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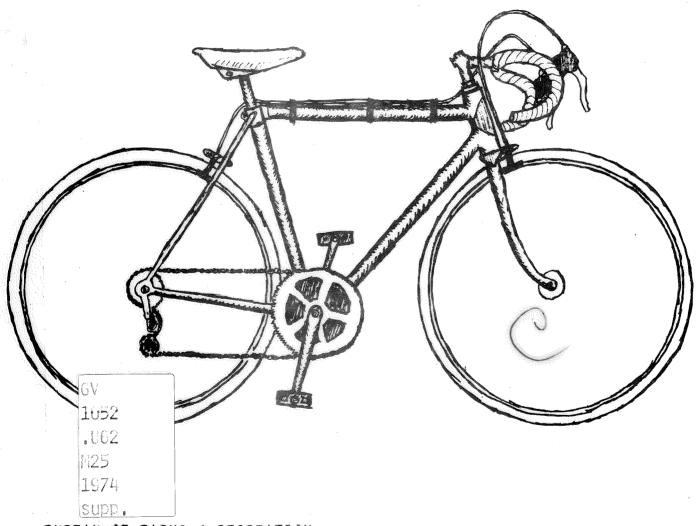
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BICYCLING IN MAINE

technical supplement



BUREAU OF PARKS & RECREATION

DEPARTMENT OF CONSERVATION

AND THE

DEPARTMENT OF TRANSPORTATION

MARCH 1974

STATE LAW LIBRARY AUGUSTA, MAINE

"BICYCLING IN MAINE" technical supplement

prepared by

Department of Conservation
Donaldson Koons, Commissioner

Bureau of Parks and Recreation Thomas Dickens, Director

Planning and Research Division Thomas Cieslinski, Supervisor Department of Transportation Roger L. Mallar, Commissioner

Bureau of Planning Daniel Webster, Director

study coordinated by
Patricia Stimets

CONTENTS

The state of the s		
	Appendix Ex	hibit*
Northeast Market Survey Results	A-6 -	A-29
Northeast Market Survey Questionnaire	A-30 -	A-32
School Survey Questionnaire	A-33 -	A-34
School Survey Results	A-35 -	A-44
Teachers Survey Questionnaire	A-45 -	A-46
Teachers Survey Results	A-47 -	A-48
Police Chief Survey Questionnaire	A-49	
Police Chief Survey Results	A-50 -	A-53
Bicycle Retailers Survey Questionnaire (results in main report)	A-54 -	A-55
Maine College Campus Survey Results	A-56 -	A-57
Federal Highway Administration Memo	A-58 -	A-69
Model Municipal Ordinance	A-70 -	A-76

^{*}Appendix Exhibits A-1 through A-5 are in main report.

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ANALYSIS OF BICYCLES

AND

BICYCLE RIDERS

IN

MAINE

Oct/Nov. 1973

		,	

Number of Bicycles in Maine

Geographic Area ¹	Estimated Number of Bicycles ²	Average Number of Bicycles per Household
Augusta	10500	.69
Bangor	12700	.56
Bath Brunswick	13500	1.03
Biddeford Saco	12500	. 79
Lewiston Auburn	28700	1.11
Portland	32800	.73
Presque Isle	14300	1.26
Waterville	15800	1.31
Other Urban	28200	1.07
Rural	102500	. 85
Statewide ³	272,700	.90

¹ See Addendum A for geographic definitions.

² Figures are rounded, therefore they will not sum to Statewide total. Estimated number of bicycles is derived by multiplying survey produced number of bicycles per household times the number of households in each area according to the 1970 Census.

³ According to the 1970 Housing Census there are 303,000 occupied housing units in the state. See appendix C for computation of area households.

Distribution of Bicycles Among Maine Households

	% of Households									
Number of Bicycles	State wide	Augusta	Bangor	Bidd Saco	Bath Bruns.	Lewis Aub.	Port land	Presq. Isle		Rural
None	58.2	68.5	72.9	60.0	50.0	51.4	61.4	45.7	44.3	60.0
One	15.5	15.7	8.6	17.1	20.0	17.1	21.4	12.9	20.0	14.4
Two	12.2	5.7	11.4	10.0	14.3	14.3	7.1	21.4	14.3	11.9
Three or more	13.6	10.1	7.1	12.9	15.7	17.1	3.0.0	20.0	21.4	13.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

About the Bicycle - Number of Speeds

				% of	Bicycle	es				
Number of	State			Bidd	Bath	Lewis		Presq.		
Speeds	wide	Augusta	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
One	51.7	60.4	33.3	41.4	51.3	37.2	23.5	60.2	57.1	60.0
Three	21.9	10.4	30.8	27.6	23.8	23.1	43.2	14.8	1.3 2	22.3
Five	5.3	2.1	17.9	5.2	6.3	7.7	5.9	5.7	9.9	4.6
Ten	20.5	27.1	15.4	25.9	18.8	30.8	27.5	19.3	16.5	13.1
Other	.6	0	2 . 6	0	0	1.3	0	0	3.3	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Age of the Bicycles

					Bicycle					
Number of	State			Bidd.	Bath	Lewis	Port	Presq.	Water	
years old	wide	Augusta	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
Less than l year	11.6	10.4	20.5	10.9	12.3	16.7	21.6	3.4	20.7	10.3
One	24.0	18.8	12.8	27.3	23.3	14.1	9.8	32.9	12.0	32.4
Two	20.7	16.7	15.4	23.6	17.8	26.9	21.6	20.5	18.5	14.0
Three to five	28.4	35.4	30.8	25.5	31.5	26.9	23.5	28.4	34.8	30.9
Six or more	15.3	18.8	20.5	12.7	15.0	15.4	23.5	14.8	14.1	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Likelihood of Replacement

"Would you say in the next couple of years, that the chances are likely or unlikely that you would replace this bicycle with a new one?"

				8 (of Bicyc	les				
Replace	.:State			Bidd	Bath	Lewis	Port	Preso	y Water	
ment	wide	Augusta	Bangor	Saco	Bruns.	Aub.	1and	Isle	ville	Rural
Likely	32.4	31.2	25.6	37.3	16.7	21.8	37.5	51.1	35.9	29.4
Unlikely	67.6	68.8	74.4	62.7	83.3	78.2	62.5	48.9	64.1	70.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Estimated number of bicycles to be replaced in each										
market ¹	88355	3276	3251	4663	2255	6257	12300	7307	56 7 2	30135

¹Based upon multiplying the number of bicycles in each area by the % expected to be replaced. It is to be noted that retailer aggressiveness, gas rationing and improved riding facilities may affect these projections.

About the Rider

Age of Riders

Age of Rider	% of Riders	Cumulative %
6 - 10	29.9	-
11 - 15	29.2	59.1
16 - 20	12.6	71.7
21 - 25	6.2	77.9
26 - 30	4.6	82.5
31 - 35	5.8	88.3
36 - 40	3.3	91.6
41 - 45	3.3	94.9
46 - 50	1.8	96.7
Over 50	$\frac{3.3}{100.0}$	100.0

Age of Riders By Geographic Areas

			Panisananggy MD-79-48-48-50anih	9	of Ride	ers			
			Bidd.	Bath			Presq.	Water	
	Augusta	Bangor	Saco	Bruns.	Aub.	land	isle	ville	Rural
6-10	29.2	12.8	22.6	36.1	24.4	15.7	34.1	30.4	32.4
11-15	33.3	41.0	26.4	22.2	39.7	15.7	28.4	37.0	27.9
16-20	16.7	17.9	15.1	13.9	17.9	17.6	10.2	13.0	9.5
21-30	6.3	15.4	18.9	16.7	7.7	15.7	11.4	7.6	14.7
31-50	14.6	12.8	13.2	6.9	9.0	27.5	13.6	8.7	12.5
Over 50	_1	6 000	3.8	4.2	1.3	7.8	2.3	3.3	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.01	.00.0	100.0	100.0

 $^{^{\}mathrm{l}}$ (-) Indicates no riders were reported in that age group in that area sample.

Hours of Usage Per Week During Bicycle Riding Season 1

				9	of Rid	lers				
	State			Bidd.	Bath	Lew.	Port	Presq.	Water	
# of Hours	wide	Aug.	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
Under 1	9.7	10.4	10.3	14.5	6.9	8/729	11.8	5.7	21.7	. 8
1-5	43.6	33.3	51.3	41.8	65.3	44.9	43.1	31.8	33.7	41.3
6-10	24.9	35.4	23.1	16.4	23.6	47.4	13.7	26.1	17.4	31.7
11-20	16.7	14.6	12.7	16.4	4.2	7.7	19.6	22.7	25.0	23.0
Over 20	5.0	6.3	2.6	10.9	_2	com	11.8	13.6	2.2	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	7.3	7.9	6.1	8.4	4.5	6.3	8.9	10.6	6.9	8.2

 $^{^{\}mathrm{1}}\mathrm{This}$ was defined to the respondent as from April through October.

 $^{^2}$ (-)Indicates that no riders were reported achieving that level of usage in that area sample.

2.7

No response

For What Purposes Is The Bike Generally Used

% of Bicycles¹ State Bidd Bath Lewis Port Presq. Water wide Saco Bruns. land Isle ville Purposes Augus. Bangor Aub. Rural 72.2 82.4 78.4 83.7 88.9 89.7 60.0 94.9 Pleasure 80.7 87.5 Visiting 10.9 3.4 7.9 8.4 39.6 2.6 7.3 2.8 5.9 friends Going on 7.7 5.9 4.5 8.7 5.6 12.7 1.4 8.2 8.3 5.1 errands Commuting 5.9 4.5 6.5 8.7 5.1 7.3 1.4 3.8 to work 5.1 Commuting to and from _2 15.4 3.6 2.8 5.1 9.1 4.3 4.9 school General transporta-2.0 6.8 6.3 4.7 2.6 3.6 9.7 3.8 tion 5.4 2.4 18.2 8.3 1.3 7.8 4.5 4.2 6.3 5.1 Exercise 2.3 . 8 2.0 ***** 5.1 -1.4 7.7 1.1 Paper route 1.3 1.1 2.4 3.6 2.1 Bike tours 1.6

2.6

1.8

6.4

2.0

9.8

2.4

¹Totals will exceed 100.0% due to multiple uses by many respondents

 $^{^{2}}$ (-) indicates no respondents mentioned that as a purpose for bike usage in that area.

"What hours of the day is the bicycle generally used?"

