0
0
0
0 0
0
$M$
0
$M$
0
0 0
$=$
0
0
0
 $e-1$
$e$
0
0
0
0
0
0
0
0 0
0
0
0
-1
0
0 EIGENVALUE

[^4]

COMPIUNALITY




3

## Fnctor

$\Omega$



GREATOUT
CNVERRNO
SHEDFLEX
TIIIIMG
OANGER
LATEWORY
RAIMRELY
PCKAGES
BUMPY
SPEEO
MUGGEO
INJURY
RELAX
INSCTOLY
OSTTORUS
RUSWAIT
SHEAT
COST
3.28075
1.70763
1.19635 - N M


|  |
| :---: |
| greatout |
| caverrad |
| SKEISIEEX |
| TIRING |
| OANGER |
| Latewony |
| Rainrely |
| PCKAGES |
| Bumpy |
| SPCED |
| MUGGED |
| Induny |
| RELAX |
| InSCTDLY |
| DSTTOBUS |
| DUSWAIT |
| SUEAT |
| OS |


|  | FACTOR | FACron | Fnctor | 3 |
| :---: | :---: | :---: | :---: | :---: |
| gREATOUT | -0.14677 | -0.00339 | 0.68304 |  |
| CNUERIRNT | -0.09175 | 0.21590 | 0.03647 |  |
| Sheinfex | 0.01324 | $0.0052^{4}$ | $-0.00630$ |  |
| TrRIMg | 0.27674 | 0.20921 | -0.000140 |  |
| Danger | 0.70902 | 0.04770 | -0.11369 |  |
| lateloniry | 0.26050 | 0.50104 | -0.11681 |  |
| mainRely | 0.26727 | 0.22150 | -0.14730 |  |
| pCKASES | -0.11757 | $-0.03127$ | 0.25709 |  |
| bupiry | 0.5665 ? | 0.07452 | -0.160?? |  |
| SPEEO | -0.10170 | -0.69097 | 0.23527 |  |
| Prugren | 0.40190 | 0.12819 | 0.02716 |  |
| InJuny | 0.78345 | -0.01224 | -0.06402 |  |
| RELAX | -0.10376 | -0.09605 | 0.70536 |  |
| InSCTILy | 0.311660 | 0.10297 | -0.23453 |  |
| osttonus | 0.19010 | ก.16729 | 0.14115 |  |
| Dushart | 0.06912 | 0.59553 | -0.03903 |  |
| Slleat | 0.41906 | 0.164 .31 | -0.13709 |  |
| cosr | 0.10506 | -0.24064 | 0.11046 |  |



VARIMAX ROTATEO FACTOH MATRIX
COMMUNALITY


Finctor Matrix for Bus:
sdfal yxom, 4Dean wo78ulfuni
$m$

FACroll
-0.11332
0.16301
0.49736
0.25018
-0.02059
0.34906
0.10723
-0.09333
-0.05131
-0.16690
0.10660
-0.03000
-0.10790
0.27851
0.30606
0.71073
0.00699
-0.04121
~

FACTOR

PCT OF VAR
PCT OF VAR
CUM PCT
ergenvalue
4.67965
1.16765
0.67765
63.1
$02.9^{\prime}$
92.1 $a$
varimax rotaten factori matilx ghentout CNVERRND
SIKEDFLEX
TIRING
OANGER
LATENORY
RAINRELY
PCKAGES
BUMPY
SREED
MUGGED
INUURY
RELAX
IMSCTRLY
OSTTORUS
BUSVART
SWEAT
COST
COMMUNALITY


VARIABLE．
ON\＆UJANJ
InOLV3 SKEOFLEX
IIRING $c$
$u$
$=$
2
0
0 AVOMJIV7
 diwng
SJ9V $\begin{array}{ll}\infty & 0 \\ 2 & m \\ 2 & 0 \\ 2 & 18\end{array}$ MUGGEB งUMTNI RELAX人701JSNI 4
$\frac{4}{4}$
2
2 INCONSID $=$
$=$
$=$
$=$ Factor Matrix for Walk：



NHE
$\cdots \infty$

## 

GREATOUT CNVERRNO SKEOFLEX TIRING LATRWORY A Tjundiva SJつvリJd Bumpy 0
4
$\omega$
$\omega$
$\omega$ MUGGE？ RELAX INSCTOIY UNSAFE INCONSIO SWEAT

