

**1994/1995 WALKING AND RUNNING SURVEY OF  
HOUSEHOLD RESIDENTS**

**prepared by:**

**MAINE BUREAU OF PARKS AND RECREATION  
DEPARTMENT OF CONSERVATION**

**for the:**

**MAINE DEPARTMENT OF TRANSPORTATION**

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## PREFACE

A mailback survey of Maine residents of walking and running use, opinions and preferences was conducted by the Bureau of Parks and Recreation from November, 1994 through February, 1995 to gather data needed by the Department of Transportation as input into the preparation of State Bicycle and Pedestrian Transportation Plans. The data gathered from this survey, a companion bicycling survey, and a survey of all trail activities in 1991/92, will be used by the Bureau of Parks and Recreation in the preparation of a State Trails Plan.

Walking has long been a popular outdoor activity of Maine and United States residents. As Maine's population ages walking will continue to be a very popular activity, especially for the purpose of exercise and pleasure. According to past surveys participation in walking by Maine residents increased annually by approximately 5.5% between 1977 and 1992. In terms of total user days walking is by far the most popular outdoor recreation activity in Maine. In terms of total annual activity hours walking outpaces both running and bicycling; 263 million walking hours to 65 million running hours to 134 million bicycling hours as estimated from the results of this survey and the bicycling survey.

Walking has always been an important mode of transportation to and from work or school. Over the years however, the percent of those who walk to work or school has declined because transportation alternatives have increased, year round housing developments are located further from the place of work or school, and there are fewer sidewalks and/or safe walking shoulders along roads. However, there is a renewed interest in locating places of work and schools within the core of the community they serve or from which they draw the largest portion of their workers. The results of this survey clearly show that individuals of all ages are walking and that many would walk to work or school if walking conditions were adequate and safe. With special federal funding sources for non-motorized transportation modes the opportunity exists to identify and provide safe and attractive facilities for walkers to travel to and from work, school, shopping and business complexes or their favorite recreation areas.

Running and jogging are activities that had been growing but are expected to stabilize and perhaps even decline in total activity hours as the population ages. Even so running/jogging was the third most popular outdoor recreation activity in terms of total annual activity days in 1992 of 30 activities surveyed, just behind walking and driving for pleasure/sightseeing. Walkers and runners generally share the same space - a roadway shoulder, sidewalk or fitness center - therefore it was appropriate to survey residents regarding both activities with the same questionnaire.

Special thanks are extended to the many who helped create and pre-test the questionnaire, staff members of the Bureau of Parks and Recreation who aided with data entry, and the 408 resident households who responded to the survey.

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## DEFINITIONS

**Participation Rate:** The percent of Maine residents age 5 and over that take part in walking or running at least once a year, or, for some questions, at least once a season.

**Activity Days Per Participant:** The average number of days (or times) in a season or year a walker or jogger participates in walking or jogging.

**Mean:** The average of the total of a group of individual items, obtained by summing the total of the items and dividing by the number of items.

**Median:** The value of the middle item when the items are arranged according to size. If there is an even number of items, the midpoint is taken as the arithmetic mean of the two central items.

**Mode:** The most frequent or most common value of a group of individual items.



## MAJOR CONCLUSIONS

1. As the population ages total annual walking hours or times will increase while running/jogging hours or times will decrease. Walking will continue to be one of the most popular, if not the most popular, outdoor activity in Maine.
2. Residents walk for a wide variety of reasons including exercise, walking the dog, shopping, nature observation and visiting friends or relatives. Runners and joggers run almost exclusively for exercise/fitness/pleasure.
3. There are several obstacles to safe and enjoyable walking and running in Maine. These include road shoulder surface conditions, insufficient shoulder widths, inadequate plowing of walkways and sidewalks and motor vehicle speed.
4. Walking is not a common mode of transportation for travel to and from work. Those who do not walk or run to work cite the distance they must travel to work as the major problem. Other problems include a need for their personal motor vehicle for work errands, winter ice/snow conditions and fluctuating work schedules. Urban residents are also concerned about a lack of showers/changing facilities at work.
5. Walking is not a common mode of transportation for travel to and from school. Those who do not walk or run to school cite the distance they must travel to school as the major problem. Other problems include winter ice/snow conditions, lack of safe road shoulders, heavy motor vehicle traffic, concern on the part of parents and a lack of sidewalks from home to school.





## SUMMARY OF FINDINGS

### Seasons/Hours Of Walking

- ▶ 30.8% of an estimated 263,734,471 hours of walking by respondents age 5 and above occur during the summer months of June, July and August. The fall months of September, October and November are a close second in popularity with 27.1% of the total annual walking hours.
- ▶ The winter months of December, January and February are the least used season of the year with 16.8% of total annual walking hours.
- ▶ Those in age range 30-39 incur 22.3% of the total annual walking hours followed by 16.5% in age range 20-29, 12% in age range 15-19 and 11% in age range 50-59.
- ▶ Over 75% of annual walking hours are incurred by those over the age of 20. Unlike many outdoor activities in which participation rates decline relatively rapidly with increasing age, the percent participating in walking activities declines slowly by age.
- ▶ 71% of the respondents age 15 and above walked at least once during the last year compared to 58% from the 1991/92 SCORP survey age 16 and above who walked at least once annually. However, the 1991/92 survey definition of walking was much narrower (walking for pleasure only) than the multiple definitions used in this survey (see Questions 5 and 6 of the survey instrument in Appendix A).
- ▶ For all seasons of the year urban respondents participated in walking at a rate 4 to 5% higher than rural respondents.

### Season/Hours of Running

- ▶ 32.6% of an estimated 65,087,776 hours of running by respondents age 5 and above occur during the summer months of June, July and August. Percent of total hours for the spring and fall are very close; 26.1% and 25.6% respectively.
- ▶ The winter months of December, January and February are the least used season of the year with 15.7% of the total running hours.
- ▶ Those in age range 20-29 incur 28.3% of the total annual running hours followed by 23.3% in age range 15-19 and 17.9% in age range 10-14.
- ▶ Almost 80% of all running hours are incurred by those under the age of 30 which is markedly opposite the activity of walking where over 75% of the total hours are incurred by those over the age of 20.
- ▶ 16% of the respondents age 15 and above ran at least once during the last year which is comparable to a 15% participation rate for those age 16 and above calculated from the 1991/92 household survey done for the 1983 SCORP.

### Reasons For Walking And Running

- ▶ 37% of the respondents who walked last year did so for exercise/fitness/pleasure followed by walking the dog/other pets at 15.6%, shopping at 14.4%, observing plants or wildlife at 12.4% and visiting friends/relatives at 11.9%.

- ▶ 99.5% of the respondents who ran last year did so for exercise/fitness/pleasure. This calculation does not consider those who ran to school or work because those activities were grouped with walking to school or work.
- ▶ Respondents who walk for exercise/fitness/pleasure do so at a rate of 114 times per year, a rate far exceeding 56.2 times per year walking on shopping trips and 55.7 times per year visiting friends/relatives.
- ▶ Respondents who run for exercise/fitness/pleasure do so at a rate of 120.3 times per year.

### **Walking And Running Places**

- ▶ 65% of the respondents who walked or ran used roads frequented by motor vehicles at least once during the last year. Over 52% walked or ran on neighborhood or community streets while almost 44% walked or ran in shopping malls. High percentages of respondents also used nature interpretive trails (37.1%) and recreation trails in parks/preserves (33.9%).
- ▶ Only 2.5% used utility corridors and 3.2% used operating railroad corridors.
- ▶ Urban respondents utilized indoor fitness trails, neighborhood/community streets, outdoor fitness trails and shopping malls more than rural respondents.
- ▶ 35% of all walking and running hours occur on roads frequented by motor vehicles followed by 24.3% on neighborhood/community streets or sidewalks.
- ▶ The greatest number of walking/running trips annually per respondent was 56.4 along roads frequented by motor vehicles followed by 40.5 trips annually along neighborhood and community streets and sidewalks.

### **Satisfaction/Dissatisfaction With Selected Items**

- ▶ Respondents who walked or ran were most satisfied with the terrain, road signs/travel markers and the courtesy of bicyclists.
- ▶ Respondents were least satisfied with the lack of plowed walkways/sidewalks in the winter, road shoulder widths, road shoulder surface conditions and the speed of motor vehicle traffic.
- ▶ Over 82% of the suggestions to improve walking and running conditions pertained to the improvement of shoulders, sidewalks and crosswalks.

### **Most Important Improvements**

- ▶ Improvements most important to respondents included sidewalks along paved roads, off-road walkways in urban areas, multi-use trails to share with others and paths/trails in parks/public lands.
- ▶ Only a very small percentage of respondents were willing to spend money for trails within operating railroad corridors, paths/trails within utility corridors and shower/change facilities at work.
- ▶ More rural respondents than urban respondents desire multi-use trails, trails on abandoned railroads and shower/change facilities at work.

### **Mode Of Travel To Work**

- ▶ Motor vehicles were used frequently by approximately 99% of those who worked away from home in the last 12 months to get to work, regardless of the season of year.
- ▶ Walking is the “frequent” mode of transportation by from 4% to 6% of the respondents regardless of the season of the year.

### **Obstacles/Problems Walking Or Running To/From Work**

- ▶ Over 54% of the respondents who walked or ran to/from work at least once within the last year cited winter ice/snow conditions as a problem followed by lack of sidewalks between home and work (47.7%), sidewalk/walkway conditions (43.2%) and motor vehicle traffic speed (34.1%).
- ▶ Urban respondents felt much more strongly than rural respondents about winter ice/snow conditions, sidewalk/walkway conditions, crosswalks and crossings, shower/change facilities at work, traffic signals and road signs/markers. Rural respondents felt more strongly than rural residents about motor vehicle traffic speed.
- ▶ Terrain, traffic signals and road signs/markers are relatively minor problems compared to the other problems cited by respondents.

### **Why Workers Do Not Walk Or Run To/From Work**

- ▶ 74% of the responding workers who did not walk or run to/from work cited distance as the major problem. In addition, 26.5% needed a motor vehicle for work errands, winter ice/snow conditions was a problem for 21.5% and fluctuating work schedules was a problem for 16.4%.
- ▶ Urban respondents were more concerned than rural respondents about winter ice/snow conditions, lack of showers/changing facilities at the work place and a fluctuating work schedule. Rural respondents were more concerned than urban respondents about the distance from work.

### **Mode Of Travel To School**

- ▶ More students travel “frequently” to elementary or secondary school by a motor vehicle other than the school bus; approximately 67% by motor vehicle versus 27% by school bus. School buses are used the most in the winter months.
- ▶ Through all four seasons walking to school is done more frequently than bicycling or running to school.

### **Obstacles/Problems Walking Or Running To/From School**

- ▶ Students who walked or ran to/from school were most concerned about winter ice/snow conditions, followed by motor vehicle traffic speed, motorist and bicyclist courtesy, motor vehicle traffic volume and sidewalk and/or walkway conditions.

### **Why Students Do Not Walk Or Run To/From School**

- ▶ The primary reason students do not walk or run to and from school is that the travel distance is too far (78.1%). Other important reasons include winter ice/snow conditions (27.1%), lack of safe road shoulders and motor vehicle traffic too heavy (both 18.8%), parents won't let me (16.7%) and lack of sidewalks from home to school (15.6%).
- ▶ Urban student respondents were much more concerned than rural student respondents regarding the volume of motor vehicle traffic, sidewalk/walkway conditions, daily weather changes and winter ice/snow conditions.