	% of Bicycles									
	State			Bidd.	Bath	Lewis.	Port	Presq.	Water	
Hours	wide	Augus.	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
Afternoon	43.9	60.4	28.2	43.6	26.4	62.8	49.0	19.3	64.1	45.2
Daylight hours	25.7	10.4	48.7	23.6	41.7	20.5	35.3	34.0	9.8	27.8
Evening	9.8	12.5	12.8	5.5	19.4	5.1	3.9	12.5	12.0	11.1
Morning	8.0	2.1	_1	12.7	5.5	2.6	2.0	12.5	2.2	3.2
Other ² Responses	10.4	12.5	10.2	14.5	6.9	5.1	5.9	20.5	10.9	8.7
Don't Know	2.2	2.1		3.6	0	3.8	3.9	1.4	1.1	4.0

¹⁽⁻⁾ indicates that none of the respondents in that area said the bicycle is generally used in the morning.

Number of Trips During The past Bike Riding Season Of At Least 10 Miles Round Trip

					% of Ri	lders				
Number of	State		-	Bidd.	Bath	Lewis.	Port	Presq.	Water	
Trips	wide	Augus.	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
None	85.7	81.2	84.6	74.5	80.6	80.8	88.2	84.1	89.1	87.3
One	7.9	4.2	12.8	9.1	11.1	11.5	3.9	4.5	5.4	7.1
Two	2.0	8.3	_1	1.8	2.8	1.3	2.0	3.4	_	2.4
Three	1.5	4.2	2.6	E0054	4.2	web.	3.9	1.1	2.2	1.6
Four or more	2.9	2.1	waste	14.5	1.4	6.4	2.0	6.8	3.3	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹⁽⁻⁾ indicates that none of the respondents reported taking that number of trips in that area.

²These included various combinations of the above choices.

Mileage Traveled On Longest Of These Trips

	% of Riders Who Took Trips									
	State			Bidd.	Bath	Lewis.	Port	Presq.	Water	
Mileage	wide	Augus.	Bangor	Saco	Bruns.	Aub.	land	Isle	ville	Rural
10-15	42.2	44.4	100.0	42.8	85.7	46.7	33.3	14.3	40.0	31.3
16-20	21.8	22.2	45964	7.1	7.1	6.7	33.3	21.4	10.0	37.5
21-25	9.4	1	godi	7.1	CON	40.0	sous	21.4	10.0	6.3
26-50	18.8	22,2	Acrosa	28.5	7.1	***	33.4	21.4	30.0	18.8
Over 50	7.8	11.1	acce.	14.3	403 3	6.7	wood	21.4	10.0	6.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹⁽⁻⁾ indicates that none of the riders reported their longest trip to be in that mileage interval.

Safety Conditions

"Would you say that you are very satisfied, satisfied, not very satisfied or dissatisfied with the conditions for bicycle riding in your community?"

% Of Households With Bicycle Riders

	State wide	Augus.	Bangor	Bidd S a co	Bath Bruns.	Lewis Aub.	Port land	Presq. Isle	Water ville	
Very Satisfied	3.4	4.5	5.3	3.6	5 .7	0	3.7	7.9	2.6	3. ĵ
Satisfied	39.4	59.1	52.6	39.3	34.3	35.3	40.7	50.0	48.7	31.3
Not Very Satisfied	32.7	31.8	21.1	28.6	51.4	44.1	22.2	21.1	10.3	40.6
Dis- satisfied	22.6	0	15.8	28.6	8.6	20.6	29.6	18.4	38.5	23.4
No Opinion	1.9	4.5	5.3	0	0	0	3.7	2.6	0	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Those respondents who answered "Very Satisfied" or "Satisfied" with the conditions for bicycle riding in their community were asked why they were satisfied.

Reasons	% of "Satisfied" Respondents Mentioning*
Not too much traffic	30.0
Ride on rural/back country roads	21.2
Bicycle riders are careful/cautious	12.5
We have sidewalks in our area	8.8
We have dead end streets	7.5
Roads are wide enough in our area	7. 5
Motorists are considerate of bicyclists	5.0
Area has bicycle paths	2.5
Adequate, off highway, places to ride	2.5
Police inspect bicycles	1.3
No particular reason	12.5
Don't know	5.0

^{*}Totals may exceed 100.0% due to some respondents giving multiple reasons.

Those respondents who indicated that they were "not very satisfied" or "dissatisfied" with the conditions for bicycle riding in their community were asked how conditions could be improved.

Improvements	% of "Dissatisfied Respondents mentioning*
Need bicycle paths/trails/areas	43.6
Need separate lane on highways and roads	12.0
Improve conditions of roads, paving shoulders	12.0
Allow bicycles to ride on left side of road	6.8
Have a course and instructions to teach children how to ride bicycles	6.8
Make roads wider	6.0
Reduce speed limits	5.1
Provide signs/markers so motorist is aware of cyclist	2.6
Improve traffic control	2.6
Allow bicycles on sidewalks	1.7
License bicycles	1.7
Construct more sidewalks	1.7
Don't know, no response	6.8

^{*}Total will exceed 100.0% due to some respondents giving multiple improvements.

Those persons who didn't mention "safety" or "safety conditions" as a reason for being either satisfied or dissatisfied with bicycle riding conditions were asked:

"What is your opinion of the safety provisions for bicycle riding in your community?"

	<pre>% of Respondents not mentioning "Safety" or "Safety Conditions"</pre>
Very adequate	6.0
Adequate	33.5
Not very adequate	29.0
Inadequate	19.0
No opinion	12.5
	erpount and Clinical Planta and Palaka
Total	100.0

Funding For Improved Bicycle Riding Conditions

"If you feel that additional funds could be spent to improve bicycle riding conditions, what methods would you like to see used to raise these funds?"

	% of Respondents
Funds from the State	5.3
License/register bicycles	4.8
Funds from city/local gov't	4.3
Dept. of Trans./Highway Dept.	3.8
Fund raising events (dances, auctions)	3.8
Taxes	3.4
Parks and Recreations Dept.	2.9
Tax on bicycles	2.9
Bicycle marathon	2.4
Voluntary contributions/donations	2.0
Raise liquor/cigarette/highway taxes	1.4
Clubs	1.4
All other suggestions	5.3
Do not need to spend additional funds	3.8
Don't know, no suggestion	52.4

Addendum A:

GEOGRAPHIC DEFINITIONS

The metropolitan areas were defined as containing all communities within a 10 mile radius of the respective center city. The communities included were:

Portland Area	Biddeford Area	Presque Isle Area
Portland	Biddeford	Presque Isle
South Portland	Saco	Ft. Fairfield
Westbrook	Old Orchard Beach	Caribou
Cape Elizabeth	Kennebunk	Limestone
Falmouth	Kennebunkport	Easton
Gorham	Lyman	Washburn
Windham	Dayton	Mapleton
Cumberland	Buxton	Woodland
Scarborough	Hollis	

Lewiston-Auburn Area	Augusta Area	Bath-Brunswick Area
Lewiston	Augusta	Brunswick
Auburn	Hallowell	Bath
Lisbon	Farmingdale	Harpswell
Webster	Gardiner	Topsham
Greene	Randolph	West Bath
Minot	Winthrop	Freeport
Poland	Manchester	Pownal
Durham	Windsor	Phippsburg
New Gloucester	Vassalboro	Arrowsic
	West Gardiner	
	Readfield	
	Sidney	
	China	

A-19

Waterville	Area	Bangor	
EDGL-CH-CERTS-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-	Complete Com	The second secon	SCORPHINESSON CONSIDERATION OF THE SECOND OF

Waterville Bangor

Winslow Brewer

Oakland Orono

Fairfield Old Town

Smithfield Hampden

Belgrade Hermon

Benton Orrington

Clinton Holden

Veazie

Eddington

Glenburn

Kenduskeag

Addendum B:

RESEARCH METHODOLOGY

Sample Design

A two stage random sample of Maine households was employed in this study.

The first wave of 500 interviews were conducted with a random selection of Maine households. These households were selected from the published telephone directories of the state.

The results of this wave of interviews provided the census related data as to the number of bicycles in the state and all the findings labeled statewide in the text of the report.

The second wave was necessitated by the desire to isolate findings in specific geographic areas of the state. An additional 300 interviews were concentrated in the eight geographic regions identified in Appendix A. The 300 interviews were distributed in such a way that the total number of interviews conducted in each area equaled 70. The total was composed of the number of interviews which randomly fell in each area during wave 1 and the supplemental interviews of wave 2.

Coding and Tabulation

All interviews were coded by NMI personnel on mark sensing sheets which were converted to punch cards by the IBM 1130 machine operated by the University of Maine.

All processing was done on the University IBM computer utilizing the statistical package for the Social Sciences (SPSS) programs maintained in the University program library.

Addendum C: Estimated number of households for each geographic area.

The methodology employed was to estimate the areas population from the 1970 Census of Population and divide by the average number of persons per occupied unit in that county to determine the number of households in the area.

	Estimate of Population (000's)	Number of persons per household ²	Estimated number of households
Augusta	50.7	3.34	15180
Bangor ·	78.2	3.46	22600
Bath-Brunswick	41.2	3.15	13080
Biddeford-Saco	51.2	3.24	15800
Lewiston-Auburn	82.8	3.20	25875
Portland	143.3	3.19	44920
Presque Isle	41.4	3.65	11350
Waterville	40.3	3.34	12065
Other Urban	85.3	3.243	26355
Rural	386.0	3.203	120590

¹Source, 1970 Census of Population

²Source, 1970 Housing Census

³Estimated

Addendum D: Statistical Interpretation

Determining Confidence Intervals

The table on the next page presents the approximate 95% confidence intervals around any proportion of response in the statewide or any geographical area.

To use this table the proportion must be based on the "% of bicycles" or the "% of riders".

To use this table the reader must identify the value of the proportion, i.e. 82%, 70% etc. and the base of the proportion, i.e. statewide, Lewiston-Auburn etc.

Given these two pieces of information the proper column and row of the table can be selected. The value at the intersection of the selected row and column is added to and subtracted from the sample proportion to form the approximate 95% confidence interval.

For example: The results have shown that 11.6% of the bicycles in the state are less than 1 year old. Looking in the statewide row in column 1, we see that 2.7% must be added and subtracted to form the upper and lower bounds of the confidence interval. The interval would be 8.9% - 14.3%.

Sample Proportion

Area	0 - 19 $81 - 100$	20 - 39 $61 - 80$	40 - 60
Statewide	± 2.7	+ 4.1	± 4.5
Rural	± 4.9	<u>+</u> 7.6	+ 8.4
Waterville Presque Isle	<u>†</u> 6.1	± 9.4	±10.2
Lewiston-Auburn Bath-Brunswick	+ 6.9	1.0.4	11.2
Portland Biddeford-Saco	+ 7.8	12.2	13.3
Augusta Bangor	+ 8.8	<u>+</u> 13.3	<u>†</u> 14.5

ADDENDUM E

Crosstabulations of Data

Cross Tabulations: Number of speeds by age of bicycle by likelihood of replacement.