HEAL THY
COMMUNALITY

Factor Matrix for Walk

[^5]VARIAILE
GREATOUT
CNVEIIRNO
SISEOFLEX
TIRIHG
DAMGER
LATEWORY
RAINICLY
PCKAGES
BUMIY
SPEEU
MUGGEA
INJURY
RELAX
INSCTOLY
UHSAFE
INCOHIIO
SHEAT
HEALTIY

N
\[

$$
\begin{aligned}
& \text { GREATOUT } \\
& \text { CNVERIRNI } \\
& \text { SIKEOFLEX } \\
& \text { YIHING } \\
& \text { OANGER } \\
& \text { LATEHOIYY } \\
& \text { IIAINIIELY } \\
& \text { PCIRAGFS } \\
& \text { OUPMY } \\
& \text { SSEEO } \\
& \text { MUGGED } \\
& \text { INJURY } \\
& \text { RELAX } \\
& \text { INSCTDLY } \\
& \text { UNSAFE } \\
& \text { INCOHSID } \\
& \text { SWEAT } \\
& \text { HEAI.TIY }
\end{aligned}
$$
\]

FACrOR



PCT
60.8
80.7
91.7 0
0
0
0
0
0
0 1705
1641
1070
8332
6301
8194
9862
2488
2959
7572
1945
5880
6065
7627
3203
2351
6815
1205

Factor Matrix for Walk:
Huntington Beach Work Trips


| -0.01357 | 0.67924 | - GREATO | 0.569 |
| :---: | :---: | :---: | :---: |
| 0.03612 | 0.53114 | CNVERRNO | 0.30757 |
| 0.08726 | 0.27793 | SKEOFLEX | 0.35401 |
| 0.62879 | -0.22387 | -TIRING | 0.56320 |
| 0.02056 | -0.12693 | oanger | 0.82762 |
| 0.39236 | -0.09476 | LATEHORY | 0.56587 |
| 0.27610 | -0.00328- | - RAINREL | 0.43602 |
| -0.13861 | 0.09505 | PCKAGES | 0.24077 |
| 0.31983 | -0.07825 | BUMPY | 0.43783 |
| -0.14910 | -0.24092- | - Speer | 0.41651 |
| 0.52399 | 0.08334 | MUGGED | 0.45735 |
| 0.01785 | -0.21753 | IMJURY | 0.66778 |
| -0.54883 | -0.68850- | PELAX | 0.84560 |
| 0.45130 | -0.24772 | INSCTOL | 0.56801 |
| 0.17598. | -0.13780 | UNSAFE | 0.74598 |
| -0.19847 | -0\%00295- | - INCONSID | -. 0.56125 |
| 0.47103 | -0.08487 | SHEAT | 0.43334 |
| -0.21391 | 0.54611 | HEALTHY | 0.38338 |

$$
\begin{aligned}
& \varepsilon 6400^{\circ} 0 \\
& -19120^{\circ} 0- \\
& \hline 06150^{\circ} 0-
\end{aligned}
$$

$$
\begin{array}{r}
11.0 n 219 \\
-11.02067
\end{array}
$$

$$
.77247
$$

$$
\begin{aligned}
& 17507 \\
& 77247
\end{aligned}
$$

$$
\text { 1. } 1.11 \text { VAI.UI }
$$

$$
\begin{gathered}
0.14209 \\
-0.04000 \\
0.09041 \\
0.10065 \\
\hline 0.10812 \\
0.23590 \\
-0.011074 \\
\hline-0.59010 \\
0.55710 \\
-0.12346
\end{gathered}
$$

$$
\begin{array}{rr}
0.131116 & 0.07600 \\
0.11209 & -0.07973 \\
\hline
\end{array}
$$

$$
\begin{array}{rr}
-0.04000 & 0.10255 \\
0.09041 & 0021
\end{array}
$$

$$
\begin{array}{ll}
0.10065 & -0.02764 \\
0.10012 & -0.01301
\end{array}
$$

$$
\begin{array}{rr}
0.23590 & 0.21475 \\
0.10 .05190
\end{array}
$$

ret of

$$
\begin{gathered}
51.2 \\
23.8 \\
9.9
\end{gathered}
$$

$$
0.16900
$$

vnll

$$
-0
$$

$$
\begin{aligned}
& \text { PCT } \\
& 51.2 \\
& 75.0 \\
& 04.9
\end{aligned}
$$

```
r.um
```