### **Mode Of Travel To Shop, Visit Friends/Family Or Socialize/Recreate**

- ▶ The majority of shopping, personal/family travel and social/recreation travel is done by motor vehicle.
- ▶ Walking and bicycling is an important form of social/recreation oriented transportation for 19.4% and 12.1% of the respondents respectively.

### **Additional Comments**

- ▶ 23.6% of the respondent additional comments were a desire for more sidewalks/walkways.
- ▶ The improvement of roads and shoulders was also a desire of several respondents.

## SURVEY METHODOLOGY

A mailback survey to household residents was collaboratively selected by the Bureau of Parks and Recreation (BPR) and the Department of Transportation (DOT) based upon the successful experience of the BPR with a mailback survey for the 1993 Maine State Comprehensive Outdoor Recreation Plan (SCORP) and the relatively low cost of such a survey. While 96% of Maine households have telephone service, a telephone or personal interview survey would have been prohibitively expensive.

A total of 2,000 randomly selected mailing addresses, printed on labels, of registered motor vehicle owners, were requested from the Bureau of Motor Vehicles of the State Department. Each individual was mailed a seven-page questionnaire containing 29 questions and ample space for additional write-in comments. Various draft questionnaires were tested at several workshops held throughout the state and by selected employees with the BPR and the DOT.

There are two major problems with the mailback survey process chosen. First, 7.7% of Maine households do not have a registered motor vehicle; there was no way to include those households in the survey. Therefore there was no way to ascertain, within the framework of this survey, whether households without motor vehicles use walking or running for transportation or recreation purposes any more or less than households with motor vehicles. Secondly, individuals or households with an interest in completing and returning the survey instrument will likely be over-represented in the returns while those with less or no interest will likely be under-represented in the returns.

In an attempt to address the second problem a prepaid return envelope and a one-day, day use pass redeemable at any State Park or Historic Site day use area in 1995 was enclosed with the survey instrument.

Several socio-economic and geographic characteristics of survey respondents were compared with 1990 Census data to check for possible biases. Briefly, the findings were:

- ▶ a good distribution of respondents by county;
- ▶ a good distribution of respondents by urban and rural residence;
- ▶ more coastal respondents and less inland respondents than might be expected;
- ▶ more respondents than would be expected for age ranges 40-59 and 70+ and less than would be expected for age ranges 5-39; and
- ▶ many more college bound or educated respondents than would be expected.

To ensure that individuals within households who received the questionnaire were randomly selected the receiving household was asked to complete the questionnaire for the member age 5 and above who most recently had a birthday. This process helped address the distribution of the survey instrument among all ages and age ranges. Furthermore, in the report

of seasonal and annual walking and running use in Question 5, the seasonal use reported by respondents is adjusted using the 1990 Census age range percentages (percent in each age range) to accurately estimate total use.

The questionnaires were mailed the second week of November 1994, with the objective of at least 400 useable returns. A total of 408 useable questionnaires were returned. Of the 2,000 mailed, 120 were returned because of changed or undeliverable mailing addresses. The return rate therefore was 408 divided by 1,880 or 21.7%, an acceptable return rate for a mailback survey with no followup to those not responding.

Data was tabulated by question and, in some instances, stratified by age range and residence (urban/rural and coastal/inland) of the respondent.

## SURVEY FINDINGS

The findings on the following pages are largely calculated based upon 408 returned questionnaires, which was the number of responses to the age of respondent question, Question 4. Some questions have fewer respondents because of individuals who chose not to answer that question. Others have even fewer respondents because the question was not applicable to the individual, especially regarding work or school activity.

Although clear differences are presented as findings, tests were not done to determine their statistical accuracy.

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### Question 1: CITY OR TOWN IN WHICH YOU PERMANENTLY RESIDE.

The opening question drew 408 responses from 186 different minor civil divisions, three of which were unorganized. Minor Civil Divisions with nine or more responses were Portland

Table 1  
Respondent County of Residence

County	Number of Respondents	Percent of Total	1990 Population Percent
Androscoggin	32	7.8	8.6
Aroostook	29	7.1	7.1
Cumberland	83	20.3	19.8
Franklin	10	2.5	2.4
Hancock	13	3.2	3.8
Kennebec	40	9.8	9.4
Knox	7	1.7	3.0
Lincoln	11	2.7	2.5
Oxford	18	4.4	4.3
Penobscot	48	11.7	11.9
Piscataquis	11	2.7	1.5
Sagadahoc	10	2.5	2.7
Somerset	15	3.7	4.0
Waldo	15	3.7	2.7
Washington	13	3.2	2.9
York	53	13.0	13.4
Totals	408	100.0	100.0



(18), Bangor (16), Lewiston (13), Brunswick (11) and Auburn (9).

Residence was sorted into County, Urban/Rural and Coastal/Inland and the number of respondents from each compared with 1990 population census data to estimate the geographic validity of the population of individuals responding. The Urban/Rural and Coastal/Inland sorts were also used several times in this report to provide in-depth analysis of select questions.

The returns by county of residence generally appear to be well distributed throughout the state. Counties with slightly higher rates of return include Piscataquis and Waldo. Counties with slightly lower rates of return include Androscoggin and Knox.

Table 2  
Respondent Urban/Rural Residence

Urban/Rural Area	Number of Respondents	Percent of Total	1990 Population Percent
Cities 20,000 + (A)	85	20.8	21.8
Cities 10,000 - 19,000 (B)	31	7.6	8.7
Less than 10,000 (Rural)	292	71.6	69.5
Totals	408	100.0	100.0

Slightly more rural responses than expected and slightly less urban A and B responses than expected were received.

Urban A cities and their 1990 populations are Auburn (24,309), Augusta (21,325), Bangor (33,181), Biddeford (20,710), Brunswick (20,906), Lewiston (29,757), Portland (64,358), Sanford (20,463) and South Portland (23,163).

Urban B cities and their 1990 populations are Gorham (11,856), Orono (10,573), Presque Isle (10,550), Saco (15,181), Scarborough (12,518), Waterville (17,173), Westbrook (16,121) and Windham (13,020).

The coastal population is over-represented by individuals returning questionnaires and the inland population is under-represented (Table 3). For the purposes of this survey those cities and towns categorized as coastal, from which questionnaires were received (46), were Bar Harbor, Bath, Belfast, Biddeford, Blue Hill, Boothbay, Boothbay Harbor, Brooklin, Brunswick, Calais, Camden, Cape Elizabeth, Cumberland, Damariscotta, Edgecomb, Eliot, Ellsworth, Falmouth,

Table 3  
Respondent Coastal/Inland Residence

Coastal/Inland	Number of Respondents	Percent of Total	1990 Population Percent
Coastal	128	31.4	22.3
Inland	280	68.6	77.7
Totals	408	100.0	100.0

Freeport, Gouldsboro, Harpswell, Kennebunk, Kennebunkport, Kittery, Lubec, Machias, Machiasport, Milbridge, Old Orchard Beach, Portland, Rockland, Saco, Scarborough, South Bristol, South Portland, Southwest Harbor, Stockton Springs, Stonington, Topsham, Waldoboro, Wells, Westbrook, Wiscasset, Woolwich, Yarmouth and York.

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**Question 2: AGE OF EACH INDIVIDUAL WHO RESIDES YEAR-ROUND IN THE HOUSEHOLD SURVEYED, INCLUDING THE INDIVIDUAL RESPONDING TO THE SURVEY.**

The ages of all household members were sorted into age ranges to allow for a comparison with 1990 census data as shown in Table 4.

Table 4  
Age Range of Household Members

Age Range	Number in Range	Percent of Total	1990 Population Percent
1 - 14	207	18.9	21.1
15 - 24	121	11.0	14.2
25 - 34	140	12.8	16.7
35 - 44	200	18.3	15.7
45 - 64	268	24.5	19.0
65 - 74	98	8.9	7.4
75 - 84	47	4.3	4.4
85 +	14	1.3	1.5
Totals	1385	100.0	100.0

The average age of household members was 38.2 and the median age was 39. Age ranges

35-74 are over-represented in the households from which a questionnaire was received while age ranges 1-35 are under-represented. Age ranges 75+ are adequately represented. [Note: This is not the age range data used in adjusting responses to determine seasonal and total use under Question 5, Tables 6 and 7.]

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**Question 3: NUMBER OF REGISTERED HIGHWAY MOTOR VEHICLES IN HOUSEHOLD.**

Households surveyed had a mean of 2.2, a median of 2 and a mode of 2 registered highway motor vehicles per household.

Almost 29 percent of the households surveyed had three or more vehicles. However, this survey is drawn from the list of those with a registered motor vehicle. Therefore, households with no registered motor vehicles were theoretically not surveyed. Given this, six respondents to the survey reported no registered motor vehicles within the household.

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**Question 4: AGE OF RESPONDENT COMPLETING SURVEY WHO MOST RECENTLY HAD A BIRTHDAY.**

For ease of cross-tabulations with other data collected, the ages of the individuals responding to the survey were grouped into ranges appropriate for analysis of elementary and secondary school students. Beyond secondary school each range is a group of 10 years up to age

Table 5  
Age Ranges Of Respondents

Age Range	Number of Respondents	Percent of Total	1990 Percent of Population
5 - 9	17	4.1	7.7
10 - 14	15	3.7	7.4
15 - 19	22	5.4	7.7
20 - 29	54	13.2	16.2
30 - 39	64	15.7	18.2
40 - 49	75	18.4	14.1
50 - 59	59	14.5	9.6
60 - 69	43	10.5	9.2
70 +	59	14.5	9.9
Totals	408	100.0	100.0

70. Table 5 presents the number of respondents in each age range and compares that number with the 1990 population census data. Age range 0-4 was not included because no individuals were sampled in that range.

The 408 individuals responding was under-represented in age ranges 5-39 and over-represented in age ranges 40-70+. [Seasonal and total hours of use, presented under Question 5, Tables 6 and 7, have been adjusted according to the 1990 Census age range distribution.]

The mean age of respondents was 44.2 years while the median age was 43 years. The state median age in 1990 was 33.9 years.

**Question 5: HOURS A WEEK YOU WALKED OR RAN FOR EACH OF THE FOUR SEASONS WITHIN THE LAST 12 MONTHS.**

An accurate estimate of hours spent walking or running requires the adjustment of the hours reported by respondents by age range. The data findings in Tables 6 and 7 are adjusted as explained in the Table footnotes. For both walking and running Winter = December, January and February; Spring = March, April and May; Summer = June, July and August and Fall = September, October and November.

Table 6  
Estimated Walking Hours By Age Range

			Hours Per Week					
Age Range	# Repls	Adjust. Ratio	Winter	Spring	Summer	Fall	Totals	% of Total
5-9	17	5206	203,034	333,184	494,570	296,742	1,327,530	6.5
10-14	15	5638	163,519	352,412	411,617	279,110	1,206,658	5.9
15-19	22	3996	407,661	629,477	763,366	637,470	2,437,974	12.0
20-29	54	3422	561,283	795,722	1,025,027	963,423	3,345,455	16.5
30-39	64	3255	823,546	1,160,452	1,342,739	1,196,258	4,522,995	22.3
40-49	74	2169	329,720	545,557	682,325	599,282	2,156,884	10.6
50-59	59	1863	370,760	556,140	623,213	669,791	2,219,904	11.0
60-69	43	2443	298,102	377,515	480,140	419,054	1,574,811	7.8
70 +	59	1907	251,779	372,901	428,808	441,568	1,495,056	7.4
Subtot			3,409,404	5,123,360	6,251,805	5,502,698	20,287,267	100.0
Weeks			13	13	13	13		
Total.			44,322,252	66,603,680	81,273,465	71,535,074	263,734,471	
% of Total			16.8	25.3	30.8	27.1	100.0	

**Adjustment Ratio** was derived for each age range by dividing the 1990 population in each age range by the number of replies in each age range. Hours per week was calculated by multiplying the adjustment ratio times the average walking hours per week for each age range by season.

