

APPENDICES

for the

BICYCLE AND PEDESTRIAN PLAN

Syracuse Metropolitan Transportation Council

Final Report March 2005

Appendix A is Available Upon Request

APPENDIX A

PUBLIC INVOLVEMENT

- List of SAC Members and Agencies Represented
- Stakeholder, Workshop, and Public Meeting Minutes
- Press Releases, Flyers, *In Motion*... Newsletters, and Bicycle and Pedestrian Plan Web Site
- Study Advisory Committee (SAC) Meeting Minutes
- Public Comments Received on the Bicycle and Pedestrian Plan and Bike Suitability Map
- Bicycle and Pedestrian Related Articles from Various *Directions* Newsletters





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0.1 Miles

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Walkway Location Existing Active NYS Rail Roads Water Body Village Radisson Community City of Syracuse

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Smtc

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Sidewalk Inventory

---- Active NYS Rail Roads

Town of De Witt

City of Syracuse

🗾 Water Body

Other Towns

iiiii Village

Town of DeWitt (North)

0.4 Miles

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0.4 Miles

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100 Clinton Square 126 North Salina Street, Suite 100 Syracuse, New York 13202 (315) 422-5716 Fax: (315) 422-7753 www.smtcmpo.org Sidewalk Inventory Town of Geddes

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0.1

Sidewalk Inventory Village of Baldwinsville

Active NYS Rail Roads

City of Syracuse

Village of Baldwinsville

Water Body

Towns

0.2 Miles Basemap Copyrighted by NYSDOT, 2001 Datasources: SMTC, NYSDOT (2001), V/Baldwinsville (2002) Prepared by SMTC, 06/2002

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NYS Department of Motor Vehicles Governor's Traffic Safety Committee



NYS Vehicle & Traffic Law Excerpts



PLEASE READ THIS FIRST! These excerpts are provided for information only and NOT as the basis for legal or judicial determinations. ALWAYS verify them against the most recent available copy of the law. The entire Vehicle and Traffic Law, sorted by section number, is available from the <u>New York State Assembly Site</u> or from the <u>New York State</u>

Contents 2002 - 2003 Edition

Senate Site.

Article 27	Pedestrians' Rights and Duties
Section 1150.	Pedestrians subject to traffic regulations.
Section 1151.	Pedestrians' right of way in crosswalks.
Section 1151-a.	Pedestrians' right of way on sidewalks.
Section 1152.	Crossing at other than crosswalks.
Section 1153.	Provisions relating to blind or visually impaired persons.
Section 1155.	Pedestrians to use right half of crosswalks.
Section 1156.	Pedestrians on roadways.
Section 1157.	Pedestrians soliciting riders, or business.

Sec. 1150. Pedestrians subject to traffic regulations.

Pedestrians shall be subject to traffic control signals as provided in section eleven hundred eleven of this title, but at all other places pedestrians shall be accorded the privileges and shall be subject to the restrictions stated in this article.

Back to Section List

Sec. 1151. Pedestrians' right of way in crosswalks.

(a) When traffic-control signals are not in place or not in operation the driver of a vehicle shall yield the right of way, slowing down or stopping if need be to so yield, to a pedestrian crossing the roadway within a crosswalk on the roadway upon which the vehicle is traveling, except that any pedestrian crossing a roadway at a point where a pedestrian tunnel or overpass has been provided shall yield the right of way to all vehicles.

Effective 1/19/03.

(b) No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impractical for the driver to yield.

(c) Whenever any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass such stopped vehicle.

Back to Section List

Sec. 1151-a. Pedestrians' right of way on sidewalks.

The driver of a vehicle emerging from or entering an alleyway, building, private road or driveway shall yield the right of way to any pedestrian approaching on any sidewalk extending across such alleyway, building entrance, road or driveway.

Back to Section List

Sec. 1152. Crossing at other than crosswalks.

(a) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right of way to all vehicles upon the roadway.

(b) Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right of way to all vehicles upon the roadway.

(c) No pedestrian shall cross a roadway intersection diagonally unless authorized by official traffic-control devices; and, when authorized to cross diagonally, pedestrians shall cross only in accordance with the official traffic-control devices pertaining to such crossing movements.

Back to Section List

Sec. 1153. Provisions relating to blind or visually impaired persons.

(a) Notwithstanding the foregoing provisions of this article every driver of a vehicle approaching an intersection or crosswalk shall yield the right of way to a pedestrian crossing or attempting to cross the roadway when such pedestrian is accompanied by a guide dog or using a cane which is metallic or white in color or white with a red tip.

(b) No person, unless blind or visually impaired, shall use on any street or highway a cane which is metallic or white in color or white with a red tip.

(c) This section shall not be construed as making obligatory the employment of the use of a guide dog or of a cane or walking stick of any kind by a person blind or visually impaired.

Back to Section List

Sec. 1155. Pedestrians to use right half of crosswalks.

Pedestrians shall move, whenever practicable, upon the right half of crosswalks.

Back to Section List

Sec. 1156. Pedestrians on roadways.

(a) Where sidewalks are provided and they may be used with safety it shall be unlawful for any pedestrian to walk along and upon an adjacent roadway.

(b) Where sidewalks are not provided any pedestrian walking along and upon a highway shall when practicable walk only on the left side of the roadway or its shoulder facing traffic which may approach from the opposite direction. Upon the approach of any vehicle from the opposite direction, such pedestrian shall move as far to the left as is practicable.

Back to Section List

Sec. 1157. Pedestrians soliciting rides, or business.

(a) No person shall stand in a roadway for the purpose of soliciting a ride, or to solicit from or sell to an occupant of any vehicle.

(b) No person shall stand on or in proximity to a street or highway for the purpose

of soliciting the watching or guarding of any vehicle while parked or about to be parked on a street or highway.

(c) No person shall occupy any part of a state highway, except in a city or village, in any manner for the purpose of selling or soliciting.

Pedestrian Safety Index & Overview V&T Law Index

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NYS Department of Motor Vehicles Governor's Traffic Safety Committee



NYS Vehicle & Traffic Law Excerpts

Bicycles & Wheel Sport Safety Index & Overview

The bicycle helmet law has changed.

As of January 1, 2005, persons less than 14 years old are required to wear a certified bicycle helmet when riding a skate board. See <u>Section 1238</u> of the Vehicle and Traffic Law.

▲ PLEASE READ THIS FIRST!

These excerpts are provided for information only and NOT as the basis for legal or judicial determinations. ALWAYS verify them against the most recent available copy of the law. The entire Vehicle and Traffic Law, sorted by **section number**, is available from the <u>New York State Assembly Site</u> or from the <u>New York State Senate Site</u>.

Contents 2003 - 2004 Edition (as of December 2004)

Article 1	Words and phrases defined
Section 102.	Definition of Bicycle, Bicycle lane and Bicycle path.
Article 9	
Section 375 24-a.	Use of earphones while driving or riding a bicycle
Article 34	Operation of Bicycles and Play Devices
Section 1230.	Effect of regulations.
Section 1231.	Traffic laws apply to persons riding bicycles or skating or gliding on in-line skates.
Section 1232.	Riding on bicycles.
Section 1233.	Clinging to vehicles.
Section 1234.	Riding on roadways, shoulders, bicycle or in-line skates lines and

bicycle or in-line skates paths.

Section 1235.	Carrying articles.
Section 1236.	Lamps and other equipment on bicycles.
Section 1237.	Method of giving hand and arm signals by bicyclists.
Section 1238.	Passengers on bicycles under one year of age prohibited passengers and operators under fourteen years of age to wear protective headgear.
Section 1239.	Reflective material and devices for in-line skating.
Article 26	Right of way
Section 1146.	Drivers to exercise due care.

Section 102. Definition of Bicycle, Bicycle lane and Bicycle path.

102. Bicycle. Every two or three wheeled device upon which a person or persons may ride, propelled by human power through a belt, a chain or gears, with such wheels in a tandem or tricycle, except that it shall not include such a device having solid tires and intended for use only on a sidewalk by pre-teenage children.

102-a. Bicycle lane. A portion of the roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicycles.

102-b. Bicycle path. A path physically separated from motorized vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way and which is intended for the use of bicycles.

Back to Section List

Section 375 24-a. Use of earphones while driving or riding a bicycle

It shall be unlawful to operate upon any public highway in this state a motor vehicle, limited use automobile, limited use motorcycle or bicycle while the operator is wearing more than one earphone attached to a radio, tape player or other audio device.