Bicycles to be replaced (base = 146 bicycles)

Number of Speeds	Less than one year	One <u>Year</u>	Two <u>Years</u>	Three to five Years	More than Five Years	Total
One	2.1	17.1	16.4	29.5	11.6	76.7
Three	Manif	5.5	2.1	5.5	. 7	11.6
Five	. 7	ans.	1.4	0	.7	2.7
Ten	1.4	3.4	1.4	. 7	-	6.8
Other	-	LEDS	1.4	. 7	•••	2.1
Total	4.2	26.0	22.6	34.2	13.0	100.0

Bicycles not likely to be replaced (base = 301 bicycles)

	Less than One Year	One <u>Year</u>	Two Years	Three to five Years	More than Five Years	Total
One	3.3	7.0	5.0	13.3	11.3	39.9
Three	3.3	5.6	6.0	8.3	3.7	26.9
Five	. 7	1.7	1.7	2.3	.3	6.6
Ten	6.3	9.3	8.0	1.7	1.0	26.2
Other	wind	MSSI	geon		.3	. 3
Total	13.6	23.6	20.9	25.6	16.6	100.0

Cross tabulation: Purpose of use by hours of day of use. (base = 456 bicycles)

Hours of Day of Use

Purpose of Use	After noon	Day- light Hours	Evening	Morning	Other and Don't Know	Total
Pleasure	36.6	19.5	8.1	5.3	10.7	80.7
Visiting friends	4.4	2.4	. 2	-	.9	8.4
Going on errands	3.9	1.5	. 2	. 9	1.5	8.2
Commuting to work	. 4	2.2	. 9	. 7	1.3	5.1
Commuting to and from school	. 4	1.5	0	1.3	1.1	4.9
General Transportation	1.1	2.2	. 7	. 7		4.7
Evening	1.8	. 4	1.1	. 4	. 2	4.2
Paper Route	1.1	-	. 2		.7	2.0
Bike tours	. 4	. 7		-	. 4	1.6
No response	1.3	. 4	. 2	_	. 7	2.7

Crosstabulation: Age of rider by mileage of longest trip. (Base = 65 bicycles)

Mileage of Longest Trip

Age of Rider	10 600 15	16 - 20	21 - 25	<u> 26 - 50</u>	Over 50	Total
6 - 10	3.1	613	1.6		-	4.5
11 - 15	12.5	9,3	4.7	9.3	4.6	40.4
16 - 20	9.3	6.2	1.6	4.7	3.1	24.9
21 - 30	9.3	1.6	gg/A	3.1	_	14.0
31 - 50	7.8	4.7	1.6	1.5	_	15.3
Over 50	£155+	MACA.	essed	META	bacin	_
Total	42.2	21.8	9.4	18.8	7.8	100.0

Crosstabulation: Number of trips by age of rider.

Age of Rider	None	<u>One</u>	Two	Three	Four or More	Total
6 - 10	28.6	. 4	. 4	_	. 2	29.9
11 - 15	23.3	3.4	. 4	.9	1.1	29.2
16 - 20	9.3	2.0	. 2	-	1.1	12.6
21 - 30	8.9	1.1	. 4	. 4	-	10.8
31 - 50	12.2	.9	. 4	. 2	. 4	14.2
Over 50	3.3	-		-	-	3.3
Total	85.7	7.9	2.0	1.5	2.9	100.0

Goo	d "I'm	from Normark Research. We are con-
	ting a study for the State Department ation on bicycle usage in Maine. May	
Ϊ.	How many usable bicycles are present By bicycles we mean to exclude motor	•
	(number of bicycles)	If none terminate and record.
2.	Could you tell me the age and first	names of each member of the family who has

a bicycle(s)?
(If no adult mentioned probe in case they've been forgotten)

Now, for each family member that owns a bike, I am going to ask you some questions about that bicycle and their usage of it.

- 3. First, let's discuss .(the first family member named)
 - A. How many speed does his (her) bicycle have? (Record under Col A)
 - B. About how old is that bicycle? (Record under Col B)
 - C. Would you say in the next couple of years, that the chances are likely or unlikely that he/she/you would replace this bicycle with a new bicycle? (If likely X in Col C)
 - D. Between the months of April and October, about how many hours a week would you estimate this bicycle is used? (Record under Col D)
 - E. For what purposes is the bicycle generally used? (Do not read list. Record letter(s) found next to each reason in appropriate space under Col E)
 - a. Commuting to and from school
 - b. Visiting friends
 - c. Going on errands
 - d. Bike tours
 - e. Commuting to work
 - F. Pleasure
 - g. General transportation
 - h. Other reasons (specify)

NorMark

NORTHEAST MARKETS, INC.

	F. What hours of	the day is the bicy	cle generall	y used? (Record under Col F)				
4.	. One final question about this bike and rider During the past bicycle riding season from April to this month, did							
	ever take a single trip or tour of at least 10 miles round trip? (If yes record below and continue with 4a. If no or don't remember continue with next rider and ask question 3)							
	Yes-trip(s)	A # Of trips	B Mileage	Origin/Destination of latest Trip				
Z	ganzan mendari 1988 mengan Masar Anggan Sagar Saga Sagar Sagar Sa	interface and the contract of						
Υ								
X			protes Milleralance (1882 1982 1880 1891 1880 1891 1880 1891 1880 1891 1890 1890	rain-Visso sina niiga viiniik viiti. _{Siire} paavaa arain siiniiliin viira dhankii siidiin kaleessa kiiniid ka siidiin ka				
W		matter digital and all the resources and purples and a sets. All the resources distinguished a sets.	Mo - to a standardoff-state of a vide addresse and					
٧	gan kalantagan nga ugangkakkan Manayo wak unipunian sa Timor Park Park Sa unipunian 1918 1918		and with difference windowns and without the matter accompany consumers with the company consumers when the company consumers were the construction of the company consumers when the company consumers were the construction of t					
U								
	A. About how man	y such trips did	take of	this length or more?				
		approximate mileage, rip? (Probe if just	-	and the destination of the most				
	erviewer: Ask quesue to ask question		family membe	r who has a bicycle, then con-				
5.	dissatisfied with nity?	the conditions and	provisions f	ied, not very satisfied, or or bicycle riding in your commu-				
	(If a or b ask:)	S. C. N.V	o D o	U o J o westerniterense es				
6.	What reasons do yo	ou have for feeling	satisfied wit	th these conditions? (Probe)				
	(If c or d ask:) How could the cond	ditions be improved?	(Probe)					

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sed in the state to suppor methods would you most fa	
•	
,	*
S	
May I have your name and	address for
Town	, yanga kelumalkan yan elikum dan kalaum terminan daga keleben dan daga keleben dan da
	Int.
•	methods would you most fa ase indicate your preferen you would favor <u>2nd</u> most.

SCHOOL SURVEY ON BICYCLING

SCH	OOL GRADE	#ging@compactionninth.com/t.Al-intelligible in #Millianninth	TOWN
1	DO YOU HAVE A BICYCLE?		YES NO
2	IF YES, WHAT TYPE OF BICYCLE DO YOU	HAVE?	
	Standard	Touring	
	Stingray	10 Speed	
		5 Speed	
		3 Speed	
3.	DOES YOUR BICYCLE HAVE:		
	 a) A Headlight? b) Reflectorized Tape on Ha c) Tail Light or Tail Refle d) Pedal Reflectors? e) Brakes in Working Order? f) Horn or Bell? 	ectors?	YES NO YES NO YES NO YES NO YES NO YES NO
4.	IS YOUR BICYCLE REGISTERED?		YES NO
	IF YES, WHERE IS IT REGISTER	RED?	Police Department Town Office Other
5.	WAS YOUR BICYCLE INSPECTED TO MAKE S IT WAS SAFE TO RIDE AND IN GOOD WORK CONDITION?		YES NO
	IF YES, WHO INSPECTED IT?	a.	A Policeman A Bicycle Rodeo Worker Your Mom or Dad Other
6.	HAVE YOU EVER HAD A COURSE IN BICYCLE SAFETY?		YES NO
	IF YES, WHO TAUGHT YOU?		A Policeman A School Teacher Your Mom or Dad Other
	W	Within the Last Ye Within the Last 2 More Than 2 Years	Years
7.	HOW OLD WERE YOU WHEN YOU FIRST		Years Old

8.	DO YOU EVER RIDE YOUR BIKE	
	a) To go to and from school b) To go to a friend's house c) To go on an errand d) To go to work (ex. babysitting, paper route) e) To just ride around for fun f) After dark	YES NO
9.	IF YOUR TOWN HAS SIDEWALKS DO YOU EVER RIDE ON THE SIDEWALK?	YES NO
10.	ARE THE STREETS OR ROADS WHERE YOU RIDE MOST OFTEN	0
	Not So Busy (Quiet (Very F	Lots of Cars & Trucks) Some Cars & Trucks) ew Cars & Trucks) n Streets Or Roads
11.	IF YOU RIDE ON A STREET OR ROAD, WHICH SIDE DO YOU RIDE ON?	LEFT RIGHT BOTH
12.	WHEN YOU MAKE A LEFT TURN ON YOUR BICYCLE, WHICH SIGNAL SHOULD YOU GIVE? (CHECK ONE ONLY)	
13.	DO YOU EVER PLAY GAMES ON YOUR BICYCLE?	YES NO
	IF YOU DO PLAY GAMES, WHICH ONES?	
14.	DO YOU EVER CARRY SOMEONE ELSE ON YOUR BIKE?	YES NO
15.	HAVE YOU EVER HAD AN ACCIDENT WITH A CAR OR A TRUCK WHILE BICYCLING?	YES NO
	IF YES, HOW OLD WERE YOU?	YEARS OLD
16.	DO YOU STOP FOR SCHOOL BUSES WHICH ARE TAKING ON PUPILS?	YES NO

TOTAL OF ALL GRADES SURVEYED (GRADES 5, 6, 7 and 8) (2869 Responded out of 4400 = 65% Response)

THE TABULATED RESULTS ARE "YES" RESPONSES *(Except for Question Number 2)

1. Do you have a bicycle?

Urban Rural Total 1414 of 1488 = 95% 1297 of 1381 = 94% 2711 of 2869 = 94%

2. What type of bicycle do you have?

Urban Rural Total
Standard-758 of 1315=57% 870 of 1396 = 62% 1628 of 2711 = 60%
Touring -557 of 1315=43% 526 of 1396 = 38% 1083 of 2711 = 40%

3. Does your bicycle have a headlight?

Urban Rural Total
268 of 1315 = 20% 221 of 1396 = 16% 489 of 2711 = 18%

4. Is your bicycle registered?

Urban Rural Total 352 of 1315 = 27% 201 of 1396 = 15% 553 of 2711 = 20%

5. Was your bicycle inspected?

Urban Rural Total 835 of 1315 = 64% 862 of 1396 = 62% 1697 of 2711 = 63%

6. Have you had a course in bicycle safety?

Urban Rural Total 626 of 1315 = 48% 762 of 1396 = 55% 1388 of 2711 = 51%

8f. Do you ever ride your bike after dark?