The findings in Table 6 indicate that total walking hours are distributed throughout the year with 30.8% occurring during the summer months followed by 27.1% in the fall months and 25.3% in the spring months. Almost 17% of the total walking hours occur during the winter months. These findings are in sharp contrast to the bicycling findings of 52.8% of total hours occurring during the summer months and only 4.3% of the hours occurring during the winter months.

Those in age range 30-39 incur 22.3% of all walking hours followed by age range 20-29 (16.5%) and 15-19 (12.0%). Over 75% of all walking hours are incurred by those over the age of 20. Unlike bicycling, total annual hours participated in walking declines at a much lower rate as one ages. Those over age 60 participate in walking at much higher rates than in the activity of bicycling.

It is also possible to determine from the responses to Question 5 the percent in each age group who participated in walking at least once during the summer months as follows:

- ▶ age range 5-9 = 71% participation;
- ▶ age range 10-14 = 67% participation;
- ▶ age range 15-19 = 73% participation;
- ▶ age range 20-29 = 63% participation;
- ▶ age range 30-39 = 75% participation;
- ▶ age range 40-49 = 69% participation;
- ▶ age range 50-59 = 75% participation;
- ▶ age range 60-69 = 79% participation;
- ▶ age range 70 + = 66% participation.

Overall, 58% of the respondents walked at least once during the winter months, 70% in the spring months, 70% in the summer months and 69% in the fall months. Almost 58% of the age 16 and above respondents to the 1991/92 SCORP household survey walked at least once during the last 12 months. In this survey 71% age 15 and above walked at least once during the last 12 months. The percent participation difference is largely explained by the use of a definition of walking that was much broader in this survey than in the 91/92 survey. The 1991/92 survey walking definition was basically "walking for pleasure." This survey included as walking, for example, walking the dog, walking in shopping malls, walking to visit friends and relatives and walking to observe nature.

An urban/rural cross-tabulation analysis was also done for the respondents by season of use. For all seasons of the year urban respondents participated in walking at a rate 4% to 5% higher than rural respondents.

The findings in Table 7 indicate that total running hours are distributed throughout the year with 32.6% occurring during the summer months followed by 26.1% in the spring months

and 25.6% in the fall months. Almost 16% of the total running hours occur during the winter months. These findings are in sharp contrast to the bicycling findings of 52.8% of total hours occurring during the summer months and only 4.3% of the hours occurring during the winter months but are very consistent with the seasonal distribution of walking hours.

Table 7  
Estimated Running Hours By Age Range

			Hours Per Week					
Age Range	# Repls	Adjust. Ratio	Winter	Spring	Summer	Fall	Totals	% of Total
5-9	16	5531	63,606	107,854	204,647	124,447	500,554	10.0
10-14	15	5638	118,398	205,787	346,737	225,520	896,442	17.9
15-19	22	3996	179,890	347,652	343,656	295,704	1,166,902	23.3
20-29	54	3422	256,650	350,755	441,438	367,865	1,416,708	28.3
30-39	64	3255	50,452	149,730	139,965	117,180	457,327	9.1
40-49	75	2140	88,810	103,790	108,070	108,070	408,740	8.2
50-59	59	1863	22,356	24,219	31,671	29,808	108,054	2.1
60-69	43	2443	0	0	0	2,443	2,443	0.1
70 +	59	1907	7,628	17,163	17,163	7,628	49,582	1.0
Subtot			787,790	1,306,950	1,633,347	1,278,665	5,006,752	100.0
Weeks			13	13	13	13		
Total.			10,241,270	16,990,350	21,233,511	16,622,645	65,087,776	
% of Total			15.7	26.1	32.6	25.6	100.0	

Adjustment Ratio was derived for each age range by dividing the 1990 population in each age range by the number of replys in each age range. Hours per week was calculated by multiplying the adjustment ratio times the average running hours per week for each age range by season.

Those in age range 20-29 incur 28.3% of the total running hours followed by age range 15-19 (23.3%) and 10-14 (17.9%). Almost 80% of all running hours are incurred by those under the age of 30 which is markedly opposite the activity of walking where over 75% of the total hours are incurred by those over the age of 20. Like bicycling total annual running hours declines significantly as one ages; only 3.2% of those over age 50 participate in the activity of running.

It is also possible to determine from the responses to Question 5 the percent in each age group who participated in running at least once during the summer months as follows:

- ▶ age range 5-9 = 29% participation;
- ▶ age range 10-14 = 40% participation;
- ▶ age range 15-19 = 32% participation;
- ▶ age range 20-29 = 28% participation;
- ▶ age range 30-39 = 23% participation;
- ▶ age range 40-49 = 19% participation;

- ▶ age range 50-59 = 10% participation;
- ▶ age range 60-69 = 0% participation;
- ▶ age range 70 + = 5% participation.

Overall, 11% of the respondents ran at least once during the winter months, 16% in the spring months, 16% in the summer months and 15% in the fall months. Almost 15% of the age 16 and above respondents to the 1991/92 SCORP household survey ran at least once during the last 12 months. In this survey 16% age 15 and above ran at least once during the last 12 months.

An urban/rural cross-tabulation analysis was also done for the respondents by season of use. For all seasons of the year urban respondents participated in running at rates equivalent to rates for rural respondents.

### Question 6: REASONS FOR WALKING OR RUNNING

As indicated in Table 8 the primary reasons for all walking trips/days is exercise, fitness and pleasure at 37.0% followed by walking the dog/other pets (15.6%), shopping (14.4%), observing plants or wildlife (12.4%) and visiting friends/relatives at 11.9%. The primary reason for all running trips/days is for exercise/fitness/pleasure at 99.5%. These percentage findings do

Table 8  
Estimated Trips/Days By Reason For Walking And Running

Reason	Times Per Year Per Person	Walking Total Trips/Days	Percent of Total	Running Total Trips/Days	Percent of Total	Trip/Days Both Run/Walk	Percent of Total
Observe plants/wildlife	52.2	22,752,008	12.4				
Walking sports	19.2	3,799,912	2.1				
Personal business/medical	36.9	7,220,112	3.9				
Run-a-thons	5.2			117,264	.5		
Run/jog exercise/fit./pleasure	120.3			23,176,392	99.5		
Shopping trips	56.2	26,376,024	14.4				
Visit friends/relatives	55.7	21,785,976	11.9				
Visit historic/cultural sites	13.7	3,967,432	2.1				
Walk-a-thons	16.2	1,130,760	.6				
Walk exercise/fit./pleasure	114.1	67,879,104	37.0				
Walk/run to/from school	100.3					7,557,944	47.4
Walk/run to/from work	125.3					8,398,336	52.6
Walk dog/other pets	117.9	28,634,752	15.6				
Totals		183,546,080	100.0	23,293,656	100.0	15,956,280	100.0

not include the reasons of "walking/running to/from school" and "walking/running to/from work" because walking and running were a combined response for school and work trips in the

questionnaire.

Those who walk the dog or other pets do so on the average of 117.9 trips/days per year closely followed by those who walk for exercise/fitness/pleasure at an average of 114.1 trips/days per year. Runners run/jog for exercise/fitness/pleasure at an average of 120.3 trips/days per year. Those who walk or run to/from school do so at an average of 100.3 trips/days per year. Those who walk or run to/from work do so at an average of 125.3 trips/days per year.

The Total Trips\Days columns in Table 8 is a mix of trips and days and therefore cannot be directly compared to Question 5 results. In addition, not everyone who responded to Question 5 responded to Question 6. Therefore there can be no direct comparison between the total walking or running hours from Question 5, Tables 6 and 7 and the total trips/days from Question 6, Table 8.

**Question 7: WHERE RESPONDENTS WALK OR RUN.**

Question 7 was designed to determine where residents walk or run and the average

Table 9  
Places Where Residents Walk Or Run By Occurrence

Place	Count of Occurrences	Percent of Total Respondents	Percent of Urban Respondents	Average Times Walk or Run Last 12 Months
Motor vehicle roads	184	65.0	51.2	125.4
Nature/Int. trails	105	37.1	37.8	19.0
Cultural Int. trails	48	17.0	18.3	11.5
Indoor fitness trails	25	8.8	13.4	68.2
Neigh/comm. streets	148	52.3	69.5	112.1
Outdoor fitness courses	32	11.3	15.9	18.7
Recreation trails	96	33.9	34.1	25.5
School running tracks	22	7.8	4.9	13.1
Shopping malls	124	43.8	53.7	35.2
Unpaved/jeep roads	75	26.5	12.2	40.5
Aband. RR corridors	18	6.4	4.9	7.1
Oper. RR corridors	9	3.2	0	4.7
Utility corridors	7	2.5	2.4	45.3
	N = 283		N = 82	

Percentages add to more than 100% because of multiple responses.

amount of time in minutes they spend at those places. The major findings were that residents walk or run on or at (1) roads frequented by motor vehicles, (2) neighborhood/community



streets/sidewalks, (3) shopping malls and (4) recreation trails in parks/preserves.

Sixty-five percent of the respondents who walk or run use roads frequented by motor vehicles. Over 52% walk or run on neighborhood or community streets while almost 44 percent walk or run in shopping malls. Relatively high percentages also use nature interpretive trails (37.1%) and recreation trails in parks/preserves (33.9%). Only 2.5% use utility corridors and 3.2% use operating railroad corridors.

Urban residents utilize indoor fitness trails, neighborhood/community streets, outdoor fitness trails and shopping malls to walk or run more than rural residents. Rural residents utilize roads frequented by motor vehicles and unpaved/jeep roads to walk or run more than urban residents.

The important finding regarding the data in Table 10 is that 35% of all walking and running hours occur on roads frequented by motor vehicles, followed by 24.3% on

Table 10  
Places Where Respondents Walk Or Run By Hours

Place	Annual Times Per Sample	Total Annual Times	Minutes Per Time	Total Person Hours	% of Total Person Hours	Total Person Day
Motor vehicle roads	56.4	64,425,400	43.8	47,030,542	35.0	5,878,817
Nature Interpretive trails	4.9	5,572,832	103.2	9,585,271	7.1	1,198,159
Cultural Interpretive trails	1.3	1,535,600	73.4	1,878,550	1.4	234,819
Indoor fitness tracks	4.2	4,760,360	45.3	3,594,071	2.7	449,259
Neigh/community streets	40.6	46,349,992	42.3	32,676,744	24.3	4,084,593
Outdoor fitness course	1.5	1,672,408	70.6	1,967,866	1.5	245,983
Recreational trails	6.0	6,845,984	98.3	11,216,003	8.3	1,402,000
School tracks	.7	804,096	32.6	436,892	.3	54,611
Shopping malls	10.7	12,187,080	77.4	15,721,333	11.7	1,965,167
Unpaved/jeep roads	7.4	8,749,304	61.7	8,997,200	6.7	1,124,650
Abandoned RR corridors	.3	354,584	56.8	335,672	.3	41,959
Operating RR corridors	.1	117,264	48.9	95,570	.1	11,946
Utility corridors	.8	885,064	53.6	790,657	.6	98,832
Totals		154,259,968		134,326,371	100.0	16,790,796

Total Annual Times calculated by multiplying the respondent times walked or ran in the last 12 months by the ratio of the sample of individuals to the total population (ratio is 1:2,792).

Total Person Hours is calculated by multiplying respondent total annual times by minutes per time and dividing by 60 minutes per hour.

Total Person Days is respondent total person hours divided by 8 hours per day.

neighborhood/community streets or sidewalks. Less than one percent each of all walking and

running hours occur on school tracks, abandoned railroad corridors, operating railroad corridors and utility corridors.