Back to Section List
Section 1230. Effect of regulations.

(a) The parent of any child and the guardian of any ward shall not authorize or knowingly permit any such child or ward to violate any of the provisions of this article.
(b) These regulations applicable to bicycles or to in-line skates shall apply whenever a bicycle is, or in-line skates are, operated upon any highway, upon private roads open to public motor vehicle traffic and upon any path set aside for the exclusive use of bicycles, or in-line skates, or both.

Back to Section List

Section 1231. Traffic laws apply to persons riding bicycles or skating or gliding on in-line skates.

Every person riding a bicycle or skating or gliding on in-line skates upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by this title, except as to special regulations in this article and except as to those provisions of this title which by their nature can have no application.

Back to Section List

Section 1232. Riding on bicycles.

(a) A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto, nor shall he ride with his feet removed from the pedals.

(b) No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

Back to Section List

Section 1233. Clinging to vehicles.

1. No person riding upon any bicycle, coaster, in line skates, roller skates, sled or toy vehicle shall attach the same or himself to any vehicle being operated upon a roadway.

2. No person shall ride on or attach himself to the outside of any vehicle being operated upon a roadway.

The provisions of this section shall not apply to:

(i) vehicles in an emergency operation as defined in section one hundred fourteen-b of this chapter; and

(ii) farm type tractors used exclusively for agricultural purposes or other farm equipment; and

(iii) riding on the open, uncovered cargo area of a truck with the permission of the operator of such truck; and

(iv) vehicles employed by a municipality tor local garbage collection; and

(v) vehicles participating in a parade pursuant to a municipal permit.

3. No vehicle operator shall knowingly permit any person to attach any device or himself to such operator's vehicle in violation of subdivision one or subdivision two of this section.

Back to Section List

Section 1234. Riding on roadways, shoulders, bicycle or in-line skates lanes and bicycle or in-line skates paths.

(a) Upon all roadways, any bicycle or in-line skates shall be driven either on a usable bicycle or in-line skates lane or, if a usable bicycle or in-line skates lane has not been provided, near the right-hand curb or edge of the roadway or upon a usable right-hand shoulder in such a manner as to prevent undue interference with the flow of traffic except when preparing for a left turn or when reasonably necessary to avoid conditions that would make it unsafe to continue along near the right-hand curb or edge. Conditions to be taken into consideration include, but are not limited to, fixed or moving objects, vehicles, bicycles, in-line skates, pedestrians, animals, surface hazards or traffic lanes too narrow for a bicycle or person on in-line skates and a vehicle to travel safely side-by-side within the lane.

(b) Persons riding bicycles or skating or gliding on in-line skates upon a roadway shall not ride more than two abreast. Persons riding bicycles or skating or gliding on in-line skates upon a shoulder, bicycle or in-line skates lane, or bicycle or in-line skates path, intended for the use of bicycles or in-line skates may ride two or more abreast if sufficient space is available, except that when passing a vehicle, bicycle or person on in-line skates, or pedestrian, standing or proceeding along such shoulder, lane or path, persons riding bicycles or skating or gliding on in-line skates shall ride, skate, or glide single file. Persons riding bicycles or skating or gliding on skates shall ride, skate, or a roadway shall ride, skate, or glide single file when being overtaken by a vehicle.

(c) Any person operating a bicycle or skating or gliding on in-line skates who is entering the roadway from a private road, driveway, alley or over a curb shall come to a full stop before entering the roadway.

Back to Section List

Section 1235. Carrying articles.

No person operating a bicycle shall carry any package, bundle, or article which

prevents the driver from keeping at least one hand upon the handle bars. No person skating or gliding on in-line skates shall carry any package, bundle, or article which obstructs his or her vision in any direction.

Back to Section List

Section 1236. Lamps and other equipment on bicycles.

(a) Every bicycle when in use during the period from one-half hour after sunset to one-half hour before sunrise shall be equipped with a lamp on the front which shall emit a white light visible during hours of darkness from a distance of at least five hundred feet to the front and with a red light visible to the rear for three hundred feet. Effective July first, nineteen hundred seventy-six, at least one of these lights shall be visible for two hundred feet from each side.

(b) No person shall operate a bicycle unless it is equipped with a bell or other device capable of giving a signal audible for a distance of at least one hundred feet, except that a bicycle shall not be equipped with nor shall any person use upon a bicycle any siren or whistle.

(c) Every bicycle shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level, clean pavement.

(d) Every new bicycle shall be equipped with reflective tires or, alternately a reflex reflector mounted on the spokes of each wheel, said tires and reflectors to be of types approved by the commissioner. The reflex reflector mounted on the front wheel shall be colorless or amber, and the reflex reflector mounted on the rear wheel shall be colorless or red.

(e) Every bicycle when in use during the period from one-half hour after sunset to one-half hour before sunrise shall be equipped with reflective devices or material meeting the standards established by rules and regulations promulgated by the commissioner; provided, however, that such standards shall not be inconsistent with or otherwise conflict with the requirements of subdivisions (a) and (d) of this section.

Back to Section List

Section 1237. Method of giving hand and arm signals by bicyclists.

All signals herein required to be given by bicyclists by hand and arm shall be given in the following manner and such signals shall indicate as follows:

1. Left turn. Left hand and arm extended horizontally.

2. Right turn. Left hand and arm extended upward or right hand and arm extended horizontally.

3. Stop or decrease speed. Left hand and arm extended downward.

Back to Section List

Section 1238. Passengers on bicycles under one year of age prohibited;

passengers and operators under fourteen years of age to wear protective headgear. 1. No person operating a bicycle shall allow a person who is under one year of age to ride as a passenger on a bicycle nor shall such person be carried in a pack fastened to the operator. A first violation of the provisions of this subdivision shall result in no fine. A second violation shall result in a civil fine not to exceed fifty dollars.

2. No person operating a bicycle shall allow a person one or more years of age and less than five years of age to ride as a passenger on a bicycle unless:

(a) such passenger is wearing a helmet meeting standards established by the commissioner. For the purposes of this subdivision wearing a helmet means having a helmet of good fit fastened securely upon the head with the helmet straps; and

(b) such passenger is placed in a separate seat attached to the bicycle and such seat shall have adequate provision for retaining the passenger in place and for protecting the passenger from the moving parts of the bicycle.

* 2-a. The commissioner shall promulgate rules and regulations establishing standards for helmets required to be worn while bicycling or in-line skating. Such standards, to the extent practicable, shall reflect the standards recommended by the Snell Memorial Foundation, Safety Equipment Institute, or United States Consumer Product Safety Commission. * NB Effective until January 1, 2005

* 2-a. The commissioner shall promulgate rules and regulations establishing standards for helmets required to be worn while bicycling, in-line skating, or operating a skate board. Such standards, to the extent practicable, shall reflect the standards recommended by the Snell Memorial Foundation, Safety Equipment Institute, or United States Consumer Product Safety Commission. * **NB Effective January 1**, **2005**

3. Any person who violates the provisions of subdivision two of this section shall pay a civil fine not to exceed fifty dollars.

4. The court shall waive any fine for which a person who violates the provisions of paragraph (a) of subdivision two of this section would be liable if such person supplies the court with proof that between the date of violation and the appearance date for such violation such person purchased or rented a helmet, which meets the requirements of paragraph (a) of subdivision two of this section. Further, the court shall waive any fine for which a person who violates the provisions of paragraph (b) of subdivision two of this section would be liable if such person supplies the court with proof that between the date of violation and the appearance date for such violation such person purchased or rented a seat which meets the requirements of paragraph (b) of subdivision two of this section. The court may waive any fine for which a person

who violates the provisions of subdivision two of this section would be liable if the court finds that due to reasons of economic hardship such person was unable to purchase a helmet or seat. Such waiver of fine shall not apply to a second or subsequent conviction under paragraph (a) or (b) of subdivision two of this section.

5. (a) No person operating a bicycle shall allow a person five or more years of age and less than fourteen years of age to ride as a passenger on a bicycle unless such passenger is wearing a helmet meeting standards established by the commissioner.

(b) No person, one or more years of age and less than fourteen years of age, shall operate a bicycle unless such person is wearing a helmet meeting standards established by the commissioner.

(c) For the purposes of this subdivision wearing a helmet means having a helmet of good fit fastened securely upon the head with the helmet straps.