Urban Rural Total
565 of 1315 = 54% 576 of 1396 = 41% 1141 of 2711 = 42%

9. Do you ride on the sidewalk?

Urban Rural Total
715 of 1315 = 54% 660 of 1396 = 47% 1375 of 2711 = 51%

13. Do you play games on your bicycle?

Urban Rural Total 646 of 1315 = 49% 736 of 1396 = 53% 1382 of 2711 = 51%

*Responses to question No. 2 were separated into two bicycle types - standard or touring.

14. Do you ever carry someone else on your bicycle?

Rural Urban

Urban Rural Total 645 of 1315 = 49% 686 of 1396 = 49% 1331 of 2711 = 49%

15. Have you ever had an accident with a car or bus while bicycling?

Urban Rural Total

16. Do you stop for school buses that are taking on pupils?

Urban Rural Total 840 of 1315 = 64% 898 of 1396 = 64% 1738 of 2711 = 64%

3. (cont'd) Does your bicycle have

b. reflectorized tape on handlebars?

Rural Total Urban

c. tail light or tail reflectors?

Rural Urban

1034 of 1315 = 79% 1043 of 1396 = 75% 2077 of 2711 - 77%

d. pedal reflectors?

Urban Rural Total

876 of 1315 = 66% 896 of 1396 = 64% 1772 of 2711 = 65%

e. brakes in working order?

Rural Urban Total

f. horn or bell?

Urban Rural Total 97 of 1315 = 7% 94 of 1396 = 7% 191 of 2711 = 7% Rural

QUESTIONS HAVING OTHER THAN A SIMPLE YES OR NO RESPONSE

7. How old were you when you first learned to ride a bike?

URBAN

AGE	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
NUMBER OF RESPONSES	0	4	30	185	410	319	196	105	27	14	3	2	1295

RURAL

AGE	1	2	3	: 4	5	6	7	8	9	10	11	12	TOTAL
NUMBER OF RESPONSES	1	3	20	189	436	330	212	114	40	17	7	3	1372

AGE	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
NUMBER OF RESPONSES	1	7	50	374	846	649	408	219	67	31	10	5	2667

10. Are the streets where you ride most often....?

		URBAN	RURAL	TOTAL
The Busiest	197 of	1315=15%	214 of 1396=15%	411 of 2711=15%
Not so Busy	7 13 of	1315=54%	679 of 1396=49%	1392 of 2711=52%
Quiet	365 of	1315=28%	428 of 1396=31%	793 of 2711=29%
Do not ride on	40 of	1315= 3%	75 of 1396= 5%	115 of 2711= 4%
streets and roads		100%	100%	100%

11. If you ride on a street or road which side do you ride on?

	URBAN	RURAL	TOTAL
Left	115 of 1315 = 9%	136 of 1396 = 10%	251 of 2711 = 9%
Right	531 of 1315 = 40%	499 of 1396 = 36%	1030 of 2711 = 38%
Both	669 of 1315 = 51%	761 of 1396 = 54%	1430 of 2711 = 53%
	100%	100%	100%

12. When you make a left turn on your bicycle which signal should you give?

(Three illustrations were shown on the questionnaire; one for a right turn, one for a stop, and one for the correct left turn)

	URBAN	RURAL	TOTAL		
Left turn	1054 of 1315 = 80%	1057 of 1396 = 76%	2111 of 2711 = 78%		
Right turn	215 of 1315 = 16%	270 of 1396 = 19%	485 of 2711 = 18%		
Stop	46 of 1315 = 4%	69 of 1396 = 5%	115 of 2711 = 4%		
	100%	100%	100%		

QUESTION //1

DO YOU HAVE V BICACTES

GRADES	Urban	Rural	Total
5	94%	93%	94%
6	97%	93%	94%
7	92%	94%	.94%
8	94%	9,4%	94%
Total	95%	94%	94%

The above indicates"YES" responses. Of the 2,869 questionnaires returned, 2,711 answered "yes".

QUESTION #2
*WHAT TYPE OF BICYCLE DO YOU HAVE?

GRADES	Urb Standard	an Touring	Rural Standard	Touring	Tota Standard T	
5	74%	26%	7 5%	25%	74%	26%
6	66%	34%	70%	29%	68%	32%
7	48%	52%	51%	49%	50%	50%
8	39%	61%	46%	54%	42%	58%
Total	57%	43%	62%	38%	60%	40%

^{*} Other Data Collected with this Question related to number of bicycle speeds.

QUESTION #3

*DOES YOUR BICYCLE HAVE A HEADLIGHT?

GRADES	Urban	Rural	Total
5	18%	12%	15%
6	15%	17%	16%
7	25%	19%	·22%
8	24%	16%	20%
Total	20%	16%	18%

THE ABOVE INDICATES A "YES" RESPONSE.

QUESTION #4
IS YOUR BICYCLE REGISTERED?

GRADES	Urban	Rural	Total
5	35%	12%	24%
6	.26%	16%	22%
7	27%	16%	22%
8	19%	13%	16%
Total	27%	15%	20%

THE ABOVE INDICATES "YES" RESPONSES.

The Question also asked "Where is it registered?"

---Police Department

---Town Office

---Other

Δ.

^{*} Other data collected with this question related to safety features.

QUESTION #5

WAS YOUR BICYCLE INSPECTED?

GRADES	Urban	Rural	Total
5	68%	67%	68%
6	66%	68%	67%
7	60%	52%	56%
8	58%	5,4%	56%
Total	64%	62%	63%

THE ABOVE INDICATES "YES" RESPONSES

The Question also asked "Who inspected it?"

QUESTION #6

HAVE YOU HAD A COURSE IN BICYCLE SAFETY?

GRADES	Urban	Rural	Total
5	55%	50%	53%
6	53%	67%	62%
7	49%	49%	49%
8	36%	43%	39%
Total	48%	55%	51%

THE ABOVE INDICATES "YES" RESPONSES.

The questions also asked - "Who taught you?"

"When?"

QUESTION #8f

DO YOU EVER RIDE YOUR BIKE AFTER DARK?

GRADES	Urban	Rural	Total
5	27%	31%	29%
6	41%	36%	38%.
7	42%	46%	45%
8	60%	56%	59%
Total	42%	4 1%	42%

THE ABOVE INDICATES "YES" RESPONSES.

QUESTION #9

DO YOU RIDE ON THE SIDEWALK?

GRADES	Urban	Rural	Total
5	61%	38%	51%
6	49%	49%	49%
7	5 4 %	50%	52%
8	52%	52%	52%
Total	54%	47%	51%

THE ABOVE INDICATES "YES" RESPONSES.

QUESTION #13

DO YOU PLAY GAMES ON YOUR BICYCLES?

GRADES	Urban	Rural	Total
5	53%	54%	53%
6	58%	55%	56%
7	34%	53%	44%
8	45%	49%	47%
Total	49%	53%	51%

THE ABOVE INDICATES "YES" RESPONSES.

QUESTION #14

DO YOU EVER CARRY SOMEONE ELSE ON YOUR BICYCLE?

GRADES	Urban	Rural	Total
5	47%	43%	45%
6	44%	51%	48%
7	50%	50%	5ò%
8	55%	52%	54%
Total	49%	49%	49%

THE ABOVE INDICATES "YES" RESPONSES.

QUESTION #15

HAVE YOU EVER HAD AN ACCIDENT WITH A CAR OR BUS WHILE BICYCLING?.

GRADES	Urban	Rural	Total
5	11%	8%	10%
6	11%	9%	10%
7	12%	14%	14%
8	14%	15%	14%
Total	12%	11%	11%

THE ABOVE INDICATES "YES" RESPONSES.

QUESTION #16

DO YOU STOP FOR SCHOOL BUSES THAT ARE TAKING ON PUPILS?

GRADES	Urban	Rural	Total
5	78%	76%	77%
6	67%	67%	67%
7	68%	64%	66%
8	46%	47%	46%
Total	64%	64%	64%

THE ABOVE INDICATES "YES" RESPONSES.

TEACHER'S INSTRUCTION - SCHOOL SURVEY ON BICYCLING

The Maine Department of Parks and Recreation and the Department of Transportation jointly are conducting a statewide school survey of fifth, sixth, seventh and eighth graders to assess the bicycling characteristics at this age group. The results of this survey will be incorporated into a report being prepared by the two agencies for submission to the Legislature in January. This study was requested by the 106th Legislature to investigate such areas as "volume of present bicycle traffic on and off the highway; an inventory of existing and potential bicycle trails; methods of bicycle path construction and innovations used in other states to meet increasing needs; projected increases in bicycle traffic on and off the highway." (Public Law Chapter 133)

Your help in administering this survey to your students is much appreciated. Questions have been designed to 1) assess riding habits, 2) evaluate knowledge of proper bicycling, and 3) determine facilities and programs available to the students and their use of same.

The questions are straight forward and should take no longer than fifteen minutes. We would encourage you to let the students work as independently as possible. Should there be any questions, the following definitions should help. Once an explanation is given, the student should answer as best he or she can or leave the answer blank.

DEFINITIONS

Bicycle Types:

Standard - bicycle with foot brakes, conventional handlebars, wide low pressure tires, usually are heavier than touring or sting ray bikes.

Sting ray - bicycle with high rise handle bars, long narrow sea, small wheels & wheel base.

Touring - bicycle with hand brakes, comes in several speeds, narrow low pressure tires, dropped or conventional handlebars.