The greatest number of trips per respondent occurred along roads frequented by motor vehicles (56.4) and neighborhood and community streets and sidewalks (40.5). A distant third is in shopping malls at 10.7 trips per respondent.

A cross-tabulation of age and times participating at places indicated the following "favorite" places by age range:

- ▶ 10-14 - school tracks;
- ▶ 15-19 - school tracks and indoor tracks;
- ▶ 20-29 - outdoor fitness tracks and school tracks;
- ▶ 40-49 - unpaved/jeep roads and recreation trails in parks/preserves;
- ▶ 60-69 - cultural trails; and
- ▶ over 70 - along motor vehicle roads, in shopping malls and along unpaved/jeep roads.

### Question 8: LONGEST WALK AND RUN IN LAST 12 MONTHS

The mean and median of the longest walk taken within the last 12 months was 6.6 and

Table 11  
Reasons For Longest Walk Last 12 Months

Reason	Number Occurrences	Percent of Total
Fitness/health/exercise	101	36.6
Pleasure/fun/recreation	70	25.4
Hiking	31	11.2
Nature/scenery	18	6.5
Shopping	13	4.7
Walk-a-thon	11	4.0
Hunting	9	3.3
Walk the dog/pets	8	2.9
Walk to/from work	7	2.5
Visit historic sites	5	1.8
Visit friends/relatives	4	1.4
Play golf	3	1.1
Check things/work in woods	3	1.1
Fishing	3	1.1
Seek food/lodging	2	.7

4.5 miles respectively. The range of walks (by 276 respondents) was .5 to 100 miles.

Based upon 276 individual respondents the number one reason for the “longest walk in the last 12 months” was for fitness and health at 36.6%, followed by pleasure/fun/recreation at 25.4%. Percentages add to more than 100% because of multiple responses.

Table 12  
Reasons For Longest Run In Last 12 Months

Reason	Number Occurrences	Percent of Total
Fitness/health/exercise	42	57.5
Pleasure/fun/recreation	10	13.7
Training/endurance	9	12.3
Racing	8	11.0
A sport for me	6	8.2
Work related	2	2.7
Catch a plane	1	1.4
Shopping	1	1.4
Run home from school	1	1.4
Kyack shuttle	1	1.4

The most common reasons of 73 respondents for the longest run in the last 12 months was health/exercise/fitness at 57.5% followed by pleasure and recreation at 13.7%, training/endurance at 12.3% and racing at 11%. The mean longest distance was 4.5 miles and the median 3 miles with a range of .25 to 26.2 miles (marathon distance).

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#### **Question 9: WALKING/RUNNING ACCIDENTS LAST 12 MONTHS**

Over 97% of 304 respondents did not have a walking/running accident in the last 12 months. The reason for the accidents of the eight individuals reporting in the affirmative were all different, ranging from incidents with bicycles, ATVs and other runners to tripping or twisting an ankle while running.

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#### **Question 10: DEGREE OF SATISFACTION WITH 11 SPECIFIC ITEMS.**

Table 13 summarizes the ratings given by from 215 to 277 individuals to 11 specific items. Responses could vary from 1 - least satisfied, to 5 - most satisfied. Under the “Percent Satisfaction” columns, “most” includes responses of 4 or 5 while “least” includes responses of 1

or 2. The "Average Satisfaction Rating" is the mean of all responses to each item. "Satisfaction Rankings" of "best" and "worst" are based upon the "Average Satisfaction Rating." However, there is a very close correlation between the average satisfaction rating and the percent of respondents most or least satisfied.

Table 13 shows that individuals who walk or run are **most satisfied** with the following:

- ▶ terrain (hills),
- ▶ signs/travel markers, and
- ▶ courtesy of bicyclists.

Individuals who walk or run are **least satisfied** with the following:

- ▶ lack of plowed walkways/sidewalks in the winter,
- ▶ road shoulder widths,
- ▶ road shoulder surface conditions, and
- ▶ the speed of motor vehicle traffic.

The rankings of both the most satisfied and least satisfied items are similar to the item rankings cited by bicyclists in the bicycle survey, especially regarding travel space in winter/lack of plowed sidewalks, road shoulder widths, road shoulder surface conditions and the speed of motor vehicle traffic.

Table 13  
Respondent Degree Of Satisfaction With Selected Items

Item Name	Number Responses	Percent Satisfaction		Average Satisfaction Rating		Satisfaction Rankings	
		Most	Least	All	Urban	Most Sat.	Least Sat.
Courtesy of bicyclists	252	50.4	18.3	3.46	3.43	3	
Courtesy of motorists	277	31.0	31.4	2.98	2.96		
Road crosswalks/crossings	241	29.5	32.8	2.95	3.03		
Motor vehicle traffic speed	266	21.8	50.8	2.59	2.71		4
Motor vehicle traffic volume	251	34.3	31.9	3.04	3.00		
Plowed sidewalks in winter	237	17.3	61.6	2.26	1.96		1
Shoulder surface conditions	260	23.8	55.0	2.46	2.49		3
Road shoulder widths	257	16.7	54.5	2.39	2.50		2
Sidewalk maintenance	228	27.2	41.2	2.72	2.78		
Signs/travel markers	215	48.4	14.9	3.47	3.47	2	
terrain (hills)	215	58.6	07.0	3.72	3.70	1	

**Question 11: HOW COULD CONDITIONS OR PROVISIONS BE IMPROVED FOR ITEMS YOU ARE DISSATISFIED WITH IN QUESTION 10.**

There were 196 individual respondents to this open-ended question resulting in 304 suggestions for improving conditions or provisions for walking and running which are summarized as follows.

<u>Number Responses</u>	<u>Item</u>
63	More/better walking paths/sidewalks
58	Maintain/repair/widen road shoulders
30	Better sidewalk plowing
29	Motorists should obey speed limits
20	Motorist courtesy/behavior
15	Better road signs/lights
14	Better road maintenance
14	Better road/shoulders winter plowing
11	More crosswalks and/or enforce crosswalks
7	Bicyclists obey road rules
7	Enforce motorist laws
4	Educate motorists
4	Provide designated bicycle lanes
3	Bicycle safety/courtesy
3	Keep large trucks off 2-lane roads
2	Require lights on bicycles
2	Keep bicyclists off roads
2	Keep bicyclists off shoulders
16	Other

One hundred sixty two (162) of the responses to Question 11 pertained to improvement of shoulders, sidewalks and crosswalks which is over 82% of the 196 individuals responding. It is very clear that the number one priority of walkers and runners is the improvement of shoulders and sidewalks to provide a safe place for their activity.

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**Question 12: IMPROVEMENTS WHICH ARE THE MOST IMPORTANT TO YOU.**

Sidewalks along paved roads and off-road walkways in urban areas are desired by a high percentage of respondents, but in particular by urban respondents. Other important improvements desired by respondents include multi-use trails, paths/trails in parks and public lands, and paths/trails on abandoned railroads. More rural respondents than urban respondents

desire multi-use trails, trails on abandoned railroads and shower/change facilities at work.

Table 14  
Importance Of Improvements To Respondents

Item	Number Responses	Percent of Importance		
		All Respondents	Urban Respondents	Rural Respondents
Sidewalks along paved roads	163	59.7	64.7	57.4
Off-road walkways in urban areas	121	44.3	56.5	38.8
Multi-use trails to share with others	103	37.7	30.6	41.0
Paths/trails in parks/public lands	100	36.6	44.7	33.0
Paths/trails on abandoned railroads	71	26.0	23.5	27.1
New rural/mountain trails/paths	63	23.1	28.2	20.7
Marked crossings at intersections	60	22.0	20.0	22.9
Improve existing hiking trails	58	21.2	25.9	19.1
Benches/shelters along walkways	51	18.7	22.4	17.0
Shower/change facilities at work	27	9.9	5.9	11.7
Paths/trails within utility corridors	24	8.8	7.1	9.6
Trails within operation RR corr.	16	5.9	7.1	5.3
		N = 273	N = 85	N = 188

Percentages add to more than 100% because of multiple responses.

**Question 13: DOES RESPONDENT HAVE A DRIVERS LICENSE OR PERMIT.**

Yes = 366 = 90.1%

No = 40 = 9.9%

**Question 14: ONE WAY MILES AND MINUTES RESPONDENT LIVES FROM PLACE OF WORK BY MOTOR VEHICLE.**

Over forty-three percent (43.4%) of the survey respondents did not work which isn't surprising considering students between the ages of 5-19 were included in the survey.

For those who did work:

**Miles one-way travel to work**

- mean of 22.4 miles one way to work.

- median of 10 miles one way to work.
- 10% live within 1 mile from place of work.
- 31.1% live 20 or more miles one way from place of work.
- 7.8% live 40 or more miles one way from place of work.

**Minutes one-way travel to work**

- mean of 28.4 minutes one way to work.
- median of 20 minutes one way to work.
- mode of 20 minutes (most responses).
- 6.9% live 1 hour or more from work by motor vehicle.

**Question 15: DISTANCE OF PUBLIC TRANSIT BUSES FROM YOUR HOME IN BLOCKS OR MILES, IF AVAILABLE.**

**Blocks from home**

- mean of 2.8 blocks.
- median of 2 blocks.
- This question had a low response because of placement within the survey. Should have been asked of all respondents.

**Miles from home**

- mean of 9.8 miles.
- median of 3 miles.
- Low response rate for same reason as above.

**Question 16: USUAL MODE OF TRANSPORTATION TO AND FROM WORK BY SEASON.**

In Table 15 "Freq." means that the respondent frequently used the mode of travel while "Some" means that the respondent sometimes used the mode of travel. The "drove alone," "drove with passengers" and "passenger with driver" categories all included cars, trucks and motorcycles.

Clearly the largest number and percentage of respondents traveled to and from work using some sort of motor vehicle. In the winter 96.9% of the respondents used motor vehicles frequently to get to work. Frequent percentages for the other seasons were 99.9% in the spring, 99.1% in the summer, and 99.9% in the fall. Walking was the most frequently used non-motorized form of transportation in all seasons.

Table 15  
 Transportation Modes Used For Trips To/From Work

Travel Mode	Seasonal Percentages Based Upon 231 Individual Responses							
	Winter		Spring		Summer		Fall	
	Freq.	Some	Freq.	Some	Freq.	Some	Freq.	Some
Drove alone	78.4	5.6	80.5	5.2	80.0	5.2	80.5	5.2
Drove with passen.	9.5	11.3	9.5	10.8	9.1	12.6	9.5	10.4
Passen. with driver	4.3	10.0	4.8	9.5	5.2	9.5	4.8	8.7
Walked	4.3	3.9	5.6	3.9	6.1	2.6	5.2	3.5
Car/vanpool	3.0	7.4	3.0	6.5	3.5	6.1	3.0	7.4
Bicycled		.9	.4	3.9	.4	3.9	.4	2.2
Bus/public transit	1.7	1.7	1.7	1.3	.9	1.7	1.7	1.7
Running		.4		.4		.9		.4
Taxi		.4		.4		.9		.4
Scoter/moped			.4		.4		.4	

"Frequent" percentages add to more than 100% because of multiple responses.