* 5-a. No person, one or more years of age and less than fourteen years of age, shall skate or glide on in-line skates unless such person is wearing a helmet meeting standards established by the commissioner. For the purposes of this subdivision, wearing a helmet means having a helmet of good fit fastened securely on the head of such wearer with the helmet straps securely fastened. * NB Effective until January 1, 2005

* 5-a. No person, oneor more years of age and less than fourteen years of age, shall skate or glide on in-line skates ora skateboard unless such person is wearing a helmet meeting standards established by the commissioner. For the purposes of this subdivision, wearing a helmet means having a helmet of good fit fastened securely on the head of such wearer with the helmet straps securely fastened. * **NB Effective January 1, 2005**

5-b. No person less than fourteen years of age shall ride upon, propel or otherwise operate a two-wheeled vehicle commonly called a scooter unless such person is wearing a helmet meeting standards established by the commissioner. As used in this subdivision, wearing a helmet means having a properly fitting helmet fixed securely on the head of such wearer with the helmet straps securely fastened.

6. (a) Any person who violates the provisions of subdivision five, five-a or five-b of this section shall pay a civil fine not to exceed fifty dollars.

(b) The court shall waive any fine for which a person who violates the provisions of subdivision five of this section would be liable if such person supplies the court with proof that between the date of violation and the appearance date for such violation such person purchased or rented a helmet.

* (c) The court may waive any fine for which a person who violates the provisions of subdivision five or five-a of this section would be liable if the court finds that due to reasons of economic hardship such person was unable to purchase a helmet or due to such economic hardship such person was unable to obtain a helmet from the statewide in-line skate and bicycle helmet distribution program, as established in section two hundred six of the public health law, or a local distribution program. * NB

Effective until January 1, 2005

* (c) The court may waive any fine for which a person who violates the provisions of subdivision five, five-a, or five-b of this section would be liable if the court finds that due to reasons of economic hardship such person was unable to purchase a helmet or due to such economic hardship such person was unable to obtain a helmet from the statewide in-line skate and bicycle helmet distribution program, as established in section two hundred six of the public health law, or a local distribution program. **NB Effective January 1, 2005**

7. The failure of any person to comply with the provisions of this section shall not constitute contributory negligence or assumption of risk, and shall not in any way bar, preclude or foreclose an action for personal injury or wrongful death by or on behalf of such person, nor in any way diminish or reduce the damages recoverable in any such action.

8. A police officer shall only issue a summons for a violation of subdivision two, five, or five-a of this section by a person less than fourteen years of age to the parent or guardian of such person if the violation by such person occurs in the presence of such person's parent or guardian and where such parent or guardian is eighteen years of age or more. Such summons shall only be issued to such parent or guardian, and shall not be issued to the person less than fourteen years of age.

* 9. Subdivisions five, five-a, five-b and six of this section shall not be applicable to any county, city, town or village that has enacted a local law or ordinance prior to the effective date of this subdivision that prohibits a person who is one or more years of age and less than fourteen years of age from operating a bicycle or skating or gliding on in-line skates without wearing a bicycle helmet meeting the standards of the American National Standards Institute (Ansi Z 90.4 bicycle helmet standards), the Snell Memorial Foundation's Standards for Protective Headgear for use in Bicycling, or the American Society of Testing and Materials (ASTM) bike helmet standards, or that prohibits a person operating a bicycle from allowing a person five or more years of age and less than fourteen years of age to ride as a passenger on a bicycle unless such passenger is wearing a bicycle helmet that meets such standards. The failure of any person to comply with any such local law or ordinance shall not constitute contributory negligence or assumption of risk, and shall not in any way bar, preclude or foreclose an action for personal injury or wrongful death by or on behalf of such person, nor in any way diminish or reduce the damages recoverable in any such action. The legislative body of a county, city, town or village may enact a local law or ordinance that prohibits a person who is fourteen or more years of age from skating or aliding on in-line skates or from operating or riding as a passenger on a bicycle without wearing a bicycle helmet. * NB Effective until January 1,2005

* 9. Subdivisions five, five-a, five-b, and six of this section shall not be applicable to any county, city, town or village that has enacted a local law or ordinance prior to the effective date of this subdivision that prohibits a person who is one or more years of age and less than fourteen years of age from operating a bicycle or skating or gliding on in-line skates or a skate board without wearing a bicycle helmet meeting the standards of the American National Standards Institute (Ansi Z 90.4 bicycle helmet standards), the Snell Memorial Foundation's Standards for Protective Headgear for use in Bicycling, or the American Society of Testing and Materials (ASTM) bike helmet standards, or that prohibits a person operating a bicycle from allowing a person five or more years of age and less than fourteen years of age to ride as a passenger on a bicycle unless such passenger is wearing a bicycle helmet that meets such standards. The failure of any person to comply with any such local law or ordinance shall not constitute contributory negligence or assumption of risk, and shall not in any way bar, preclude or foreclose an action for personal injury or wrongful death by or on behalf of such person, nor in any way diminish or reduce the damages recoverable in any such action. The legislative body of a county, city, town or village may enact a local law or ordinance that prohibits a person who is fourteen or more years of age from skating or gliding on in-line skates, operating a skate board, or operating or riding as a passenger on a bicycle without wearing a bicycle helmet. * **NB Effective January 1, 2005**

* 10. No person shall skate or glide on in-line skates outside during the period of time between one-half hour after sunset and one-half hour before sunrise unless such person is wearing readily visible reflective clothing or material which is of a light or bright color. * NB Effective until January 1, 2005

* 10. No person shall skate or glide on in-line skates or a skate board outside during the period of time between one-half hour after sunset and one-half hour before sunrise unless such person is wearing readily visible reflective clothing or material which is of a light or bright color. * **NB Effective January 1, 2005**

Back to Section List

Section 1239. Reflective material and devices for in-line skating.

The commissioner is hereby directed to promulgate rules and regulations to establish standards for reflective devices and/or material to be equipped into in-line skates pursuant to section three hundred ninety-one-m of the general business law.

Back to Section List

Section 1146. Drivers to exercise due care.

Notwithstanding the provisions of any other law to the contrary, every driver of a vehicle shall exercise due care to avoid colliding with any bicyclist, pedestrian or domestic animal upon any roadway and shall give warning by sounding the horn when necessary. For the purposes of this section, the term "domestic animal" shall mean domesticated sheep, cattle and goats which are under the supervision and control of a pedestrian.

Bicycle & In-line Skate Index & Overview

V&T Law Index

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APPENDIX D

BICYCLE AND PEDESTRIAN AWARENESS SURVEY (Completed by Zogby International)

Residents' Views On Bicycling, Walking, and Jogging In Onondaga County

Submitted to: Danielle Zebley Syracuse Metropolitan Transportation Council

Submitted by: **Zogby International** John Zogby, President and CEO Regina Bonacci, Vice President and Chief of Staff John Bruce, Vice President and Systems Administrator Rebecca Wittman, Vice President and Managing Editor

Joseph Zogby, Writer

September 25, 2002

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Table Of Contents

Subject	Page
I. Methodology and Sample Characteristics	2
II. Executive Summary	3
III. Narrative Analysis	4
Tables	
1. Knowledge of Helmet Law	9
2. Knowledge of Safety Issues	15

Appendix (Appendices for this report are available upon request) A: Cross Tabulations

- B : Zip Code Cross Tabulations
- C: Survey Instrument

I. Methodology and Sample Characteristics

Methodology

Zogby International conducted interviews of 404 adults chosen at random in Onondaga County. All calls were made from Zogby International headquarters in Utica, N.Y., from Saturday, September 14 to Sunday, September 15, 2002. The margin of error is \pm 5.0%. Slight weights were added to age and gender to more accurately reflect the population. Margins of error are higher in sub-groups.

Samula Chanastanistica	Ene en en en	Valid
Sample Characteristics	Frequency	Percent*
Sample size	404	100
City of Syracuse	127	31
Onondaga County	277	69
18-29	75	19
30-49	153	39
50-64	83	21
65+	83	21
18-24	48	12
25-34	49	13
35-54	165	42
55-69	75	19
70+	57	14
Did not answer age	11	
Less than high school	22	6
High school graduate	82	20
Some college	104	26
College graduate+	195	49
Parent of child under 18	152	38
Not parent of child under 18	250	62
Male	195	48
Female	209	52

* Numbers have been rounded to the nearest percent and might not total 100.

II. Executive Summary

Two-fifths of respondents in Onondaga County own and ride a bicycle. One-third neither owns nor rides a bicycle.

Most cyclists ride their bicycles on a weekly basis than on a monthly basis, and rarely ride daily.