While the students are answering the surveys, we would like to ask for your thoughts on the topics listed on the attached page.

school sy bicycline	g habits	: Tes	eny indigeny manazana	riease C	omment_		
	is not a	a school p: o	rogram, is	anythin	g being	done to	start
What are observed	the threamong ye	ee most com our studen	mmon viola ts?	tions of	good b	icycling	you ha
ngagang gagana Milija sakah Tana and Mililah ANN Bashanga ayang and Miliyang and A							
What fact	ilities ided by	(i.e. marke the commun	ed routes, ity and/or	paths, school?	racks)	for bicy	cling
72							
	ilities a	are needed	if any?				
			if any?				
Would you	ı like to		if any?	school,		ng Safet	
Would you Instruct: Please fe	ı like to ion Broch	o receive,	if any? for your icycling F	school,	Bicycli: Yes	ng Safet	y No
Would you Instruct: Please fe	ı like to ion Broch	o receive, hures or Ba	if any? for your icycling F y comments ycling	school,	Bicycli Yes cs ment	ng Safet	y No any
Would you Instruct: Please fe	ı like to ion Broch	o receive, hures or Ba	if any? for your icycling F y comments ycling	school, ilms?	Bicycli Yes Cs ment	ng Safet	y No any
Would you Instruct: Please fe	ı like to ion Broch	o receive, hures or Ba	if any? for your icycling F y comments ycling	school, ilms? on topi	Bicycli Yes Cs ment	ng Safet	y No any
Would you Instruct: Please fe	ı like to ion Broch	o receive, hures or Ba	if any? for your icycling F y comments ycling	school, ilms? on topi	Bicycli Yes cs ment	ng Safet	y No any
Would you Instruct: Please fe	ı like to ion Broch	o receive, hures or Ba	if any? for your icycling F y comments ycling	school, ilms?	Bicycli Yes Cs ment	ng Safet	y No any

(Please detach this page from instructions and return with students' questionnaires)

TEACHERS BICYCLE SURVEY

Results tabulated indicate a "Yes" response

Do you feel bicycle safety instructions, if presently taught in your school system, meet the needs of the student to learn about proper bicycling habits?

Total - All teachers responding

9 of 92 = 10%

If there is not a school program, is anything being done to start one? 2.

Total - All teachers responding

6 of 92 = 78

Would you like to receive, for your school, bicycling safety instruction brochures or bicycling films?

Total - All teachers responding

90 of 92 = 98%

Question #1 (Comments)

In addition to the "Yes" or "No" response to Question #1, an opportunity was given to the teachers to comment on their school's bicycle education program, if any.

a)	No program exists at our school	35
b)	Not aware of a program	6
c)	Police give talks to students	5
d)	A need for a program exists	12
e)	No comment	20

What are the three most common violations of good bicycling you have observed among your students?

Most common responses:

68 responses relate to what part of the street the students ride in

44

	2) Riding in center of road 3) Weaving in and out of traffic	7
b)	Two or more on a bicyle	42
c)	Lack of defensive riding (looking before darting into traffic)	28
d)	Failure to use hand signals	27
e)	General disregard of traffic control devices and laws	19
f)	Bicycles not properly equipped for night riding	18

1) Wrong side of the road

TEACHERS BICYCLE SURVEY

4. What facilities (i.e. marked routes, paths, racks) for bicycling are provided by the community and/or school?

	Number
Marked bicycle paths or trails No facilities that I am aware of	41 13 4 41 5
at facilities are need if any?	
Off-street bicycle paths and trails Bicycle racks at schools Bicycle inspection Program of safety and riding instruction All of the above apply Present facilities are adequate	24 30 13 3 8 6 7 23
	Marked bicycle routes on existing streets Marked bicycle paths or trails No facilities that I am aware of No comments at all at facilities are need if any? Bicycle lanes and routes Off-street bicycle paths and trails Bicycle racks at schools Bicycle inspection Program of safety and riding instruction All of the above apply Present facilities are adequate

Muni	α 1 n 2	1 7 7	- T 7	

BICYCLE REGISTRATION, INSPECTION, ENFORCEMENT AND SAFETY EDUCATION SURVEY

1.	DOES YOUR MUNICIPALITY HAVE A PROGRAM FOR BICYCLE REGISTRATION?	YES	NO
2.	IS BICYCLE REGISTRATION MANDATORY? IF SO, HOW MANY BICYCLES WERE REGISTERED IN 1973?	YES	NO
3.	DO YOU FAVOR MANDATORY BICYCLE REGISTRATION?	YES	NO
4.	DO YOU PREFER REGISTRATION ON THE STATE LEVEL? PLEASE COMMENT.	YES	NO
5.	DO YOU PREFER REGISTRATION ON THE LOCAL LEVEL? PLEASE COMMENT.	YES	NO
6.	IS THERE A BICYCLE INSPECTION PROGRAM IN YOUR MUNICIPALITY?	YES	NO
7.	IS BICYCLE INSPECTION MANDATORY?	YES	NO
8.	DO YOU FAVOR MANDATORY BICYCLE INSPECTION?	YES	NO
9.	IS THERE A BICYCLE SAFETY EDUCATION PROGRAM IN YOUR MUNICIPALITY?	YES	NO
10.	DO YOU UTILIZE BICYCLE SAFETY LITERATURE? HOW OFTEN?	YES	NO
11.	WHAT METHOD IS USED BY YOUR COMMUNITY TO ENFORCE EXISTING BICYCLE LAWS (STATE OR MUNICIPAL)?		
12.	DO YOU FEEL THAT THIS IS AN EFFECTIVE METHOD?	YES	NO
13.	DO YOU FEEL THAT A SPECIAL BICYCLE SAFETY ENFORCE- MENT TEAM OR OFFICER WOULD BE EFFECTIVE?	YES	NO
14.	ON WHICH SIDE OF THE ROAD DO MOST BICYCLISTS IN YOUR MUNICIPALITY RIDE?	LEFT	RIGHT
15.	WHERE DO YOU PREFER THAT THEY RIDE?	LEFT	BOTH RIGHT
16.	COULD YOU LIST FOR US SOME OF THE BASIC BICYCLING PROBLEM IN YOUR MUNICIPALITY.	IS	_ВОТН
17.	DO YOU FEEL THAT PRESENT BICYCLE LAWS ARE DIFFICULT TO ENFORCE IN YOUR COMMUNITY? PLEASE COMMENT.	YES	NO
18.	IF YOU THINK PRESENT BICYCLE LEGISLATION SHOULD BE CHANGE WHAT WOULD YOU SUGGEST?	ED,	

POLICE CHIEFS SURVEY

(108 Responded out of 124, 87% Response) THE TABULATED RESULTS ARE "YES" RESPONSES

1.)	Does y	our Municipality have	e a program for bicycle	e registration?
		URBAN	RURAL	TOTAL
		23 of 36 = 64%	16 of 72 = 23%	39 of 108 = 36%
2 N	Is hic	ycle registration man	ndatory?	
2.,	10 210	-	~	mom a r
		URBAN	RURAL	TOTAL
		12 of 36 = 33%	7 of 72 = 10%	19 of 108 = 18%
3.)	Do you	favor mandatory bicy	ycle registrations?	
		URBAN	RURAL	TOTAL
		30 of 36 - 83%	61 of 72 = 85%	91 of 108 = 84%
4.)	Do you	favor registration of	on a state level?	
		URBAN	RURAL	TOTAL
		8 of 35 = 23%	35 of 70 = 50%	43 of 105 = 41%
5.)	Do you	favor registration of	on a local level?	
		URBAN	RURAL	TOTAL
		28 of 36 = 78%	30 of 69 = 43%	58 of 105 = 55%
6.)	Is the:	re a bicycle Inspecti	ion Program in your Mu	nicipality?
		URBAN	RURAL	TOTAL
		21 of 36 = 58%	27 of 72 = 37%	48 of 108 = 44%
7.)	Is bicy	ycle Inspection manda	atory?	
		URBAN	RURAL	TOTAL

4 of 36 = 11% 7 of 72 = 10% 11 of 108 = 10%

8.) Do you favor mandatory bicycle inspection?

URBAN RURAL TOTAL

28 of 36 = 78% 58 of 71 = 82% 86 of 107 = 80%

9.) Is there a bicycle safety education program in your municipality?

URBAN RURAL TOTAL

28 of 36 = 78% 33 of 72 = 46% 61 of 108 = 56%

10.) Do you utilize bicycle safety literature?

URBAN RURAL TOTAL

31 of 36 = 86% 49 of 71 = 69% 80 of 107 = 75%

11.) What method is used by your community to enforce existing bicycle laws?

The majority of responses indicated the communities relied on the regular police patrols.

Ten responses revealed that communities were using impoundment and ten responses replied simply "none".

12.) Do you feel this is an effective method?

Fifty-five responses were in the affirmative and forty-five said "No".

(There were 100 responses to Question #12, as eight communities left this question blank.)

(The tabulated results for question 13 are "yes" responses)

13.) Do you feel that a bicycle safety enforcement team or officer would be effective?

URBAN RURAL TOTAL

30 of 36 = 83% 52 of 70 = 74% 82 of 106 = 77%

(The results for questions 14 and 15 are for the following three responses - Left, Right, or Both).

14.) On which side of the road do most bicyclists in your municipality ride?

	U!	RBAI	1				RUR	AL				TOT	ΑL	
LEFT RIGHT	_						-			148 448				11% 51%
вотн	11	of	36	==	30%	30	of	72	=	42%				38%

15.) Where do you prefer that they ride?

h) No comment

	UI	RBAI	1				RUR	$_{ m AL}$			Ĺ	TOT	ĄΓ		
LEFT	7	of	36	=	19%	22	of	72	=	31%	29	of	108	33	27%
RIGHT	29	of	36	process process	81%	47	of	72	-	65%	76	of	108	60000 60000	70%
BOTH	0	of	36	-	0 ક	3	of	72	*****	48	3	of	108	60000 60000	3%

	Could you list for us some of the basic bicycling problems in your municipality?	Number of Responses Indicating A Problem
a) Night riding with inadequate lights and reflectors	48
b) Inadequate inspection, faulty bicycles	6
С) Two or more persons on one bicycle	18
d) Riding two and three abreast on streets and highways	3
е) Lack of respect for traffic laws and control devices	18
f) Riding on sidewalks	14
g) Weaving and cutting across traffic	20
h) Riding on wrong side of roadway (on left)	17
i) Lack of bicycle education	11
j) Existing roads and streets inadequate for bicycles	8
k) Lack of bicycle paths and/or routes	4
1) Lack of parental cooperation and supervision	4
m	n) Inexperience of riders (children)	5
n) Theft of bicycles	6
0) Have no problems	4
p) Did not answer question 16	15
$\bar{\mathbf{q}}$) All of the problems apply	2

17.)	Do	you feel that present bicycle laws are difficult to	Number of
	eı	nforce in your community? Please comment.	Responses
			Indicating A
			Problem
	a)	Not enough time available	8
	b)	Lack of enforcement personnel	22
	c)	Courts overloaded with motor vehicle cases now	2
	d)	Lack of public cooperation and support	3
	e)	Police reluctant to enforce laws regarding children	Ą
	f)	Lack of public education	3
		Lack of bicycle safety program	3
		No comment	66

A-52

18.)	If you think present bicycle legislation should be changed, what would you suggest?	Number of Responses Indicating A Problem
	a) Mandatory, State-wide registration	9
	b) Mandatory, State-wide inspection	5
	c) State-wide bicycle safety program	3
	d) Uniform, State-wide rules and regulations	5
	e) Create off highway bicycle trails	· 3
	f) Create bicycle lanes on existing roadways	3
	g) Require bicycles to come equipped with proper lights	
	and reflectors	6
	h) Set a minimum age limit for children riding bicycles	
	on public streets and highways	5
	i) Have bicycles face traffic on highways (ride on left	
	with pedestrians)	3
	j) The current laws are adquate	5
	k) Current laws are O.K need better enforcement	15
	1) No comment	54

SURVEY OF BICYCLE RETAILERS

as part of the

MAINE BICYCLE STUDY

Bureau of Parks & Recreation

As you are probably aware, the 106th legislature passed a bill authorizing a statewide study of recreation and transportation aspects of bicycling. The legislation directs the Department of Transportation and Bureau of Parks and Recreation to study, 1) methods of bicycle path construction and innovations used in other states, 2) existing and potential bicycle trails and 3) volume of present and projected increases of bicycles on and off the highway.