:

$$
L L K \leftrightarrows ょ \cdot 11
$$

$$
20
$$

FAC：10い E $14 L^{\circ} 1$
$\left\{4 L^{\circ} 0\right.$

ก．＇j！in9？ $-11.19 \cdot 3.3$
$-0 . j \log 0$
 1，リッ1／8＂＂ ツぐなしでいー 0.11111 $E$
$C$
$\vdots$
$\vdots$

$\vdots$ | e |
| :--- |
| $c_{2}$ |
| $\vdots$ |
| $\vdots$ |
| $\vdots$ | 11．60671 － $0.03 n 56$ くいど1000 －0．0リnl3


 $\dot{c}$
lll：16 lif） $=$
$E=$
$\vdots=$
 17．11！11 V 11 511.111
R110．F1．11

 licartsill

「！） 1

$$
\text { } \operatorname{AC.I} \operatorname{lil} \quad G
$$

 く6り110．0

 $\qquad$ －0．nálot $0.03 リ 50$
$-0.1902!$ くを゙った。 -0.17755
0.114133 －0． 055111. － 1$) .113 .230$ 0.501314 $-0.121116$ $0.11231!7$
0.14656
 $90900-0$ 0.20751 0.43565
 PCT OF

[^6]
## $02-3$ alave

Factor Matifx for Bleycle

> NKIHAX HOTAI!D. FACIOR MATRI
$\longrightarrow-$



1. ATridn) Y
"fflldiray
$=$
$=$
$=$
$=$
$=$
$=$
$\chi$
$=<$
$\vdots=$
$\therefore=$

llir.uidell.
III_ ALI'HY

Cい先



|  | ractor | FATTOR 2 | ractor | factur | Factor 5 | variable． | complumalt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ginen thut | －0．09665 | ก．20397 | 0.05962 | 0.36700 | 0.01870 | greatout | 0.23 ar － |
| churbram | －0．11357 | 日．¢пリ56 | －0．05092 | －0．05216 | －0．03334 | chiverina | 0.51690 |
| skroriex | －0．04187 | 0.52204 | －0．11072 | －0．06071 | 0.06227 | skrpriex | 0.29594 |
| ramilis | ก．46nt3 | －0．14199 ${ }^{\text {a }}$ | 0.110943 | －0．01106 | n． 10470 | thajerig | 0.41830 |
| linatir： | 0.7011 .5 | －0．08444 | 0.02559 | 0.10081 | 0.0028 2 | hadger | 0.516 .14 |
| lntamory | 0.04 ars | －п．11197 | 0.32395 | －0．00596 | 0.01630 | latevory | 0.12 .776 |
| R，TrMEETY | 0.21908 | － 0.131177 | 9． 6.67790 | 0.18216 | 0.018837 | baithifur | 0.530 \％ |
| Peknots | ก．0リフプ | 0.39579 | －0．19611 | －0．07124 | －0．22750 | bickaries | 0.25910 |
| biuper | 0.10858 | －0．10194 | 1］． 18605 | 0.14010 | 0.21069 | buitry | 0.27352 |
| Sider | －0．076．27 | 0.55224 | －n．23636 | －0．090方 | $-0.05171$ | Spefin | 0.38271 |
| \％heren | ก．23544 | －п．11243．8 | 0.23905 | 1）．15608 | 0.66290 | mugrico | 0.57696 |
| Ilisuily | 0.6111 .37 | 0.01191 | －0．02667 | 0.12555 | 0.35699 | manury | 0.521 .55 |
| RELAX | －10．33410 | 0.391211 | ก．10291 | 0.22131 | 0.00450 | helay | $0.3242 \pi$ |
| ivsernty | 0.354733 | －0．11030 | 0.06953 | －0．00201 | －0．08996 | masctinly | 0.31051 |
| prikrixnes | 0.07754 | －0．？2966 | 0.20573 | 0.50994 | 0.22319 | PEKFAPNS | 0.11094 |
| ¢LKAFPRA | 0.37976 | －0．13404 | 0.29560 | 0.47170 | －0．02317． | dikafrris | 0.972 ¢5 |
| Titet | 0.3711 ？ | －0．11．323 | －0．01597 | 0.45756 | 0.21518 | THEF | 0.110617 |
| cosit | －0．03486 | 1．00450 | 0.315211 | 0.16411 | 0.13266 | COST | 0.15290 |
| bliknsatror | －0．29526 | 0.26732 | －0．05401 | －0．33168 | 0.00503 | PRKATSHP． | 0.27168 |
| 岂 |  | factore | eigenvalue | det of var | cum pet |  |  |
|  |  | 1 | 3.72735 | $5 \overline{3} .3$ | 53.3 |  |  |
|  |  | 2 | 1.22048 | 17.5 | 70.0 |  |  |
|  |  | 3 | 1.04743 | 15.0 | 85.8 |  |  |