One in four residents of Onondaga County walks or jogs daily, while a plurality (42%) does so one or more times a week.

Two in five respondents agree that conditions in Onondaga County are friendly for bike travel, while nearly half disagree. The biggest reason people disagree is because of a lack of bike lanes and routes to desired locations.

Nearly twice as many people agree than disagree that conditions in Onondaga County are friendly to pedestrian travel. A lack of sidewalks is the biggest reason they disagree about the ease of pedestrian travel.

Personal enjoyment and exercise are the most popular reasons why people ride their bikes, walk or jog.

A majority of respondents usually travels 1-5 miles on their bicycles on each occasion, while a plurality walks or jogs 1-2 miles on each occasion. Half as many walk or jog 3-5 miles or less than a mile.

Onondaga County adults are twice as likely to bike on rural roads or on recreational trails than on city streets. On the other hand, they are more likely to walk or jog on rural roads or city sidewalks than on recreational trails or city streets.

Most adults agree – including three in four who strongly agree – that a separate lane for bicyclists and/or joggers would improve safety on roadways. Bicyclists' biggest complaint with motorists is that they drive too close or squeeze them off the road. Hence, three-fourths of cyclists say they would be more likely to use a separate lane for bicyclists when riding alongside traffic.

Respondents are most likely to say they would like to be able to reach parks and recreational trails by walking or cycling, with half as many wanting better access to malls and shopping or school. Several people also show interest in being able to walk or bike to downtown, to work, to the Carousel Mall or to the doctor's office.

III. Narrative Analysis

1. Do you own a bicycle or do you ever ride a bicycle?

Own and ride	42%
Own/do not ride	22
No	34
Not sure	2

Two-fifths of respondents (42%) own and ride a bicycle, while an additional onefifth (22%) owns a bike, but does not ride it. One in three (34%) neither owns nor rides a bicycle.

The most likely to own and ride a bicycle are a majority of 18-49 year-olds (52% average), and a 47% average of college graduates, parents of children under 18, and those residing in the "rest" of Onondaga County. Men (49%) are also much more likely than women (34%) to own and ride a bike.

2. How often do you ride a bicycle?

One or more times a week	29%
One or more times a month	26
Daily	8
Rarely	37

A plurality of people who owns and rides a bicycle says they rarely ride their bikes (37%). Slightly more respondents ride their bicycles on a weekly basis (29%) than on a monthly basis (26%), and only 8% ride daily.

A majority of Syracuse residents (54%) rides a bike *one or more* times a week. Adults 18-29 years old are the most likely to ride a bicycle one or more times a week (36%) and one or more times a month (35%).

A 43% average of 30-49 year-olds, seniors 65 and older, and parents of children under 18 say they *rarely* ride a bicycle.

3. Which of the following best explains why you ride a bicycle?

Personal enjoyment	43%
Exercise	41
Commute to stores/shopping	6
Commute to work	4
Commute to school	2
For sport or competition, such	
as in a bicycle club or race	1
Out of necessity/Only means	
of transportation	1
*Other	1
Not sure	1

*Other: (One each) Camping; To see the grandchildren; To the pool in Florida

Personal enjoyment (43%) and exercise (41%) are cited as the biggest reasons for riding a bike. They are much less likely to ride a bicycle to stores and shopping (6%), to work (4%), or to school (2%). Few people ride a bicycle for sport or competition or out of necessity (1% each).

Majorities of women and parents of children under 18 (51% each), and nearly half of 30-49 year-olds (48%), ride a bicycle for *personal enjoyment*.

A majority of seniors 65 and older (52%) and nearly half of 50-64 year-olds (47%) say they ride for the *exercise*.

Residents of Syracuse (13%) are the most likely to ride a bicycle to go *shopping*.

4. How far do you generally travel by bike on each occasion?

Less than 1 mile	15%
1-5 miles	60
6-10 miles	15
11-20 miles	4
20+ miles	5
Not sure	2

A majority of respondents (60%) usually travels 1-5 miles on their bicycles on each occasion. Approximately one in seven generally bikes 6-10 miles or less than one mile (15% each); 4% travels 11-20 miles, and 5% rides a bicycle more than 20 miles on each occasion.

Majorities of people within each sub-group (except seniors 65 and older) generally travel *1-5 miles* on each occasion.

Women are three times as likely as men to travel *less than a mile* on each occasion (24% to 8%, respectively).

5. Which of the following describes where you bike most often?

Rural roads	38%
Recreational trails	34
On city streets	18
On city sidewalks	6
Not sure	4

Onondaga County adults are twice as likely to bike on rural roads (38%) or on recreational trails (34%) than on city streets (18%). They are least likely to ride bicycles on city sidewalks (6%).

Close to half of the residents in the rest of Onondaga County and parents of children under 18 (48% average) most often bike on *rural roads*.

Women (38%) are more likely than men (30%) to bike on *recreational* trails. However, men are more likely than women to ride on *city streets* (22% men-12% women) and rural roads (41% men-34% women).

6. As a cyclist, would you be more likely or less likely to use a separate lane for bicyclists when riding alongside traffic, or would you say it makes no difference?

More likely	78%
Less likely	2
No difference	18
Not sure	3

A vast majority of cyclists (78%) would be more likely to use a separate lane for bicyclists, while only 2% would be less likely. Nearly one in five (18%) says a separate lane would make no difference.

Majorities of people in all sub-groups are more likely to use the *separate lane*. Women and 30-64 year-olds (87% average) are the most likely to use the lane for bicyclists.

Adults 18-29 years old (43%), and more men (24%) than women (10%), say this lane for bicyclists would *make no difference*.

7. Please tell me if you encounter any of the following problems with motorists while riding your bike?

They drive too close to you or	
squeeze you off the road	29%
They make turns in front of	
you or cut you off	19
Motorists do not see me on my bike	15
They honk their horns at you	13
*Other	16
Not sure	8

***Other:** (Number in parentheses denotes frequency of similar responses) I have no problems with motorists (29); I don't ride in the road or near traffic (7) **One each:** I'm more cautious; Lack of consideration; I ride too infrequently; Speed of passing; They swing too wide

Bicyclists' biggest complaint with motorists is that they drive too close or squeeze them off the road (29%). Cyclists also complain that motorists make turns in front of them or cut them off (19%); do not see them on their bikes (15%), and honk their horns at them (13%).

The most likely to complain that motorists *drive too close* or *squeeze them off the road* are 18-29 year-olds (35%).

Syracuse residents (26%) are the most likely to say motorists *turn in front of them* or cut them off.

8. Do you agree or disagree that conditions in Onondaga County are friendly for bicycle travel?

Agree	41%
Disagree	48
Not sure	11

Nearly half of all respondents (48%) disagrees that conditions in Onondaga County are friendly for bicycle travel. Two in five (41%) agree that conditions are friendly for bike travel, and 11% are not sure.

The most likely to agree that conditions are friendly are 18-29 year-olds (50%).

Majorities of Syracuse residents, 30-49 year-olds, and parents of children under 18 (53% average) *disagree* that conditions are friendly for bicycle travel.

9. Which of the following **best** explains why you feel that way (disagree that conditions in Onondaga County are friendly for bicycle travel)?

Lack of bike lanes/routes to desired locations	47%
Too many aggressive/inconsiderate motorists	17
Lack of off road trails designed for biking in the country	7
Lack of motorist education about rules/regulations/laws	
affecting bicyclists	7
Lack of bicycle racks/storage at sites	1
*Other	8
Not sure	13

*Other: Bikers need to be educated on the rules (4); Bikers should obey the law (3) One each: Bicyclists are inconsiderate; Bikes should have their own lane without cars; Cyclists don't know what they are doing; Don't ride in traffic; Drivers; Feel bikes are dangerous; Hard to flow with traffic; Hard to see; Ride on wrong side of street; Roads are not as smooth as they should be.

Nearly half disagree that conditions are friendly for bicycle travel because of a lack of bike lanes and routes to desired locations (47%). Other reasons people disagree are because of aggressive or inconsiderate motorists (17%); a lack of off-road trails designed for biking in the country (7%), and a lack of motorist education about rules affecting bicyclists (7%). One in eight (13%) is not sure why they disagree.

Majorities of 30-49 year-olds (62%), college graduates (57%), and parents of children under 18 (51%) say a *lack of bike lanes and routes* makes conditions disagreeable for cyclists. Residents in the rest of Onondaga County (49%) are slightly more likely than Syracuse residents (42%) to say the same.