**Question 17: OBSTACLES OR PROBLEMS WALKING OR RUNNING TO AND FROM WORK.**

Table 16  
 Obstacles Or Problems Encountered Walking Or Running To And From Work

Obstacle/Problem	Number Responses	Percent of Individuals Responding	Urban Percent Responding	Rural Percent Responding
Winter ice/snow conditions	24	54.5	64.3	50.0
Lack of sidewalks home to work	21	47.7	50.0	46.7
Sidewalk/walkway conditions	19	43.2	71.4	30.0
Motor vehicle traffic speed	15	34.1	28.6	36.7
Motor vehicle traffic volume	11	25.0	28.6	23.3
Motorist/cyclist courtesy	10	22.7	28.6	20.0
Crosswalks/crossings	8	18.2	35.7	10.0
Shower/change facilities at work	7	15.9	28.6	10.0
Terrain (hills)	5	11.4	14.3	10.0
Traffic signals	4	9.1	14.3	6.7
Road signs/markers	2	4.5	14.3	0

Percentages add to more than 100% because of multiple responses.



Forty-four individuals who walk or run to and/or from work responded to this question. The major obstacles or problems cited by these 44 walkers and runners, listed in Table 16, included winter ice/snow conditions, lack of sidewalks or walkways from home to work, sidewalk/walkway conditions and motor vehicle traffic speed. Road signs and markers and traffic signals are their least concern.

With only one exception urban walkers and runners expressed greater concern with the Table 16 obstacles and problems than rural walkers and runners. The greatest obstacle/problem concerns of urban respondents walking or running to and/or from work were (lack of) crosswalks/road crossings, winter ice/snow conditions and lack of walkways/sidewalks between home and work. The greatest obstacle/problem concerns of rural respondents walking or running to and/or from work included winter ice/snow conditions and lack of walkways/sidewalk between home and work

**Question 18: REASONS WHY INDIVIDUALS DO NOT WALK OR RUN TO AND FROM WORK.**

The major reason individuals do not walk or run to and from work (Table 17) for the 219 respondents to this question was that the distance is too far to walk or run (74%). Distant second and third reasons were that the respondent needed their motor vehicle for work (26.5%)

Table 17  
Reasons Why Workers Do Not Walk Or Run To And From Work

Item	Number Responses	Percent of Individuals Responding	Urban Percent Response	Rural Percent Response
Too far to walk or run	162	74.0	63.2	78.8
Need motor vehicle for work errands	58	26.5	26.5	26.5
Winter ice/snow conditions	47	21.5	27.9	18.5
Work schedule fluctuates too much	36	16.4	20.6	14.6
Frequent daily weather changes	31	14.2	14.7	13.9
Lack of walkways/sidewalks	23	10.5	10.3	10.6
Motor vehicle traffic volume	20	9.1	8.8	9.3
Motorists are not courteous	15	6.8	7.4	6.6
Lack of showers/change facilities at work	14	6.4	10.3	4.6
Sidewalk/walkway conditions	8	3.7	5.9	2.6
Too many dogs along the way	4	1.8	1.5	2.0
Work at nights	4	1.8	1.5	2.0

Percentages add to more than 100% because of multiple responses.

and winter ice and snow conditions (21.5%).

Urban respondents were more concerned than rural respondents about winter ice/snow conditions, lack of showers/changing facilities at the work place and a fluctuating work schedule. Rural respondents were more concerned than urban respondents about the distance from work.

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**Question 19: TRAVEL DISTANCE ROUND TRIP TO WORK BY CITY BLOCKS OR MILES AND MODE OF TRAVEL FOR EACH.**

The distance of only 21 work related trips during the day was reported in terms of city blocks while 256 was reported in terms of miles.

The majority of those who travel on work related trips by city block walk - 13 work related "block" trips were made by **walking** from 1 to 10 blocks while 7 work related "block" trips of 2 to 8 blocks were made by **motor vehicle**. One work related "block" trip was made by running while none were made by bicycle.

Work related day trips reported in terms of miles ranged in distance from less than one mile to 670 miles with a mean of 30.6 miles and a median of 10 miles. The "mile" trips were made by car (218), truck (27), walking (5) with six no mode of travel responses. Thus, of the 256 "mile" trips made, 95.7% were made by motor vehicle and only two percent by walking.

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**Question 20: ARE OR WERE YOU A STUDENT DURING THE LAST CALENDAR YEAR.**

Full time student - 67 - 16.5% of total of 406 responses

Part time student - 42 - 10.3%

Not a student - 297 - 73.2%

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**Question 21: DISTANCE YOU LIVE FROM THE SCHOOL YOU REGULARLY ATTEND.**

**Miles (N=48 for elementary and secondary students)**

- Mean of 7.4 miles

- Median of 3 miles

- 75% live within 10 miles of the school they regularly attend

- 66.7% live within 5 miles of the school they regularly attend

- Mile range from .25 to 35

Blocks (N=5)

- Mean of 8.5 blocks.
- Insufficient samples to determine median.

**Question 22: USUAL MODE OF TRANSPORTATION TO AND FROM SCHOOL BY SEASON.**

In Table 18 "Freq." means that the respondent frequently used the mode of travel while "Some" means that the respondent sometimes used the mode of travel. The "Drove Alone," "Drove With Passengers" and "Passenger with Driver" categories all included cars, trucks and motorcycles.

As would be expected school buses are used frequently to get to and from school by students. Combined with the "Bus/Public Transit" category, a category which many students may have thought to mean or include "school buses," 29.2% used buses frequently to get to and from school in the winter, 27.6% in the spring and 26.4% in the fall. These percentages would be greater if students age 19 and over were excluded from the analysis. However, driving to school or being driven to school "frequently" in a motor vehicle is the primary mode of transportation for 62.2% of the students in the winter, 60.4% in the spring and 66.1% in the fall.

Table 18  
Transportation Modes Used For Trips To/From School

Travel Mode	Seasonal Percentages Based Upon 106 Individual Responses							
	Winter		Spring		Summer		Fall	
	Freq.	Some.	Freq.	Some.	Freq.	Some.	Freq.	Some.
Drove alone	37.7	3.8	37.7	4.7	25.5	3.8	38.7	3.8
School bus	25.4	5.7	23.6	6.6	11.3	3.8	22.6	6.6
Passenger in vehicle	13.2	14.2	12.3	13.2	6.6	11.3	13.2	11.3
Drove with passeng.	11.3	6.6	10.4	7.5	9.4	4.7	14.2	5.7
Walked	7.5	3.8	7.5	7.5	4.7	5.7	8.5	5.7
Car/vanpool	4.7	6.6	4.7	4.7	3.8	2.8	4.7	6.6
Bus/public transit	3.8	.9	3.8	1.9	2.8	.9	3.8	.9
Bicycle			2.8	6.6	.9	4.7	1.9	6.6
Run		.9	1.9	.9		.9	.9	.9
Scooter/moped		.9		.9		.9		.9
Taxi								

Comparisons with the results of Question 16 regarding the travel mode of those going to and from work indicate that slightly greater percentages of students walk to school and bicycle to school than workers who walk to work and bicycle to work; results that are consistent with findings from the bicycle survey.

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**Question 23: OBSTACLES OR PROBLEMS ENCOUNTERED WALKING OR RUNNING TO AND FROM SCHOOL.**

Based upon 23 individual responses Table 19 summarizes the obstacles/problems encountered by students who walk or run to and/or from school.

Clearly the greatest concern of students who walk or run to and from school is winter ice/snow conditions. Students are also concerned about motor vehicle traffic speed, motorist and bicyclist courtesy, motor vehicle traffic volume and sidewalk and/or walkway conditions. There were insufficient samples for an urban/rural analysis.

Table 19  
Obstacles/Problems Encountered Walking Or Running To/From School

Obstacle/Problem	Number Responses	Percent of Individuals Responding
Winter ice/snow conditions	17	73.9
Motor vehicle traffic speed	12	52.2
Motorist/cyclist courtesy	11	47.8
Motor vehicle traffic volume	11	47.8
Sidewalk/walkway conditions	11	47.8
Crosswalks/crossings	8	34.8
Lack of sidewalks home to school	8	34.8
Terrain (hills)	3	13.0
Traffic signals	3	13.0
Road signs/markers	2	8.7

Percentages add to more than 100 percent because of multiple responses

---

**Question 24: REASONS WHY STUDENTS DO NOT WALK OR RUN TO AND FROM SCHOOL.**

The overwhelming reason students do not walk or run to and/or from school is that it is too far to walk or run; 78.1% of the 96 respondents cited this as a reason. Other reasons include winter ice/snow conditions (27.1%), the lack of safe roadside shoulders (18.8%) and motor

vehicle traffic is too heavy (18.8%).

Table 20  
Reasons Why Students Do Not Walk Or Run To/From School

Reasons	Number Responses	Percent of Individuals Responding	Urban Percent Responding	Rural Percent Responding
Too far to walk or run	75	78.1	72.4	80.6
Winter ice/snow conditions	26	27.1	34.5	23.9
Lack of safe road shoulders	18	18.8	20.7	17.9
Motor vehicle traffic too heavy	18	18.8	34.5	11.9
Parents won't let me	16	16.7	34.5	16.4
Lack of sidewalks home to school	15	15.6	17.2	14.9
Frequent daily weather changes	11	11.5	17.2	9.0
Motorists are not courteous	9	9.4	10.3	9.0
Sidewalk/walkway conditions	8	8.3	13.8	6.0
Too many dogs along the way	2	2.1	3.4	1.5

Percentages add to more than 100 percent because of multiple responses.

Urban student respondents were much more concerned than rural student respondents regarding the volume of motor vehicle traffic, sidewalk/walkway conditions, daily weather changes and winter ice/snow conditions.

**Question 25: PRIMARY MEANS OF TRAVEL TO SHOP, VISIT FRIENDS OR FAMILY, OR SOCIALIZE/RECREATE.**

The 372 individuals who responded to this question clearly conduct the majority of their shopping, personal/family travel and social/recreation travel using a motor vehicle. Only in the area of social/recreation travel is a mode other than a motor vehicle used to any great extent: 19.4% walk and 12.1% bicycle.

Table 21  
Primary Mode Of Travel To Shop, Visit Friends Or Family, Or Socialize/Recreate

Travel Mode	Percentage Using Travel Mode		
	Shopping	Personal/Family	Social/Recreation
Drive alone in motor vehicle	40.1	31.7	22.8
Drove with passengers	34.1	39.0	40.9
Passenger in a motor vehicle	24.7	24.7	27.7
Walk	5.1	5.6	19.4
Bicycle	2.4	2.2	12.1
Car/Vanpool	2.7	4.6	4.6
Run	0	1.1	4.3
Bus/Public transit	1.1	1.9	2.4
Taxi	0	.5	1.3
Scooter or moped	0	.3	.5

Percentages add to more than 100 percent because of multiple responses.

**Question 26: ROUND TRIP DISTANCE IN MILES FOR MOST RECENT TRIP TO SHOP, VISIT FAMILY/FRIENDS, OR FOR SOCIAL/RECREATION.**

Mean distances traveled for personal/family and social/recreational reasons are much longer than mean distances traveled for shopping reasons. However, the median distances traveled (mid-point respondent) for all those trip purposes are very close. A few long distance personal/family and social/recreational travelers raise the mean considerably for those two purposes.

Table 22  
Mean And Median Shop, Visit And Recreation Travel Distances

Trip Purpose	One-Way Travel Distance Mean Miles	One-Way Travel Distance Median Miles	Range Miles Traveled
Shopping	14.3	8	.1 - 200
Personal/Family	50.3	10	.2 - 1,000
Social/Recreational	72.8	9	.2 - 3,000

**Question 27: GENDER OF RESPONDENT.**

Female = 219 = 54.5%

Male = 173 = 45.5%

1990 State distribution was 51.3% female and 48.7% male

---

**Question 28: EDUCATION LEVEL OF RESPONDENT.**

Comparing 1990 Census data with the education level of survey respondents:

- \* 8.8% of Maine's adult residents have not graduated from high school while 13.3% of the adult respondents to the walking and running survey did not graduate from high school.
- \* 41.7% of Maine's adult residents have entered college or vocational school while 57.7% of the adult respondents to the walking and running survey entered college or vocational school.
- \* 18.8% of Maine's adult residents have graduated from college or vocational school while 38.1% of the adult respondents to the walking and running survey graduated from college or vocational school.