|  | FACTOP？ 1 | YNCTOLR | FACTOR | 3 racton 4 | FACTOR 5 | VARIIABIL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| dilif．inder | －0．084 12 | 0．06， 517 | 1）． 050115 | $0.02946^{-}$ | 0.44129 | GKL．ATAIST |
| C．jvfrlerma | －0．12nct | 1）．7？071 | －0．03195 | －0．17391 | 0.10633 | CNVERRATI |
|  | －0．06120．0． | 0．＇りバす」 |  | －0．12066 | ก．02718． | SKENFErx |
| 1 11：1 ivf： | 11．151．？${ }^{\text {a }}$ | －－ジのn！ | 0．1年273 | 0.11186 | －0．1．3420 | Tlllimo |
| ！1．1rlials | 0．1．ritn 1 | －п．！＇リハ1f． | 0．03613 | －0．10161 | －0．25102 | DANGER |
| LATP．What | ก．J． 17 「ı | 0．6n4ril | ก．35155 | －0．02001 | 0.05210 | Lntrhomy |
|  | 11．32．2ヘ3 | －－っらく37 | 0.51113 | －0．006113 | 0．1066？ | HAINRELY |
| rcks．ts | 10．11217 | 0．2ヶリリッ | －0． 57300 | －0．237ก7 | 0.14318 | PCRMEES |
| 1）11917 | 0.39510 | －ク．1F9！？ | 0．308）2 | 0.04597 | 0.09077 | Humpr |
| ¢小「卜！ | －11．07：150 |  | －11．3732．1 | － 0.378088 | 0.29371 | SHEEG |
| Fillifill | 0．97：0．． | －n．011393 | 0．2？780 | 0． 27190 | 0.04690 | MUSOREO |
| 11：JHIIY | $0.711!$ 3！ | 0.0176 | ก．10190 | 0.11114 | －0．16G66 | IHJUKY |
| REしが兄 | －0．2．3110 | 0．10ヶ90 | －0．00465 | $-0.1771 .3$ | D．64574 | M1． $1.0 x$ |
| fllior lra＿y | 0.5 .5346 | －7．11nG14 | $0.7605 ?$ | 0.03596 | －0．17295 | ［ Misctioly |
| Phat x！els | 0.39150 | －0．1501G | 0.17296 | 0.35791 | 0.33267 | PIRISEXINS |
| Wl Y．ñllil： | $0.40 x ワ y$ | －0．17111 | 0．11347 | 0.51242 | 0．2．6495 | WLKAFPRK |
| l｜l｜＇｜ | 0.60156 | －0．00152 | 0.10142 | 0.36332 | 0.09199 | TIIEF |
| Cosis | $0.0211 ?$ | 10.013 .11 | 0.2 .9 .367 | －0．01288 | 0.24720 | COST |
| Miknlslin | －0．06173 | ก．16289 | （1）．01501 | －0．5136B | 0.16252 | Pl？KATSIIP |