Residents of Syracuse (22%) are the most likely to blame *aggressive and inconsiderate motorists* for unfriendly treatment of cyclists.

10. Are Centro buses in Onondaga County equipped with bicycle racks?

Yes	27%
No	29
Not sure	44

Respondents are evenly divided on whether Centro buses in Onondaga County are (27%) or are not (29%) equipped with bicycle racks. A plurality (44%) is not sure.

Those who say that Centro buses in Onondaga County *are equipped* with bicycle racks include more Syracuse residents (44%) than people in the rest of the county (19%); twice as many 30-64 year-olds (34% average) than 18-29 year-olds and seniors 65 and older (17% each); more parents of children under 18 (32%) than people without children (24%), and more men (31%) than women (23%).

11. Please tell me if you encounter any of the following problems with cyclists while driving your car?

They do not obey traffic lights and signs	25%
They ride on the wrong side of the street	23
They bike too close to you	19
They make illegal turns in front of you/cut you off	16
*Other	11
Do not drive	2
Not sure	3

*Other: I encounter no problems (56); Not wearing helmets, no reflectors (8); Riding side-by-side (5); Kids don't know the rules (2)

One each: Children play "chicken"; Cross intersections on red light; Don't give right of way; In the middle of the road; Kids going along with traffic cannot see the cars; Kids speeding on bikes on hills; Ride at night; Ride in main road; I think they should face traffic; Too many are wearing headsets; Travel in park; Unaware that motorists know how to deal with cyclists; Uncertain about their actions; Unsupervised; Very little respect for motorists; Weave in and out of traffic.

Drivers say that the biggest problems they encounter with bicyclists include not obeying traffic lights and signs (25%) and riding on the wrong side of the street (23%).

Motorists also say that bikers ride too close to their cars (19%) and make illegal turns in front and cut them off (16%). Some people, though, say that they have no problems with bicyclists (7%)

12. Which **one** of the following three statements comes closest to your knowledge of safety laws in Onondaga County?

Table	1.	Knowledge	e of Helmet Law

	%
B: Only cyclists under the age of 18 in	54
Onondaga County are required to wear helmets.	54
A: All cyclists in Onondaga County, adults and	36
children, are required by law to wear helmets.	50
C: Wearing helmets is optional when cycling	5
in Onondaga County	5
Not sure	6

A majority thinks the law requires only cyclists under the age of 18 in Onondaga County to wear helmets (54%). Approximately one in three believes that all cyclists in Onondaga County are required by law to wear helmets (36%), and only 5% feels the law says wearing helmets is optional. A majority of residents in the rest of Onondaga County (59%) say that *only cyclists under 18* are required to wear helmets. A majority of 18-64 year-olds (58% average) says that only cyclists under 18 are required to wear a helmet.

Syracuse residents, however, are closely divided, with 44% saying riders under 18 are required to wear helmets, and 41% saying it applies to *all cyclists*. A majority of seniors 65 and older (54%) says it is required of all cyclists.

13. How often do you go walking or jogging?

Daily	27%
One or more times a week	42
One or more times a month	8
Rarely	12
Never	10

One-fourth of respondents (27%) walks or jogs daily, while a plurality (42%) does so one or more times a week. Eight percent walks or jogs one or more times a month, while 12% rarely walk or jog. One in ten (10%) never goes walking or jogging.

Those who jog or walk *daily* include at least one-third of 18-29 year-olds (36%) and 50-64 year-olds (33%).

Adults 30-49 years old and college graduates (47% each) are the most likely to walk or jog *one or more* times a week.

Seniors 65 and older (22%) are the most likely to say they never walk or jog.

14. Which of the following best explains why you walk or jog?

Exercise	44%
Personal enjoyment	33
To get to the stores/shopping	8
For sport or competition,	
such as in a club or race	4
To get to school	3
Out of necessity / only means	
of transportation	3
To get to work	2
*Other	3

*Other: Walk the dog (4); Walk on the job (3); My health (2); Do not walk often (2)

One each: Errands; Hunting and fishing; Visiting the State Fair; To be out and about; I'm too heavy to walk or jog far; While I'm looking for my kids.

People in Onondaga County are most likely to walk or jog for exercise (44%) or personal enjoyment (33%). Fewer do so to go shopping (8%); for sport or competition (4%); to get to school (3%); because they have no other means of transportation (3%), or to get to work (2%).

Adults 50 and older and residents of the rest of the county walk or jog for the *exercise* (49% average).

Those who like to walk or jog for *personal enjoyment* include 30-49 year-olds (37%).

Syracuse residents (9%) and 18-29 year-olds (11%) are most likely to say they walk or jog to *school*.

Syracuse residents and 18-29 year-olds (13% each) are also the most likely to say they walk or jog to go *shopping*.

15. How far do you generally walk/jog on each occasion?

A very short distance	12%
Less than 1 mile	20
1-2 miles	43
3-5 miles	22
More than 5 miles	3

A plurality of respondents (43%) walks or jogs 1-2 miles on each occasion. Half as many walk or jog 3-5 miles (22%) or less than a mile (20%). One in eight travel only a very short distance (12%), while 3% walk or jog more than five miles on each occasion.

Syracuse residents and seniors 65 and older (18% average) are most likely to walk or jog a *very short distance* on each occasion.

More than one-third of seniors 65 and older (35%) also walk or jog *less than a mile* on each occasion.

Adults 30-64 years old (47% average) are most likely to walk or jog 1-2 miles.

Residents in the rest of Onondaga County (26%) are twice as likely as those in Syracuse (14%) to walk or jog 3-5 miles. Others who walk or jog 3-5 miles include a 29% average of 18-29 year-olds, 50-64 year-olds, and college graduates, and more men (27%) than women (18%).

16. Which of the following describes where you are most likely to walk/jog?

Rural roads	30%
On city sidewalks	28
Recreational trails	22
On city streets	14
In a mall/indoors only	6

People are more likely to walk or jog on rural roads (30%) or city sidewalks (28%) than on recreational trails (22%) or city streets (14%). They are least likely to walk or jog indoors (6%).

Residents of the rest of Onondaga County (42%), parents of children under 18 (36%), and women (34%) are among the most likely to walk or jog on *rural roads*.

Syracuse residents (60%) are by far the most likely to walk or jog on *city sidewalks*. Others include a 35% average of 18-29 year-olds and seniors 65 and older, and more women (31%) than men (24%).

Adults 18-29 years old (30%) and men (29%) are the most likely to walk or jog on *recreational* trails.

City streets are most often used by 30-49 year-olds, college graduates, and parents of children under 18 (18% average).

17. Do you agree or disagree that conditions in Onondaga County are friendly to pedestrian travel?

Agree	61%
Disagree	34
Not sure	5

Respondents are almost twice as likely to agree (61%) than disagree (34%) that conditions in Onondaga County are friendly to pedestrian travel.

Majorities of people in every sub-group *agree* that conditions are friendly. Among the most likely to agree are 18-29 year-olds (68%).

Syracuse residents, those 50-64 year-olds, and college graduates (38% each) are among the most likely to *disagree*.

18. Which of the following **best** explains why you feel that way (disagree that conditions in Onondaga County are friendly to pedestrian travel)?

Lack of sidewalks/or lack of sidewalks	
leading to desired destinations	48%
Sidewalks in poor condition	14
Lack of motorist education about the rules/	
regulations/ laws affecting pedestrians	13
Lack of off-road trails/sites designed	
for pedestrians/joggers	7
Lack of traffic and/or pedestrian lights to	
allow pedestrians to cross at the intersections	1
*Other	9
Not sure	8

***Other:** People drive way too fast (3); Pedestrians are too aggressive, they are walking in the road (2); Inconsiderate drivers (2)

One each: Depends on where you walk; I'm only familiar with the city of Syracuse; Lack of security, bad neighborhoods; No biker path lanes; Okay except when biking or jogging on Rte. 80; The lack of signs; They are not well supervised; We are allowed to turn right.

Nearly half disagree that conditions in Onondaga County are friendly to pedestrian travel because they say there is a lack of sidewalks (48%). Others disagree because they say sidewalks are in poor condition (14%); because motorists lack education about rules affecting pedestrians (13%), or because of a lack of off-road trails or pedestrian-only paths (7%).

Majorities of residents in the rest of Onondaga County, 30-49 year-olds, college graduates, parents of children under 18, and men (57% average) disagree conditions are friendly because of a *lack of sidewalks*.