Even without statistical tests it is clear that the walking and running survey had a much higher percentage of respondents with a college or vocational education than would be expected in comparison to the 1990 Census data for Maine residents.

Table 23  
Education Levels Of Respondents

Respondent Education Level	Number Respondents	Percent of Total
Still in elementary/secondary school	40	10.2
Grade school education	12	3.1
Some high school education	40	10.2
Graduated high school	74	18.9
Some college/vocational school	76	19.5
Graduated college/vocational school	88	22.5
Post-college education/graduation	61	15.6

---

**Question 29: CURRENT OCCUPATION OF RESPONDENT.**

Based upon 390 individual respondents 43.8% of the walking and running survey respondents are working full time and 15.9% are working part time. The category of fully retired accounted for 17.7% of the respondents while only 3.1% were semi-retired working part time. Full time students accounted for 15.1% of the respondents while homemakers accounted for 11.5%. Overall it would seem, without direct comparison to 1990 Census data, that a good cross-section of Maine residents in terms of occupation responded to the walking and running survey.

Table 24  
Occupation Of Respondents

Occupation	Number Responses	Percent of Individual Respondents
Working full time	171	43.8
Fully retired	69	17.7
Working part time	62	15.9
Full time student	59	15.1
Homemaker	45	11.5
Part time student	29	7.4
Not presently employed	17	4.4
Semi-retired/working part time	12	3.1

Percentages add to more than 100 percent because of multiple responses.

**Question 30: ADDITIONAL COMMENTS.**

Only 55 individuals provided additional comments; these were grouped into the categories presented in Table 25. Further consolidation of those comments yield the following findings:

- \* additional sidewalks, walkways and paths desired by 19 respondents; and
- \* improvement of roads and shoulders desired by 9 respondents.



Table 25  
Additional Comments By Survey Respondents

Comment	Number Responses	Percent of Individual Responses
More sidewalks/walkways	13	23.6
Thanks for the pass	6	10.9
Need places/paths to walk/run/bike	6	10.9
More public transportation	6	10.9
Improve road shoulders	5	9.1
Enforce traffic/biking laws	4	7.3
Maintain/repair roads	4	7.3
Good survey	3	5.5
Bad survey	3	5.5
Better ice/snow removal	3	5.5
Drivers rude/not courteous	2	3.6
Vehicle speed/volume concerns	2	3.6
Other	12	21.8

Percentages add to more than 100 percent because of multiple responses.

**APPENDIX A**

**WALKING/RUNNING QUESTIONNAIRE**



## WALKING/RUNNING ACTIVITY SURVEY

We need your assistance. Just 20 minutes of your time responding to the attached questionnaire will help the Department of Transportation (DOT) and the Bureau of Parks and Recreation (BPR) identify how much Maine residents walk and run, their preferences and opinions regarding walking and running and obstacles and problems encountered while walking or running. The information provided by your response and by other Maine residents will be used by the DOT and the BPR in the development of a statewide bicycling and walking transportation plan.

**Instructions:** This survey is to be completed by, or for, the household member age five (5) or older who most recently had a birthday, and who is currently residing in your household. This assures us that the person for whom the survey is completed from your household has been randomly selected. **A parent or other adult may complete the form for a child, but answers should reflect the child's activity and not that of the adult.** Please complete the survey even if the person responding does not walk or run for any of the purposes listed in question 6. Return the survey to us in the enclosed stamped and addressed envelope.

As a token of our appreciation for return of your completed survey please accept the enclosed one day pass allowing free entry to any State Park or Historic Site day use area in 1995.

### HOUSEHOLD INFORMATION

1. City or town in which you permanently reside. \_\_\_\_\_
2. Write in the age of each individual who resides year round in your household, including yourself.  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
3. How many registered **highway** motor vehicles (cars, trucks and motorcycles) are owned by members of your household. \_\_\_\_\_ number vehicles

### WALKING/RUNNING INFORMATION ABOUT YOURSELF

4. Age of person who most recently had a birthday and about whom this survey is being completed. \_\_\_\_\_ years
5. For each of the following seasons within the last 12 months, about how many hours a week did you walk or run.

	<u>Walk</u>	<u>Run</u>
Winter months	(a) _____ hours per week	(b) _____ hours per week
Spring months	(c) _____ hours per week	(d) _____ hours per week
Summer months	(e) _____ hours per week	(f) _____ hours per week
Fall months	(g) _____ hours per week	(h) _____ hours per week

[If you do not walk or run go to Question 13, Work Travel]

6. **Why do you walk or run.** During the last 12 months how many times or days did you participate in each of the following walking/running activities/purposes.

**Times**  
**or Days**

- \_\_\_\_\_ (a) observing plants or wildlife  
 \_\_\_\_\_ (b) participate in a walking sport  
 such as golf or hunting  
 \_\_\_\_\_ (c) personal business/medical  
 trips  
 \_\_\_\_\_ (d) run-a-thons  
 \_\_\_\_\_ (e) running/jogging for exercise/  
 fitness/pleasure  
 \_\_\_\_\_ (f) shopping trips to grocery  
 store, mall, etc.

**Times**  
**or Days**

- \_\_\_\_\_ (g) visit friends/relatives near home  
 \_\_\_\_\_ (h) visit historic sites/cultural areas  
 \_\_\_\_\_ (i) walk-a-thons  
 \_\_\_\_\_ (j) walk for exercise/fitness/  
 pleasure  
 \_\_\_\_\_ (k) walk/run to/from school  
 \_\_\_\_\_ (l) walk/run to/from work  
 \_\_\_\_\_ (m) walk the dog/other pets  
 \_\_\_\_\_ (n) other (list) \_\_\_\_\_  
 \_\_\_\_\_ (o) other (list) \_\_\_\_\_

7. **Where do you walk or run.** For each of the following walking/running destinations/trips write in the number of times you walked or ran during the last 12 months and the usual amount of walking/running time round trip (fill in as many as apply).

**Number Minutes**  
**of Times Round Trip**

- \_\_\_\_\_ (a) \_\_\_\_\_ (b) along roads frequented by motor vehicles  
 \_\_\_\_\_ (c) \_\_\_\_\_ (d) designated nature interpretive trails in parks or preserves  
 \_\_\_\_\_ (e) \_\_\_\_\_ (f) designated cultural interpretive trails in historic/cultural areas  
 \_\_\_\_\_ (g) \_\_\_\_\_ (h) indoor fitness tracks  
 \_\_\_\_\_ (i) \_\_\_\_\_ (j) neighborhood/community streets or sidewalks  
 \_\_\_\_\_ (k) \_\_\_\_\_ (l) outdoor fitness courses or trails  
 \_\_\_\_\_ (m) \_\_\_\_\_ (n) recreation trails in parks/preserves  
 \_\_\_\_\_ (o) \_\_\_\_\_ (p) school running tracks  
 \_\_\_\_\_ (q) \_\_\_\_\_ (r) shopping malls  
 \_\_\_\_\_ (s) \_\_\_\_\_ (t) unpaved roads/jeep roads  
 \_\_\_\_\_ (u) \_\_\_\_\_ (v) within abandoned railroad corridors  
 \_\_\_\_\_ (w) \_\_\_\_\_ (x) within operating railroad corridors  
 \_\_\_\_\_ (y) \_\_\_\_\_ (z) within utility corridors  
 \_\_\_\_\_ (aa) \_\_\_\_\_ (bb) other (list) \_\_\_\_\_

8. Within the past 12 months, what was the longest walk and the longest run you took and the reason for each. (a) walk: \_\_\_\_\_ miles \_\_\_\_\_ reason  
 (b) run: \_\_\_\_\_ miles \_\_\_\_\_ reason

9. Within the last 12 months have you been involved in any walking/running accidents (circle one only). (a) 1 Yes 2 No  
 If yes, please describe the accident. (b) \_\_\_\_\_  
 \_\_\_\_\_

10. Circle your degree of satisfaction with the following as they relate to walking and running you do in Maine. Please rate as many as apply.

most satisfied --- least satisfied

- |   |   |   |   |   |     |  |
|---|---|---|---|---|-----|--|
| 5 | 4 | 3 | 2 | 1 | (a) | courtesy of bicyclists                     |
| 5 | 4 | 3 | 2 | 1 | (b) | courtesy of motorists                      |
| 5 | 4 | 3 | 2 | 1 | (c) | crosswalks/crossings at road intersections |
| 5 | 4 | 3 | 2 | 1 | (d) | motor vehicle traffic speed                |
| 5 | 4 | 3 | 2 | 1 | (e) | motor vehicle traffic volume               |
| 5 | 4 | 3 | 2 | 1 | (f) | plowed walkways/sidewalks in winter        |
| 5 | 4 | 3 | 2 | 1 | (g) | road shoulder surface conditions           |
| 5 | 4 | 3 | 2 | 1 | (h) | road shoulder widths                       |
| 5 | 4 | 3 | 2 | 1 | (i) | sidewalk maintenance                       |
| 5 | 4 | 3 | 2 | 1 | (j) | signs/travel markers                       |
| 5 | 4 | 3 | 2 | 1 | (k) | terrain (e.g., hills)                      |
| 5 | 4 | 3 | 2 | 1 | (l) | other (list) _____                         |

11. If you expressed dissatisfaction for any of the above, how could conditions or provisions be improved. \_\_\_\_\_

12. Recognizing that all improvements cost money, which of the following, if any, do you favor (circle all that apply).

- |   |   |    |   |
|---|---|----|---|
| 1 | benches/shelters along walkways                                       | 7  | paths/trails in parks/public lands/preserves    |
| 2 | improve existing hiking trails  | 8  | paths/trails on abandoned railroads             |
| 3 | marked crossings at intersections                                     | 9  | paths/trails within operating railway corridors |
| 4 | multi-use trails to share with bicyclists/roller bladers/winter users | 10 | paths/trails within utility corridors           |
| 5 | new rural/mountain trails/paths                                       | 11 | shower/change facilities at work place          |
| 6 | off-road walkways near/in urban areas                                 | 12 | sidewalks along paved roads                     |

## WORK TRAVEL

13. Does the person for whom this survey is being completed have a driver's license or permit (circle one only). 1 Yes 2 No

[remember, for person in household with the most recent birthday]

14. If you work away from home (for pay or as a volunteer), about how far is your work place from where you live in terms of both miles and time.

\_\_\_\_\_ (a) miles one way, \_\_\_\_\_ (b) minutes one way by motor vehicle.

[if you do not work away from home go to Question 20 School Travel]

15. If public transit buses are available, about how far is it from your home to the nearest bus stop in terms of either blocks or miles.  
 \_\_\_\_\_ (a) blocks, or \_\_\_\_\_ (b) miles.
16. For your **usual trip** to and from work please indicate with an **F (Frequently)** or **S (Sometimes)** which of the following transportation modes you use for either all or part of the work trip for each season of the year (include walking if the distance walked is more than one block).