In regard to the latter, we are especially anxious to obtain as accurate a picture of Maine bicycle sales during the past four years as possible. National figures computed to Maine are not enough. I would ask, therefore, that you spend a few moments of your time to fill out the questions below as accurately as your records allow.

We have allowed space for comments and would be most interested in your views of cycling in Maine.

We have a <u>deadline</u> for the legislature, so please return the survey no later than <u>December 15, 1973</u>.

Sincerely.

Patricia E. Stimets
Planning Associate
Bicycle Study Coordinator

SURVEY

SHOP		LOCATION	
Number of years in bicycle	business		aliferata
Brand of bicycle(s) sold:			

	U.S.	Make	Fo	reign M	lake	Tot	al	
970								
1971			na ann an Aire	alah dalah seria di Salah seria da seria seria seria di Salah seria di Salah seria di Salah seria di Salah ser				······································
1972		arman and the second of the se						
1973					arcindamagila da camani procedence e un en simple blada			
What type of	f bicycle	s were	sold du	ring th	ose s	ame ye	ars:	
	-	1970	1971	1972	197	<u>3</u>		
Couring: 10) speed				<u> </u> 			
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SCHOOL & LOCATION	# OF BICYCLES	SOURCE	# OF FULL-TIME & RESIDENT STUDENTS
Bates	250-300 35 racks	Asst. Dean of Student Student Affairs Office Fall '73	1,250 full-time 1,170 resident
Bowdoin	200-300 7 racks	Dean of Students Fall '73	1,236 full-time 927 resident 184 fraternity housing
Colby	350-400	Campus Security Fall '73	1,577 full-time 1,426 resident
College of the Atlantic	30 3 racks	Dean of Students Fall '73	53 full-time
Husson	15-18	Dean of Students Fall '73	750 total (1 commuter faculty)
Nasson	. 250	Dean of Students Fall '73	797 full-time 700 resident
Ricker	50-75	Dean of Students Fall '73	413 total
St. Francis	30	Dean of Students Fall '73	469 full-time 435 resident
St. Joseph's	15	Dean of Students Fall '73	500 full-time 265 resident
Thomas	30	Dean of Students Fall '73	500 full-time 300 resident
U.M. Augusta	30	Dean of Students Fall '73	2,544 total 608 day
U.M. Bangor	50	Dean of Students Fall '73	430 full-time 435 resident
SUB-TOTAL]	.300 - 1528		10,519 full-time 7,666 resident

	SCHOOL & LOCATION	# OF BICYCLES	SOURCE	# OF FULL-TIME & RESIDENT STUDENTS
U	.M. Farmington	250	Dean of Students Fall of '73	1,476 full-time 875 resident
U	.M. Fort Kent	55	Dean of Students Fall of '73	414 full-time
U	.M. Machias	40	Dean of Students Fall of '73	600 full-time 240 resident
U	.M. Orono		Mrs. Millie Cannon Dept. of Police & Safety Fall of '73	8,978 full-time 5,590 resident
U.	.M. Portland - Gorham	Portland - 25 3 racks	Student Affairs Plant Dept.	8,128 full-time (P&G tota 977 resident (Gorham on
U.	.M. Presque Isle	65	Dean of Students Fall of '73	900 full-time 430 resident
n I We	estbrook	150	Dean of Students Fall of '73	500 full-time 327 resident
SI	UB-TOTAL	1,900 - 4,620		20,996 full-time 5,595 resident
T	OTAL	3,200 - 6,148		31,515 full-time 13,261 resident

Information was gathered by the Bureau of Parks and Recreation via a telephone survey of all University branches and Colleges in Maine. In all instances, unless otherwise noted, figures were provided by the Dean of Students. The information is as of Fall 1973 and is usually an estimate of the number of bicycles on campus.



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

WASHINGTON, D.C. 20590

FEDERAL-AID HIGHWAY PROGRAM MANUAL

TRANSMITTAL 18
March 8, 1974
HNG-22

1. MATERIAL TRANSMITTED

Subsection 1, Bikeways and Pedestrian Walkways in Conjunction with Federal and Federal-aid Highways; Section 1, General; Chapter 1, Engineering; Volume 6, Engineering and Traffic Operations.

2. EXISTING ISSUANCES AFFECTED

Supersedes PPM 21-23 dated March 14, 1973.

3. COMMENTS

This issuance contains instructions for the immediate implementation of 23 U.S.C. 217. This section of the Act has been interpreted briefly as follows:

- a. Bicycle facilities and walkways, as incidental features of highway construction projects, may continue to be approved without restrictions as to the amount or sources of funds, provided the bikeway or walkway is within the highway right-of-way and is constructed concurrently with a Federal-aid highway project.
- b. Federal-aid funds, except Interstate, may be used for the construction of bicycle and pedestrian facilities independent of highway projects, for facilities off the normal Federal-aid highway right-of-way, and for additional right-of-way for construction of these facilities. The amount of Federal-aid participation in these types of projects is subject to the funding limitations set forth in the Act, namely, not more than \$40 million in any fiscal year and not more than \$2 million by any State in any fiscal year.
- c. The Division Engineer in each State should insure that the State is aware of the availability of

Federal-aid highway funds for the construction of bicycle and pedestrian facilities and should encourage the maximum utilization of these funds for this purpose.

4. REGULATORY MATERIAL

The regulatory material reflected in the attached directive appears in italicized type and will be published as regulations in the Federal Register.

5. FILING INSTRUCTIONS

The material transmitted by this issuance is to be filed as indicated below:

a. Page Changes

Remove	Insert
1 of Table of Contents for Vol. 6, Chap. 1, dated 12/17/73	i of Table of Contents for Vol. 6, Chap. 1, dated 3/8/74
PPM 21-23, dated 3/14/73 (Vol. 6, Chap. 1, Sec. 1, Subsec. 1)	1 thru10, Vol. 6, Chap. 1, Sec. 1, Subsec. 1, dated 3/8/74

b. Transmittal Changes. After filing the attached pages, this transmittal should be filed behind the tab identified as "Transmittal Changes" in Book V.

Norbert T. Tiemann

Federal Highway Administrator

alum

DISTRIBUTION Basic



U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

FEDERAL-AID HIGHWAY PROGRAM MANUAL

VOLUME 6.	ENGINEERING AND TRAFFIC OPERATIONS
CHAPTER 1.	ENGINEERING
SECTION 1.	GENERAL

SUBSEC. 1.

BIKEWAYS AND PEDESTRIAN WALKWAYS IN CONJUNCTION WITH FEDERAL AND FEDERAL-AID HIGHWAYS

Par.

- 1. PURPOSE
- 2. AUTHORITY
- 3. DEFINITION
- 4. BACKGROUND
- 5. POLICY
- 6. FEDERAL PARTICIPATION
- 7. PLANNING
- 8. APPLICABILITY OF EXISTING LAW, REGULATION AND DIRECTIVES
- 9. DESIGN CRITERIA FOR BIKEWAYS AND WALKWAYS
- 10. SHARED ROADWAYS
- 11. PROGRAMMING

1. PURPOSE

* The purpose of this subsection is to provide policies and procedures relating to bicycle and pedestrian facilities on Federal-aid system highways and Federal participation in the cost of these facilities.

2. AUTHORITY

23 U.S.C. 217, 315, 106

3. DEFINITIONS

- a. "Bicycle" means a two-wheeled vehicle propelled solely by human power.
- b. "Bikeway" means a continuous way designated for use of bicycles and other vehicles propelled by human power.
- * Regulatory material is italicized

- c. "Bicycle trail" means a bikeway separated from the through lanes for motor vehicles by space or barrier.
- d. "shared roadway" means a roadway which may be shared by motor vehicles and bicycles, or a portion of which is reserved for use by bicycles and other nonmotorized vehicles.
- e. "Pedestrian walkway" or "walkway" means a continuous way designated for pedestrians and separated from the through lanes for motor vehicles by space or barrier.
- f. "Highway construction project" means a project financed in whole or in part with Federal-aid or Federal funds for the construction, reconstruction or improvement of a highway or a portion thereof, including bridges and tunnels.
- g. "Independent bikeway or walkway construction project" means a highway construction project to provide bicycle or pedestrian facilities, in contrast with a project whose primary purpose is to serve motorized vehicles.
- h. "Snowmobile" means a motorized vehicle solely designed to operate on snow or ice.