Those who say that *sidewalks are in poor condition* include a 35% average of Syracuse residents and 18-29 year-olds, and more women (17%) than men (11%).

19. What specific places in Onondaga County would you like to be able to reach by walking or cycling?

Parks/recreational trails	28%
Malls/shopping areas/supermarkets	15
Schools/colleges	13
Downtown	10
Work	9
Carousel Mall/DestiNY USA	9
Doctor's offices/hospitals	8
*Other	5
Not sure	4

*Other: None (34); I live too far away (9); Church (2); The local neighborhood (2)

One each: Cemetery; Drug store, beauty salon; Erie Canal; More bike routes; Onondaga Park; Pleasure and exercise; Post office; Suburb; Transportations Department; Would like connection to East and West Canal Park.

Respondents are most likely to say they would like to be able to reach parks and recreational trails by walking or cycling (28%). Half as many would like access to malls and shopping (15%) or school (13%). Less than 10 percent each would also like to be able to walk or bike to downtown, to work, to the Carousel Mall, or to the doctor.

Adults age 50-64 (35%) and people in the rest of Onondaga County (31%) are among the most likely to want to reach *parks and recreational trails*.

Syracuse residents and 18-29 year-olds (14% each) are among the most likely to say they would like to reach *downtown* by walking or cycling.

The 18-29 year-olds (14%) are also most likely to want to reach Carousel Mall.

20. Do you agree or disagree that a separate lane for bicyclists and/or joggers would improve safety on roadways?

Strongly agree	73%		
Somewhat agree	17	Agree	90%
Somewhat disagree	6		
Strongly disagree	2	Disagree	8
Not sure	2		

Most adults (90%) in Onondaga County – including four-fifths or more within each sub-group – agree that a separate lane for bicyclists and/or joggers would improve safety on roadways. Overall, three-fourths (73%) *strongly agree*.

Only 8% of respondents strongly or somewhat *disagree*. Syracuse residents (13%) and 18-29 year-olds (14%) are the most likely to disagree.

21 – 24, 26, 27. Now I would like to get your opinion on a series of safety-related questions.

	Yes	No	Not
			sure
24. When crossing a street, is a pedestrian required to obey traffic signals?	99	0	1
21. Is a bicyclist required to obey the same traffic signals and traffic laws as drivers?	96	2	2
26. When a driver approaches an intersection or crosswalk, are they required to allow a blind pedestrian with a cane or guide dog to cross first?	85	5	9
23. When pedestrians walk or jog in the street, are they required to face traffic?	59	29	12
27. If there is no crosswalk at an intersection, does a pedestrian have the right of way?	53	36	11
22. Is a bicyclist required to ride facing traffic?	24	71	5

Table 2. Knowledge of Safety Issues (ranked by % yes)

Nearly all respondents say that a pedestrian is required to obey traffic signals when crossing a street (99%) and that a bicyclist is required to obey the same traffic signals and traffic laws as drivers (96%). Most say that a driver is required to allow a blind pedestrian with a cane or guide dog to cross first (85%).

Majorities agree that pedestrians are required to face traffic when walking in the street (59%) and have the right of way if there is no crosswalk at an intersection (53%). Only one in four says a bicyclist is required to ride facing traffic (24%), while more than two-thirds say a bicyclist is not required to face traffic (71%).

Adults ages 18-29 are the most likely to say that a *bicyclist is not required to obey* the same traffic signals and traffic laws as drivers (9%), and a driver is *not required to allow a blind pedestrian* with a cane or guide dog to cross first (13%).

Women and 50-64 year-olds (70% average), seniors 65 and older and college graduates (64% average), are the most likely to say that *pedestrians who walk or jog in the street* are required to face traffic. Syracuse residents, parents of children under 18 and men (37% average) and 18-29 year-olds (50%) are among the most likely to say they are *not required* to face traffic.

Syracuse residents, 50-64 year-olds, and men (58% average) are among the most likely to say that a *pedestrian has the right of way* if there is no crosswalk at an intersection.

One-third of 18-29 year-olds (34%) says that a *bicyclist is required to ride facing traffic*. College graduates (81%) and 30-49 year-olds (77%) are the most likely to disagree.

25. If you just started crossing an intersection and a "Don't Walk" or red hand signal is flashing, is it okay to continue to cross the street, or are you required to go back to the curb and wait for traffic to stop?

Required to go back	57%
Continue to cross	32
Not sure	11

A majority of respondents (57%) says a pedestrian is required to go back to the curb and wait for traffic to stop if encountering a "Don't Walk" signal in an intersection. One in three (32%) says it is okay to continue to cross the street, and 11% are not sure.

Majorities of people within each sub-group (except pluralities of 50-64 year-olds and those with some college education), agrees a person *is required to go back to the curb* and wait. More than three-fifths of Syracuse residents, 18-29 year-olds, and seniors 65 and older (64% average) alos agree.

Two-fifths of adults with some college education or a college degree (39% each) believe it is okay for a person to *continue to cross the street*.

APPENDICES

Appendices for this survey report are available upon request

APPENDIX E

Recommendation Action Item Details

APPENDIX E

Recommendation Action Item Details

Each action item listed in the Recommendations Chapter is further detailed within this appendix. Action items are listed in the order they appear in the recommendations chapter, and are denoted by their Action Item Number.

Bicycle Facilities Action Items:

B1: Provide additional bike riding facilities

- Local municipalities and other agencies should strive to provide additional bicycle facilities such as newly paved or repaved road shoulders, bicycle lanes, on-road bicycle routes and signage such as "Share the Road" signs, when and where appropriate, particularly when repaving or reconstructing a road. At the state level of government, the NYSDOT examines how bicycle facilities may or may not fit into every road construction project that is being worked on. The SMTC Bicycle and Pedestrian Plan does not recommend specific facilities at specific locations. The type of bicycle space depends on design, maintenance and community sentiment issues.¹ See the attached summary sheets on *Reasons for Highway Shoulders* and *Benefits of Urban Bike Lanes to Other Road Users* at the end of this Appendix.

When determining whether or not to provide additional bike riding facilities, municipalities could take the following into consideration:

- Complete a Bikeability Checklist in your community. The Pedestrian and Bicycle Information Center (www.bicyclinginfo.org) offers a Bikeability Checklist to help you determine how bikeable your community is. Inside the checklist "you'll find insightful questions, allowing you to evaluate your neighborhood's bikeability. In addition to the questions, the Checklist provides both immediate answers and long-term solutions to your neighborhood's potential problems."² A copy of the checklist can be found at the end of this Appendix.
- Develop a list of bike destinations and suggested connections between these destinations for cyclists (i.e. hospitals, colleges, schools, parks, etc.)
- Determine and implement a minimum number of miles to be striped as bike lanes each year.
- New/repaved streets should be striped with 4'-6' shoulders when and where feasible (see design guidelines chapter)
- Develop specifications for roadway design on intersection treatments and different width roads in an effort to accommodate bicyclists (see design guidelines chapter)
- Repair and sweep streets/shoulders where travel conditions are not adequate for safe bicycle travel (also see B4).

¹ Genesee Transportation Council, *Bicycle and Pedestrian Action Plan for the Rochester Metropolitan Area*, February 1996, p. 29.

² Pedestrian and Bicycle Information Center, *Bikeability Checklist*, <u>http://www.bicyclinginfo.org/cps/checklist.htm</u>, 2/4/05.