<u>Winter</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>		<u>Codes for Office Use</u>	
_____	_____	_____	_____	(a) Bicycle		
_____	_____	_____	_____	(b) Bus/public transit	WF	WS
_____	_____	_____	_____	(c) Carpool/vanpool	SPF	SPS
_____	_____	_____	_____	(d) Drove alone in car, truck or motorcycle	SUF	SUS
_____	_____	_____	_____	(e) Drove car, truck or motorcycle with passenger(s)	FF	FS
_____	_____	_____	_____	(f) Passenger in car, truck or motorcycle		
_____	_____	_____	_____	(g) Running		
_____	_____	_____	_____	(h) Scooter or moped		
_____	_____	_____	_____	(i) Taxi		
_____	_____	_____	_____	(j) Walk		
_____	_____	_____	_____	(k) Other (list) _____		

17. If you **walk or run to or from work** what obstacles or problems, if any, do you typically encounter (circle all that apply).

- |   |                                    |
|---|------------------------------------|
| 1 crosswalks/crossings                                | 6 shower/change facilities at work |
| 2 lack of walkways/sidewalks<br>between home and work | 7 sidewalk/walkway conditions      |
| 3 motorist/cyclist courtesy                           | 8 signs/markers                    |
| 4 motor vehicle traffic volume                        | 9 terrain (e.g., hills)            |
| 5 motor vehicle traffic speed                         | 10 traffic signals                 |
| other (list) _____                                    | 11 winter ice/snow conditions      |

18. If you **do not walk or run to and from work**, why not (circle as many as apply).

- |  |                                       |
|--|---------------------------------------|
| 1 frequent daily weather changes                       | 6 need motor vehicle for work errands |
| 2 lack of walkways/sidewalks                           | 7 sidewalk/walkway conditions         |
| 3 lack of showers/changing<br>facilities at work place | 8 too far to walk or run              |
| 4 motorists are not courteous                          | 9 too many dogs along the way         |
| 5 motor vehicle traffic volume                         | 10 winter ice/snow conditions         |
| other (list) _____                                     | 11 work schedule fluctuates too much  |

19. If you made **work related trips** during the day on your most recent workday, how far did you travel **round trip** and how (car, bus, walked, etc.) did you travel. (Answer for up to 5 trips. Include any trips more than one block in length. A trip may be to attend a meeting, make a delivery, or do an errand.)

- Trip 1 (a) \_\_\_\_\_ blocks or (b) \_\_\_\_\_ miles; (c) \_\_\_\_\_ how  
 Trip 2 (a) \_\_\_\_\_ blocks or (b) \_\_\_\_\_ miles; (c) \_\_\_\_\_ how  
 Trip 3 (a) \_\_\_\_\_ blocks or (b) \_\_\_\_\_ miles; (c) \_\_\_\_\_ how  
 Trip 4 (a) \_\_\_\_\_ blocks or (b) \_\_\_\_\_ miles; (c) \_\_\_\_\_ how  
 Trip 5 (a) \_\_\_\_\_ blocks or (b) \_\_\_\_\_ miles; (c) \_\_\_\_\_ how

**SCHOOL TRAVEL**

20. Are you currently, or were you, a full time or part time student during the last calendar year. (circle one only)

- 1 Full time student      2 Part time student      3 Not a student

[if Not a student, go to Question 25, Other Trips]

21. Approximately how far do you live from the school you regularly attend.  
 \_\_\_\_\_ (a) miles, or \_\_\_\_\_ (b) blocks.

22. For your **usual trip** to and from school please indicate with an **F (Frequently)** or **S (Sometimes)** which of the following transportation modes you use for either all or part of the school trip for each season of the year (include walking if the distance walked is more than one block).

				<u>Codes for Office Use</u>		
<u>Winter</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>	WF	WS	
_____	_____	_____	_____	(a) Bicycle	SPF	SPS
_____	_____	_____	_____	(b) Bus/public transit	SUF	SUS
_____	_____	_____	_____	(c) Carpool/vanpool	FF	FS
_____	_____	_____	_____	(d) Drove alone in car, truck or motorcycle		
_____	_____	_____	_____	(e) Drove car, truck or motorcycle with passenger(s)		
_____	_____	_____	_____	(f) Passenger in car, truck or motorcycle		
_____	_____	_____	_____	(g) Running		
_____	_____	_____	_____	(h) School Bus		
_____	_____	_____	_____	(i) Scooter or moped		
_____	_____	_____	_____	(j) Taxi		
_____	_____	_____	_____	(k) Walk		
_____	_____	_____	_____	(l) Other (list) _____		

23. If you **walk or run to or from school** what obstacles or problems, if any, do you typically encounter (circle all that apply).

- |  |                               |
|--|-------------------------------|
| 1 crosswalks/crossings                               | 6 sidewalk/walkway conditions |
| 2 lack of walkways/sidewalks between home and school | 7 signs/markers               |
| 3 motorist/cyclist courtesy                          | 8 terrain (e.g., hills)       |
| 4 motor vehicle traffic volume                       | 9 traffic signals             |
| 5 motor vehicle traffic speed                        | 10 winter ice/snow conditions |
|  | other (list) _____            |



24. If you **do not** walk or run to and from school, why not (circle as many as apply).

- |   |                                      |
|---|--------------------------------------|
| 1 frequent daily weather changes                          | 5 motor vehicle traffic is too heavy |
| 2 lack of safe roadside shoulders between home and school | 6 parents won't let me               |
| 3 lack of walkways/sidewalks between home and school      | 7 sidewalk/walkway conditions        |
| 4 motorists are not courteous along route of travel       | 8 too far to walk or run             |
|   | 9 too many dogs along the way        |
|   | 10 winter ice/snow conditions        |
|   | other (list) _____                   |

**OTHER TRIPS**

Other trip purposes might include

**Shopping** - utilitarian trips such as to the grocery store, shopping mall, etc.

**Personal or Family Business** - errands, transporting others, trips to the doctor, etc.

**Social or Recreational** - visits to friends or relatives, trips to a restaurant, the movies, etc.; also vacation trips and fitness walking or bicycling.

25. Circle your **primary** means of travel for your **most recent** trip for each of the following.

<u>Shopping</u>	<u>Personal/ Family</u>	<u>Social/ Recreational</u>		
1	1	1	(a)	Bicycle
2	2	2	(b)	Bus/Public Transit
3	3	3	(c)	Carpool/Vanpool
4	4	4	(d)	Drove alone in car, truck or motorcycle
5	5	5	(e)	Drove car, truck or motorcycle with passenger(s)
6	6	6	(f)	Passenger in car, truck or motorcycle
7	7	7	(g)	Run
8	8	8	(h)	Scooter or moped
9	9	9	(i)	Taxi
10	10	10	(j)	Walk
11	11	11	(k)	Other (list) _____

Codes for Office Use  
SHOP FAMILY SOCIAL

26. Write in how far you traveled and the one way travel time for your **most recent** trip for each of the following.

	<u>Miles</u>		<u>Codes for Office Use</u>
Shopping	_____ (a)		_____
Personal/Family	_____ (b)		_____
Social/Recreational	_____ (c)		_____

**ADDITIONAL INFORMATION ABOUT the person for whom the survey is filled out for**

27. Your sex.            1 Female            2 Male

28. Your current or achieved education level (circle one only).

- |                         |  |
|-------------------------|--|
| 1 Grade school          | 4 College/Vocational college           |
| 2 High school           | 5 Graduated college/vocational college |
| 3 Graduated high school | 6 Post-college education/graduation    |

29. Your current occupation (circle as many as apply).

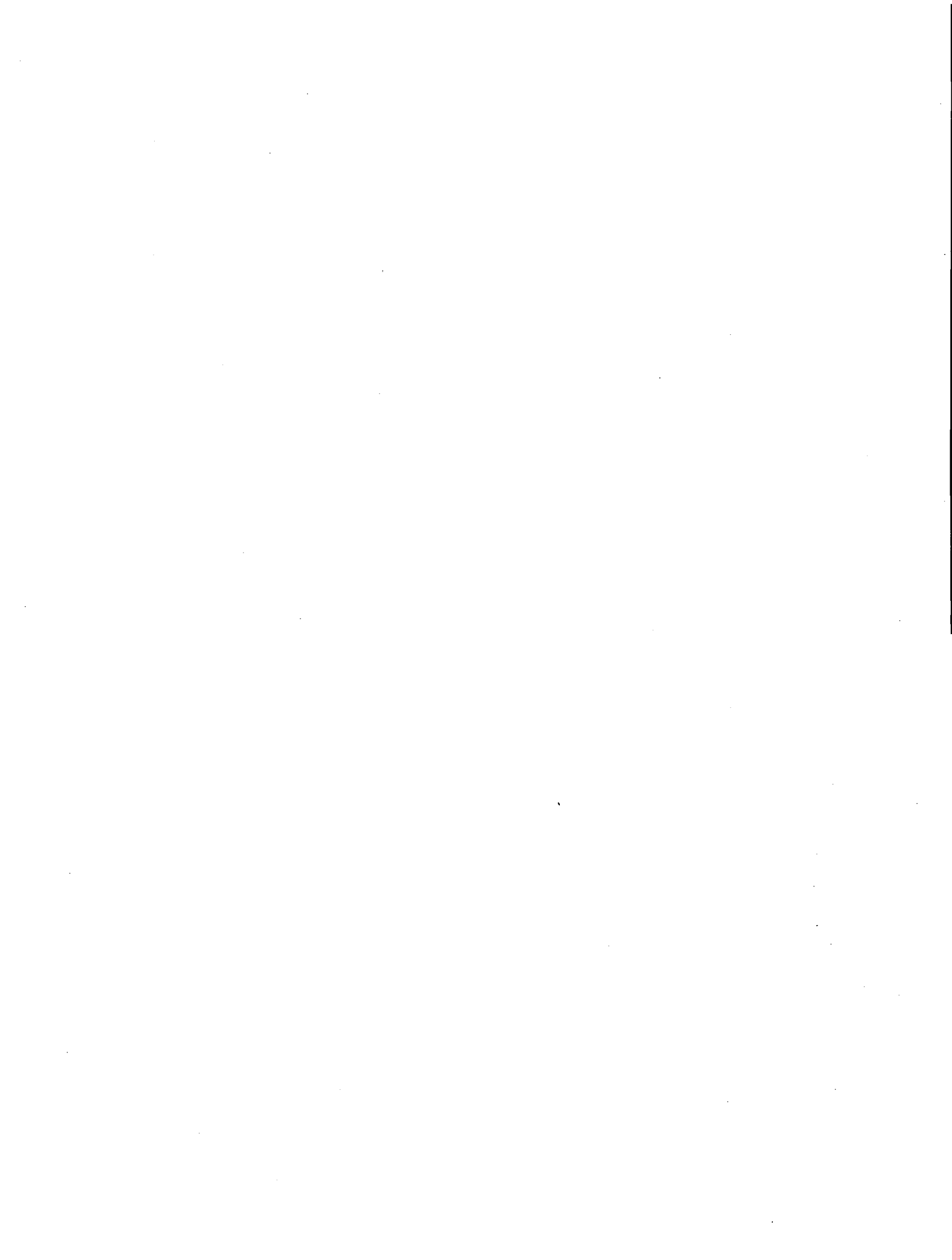
- |                                  |                          |
|----------------------------------|--------------------------|
| 1 Working full time              | 5 Part time student      |
| 2 Working part time              | 6 Full time student      |
| 3 Semi-retired/working part time | 7 Homemaker              |
| 4 Fully retired                  | 8 Not presently employed |