4. BACKGROUND

a. There is a growing interest in bicycling and walking for commuting, for recreation, and for other trip purposes. Where this activity occurs on high speed roadways, both safety and efficiency are impaired because of the mixture of motorized and nonmotorized modes of travel. Provision of bikeways or pedestrian walkways will promote safety and will assist in retaining the motor vehicle carrying capacity of the highway while adding new bicycle capacity. The Congress has recognized the importance of bicycle and pedestrian travel and has included special provisions for these modes in the Federal-Aid Highway Act of 1973. Section 124 of this Act amends Title 23, U.S. Code, by adding section 217 thereto, the principal provisions of which are:

- (1) Federal funds available for the construction of preferential facilities to serve pedestrians and persons on bicycles are those apportioned in accordance with paragraphs (1), (2), (3), and (6) of section 104(b), 23 U.S.C. and those authorized for forest highways, forest development roads and trails, public land development roads and trails, park roads and trails, parkways, Indian reservation roads and public land highways.
- (2) Not more than \$40 million of funds appropriated in any fiscal year for purposes described in the preceding paragraph may be obligated for bicycle projects and pedestrian walkways.
- (3) No State shall obligate more than \$2 million of Federal-aid funds for such projects in any fiscal year.
- (4) Such projects shall be located and designed pursuant to an overall plan which will provide due consideration for safety and contiguous routes.
- (5) No motorized vehicles shall be permitted on such trails or walkways except those for maintenance purposes and, where snow conditions and State or local regulations permit, snowmobiles.
- b. Nothing in the Federal-Aid Highway Act of 1973 is construed as having the intent of curtailing or precluding the provision of bicycle or pedestrian facilities as incidental items of construction in conjunction with highway improvements for the primary purpose of serving motor vehicular traffic. Accordingly, such bicycle or pedestrian facilities are not subject to the funding limitations contained in section 124 of the Act. Such funding limitations are held to be applicable to independent bikeway or walkway construction projects.

5. POLICY

a. The provision of bicycle and pedestrian facilities on Federal-aid highway projects is encouraged. The construction of bicycle facilities and walkways may be

approved as either incidental features of highway construction projects primarily for motor vehicular traffic or as independent bikeway or walkway construction projects where all of the following conditions are satisfied:

- (1) The facility will not impair the safety of the motorist, bicyclist or pedestrian.
- (2) The facility will be accessible to users or will form a segment located and designed pursuant to an overall plan.
- (3) A public agency has formally agreed to:
 - (a) operate and maintain the facility.
 - (b) ban all motorized vehicles other than maintenance vehicles and, when snow conditions and State or local regulations permit, snowmobiles.
- (4) It is reasonably expected that the facility will have sufficient use in relation to cost to justify its construction and maintenance.

6. FEDERAL PARTICIPATION

- a. Bicycle and pedestrian facilities may be constructed as incidental features of highway construction projects where the bikeway or walkway is to be constructed concurrently with the improvement for motor vehicular traffic and the bikeway or walkway will be within the normal right-of-way of the highway, including land acquired under 23 U.S.C. 135 and 319 (Traffic Improvements and Scenic Enhancement Programs). Projects constructed as incidental features of larger highway construction projects may be financed with the same types of Federal-aid funds as the basic highway project, including Interstate projects, and are not subject to the funding limitations for independent bikeway or walkway projects.
- b. Independent bikeway or walkway construction projects may be financed with all types of Federal-aid funds except Interstate, provided the total amount obligated

for all such projects in any one State in any one fiscal year does not exceed \$2 million of Federal-aid funds or a lesser amount apportioned by the Federal Highway Administrator to avoid exceeding the annual \$40 million cost limitation on these projects for all States in a fiscal year. Independent bikeway or walkway projects may be constructed on completed sections of Federal-aid highways. Projects may include the acquisition of land outside the right-of-way, provided the facility will accommodate traffic which would have normally used a Federal-aid highway route, disregarding any legal prohibitions on the use of the route by cyclists or pedestrians.

- c. The Federal share payable for bicycle or pedestrian facilities on a Federal-aid system shall be as provided in 23 U.S.C. 120 for such systems, except that independent bikeway or walkway construction projects on the Interstate System shall be financed as projects on the primary system or urban extensions thereof.
- d. Federal participation in eligible bicycle and pedestrian facilities may include:
 - (1) The costs of grading, drainage, paving, barriers, landscaping, and structures necessary to accommodate the number and type of users of the facility.
 - (2) The costs of supplementary facilities such as shelters, parking facilities, bicycle storage facilities and comfort stations.
 - (3) The costs of traffic control devices including signs, signals and pavement markings.
 - (4) The costs of fixed source lighting where its use is appropriate.
 - (5) The costs of curb-cut ramps on new and existing facilities, including those for the physically handicapped.
 - (6) The costs of right-of-way (land acquisition and relocation assistance) on independent bikeway and walkway construction projects.

Vol. 6, Chap. 1 Sec. 1, Subsec. 1

- (7) The costs of walks, barriers and additional widths and lengths on bridges necessary for bikeways and pedestrian walkways for route continuity.

 Washington headquarters approval is required where it is proposed to route a bikeway over a sizable structure such as a major stream crossing or viaduct.
- (8) The costs of bikeway and walkway grade separations where:
 - (a) Vehicular speeds and crossing volumes constitute a hazard of such magnitude as to justify the cost of the structure and the bikeway or walkway cannot be rerouted to another structure; or
 - (b) The separation is necessary because the highway has complete control of access.

7. PLANNING

Bikeways should be planned as parts of bicycle transportation systems. Where planning is conducted under 23 U.S.C. 134(a), consideration should be given to including bicycle transportation. Funds provided by 23 U.S.C. 307(c) may be used to plan bikeways. Consultation with organized groups of bicyclists is certain to prove valuable in the planning and design of bikeway projects, and such counsel should be actively sought.

8. APPLICABILITY OF EXISTING LAW, REGULATION AND DIRECTIVES

The provisions of 23 U.S.C. apply. Normal Federal-aid procedures established by existing directives are to be followed. This shall include, but not be limited to, applicable sections pertaining to the following: equal employment opportunity, labor provisions, maintenance requirements and utility adjustment. The A-95 Clearinghouse Requirement and the 3-C Planning Requirement may be waived where a determination is made that a bikeway or walkway will have no significant effect on land use or public works activities.

9. DESIGN CRITERIA FOR BIKEWAYS AND WALKWAYS

a. Bikeways and walkways should be designed and constructed in a manner suitable to the site conditions and the

Vol. 6, Chap. 1 Sec. 1, Subsec. 1

anticipated extent of usage. The Division Engineer may determine the acceptability of proposed standards or design criteria for trail and walkway construction. In general, a bikeway should be designed with an alignment and profile suitable for bicycle use, with a surface that will be reasonably durable, that incorporates drainage as necessary, and that is of a width appropriate for the planned one-way or two-way use. Where the bikeway or walkway crosses a street or highway at grade, the location should be such as to insure adequate sight distance, and the design should include traffic control devices for the motor vehicle, the bicycle and the pedestrian, as necessary for safe operation.

b. Bicycle trails, as distinguished from bicycle lanes and shared roadways, should be separated from the roadway a safe distance. Where acceptable separation of the trail from the roadway cannot be otherwise attained, a barrier such as a hedge, fence or guardrail should be erected. Where a bicycle trail along a highway crosses a natural barrier or a transportation route for which a grade separation is necessary, practical alternate structure treatments should be considered. It may be in order to align the trail so as to utilize a highway structure (widened as needed) and with a barrier separation rather than provide a more expensive separate trail overpass or underpass structure.

10. SHARED ROADWAYS

- a. Shared roadway arrangements that result in bicycles operating within the same lanes as high speed traffic should be avoided. In some cases, bicycle lanes outside the through lanes, either on the shoulder or parking lane where parking has been removed, can satisfactorily accommodate bicycle traffic. Within cities, low-volume thoroughfares may provide reasonably safe bicycle operating conditions.
- b. In sparsely developed areas where local ordinances permit and pedestrian volumes are not high, utilization of existing sidewalk systems with appropriate intersection treatments may be suitable segments for bikeways.

11. PROGRAMMING

- a. Approval Procedures
 - Division Engineers may approve requests to obligate funds made available under section 217 of Title 23, U.S.C. (section 124 of the 1973 Act) for construction of independent bikeway or walkway projects to the extent that the limits specified on the obligation of such funds are not exceeded. Division Engineer's approval of PS&E and authorization to advertise (stage 2, step 4) shall establish the obligation of Federal funds with regard to a particular project. For FY 1974, it will be his responsibility to insure that the total amount of Federal-aid funds obligated does not exceed \$2 million. This limitation does not apply to projects by other Federal agencies for independent bikeway and walkway projects to be constructed with funds authorized for forest highway, forest development roads and trails, public land development roads and trails, park roads and trails, parkways, Indian reservation roads and public lands highways. It will also be the Division Engineer's responsibility to determine from the Washington Office Program Analysis Division that the amount to be obligated will not cause the total of Federal and Federal-aid funds obligated for all such projects in any fiscal year to exceed \$40 million. If the amount to be obligated will not cause either limit to be exceeded, normal Federal-aid program procedures will be followed in the execution of the project.
 - (2) In order that there will be maximum utilization of funds authorized to be obligated for independent bikeway or walkway projects, stage 2 projects should be only for those items of preliminary engineering, right-of-way, or construction for which work is scheduled to proceed promptly. If unforeseen developments occur which indicate that a stage 2 project, after authorization, cannot be advanced within a reasonable period and if no costs have been incurred, it should be reverted to programmed only status in order that funds available for obligation may be used on other independent bikeway

projects. The Division Engineer should notify the Washington office immediately that the obligation authority for independent bikeway funding may be reassigned.

- (3) Obligation of FY 1974 fiscal year funds may commence immediately on a first come, first served basis subject to the funding limitations set forth in section 6b.
- (4) For FY 1975 and 1976, each State shall submit a program covering all independent bikeway or walkway construction projects not later than May 1, 1974, in the case of FY 1975 funds, and May 1, 1975, in the case of FY 1976 funds, identifying proposed projects and the source or sources of funds from which such projects are to be financed. Its proposed obligations shall not exceed \$2 million in Federal-aid funds for each fiscal year. In the event the aggregate sum of all Federal and Federalaid funds proposed to be obligated by all States and Federal agencies exceeds \$40 million for either fiscal year 1975 or 1976, funds for obligation will be allocated to the States by the Federal Highway Administration in relation to the apportionment received by the applicant States under 23 U.S.C. 104(b)(1), (2), (3), and (6). Each State will be advised of any allocation not later than June 1, 1974, for FY 1975, and June 1, 1975, for FY 1976. The Division Engineer will insure that the allocation for each fiscal year will not be exceeded.

b. Project Identification

(1) All independent bikeway and walkway construction projects shall be identified by the prefix letters BW followed by the Federal-aid primary, secondary, urban or other project number (BWRF, BWRS, BWU, etc.) for that section of highway route. The agreement number in parentheses shall be the next available consecutive number in the series for that project number.