- Discuss maintenance and up-keep responsibilities prior to installation of new bicycle facilities.
- Review and modify/adjust parking rules to create necessary travel space for bicyclists as appropriate.
- Create a bicycle system infrastructure (i.e. signage, bike rack locations) that can be shared with (or created in concert with) other municipalities.
- When planning new bicycle and pedestrian facilities or upgrading or reconstructing existing roadways to accommodate bicyclists and pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians and bicyclists. According to the *Transportation Planning Handbook*, published by the Institute of Transportation Engineers, "bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for pedestrian trips and one quarter-mile to three miles for bicycle trips."³ In addition, the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* notes that "the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile."⁴ With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.
- Obtain and share information from other communities about liability concerns relative to the creation of new bicycle facilities. See the attached NYSDOT memorandum on bicycle tort liability at the end of this Appendix. Also, a detailed report on liability titled *Liability Aspects of Bikeway Designation A Special Report*, was prepared for the Bicycle Federation of America (now known as the National Center for Bicycling and Walking) in April 1986. John W. English, a Legal Consultant, prepared the report.
- B2: Sign a system of on-road routes
 - Where appropriate, sign a system of on-road bicycle routes throughout the MPO area. This project could be completed on a regional scale with partners at the municipal level. Such on-road routes should include roads that provide adequate travel space for cyclists. The NYSDOT requires a minimum width of 4 ft. for a paved shoulder and a minimum width of approximately 12 ft. for a wide curb lane when considering design amenities for a road project. A majority of the time, a wide curb lane would provide adequate space for both motor vehicles and bicycles. If municipalities decide to sign bike routes, they should strive to incorporate existing commuting routes already used by cyclists (as long as these routes are appropriate for safe bicycling). Signage for these on-road routes would be important for both navigational purposes of the cyclist, as well as to enhance motorist awareness that the cyclists are there. "Share the Road" signs and other regulatory signs as noted in the Design Guidelines chapter could benefit both motorists and bicyclists. As noted in the NYSDOT

³ John D. Edwards, Jr., P.E., Editor, *Transportation Planning Handbook*, 2d ed., Institute of Transportation Engineers, Washington, D.C., 1999, p. 604.

⁴American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, AASHTO, Washington, D.C., 2001, p. 96.

memorandum on bicycle tort liability at the end of this appendix, no additional liability should be applied with on-road route designation. In other words, liability should be the same whether a roadway is marked as a bike route or not. Also, see the attached summary sheets on *Reasons for Highway Shoulders* and *Benefits of Urban Bike Lanes to Other Road Users* at the end of Appendix E.

Other ideas to consider include:

- Cooperative countywide design and purchasing of bike accessories (i.e. bike racks, traffic signal equipment, signage, etc.)
- Creation of a bicycle system infrastructure (i.e. signage, bike rack locations) that can be shared with (or created in concert with) other municipalities.
- Develop a list of bike destinations and suggested connections between these destinations for cyclists (i.e. hospitals, colleges, schools, parks, etc.)
- Complete a Bikeability Checklist in your community. The Pedestrian and Bicycle Information Center (www.bicyclinginfo.org) offers a Bikeability Checklist to help you determine how bikeable your community is. Inside the checklist "you'll find insightful questions, allowing you to evaluate your neighborhood's bikeability. In addition to the questions, the Checklist provides both immediate answers and long-term solutions to your neighborhood's potential problems."⁵ A copy of the checklist can be found at the end of this Appendix.
- Encourage each municipality to design a basic bike network plan that would take residents into the community's common center (or main street or commercial area) as well as through the entire community. To start, priority streets for bicycling within each community could be denoted.
 - These basic municipal bike network plans could then tie into or be developed simultaneously with a countywide bicycle network plan.
- Develop a countywide bicycle network that incorporates all municipalities. Including and incorporating each municipality in this effort would be the key to its success.
 - Bike route and bike lane planning for the region could be started by using roads already being traveled by many cyclists (i.e. Euclid Ave in City of Syracuse). Then, encourage those who bike to use specified locations so that a resident friendly bike network is eventually created.
- B3: Increase supply of bicycle parking
 - "Secure bicycle parking can help encourage more cycling. Many bicycle journeys end somewhere other than at the bicyclist's home, which may mean leaning bicycles against store windows or trees or locking them to sign posts or parking meters."⁶ Increasing bicycle parking and storage may encourage more people to bike within their community, as they would have a place to safely store their bike once they have reached their destination.

⁵ Pedestrian and Bicycle Information Center, *Bikeability Checklist*, <u>http://www.bicyclinginfo.org/cps/checklist.htm</u>, 2/4/05.

⁶ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, *Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners*, May 2002, p.20.

- "More than 1.5 million bicycles are reported stolen every year in the United States and fear of bicycle theft is recognized as a significant deterrent to bicycle use. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings."⁷
- Currently in the SMTC MPO area, there are minimal locations for bicycle parking. To date, the majority of bicycle parking locations are on the local college campuses, a few libraries and near a few buildings in downtown Syracuse. A survey of bicycle parking locations was not completed within individual municipalities. To remedy this issue, municipalities could provide additional bicycle parking facilities like bicycle racks and bicycle lockers at major destinations, such as along main streets, schools/universities, shopping districts, libraries, municipal, and other public buildings.
- Cooperative countywide design and purchasing of bike accessories (i.e. bike racks, traffic signal equipment, signage, etc.) may assist with the financial aspect of providing bicycle parking and storage.
- An excellent Bike Parking Guide is available on-line from the Association of Pedestrian and Bicycle Professionals (APBP) at A portion of the Pedestrian and Bicycle Information Center's website is dedicated to bicycle parking and can be found at <u>www.bicyclinginfo.org/de/park.htm</u>. This site notes the basics of bicycle parking, general bicycle parking costs, manufacturers of bike parking and storage facilities and also includes an excellent Bike Parking Guide developed by the Association of Pedestrian and Bicycle Professionals (APBP).
- B4: Maintain roadways for safe bicycle travel (create a spot maintenance program)
 - A spot maintenance program could provide local municipalities with a place to report infrastructure deficiencies (i.e., debris in the road shoulder or on sidewalks, potholes) via telephone or electronic communication, and also to request low cost bicycle/pedestrian improvements to roadways. "Low cost improvements for local bicycling and walking are best accomplished by integration into local and county level capital improvement programs."⁸ The goal of this program would be to create a time efficient maintenance program that provides low cost capital improvements in a community. "Road users are often the first to experience deficiencies. Spot improvement programs enable bicyclists and pedestrian to bring problems to the attention of authorities in a quick and efficient manner. Quick response from the municipality improves communication between the public and staff."⁹
 - In the state of Oregon, their "bicycle facility improvement program is intended to enhance bicycle safety and encourage bicycling through low-cost, small scale

⁷ Pedestrian and Bicycle Information Center, *Bicycle Parking*, 9/7/04, <<u>http://www.bicyclinginfo.org/de/park_basics.htm</u>>

 ⁸ New York State Department of Transportation, *Transportation Choices for the 21st Century: The New York State Bicycle and Pedestrian Plan*, 1997, p. 21.
 ⁹ Oregon Department of Transportation, *Oregon Bicycle and Pedestrian Plan – An Element of the Oregon*

⁹ Oregon Department of Transportation, *Oregon Bicycle and Pedestrian Plan – An Element of the Oregon Transportation Plan*, 1995, p. 178.

improvements suggested by concerned bicyclists (i.e., pavement maintenance and sweeping, hazard removal, bike rack installation, and grating repair)."¹⁰

- B5: Implement bicycle crash countermeasures as needed
 - The following sampling of bicycle crash countermeasures may increase a cyclist's safety on the road by reducing conflicts with motorists: "Share the Road" signs, bicyclist and/or motorist education, and striping to define the road shoulder or bike lane. Each municipality within the MPO area would have to determine which type of countermeasure(s) to incorporate within their road designs to best fit their community needs. Guidelines are available in the New York State Highway Design Manual to aid in the selection of countermeasures.
 - In addition, the United States Department of Transportation Federal Highway Administration has an excellent safety website. Within this website are several programs, including bicycle and pedestrian safety programs. To reach the bicycle safety information, go to the following web site http://safety.fhwa.dot.gov/programs.htm, and click on Bicycle Safety. Under the Knowledge heading there are Crash Types and Countermeasures where several resources exist that denote types of bicycle crashes, how to prevent them, and countermeasures to assist in alleviating these crash types.
- B6: Update of SMTC Bike Map or Use of Quantitative Tool to Measure Bicycle Suitability
 - The SMTC regions should try to update the SMTC Bicycle Map or develop a similar quantitative measure to identify the changes in the bicycle suitability of the existing roadways in the SMTC area.

¹⁰ Oregon Department of Transportation, *Oregon Bicycle and Pedestrian Plan – An Element of the Oregon Transportation Plan*, 1995, p. 178.