Vnisbinx ronalra ractur rintlilx



VARIMAX ROTATFD 「ACTOR MATHIX

|  | FACTOH 1 | racroir | ？FACTOR |  |
| :---: | :---: | :---: | :---: | :---: |
| GMFATOUT | $-0.09123$ | $-0.031505$ | 0.70530 | Glif．ntout |
| CHVIR12M0 | 0．064．58 | －0．15534 | 0.36730 | Crivr！emin |
| SKFOFLEX | －0．07512 | ก．17249 | 0.01094 | SKCDFLEX |
| 1121／SS | 0.44482 | 0.45 T | $-0.1349{ }^{-0}$ | TyHJM？ |
| Uninsern | 0.71150 | 0.01341 | －0．02061 | DAmcie： |
| Lntrimenky | 0.29613 | 0.22105 | －0．13324 | LATt．th） |
| RATMEELY | $0.33944{ }^{\text {0 }}$ | 0.39936 | －0．125う而 |  |
| pCKAbics | －0．3ก057 | $-0.143347$ | 0.22027 | PCKAEIS |
| limily | 0.51159 | 0.09009 | －0．09721 | buripy |
| SJETV | 0.01936 | $-0.5459 .3$ | 0.33768 | SHFCH |
| MuSiSF．．l | 0.65990 | 0.02208 | －0．065774 | MHGGER |
| MMJリliy | 0.02110 | －0．101120 | －0．00713 | iflulit |
| HrLny | －0．13572 | －0．244．3 | 0.69302 | RELAX |
| INSCTELY | 0.50096 | 0． 25526 | －0．10675 | IHSCTMLY |
| OSTTORIs， | 0.383544 | 1）．44869 | 0.00345 | DSTTOMUS |
| ？lEHAT | 0.17564 | 0.56718 | －0．12454 | BUSWNYT |
| Sritenr | 0.605 .51 | 0.13625 | 0.04412 | SWEAT |
| cost | －0．73077 | －0．083．36 | 0.21015 | COST |

$$
\begin{aligned}
& 0.50722 \\
& 0.34433 \\
& 0.22940 \\
& 0.113902 \\
& 0.55041 \\
& 0.15431 \\
& 0.29041 \\
& 0.30125 \\
& 0.27929 \\
& 0.115763 \\
& 0.44054 \\
& 0.68193 \\
& 0.55950 \\
& 0.35170 \\
& 0.35308 \\
& 0.36040 \\
& 0.30716 \\
& 0.13761
\end{aligned}
$$

$\square$
$\square$


## Factor Matrix for Bens：

Ifunt liggton Beach ShoppIng Trips

| Vhlirsill |
| :---: |
| Gill Alワ！ | TNไI＞用へ！： SNE UFLEX

TIHInf
（ANGEIR
LATHIJORY
IRGIPIRFLY NCKABES
PUi！！
muriritin IMIJUIRY INSCTDLY JSTro！uUS PUSWATT Shent Cos



-0.195756
$-0.16,360$
0.03673
0.142793
0.45511
-0.101536
-0.09143
-0.50001
-0.29201
-0.155756
$-0.16,360$
0.50276
0.35097
0.76154
-0.37110
-0.13 .302
-0.25326
-0.12352
0.16708
-0.10663
0.455119
-0.11536
0.50276
0.35095
0.06154
-0.37110
-0.13302
-0.25325
-0.12352
0.16308
-0.10663
0.145 .311
-0.111536

ralin rout chivemino SKI RFLEX

LinNr，til
Latruñy RAPNRELY pernises almpy srifor अいになじ） IIJJJRY REL．AX IMSCTIULY nst TOMIS ロบ：ういのIT SNTM

$-0.032 \pi=$
0.14254
0.02350
0.20774
0.73279
0.10369
0.04359
-0.19325
0.70161
-0.01319
0.67071
0.76176
-0.07601
0.40051
0.03212
0.013339
0.50471
-0.10310
0.09271
0.10092
0.10150
0.1 .7100
-0.0.…- -
FACtor

FACTOR



$=$
$=$
$=$
$=$
0
$=$ $E \pi$
$=\pi$
$=\pi$
$=0$
$=0$ $c$
0
0
0
0
0

$$
\begin{aligned}
& 6 \text { ? }
\end{aligned}
$$


[^0]:    I would like to live in this type of community.

[^1]:    7ou are now asked to emress yous afrement or disagreement with the folzowing statements ajout bicuciing to work, asswing the bieycie jacility improvements described above are available to jou on your rent wori nip. ? ?ou will nate that the list of statements is the same as that usec eariier. The turpose 0 :his last mating $i s$ to find out how you :eei aisut the oicycle-relatec incrovements.)

[^2]:    Beccuse we neei to understand how your rating of your shopping or personal business trip varies from ons means of trensportation to another, we cre asking that you go through the list of choracteristics four times, once for eacin reans of travel (waik, bicycle, 60 , and jus). Although this procese might arpear repetitious, we want to stress that your carefut ratings of aii the starements on the neat four pages are especialty important to the success of this survey.

[^3]:    FACTOR

[^4]:    4.33019 0
    0
    0
    0
    0
    0
    0
    0
    0
    0
    0

[^5]:    Denver Work TrIps

[^6]:    1.01350
    0.3700