- (2) Type code Y052 shall be reported for all line items on forms PR-37 submitted for independent bikeway or walkway projects. Bicycle and walkway facilities constructed as incidental parts of highway construction projects shall not be so identified.
- (3) Costs for bicycle, pedestrian and equestrian facilities constructed as incidental features of highway projects should be shown on a separate line on form PR-37 and identified by type code Y009 "pedestrian overpasses or underpasses," or Y051 "paths (including sidewalks)." Code Y009 should include all structures not carrying motor vehicles whether for bicycle or pedestrian use, or whether over a highway, railroad or waterway. Costs of sidewalks on structures, pavement markings, signs and signals incidental to construction for motor vehicles should not be separately reported under codes Y009 or Y051.

MODEL MUNICIPAL BICYCLE ORDINANCE

Based on an Ordinance Recommended by the Bicycle Institute of America (BIA)

The model ordinance outlined below has been tried and tested for several years in more than 100 cities and towns where there are several thousand bicycles registered — or only a few hundred. This model can only be considered a guide, and may be adapted to meet the needs of each Maine community. The BIA is confident that you will find it the basis for an ordinance that will efficiently provide for the improvement of bicycling standards in your community.

SECTION 1 - REGISTRATION OF BICYCLES
It is hereby ordained by the of the of
Section l. (a) It shall be unlawful for any person residing in the
of to ride or use a bicycle without first
obtaining from the police department a license therefor as prescribed in
Section 1 of this ordinance.
(b) No person, firm, partnership or corporation shall maintain, operate or
conduct a business of buying or selling new or secondhand bicycles within the
limits of the of without first obtaining
therefor a license from the police department as prescribed in Section 9 sub-
division (b) of this ordinance.
(c) From and after the passage of this ordinance it shall be unlawful for
any person, firm, partnership or corporation to maintain, operate or conduct
a bicycle renting agency within the limits of the of
without first obtaining a license from the police department
as herein prescribed for in Section 9 of this ordinance.
SECTION 2 - ISSUANCE OF LICENSE
Section 2. The police department is hereby authorized and directed to
issue upon written application, to residents of the of
bicycle licenses that shall be effective for one year,

SECTION 3 - LICENSE PLATES

SECTION 4 - DEALERS AND RENTAL AGENCIES

Section 4. All persons, firms, partnerships or corporations engaged in the business of buying or selling new or secondhand bicycles are hereby required to make regular reports to the police department, on forms to be furnished by the police department, giving a list of all purchases and sales made by said dealer, as well as the name and address of all persons, firms, partnerships and corporations from whom said bicycles are purchased and to whom sold, a description of each bicycle purchased or sold, and the serial number thereof, and in the case of a secondhand bicycle bought from an individual or taken in trade from a person buying a new bicycle, or a secondhand bicycle taken from a dealer's stock, the number of the license thereon if any.

SECTION 5 - TRANSFER OF LICENSE

Section 5. It shall be the duty of any person who sells or transfers owner—ship of any bicycle to report such sale or transfer by returning to the police department the registration card issued to such person as license thereof, together with the name of the person and his or her address to whom the bicycle was sold or transferred, and such report shall be made within two days of the date of sale or transfer thereof. It shall be the duty of the person who made the purchase or the transferee of said bicycle to apply to the police department for registration thereof within two days of the date of said sale or transfer.

SECTION 6 - ALTERING LICENSE

Section 6. It shall be unlawful for any person, firm, partnership or corporation to willfully, maliciously remove, destroy, mutilate or alter the serial number on any bicycle frame licensed pursuant to this ordinance. It shall also be unlawful for any person, firm, partnership or corporation to remove, destroy, mutilate or alter any license sticker or registration card during the time in which said license sticker or registration card is operative, provided, however, that nothing in this ordinance shall prohibit the police department from stamping on the frame of bicycles on which no serial number can be found, or on which said number is illegible for identification purposes, in the administration of this ordinance to prevent bicycle larceny and recovery of stolen bikes.

SECTION 7 - RENTAL PRACTICES

Section 7. No person, firm, partnership or corporation engaged in the business of renting bicycles for hire shall rent a bicycle to a minor unless the written consent of the parents or guardian is provided. The renting agency must keep the written consent on file for police inspection.

SECTION 8 - CONDITIONS OF LICENSE

Section 8. The following rules and regulations shall be observed in the operation of a bicycle on the streets and public places of:

- (a) Every person operating a bicycle shall at all times operate said bicycle with due regard for the safety of other persons and vehicles lawfully upon the streets, highways, parkways and public places, as well as for his or her own safety, and shall at all times and under all conditions yield the right-of-way to pedestrians on the streets, highways, parkways, public places and on the crosswalks.
- (b) Every person operating a bicycle shall comply with all the vehicle traffic laws, except where such laws, by their nature, do not apply to bicycles, and all vehicle traffic signs and signals erected for the regulation of traffic.

- (d) It shall be unlawful to operate a bicycle upon the streets, highways, park-ways and public places of the of that is not equipped with adequate brakes, lights and warning signal, all of which are in proper working order during all of the time of the operation of such bicycle that has the approval and has passed police inspection.
- (e) It shall be the duty of all persons operating a bicycle to ride single file, in a straight line and as near the right—hand curb as possible, on all main high—ways and thoroughfares and in central business sections.
- (f) Before turning or changing the direction of any bicycle upon any street, highway, parkway or public place, it shall be the duty of the bicycle rider to give a signal, by the extension of the hand to indicate the direction it is the intention to proceed.
- (g) It shall be unlawful for any person operating a bicycle upon any street, highway, parkway or public place to attach himself or herself to any other moving vehicle.
- (h) It shall be unlawful for any person operating a bicycle equipped for carrying only the rider to carry another person on the front or rear frame or handle bar of a bicycle.
- (i) It shall be unlawful for any person operating a bicycle to engage in fancy or trick riding and without maintaining full control of such bicycle keeping both hands on the handle bar, except when necessary to signal.

SECTION 9 - ISSUANCE OF LICENSE

Section 9. The following fees shall be collected by the police department for the various types of licenses provided under this ordinance:

- (a) The license fee to be paid for each bicycle shall be \$1.50 for the first year for which such license shall be issued, it being understood that all licenses issued under this ordinance expire on the last day of the month of March, unless that date shall happen on a Sunday in which event the license shall be dated on the first following legal date. In the case where the transfer of bicycle ownership is made in the manner prescribed in this ordinance, the fee for the transfer of said license shall be in the sum of \$1.00. Upon the loss of a license and upon evidence satisfactory of said loss, a new license shall be issued upon payment of \$1.00.
- (b) Each person, firm, partnership or corporation engaged in the business of buying or selling new and secondhand bicycles, shall be required to have a license

issued by the police department. Said license shall be effective for one year. Any person, firm, partnership or corporation engaged in the business of renting bicycles for public hire shall procure a license for their bicycle rental agency. (c) Each person, firm, partnership or corporation engaged in the business of renting bicycles for public hire, in addition to the license fee prescribed for each bicycle, as provided for in sub-division (a) of this ordinance, shall be required to have a license to operate a bicycle rental agency. All bicycles owned by said agency offered for public hire shall be registered in the name of said agency, but a record of the name, address and age of such person hiring a bicycle shall be kept on file for the inspection of the police department. License plates and registration cards issued to a bicycle rental agency shall contain the letters "RA" indicating they are issued to a bicycle rental agency.

SECTION 10 - PENALTY

Section 10. Any person, sixteen years of age and under, who violates any of the provisions of this ordinance, relating to the vehicle traffic laws or the bicycle safe riding rules and regulations and the official police instructions for the safe operation of a bicycle, shall be, for the first offense, reprimanded in a written statement by the police department, addressed to the parents or guardian of the offender, stating the nature of the violation and a warning that a repetition of the violation - or any other violation - must be prevented by the parents or guardian or the offenders registration certificate will be suspended for a period of time at the discretion of the police department and during that period of time the offender cannot ride his or her bicycle on the streets. On the second offense the offender will be summoned to appear at police headquarters with his or her bicycle, accompanied by a parent or guardian, and after a hearing on the violation, if in the discretion of the chief of police, or his representative, it is decided to punish the offender for the violation, the offender's bicycle may be impounded for a period of time not to exceed days at the discretion of the chief of police or his representative - with the approval if possible of the parent or guardian - but the decision of the chief of police shall prevail and the bicycle impounded. It is ordained that no violation of this ordinance, relating to the vehicle traffic laws or the safe bicycle riding rules and the official police instructions for the safe operation of a bicycle, as prescribed in Section 8 of this ordinance, shall be considered a criminal offense or made a matter of a court record where the offender is sixteen years of age and under. Any person over sixteen years of age, firm or partnership violating any of the provisions of this ordinance shall upon conviction thereof, in addition to the suspension or revocation of such license as herein mentioned, shall be punished by the payment of a fine not to exceed 50.00 dollars, or by imprisonment for a term not to exceed days/months or both fine and imprisonment; and any corporation violating any of the provisions of this ordinance, upon conviction thereof, will be subject to a fine not to exceed 100.00 dollars which may be recovered by an action for debt.

SECTION 11 - INSPECTION

Section 11. The chief of police, or his designated representatives, shall inspect each bicycle offered for registration and shall also examine the riding qualifications of the applicant as to his or her knowledge of the vehicle traffic laws of the state applying to bicycles, traffic signs and signals, as set forth in Section 8 of this ordinance, and if the applicants riding qualifications, knowledge of the vehicle laws of the state applying to bicycles, and the bicycle safe riding rules and regulations and the official police instructions for the safe operation of a bicycle are not satisfactory, or the bicycle is not in good ridable condition and properly equipped as provided for in this ordinance, registration of the applicant's bicycle must not be issued until all requirements are fulfilled.

SECTION 12 - QUALIFICATIONS OF DEALERS

Section 12. In the matter of the issuance of business licenses for the dealers in secondhand bicycles and the conduct and operation of a bicycle rental agency the chief of police must be satisfied that the applicants for such licenses are of good character and financially responsible.

SECTION 13 - IMPOUNDING

Section 13. Whenever any bicycle shall be impounded for violations of the provisions of this ordinance it shall be surrendered at the expiration of the impounded period to the parents or the guardian of the offender on the payment of a charge for storage, at the discretion of the chief of police, but if a charge is made it shall not exceed 1.00 dollar. In the case of the seizure of a bicycle because it has been found in the possession of a person, firm, partnership or corporation not the legal owner thereof, and the bicycle is not reclaimed by the legal owner thereof, it shall be sold at public auction — after the expiration of 90 days from the date

SECTION 14 - DEFINITION OF BICYCLE

Section 14. The term "Bicycle" as used in this ordinance shall mean a device having two wheels, with tires sixteen inches or more in diameter, connected by a frame of metal or wood and arranged to be propelled by human power. This definition does not apply to toy bicycles or velocipedes.