**THANK YOU.** Use the space below for any additional comments.

**Please return this survey in the enclosed envelope or mail to:**

**Bureau of Parks and Recreation  
Planning and Research Division  
Statehouse Station #22  
Augusta, Maine 04333**

November, 1994



## APPENDIX B

### SELECTED WALKING/RUNNING ACTIVITY SURVEY COMMENTS

13. Found it difficult to fill this form. I know bikeways, walkways would be greatly appreciated . . . all over the State. [77 year old female from Auburn]
19. I do not walk or run for sport. I do walk out of doors in the woods nearly every day. I regularly walk down to visit my neighbor - round trip about half a mile. I volunteer regularly at the Washburn-Norlands Living History Museum in Livermore. I heat my home with wood and I work in my woodlot 3 or 4 days a week. I retired from teaching school this past June. I taught for 33 years. It is my intention to remain physically active for as long as I possible can. I canoe, hike and climb mountains in season. [64 year old male from Kingfield]
26. Make designated bike lanes on all roads, including county roads. I don't bike in Maine because it is unsafe in comparison to other states. We need more regularly scheduled public transportation in Maine. And more incentives for carpooling. [45 year old female from Vienna]
39. Litter fines need to be enforced, too much broken glass everywhere (my dog cuts his feet). Streets are swept, but sidewalks are not. Vandalism ruins many nice park projects. Would like to have a full time public transportation system (train?) connecting the major cities in Maine and connecting to a bigger out of state metropolitan area! [43 year old male from Auburn]
47. Any initiative to enhance and encourage walking or running, either for fitness, pleasure or getting to and from work or shopping, is well worth the effort. Reliance on motor vehicle traffic (diminished) and increased emphasis on fitness must be made. [45 year old male from Winslow]
49. Motorists go 60 in 25mph zone here. Someway should be made to slow them down - the signs don't do it.  
As I am an older citizen and a free-lance artist and because we live in a rural seaside community, much of this questionnaire does not apply or is difficult to fill out. But the idea is a good one and we appreciate the pass! Thank you. Maine is still the greatest place to live. [70 year old female from South Bristol]
52. I have never lived in an area (Pennsylvania) that has no law requiring residents to shovel snow and rake leaves from sidewalks - have lived in Maine for 2 and 1/2 years. Saco needs many sidewalks installed and many sidewalks repaired. [58 year old female from Saco]
58. The main reason I don't walk is because I live too far away from anything and there aren't any sidewalks on my road (E. Hardscrabble Rd.) and I see many people walking by but it is dangerous because of vehicles on the road too. [17 year old female from Auburn]

73. Need more signs in residential areas to limit speed, and monitoring this by police or other officials. Need sidewalks in residential and other areas for walking, running, bicycling. Quicken road repair. Sidewalks are needed badly in this area for children and adults. (We only have sidewalks in the tiny downtown area currently.) [10 year old male from Farmington (obviously helped by a parent)]

83. We have utilized an abandoned railbed in Calais as a walkway. Many people feel it could be extended into the Moosehorn Wildlife Preserve and used as part of a trail that could be added in the future or connected with snowmobile trails. The overseer of the Moosehorn is agreeable to this. A group of citizens occasionally meets to discuss maintenance and possible expansion. [51 year old female from Calais]

90. We do not walk or run because there is nowhere to go where you do not have to worry about getting run over by vehicles. [23 year old male from Raymond]

93. Lower weight limit for 18 wheelers! There are so many now on 137 and 202 and they drive so fast. They could travel on 95 (Bangor-Augusta) but I think they overload. Also, I would like a walking path but it would serve to widen the road and cars would then go faster. Speed and no where to walk biggest danger. The speed limit is not observed where I walk in Freedom Village and surrounding area.

Great work - making the effort to send this out etc. I love walking and have been doing it for about 15 years but it is getting more dangerous on rural highways in and around Freedom. More traffic traveling faster and big trucks are beginning to scare me away from walking, which I enjoy. Thanks! [47 year old female from Freedom]

98. People do need alternative modes to the motor vehicle. The emphasis should be on walking/running infrastructure improvements that serve business and errand related trips. Rural recreational walking/running opportunities will take care of themselves. Urban compact area infrastructure improvements to facilitate walking/biking alternatives to cars for work or errands can also be used for recreational purposes. Next, if this country is serious about a reversal of the hideous land use patterns caused by overuse of the automobile, we can start to address the problem by doubling the price of gasoline. People will reside in more efficient patterns and begin to use your new walking paths and bike lanes. [29 year old male from Ellsworth]

101. I ride my bike and swim. If I could ride my bike to work I would. I would use mass transportation if it were available - but where I live it isn't economically feasible. The other member of this household rides his bike to work almost everyday all year long (10 miles round trip). [38 year old female from Lebanon]

107. Glad someone is concerned about the safe opportunities for urban and country walking in all seasons. [57 year old female from Augusta]

119. I drive a package car (truck) for UPS and have always delivered in rural sections of Maine. I am presently working in the North Edgecomb - Boothbay region. As I pointed out on question 11, the breakdown lanes in this state are almost non-existent - Rt. 27 into Boothbay from Rt 1 is a prime example. In the summer I see bicycle tours trying to negotiate out of Boothbay into horrific traffic on Rt. 27 with no alternative but to challenge on-coming traffic. I've had close encounters and witnessed many more (a mountain bike does not fare very well against a Winnebago Motor Home). Bike paths, or breakdown lanes, would be a welcome, healthy addition to many of our secondary roads. Thanks for the pass. [46 year old male from Knox]

132. Walking to and from a bus stop to any student's home in rural Maine is a hazardous experience. sometimes it's dark - there are usually no sidewalks and lots of snowbanks. Good thing for Mom! [11 year old female from Shapleigh]

148. Walking and especially running are a challenge in the Central Maine area because roadsides are not adequate or a usable surface and traffic is often not only inconsiderate but downright aggressive towards walkers/runners.

I have had drivers "pretend" they were going to run into me only to veer off at the last minute. Others do not move over as they pass by, even when conditions or on-coming traffic is not a factor.

Nature trails - parks - wildlife preserves are great but not always convenient for the daily experience when one has no time to travel. I appreciate our State Parks. I wish there was a better way to police our public lands so as to stop the few who abuse and deface them. How about volunteer patrols - an idea? [47 year old female from Fairfield]

154. If one hour per day is available for recreation/exercise, then this must be well spent. Most working adults not living close to work or shopping areas will not dedicate the time necessary to walk to and from these locations. Weekly supermarket trips with four or five bags to take home, make a walking trip less likely. Lack of sidewalk, walkway and sufficient night lighting combined with heavy traffic and rude, surly, impatient drivers doesn't tempt me to step out into the local traffic. [50 year old male from Cape Elizabeth]

181. Note: He was a shipbuilder at Bath Iron Works before retiring and also the manager of auto garage and mechanic earlier in life. He walks when he can. He keeps active. But doesn't walk on a regular basis. Sidewalks and ice and snow removal would benefit him the most. [67 year old female responding for a 76 year old male from Friendship]

197. I'd like non auto walking trails in the Belfast area. To walk into town I'd have to use Rt 3. Good walking - too much traffic. Rt 52 is not walkable at all - no shoulder. Back town roads are OK but not shoulders. I miss sidewalks! I grew up in town and walked everywhere. I occasionally drive into town just to use the sidewalks! [42 year old male from Belfast]

204. We visited Mt. Katahdin twice this year and was quite impressed with how the trails and directional signs were placed - easy to follow. We saw wildlife, plants and beautiful scenery and everything was so neat. The employees were all very courteous and helpful. [8 year old female from Chester]
213. Bicyclists could have bells to sound as they come up behind the walker to make the walker aware of his/her presence. [63 year old male from Portland]
231. Out of state people are most likely to drive significantly above speed limit and don't stop for pedestrians. Multi-use trails don't work for bikers. I rode my bike for 4 years for a 2 hour round trip to and from work and didn't need to shower. A person's decision to run, walk, bike has to do with the inner needs. [36 year old female from Peaks Island (Portland)]
244. Walking is my primary means of keeping fit in the summer, spring, fall months. I do enjoy nature/fitness trails and would use them to jog. I do have to push a stroller when going for walks so sidewalks would be wonderful, especially with all the tractor-trailer trucks traveling through Kingfield. [29 year old female from Kingfield]
245. My husband and I rollerblade frequently. Very little in this survey touches on this aspect (question 12, item 4 was the only item). The interest in rollerblading has increased greatly in our age group (30-45) in the last few years, and is still increasing. We mainly use the high school track to avoid traffic, but we dream of an auxiliary sidewalk for bladers, bicyclists, walkers etc. I have seen them out West. I would participate more in this and according to conversations with friends, they would enjoy a sidewalk along roadways also. [42 year old female from Millinocket]
246. I stopped biking due to potholes, sand and gravel. No place to lock up bike. Sidewalk riding is safer but the bumps are too much for this 40 year old back (I do like the handicap sidewalk entrance). I stopped walking near the river downtown - when my daughter and I are alone it's scary - too isolated. I love the open parks like those in Bangor - they feel safe. Popular places that could really encourage walking is the Bangor Mall (not just inside) and the Broadway Mall, but the routes are awful. The more these places that have walk/bike access the better for slowing down cars and increasing use. [40 year old female from Bangor]
258. On Rt 11 in Oakland and Belgrade the gravel and sand on the shoulder of the road is washed away and not wide enough for safe walking. We just moved to Maine from South Carolina and Maine lacks in recreation compared to South Carolina. [22 year old male from Oakland]
260. More work is needed on the dirt roads in this area. There has been little to no maintenance done on these roads this year. Many of these roads, come spring, are going to wash out and be nearly impossible to travel. People do live on these roads and school busses must travel on these roads and the way they are being cared for is outrageous!! [74 year old male from Parkman]

263. Traffic signals. Specifically there is a major intersection in Lincoln, where Rt 2 and Rt 6 meet. A . . . stop sign at this location (in the center of town) is absurd. A complete traffic signal is needed. (Respondent drew a sketch of exactly where the traffic signal is needed.) [36 year old male from Princeton]

288. Live in rural area so need car to get to office, shopping etc. However do a lot of walking on rural roads, paths in woods etc. Lumbered during hunting season. Also use discontinued roads, wood paths etc. for cross country skiing in winter. [61 year old female from Stonington]

303. People need to walk, run, and/or bike. It should be a priority to provide safe, convenient places to do the above. Also, sidewalks would allow the elderly to feel safe walking. Otherwise they are trapped in for long winter months in Maine. [51 year old female from Saco]

341. I recently moved here from New York State. One of the reasons for this move was the parks and the use of the outdoors for recreation. The freedom of movement while enjoying the many trails without signs and fences was a fantastic feeling. In New York State there are many restrictions in the form of barriers and signs. Please, never change the feeling of real nature experiences that everyone loves here in Maine. [42 year old male from Ellsworth]

345. I think it should be a law, you must stop at crosswalks if you are driving an automobile. I sometimes wait 5 minutes before I can cross the street. [11 year old female from Auburn]

348. Thank you for the complimentary pass. I have been to a few state parks in the past and have enjoyed my visit. I always find the staff to be friendly and helpful. Thanks for doing such a great job. [27 year old male from Appleton]

377. Cars going through red lights and not stopping for walk lights to right on red are a big problem.

I do not mind sharing the sidewalk with a bicyclist, but they have no interest in sharing. Here I refer to the "million dollar bridge." It is dangerous for bicyclists to be on the roadway, but when they shout for me to get out of the way when they are on my sidewalk I make sure that they run me down or come to a complete stop before getting by me. [60 year old male from South Portland]

382. I would like to see non-motor public use pathways separate from road ways so myself and others don't have to breath motor vehicle exhaust. Also no matter how courteous drivers are it's never comfortable riding a bicycle on any shoulder with 2 tons of steel barrelling along behind and passing one at frequent intervals. Even if most drivers are responsible, one never knows which have been drinking or have had bad days. Finally, it's hard to convince people to get out of their cars and start solving some of the air quality problems in Mid-Coast Maine when there is no public transportation. [30 year old male from Rockland]