Pedestrian Facilities Action Items:

- P1: Provide paved shoulder(s) when no sidewalk is available or feasible
 - Where a sidewalk is not available or feasible, providing a wide paved shoulder may be sufficient for pedestrian travel, especially in rural areas. The paved shoulder may also incorporate shoulder striping to visually separate the shoulder from the travel lane. During construction or reconstruction projects, the NYSDOT recommends a minimum paved shoulder width of 4 ft. on their roads. When constructing a road, the OCDOT attempts to incorporate 6 to 8 ft. wide shoulders on every project. A 4 ft. wide shoulder is the minimum width the County would allow, but this sometimes occurs due to a lack of right-of-way or difficult terrain.
 - Although providing a paved shoulder may be sufficient for pedestrian travel when no sidewalk is available, this can put the pedestrian more at risk, as there would be no physical separation (i.e., curb, grass strip, etc.) between the travel lane and shoulder. "In more rural areas, in particular, a "side path" made of asphalt, crushed stone or other materials may be suitable. Both FHWA and the Institute of Transportation Engineers (ITE) recommend a minimum width of 1.5 m (5 ft) for a sidewalk or walkway, which allows two people to pass comfortably or to walk side-by-side. Wider sidewalks should be installed near schools, at transit stops, in downtown areas, or anywhere high concentrations of pedestrians exist. Sidewalks should be continuous along both sides of a street and sidewalks should be fully accessible to all pedestrians, including those in wheelchairs."¹¹
 - Complete a Walkability Checklist in your community. The Pedestrian and Bicycle Information Center (www.walkinginfo.org) offers a Walkability Checklist to help you determine how walkable your community is. Inside the checklist "you'll find insightful questions, allowing you to evaluate your neighborhood's walkability. In addition to the questions, the Checklist provides both immediate answers and longterm solutions to your neighborhood's potential problems."¹² A copy of the checklist can be found at the end of this Appendix.
 - Identify attractions and destinations for pedestrian travel through the development of a list of pedestrian destinations and suggested connections between these destinations for pedestrians (i.e. hospitals, colleges, schools, parks, etc.).
 - When planning for new pedestrian facilities or upgrading or reconstructing existing roadways to accommodate pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians. According to the Transportation Planning Handbook, published by the Institute of Transportation Engineers, "bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for pedestrian trips and one quarter-mile to three miles for bicycle trips."¹³ In addition, the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric

¹¹ Pedestrian and Bicycle Information Center, *Design and Engineering: Engineering Treatment - Pedestrian Facility* Design, < http://www.walkinginfo.org/de/>, 9/13/04.

¹² Pedestrian and Bicycle Information Center, Walkability Checklist,

<<u>http://www.walkinginfo.org/cps/checklist.htm</u>>, 2/4/05. ¹³ John D. Edwards, Jr., P.E., Editor, *Transportation Planning Handbook*, 2d ed., Institute of Transportation Engineers, Washington, D.C., 1999, p. 604.

Design of Highways and Streets notes that "the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile."¹⁴ With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.

- P2: Incorporate ADA compliant facilities
 - The Americans with Disabilities Act (ADA) requires that new and altered public street crossings be accessible so that people with disabilities can use the pedestrian routes that connect buildings, facilities, and transportation modes. Title II of the ADA covers new sidewalks and streets constructed by or on behalf of a State or local government. Enforced by the Department of Justice (DOJ), Title II regulation specifically requires that curb ramps be provided when sidewalks or streets are newly constructed or altered. The Legislation also addresses existing pedestrian facilities. Within the Legislation, the DOJ recognizes the unique and significant capital expenses involved in the installation of curb ramps where existing pedestrian routes cross curbs.¹⁵ Instead of requiring immediate retrofit of facilities, the Legislation has allowed for a phased approach, that takes fiscal restraints of communities into consideration.
 - The Design Guidelines chapter notes resources for ADA-compliant design. In addition, design guidelines are available from the United States Department of Justice at http://www.usdoj.gov/crt/ada/stdspdf.htm.
- P3: Provide crosswalks/improved crosswalks (appropriate signage, markings/signals)
 - Crosswalks provide a safe and convenient location for pedestrians to cross a street or intersection. Municipalities should strive to restripe or construct new crosswalks at heavily pedestrian traveled intersections as warranted or appropriate. Such locations would primarily fall within Central Business Districts (CBD), school zones, and along main streets and commercial districts.
 - With the passage of a new pedestrian law, as of January 19, 2003, motorists must yield the right of way to a pedestrian who is walking in any part of a crosswalk that is in the same roadway as the motorist. The previous law indicated that motorists had to yield the right of way only when the pedestrian is on the same half of the roadway as the motorist. See the *Yield to Pedestrian Signs* section of the Design Guidelines chapter for more details.
 - Additionally, crosswalks and other pedestrian facilities should be in compliance with the Americans with Disabilities Act (ADA) of 1990 (see P2).
 - Crosswalks may incorporate new striping techniques that increase visibility of the crosswalk and decrease the municipal maintenance responsibility by providing adequate spacing between each stripe where vehicle tires and bicycle tires pass through (see the Design Guidelines chapter).

¹⁴American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways *and Streets*, AASHTO, Washington, D.C., 2001, p. 96. ¹⁵ Americans with Disabilities Act Home Page, New or Proposed Regulations – Requirement for Curb Ramps, April

^{17, 2002, &}lt;<u>http://www.ada.gov/newregs/curbrule.txt</u>>(February 2003).

- Identify attractions and destinations for pedestrian travel through the development of a list of pedestrian destinations and suggested connections between these destinations for pedestrians (i.e. hospitals, colleges, schools, parks, etc.).
- _ Complete a Walkability Checklist in your community. The Pedestrian and Bicycle Information Center (www.walkinginfo.org) offers a Walkability Checklist to help you determine how walkable your community is. Inside the checklist "you'll find insightful questions, allowing you to evaluate your neighborhood's walkability. In addition to the questions, the Checklist provides both immediate answers and longterm solutions to your neighborhood's potential problems."¹⁶ A copy of the checklist can be found at the end of this Appendix.
- P4: Incorporate traffic calming techniques if/where feasible
 - Chapter 25: Traffic Calming, of the New York State Highway Design Manual provides examples of traffic calming measures that are used throughout New York State on state and local roads. The specific traffic calming technique(s) utilized would be determined by either the local municipality or the road owner that is looking to slow traffic through the use of a variety of traffic calming measures. Key factors in this decision making include terrain/topography, adequate right of way and available funding. Nearly all traffic calming techniques provide additional safety benefits for bicyclists and pedestrians
 - Additional information on traffic calming techniques can be found in the Design _ Guidelines chapter.
- P5: Improve and increase sidewalk maintenance
 - Sidewalks that are blocked from pedestrian travel because of snow and ice during winter months or are cracked and heaving, can force pedestrians to walk in the road, causing unsafe walking conditions. Property owners must be made aware that sidewalks should be cleared of all debris to provide adequate travel space for pedestrians. According to NYSDOT and OCDOT policy, during construction or reconstruction, providing there is a need and the design can accommodate it, the agencies will install sidewalks within towns or villages. However it is the responsibility of the local municipality to maintain the sidewalks once they are built. Sometimes municipalities then transfer this responsibility onto the property owners.
 - "A walkway and bikeway maintenance program is necessary to ensure adequate _ maintenance of facilities. Sufficient funds should be budgeted to accomplish the necessary tasks. Neighboring jurisdictions should consider joint programs for greater efficiency and reduced cost. The program should establish maintenance standards and schedules for regular inspections."¹⁷
 - In addition, the research and use of different paving materials for sidewalks that _ would save money and decrease maintenance responsibility over time would be a plus for municipalities that are interested in installing sidewalks.

¹⁶ Pedestrian and Bicycle Information Center, *Walkability Checklist*,

http://www.walkinginfo.org/cps/checklist.htm>, 2/4/05. ¹⁷ Oregon Department of Transportation, *Oregon Bicycle and Pedestrian Plan – An Element of the Oregon* Transportation Plan, 1995, p. 178.
- Complete a Walkability Checklist in your community. The Pedestrian and Bicycle Information Center (www.walkinginfo.org) offers a Walkability Checklist to help you determine how walkable your community is. Inside the checklist "you'll find insightful questions, allowing you to evaluate your neighborhood's walkability. In addition to the questions, the Checklist provides both immediate answers and long-term solutions to your neighborhood's potential problems."¹⁸ A copy of the checklist can be found at the end of this Appendix.

P6: Implement Safe Routes to Schools programs

- In its broadest sense, Safe Routes to Schools means providing safe travel for children that are walking or bicycling to school. This can come in the form of upgrading and maintenance of sidewalks and crosswalks, removal of debris from streets, as well as additional crossing guards placed at key locations near a school.
- A Safe Routes to Schools program may provide for an increase in a student's safety and health by walking or bicycling to school along designated routes identified by the local community (police agencies, schools, parents and their children). "A successful Safe Routes to School program integrates health, fitness, traffic relief, environmental awareness, and safety under one program. It is an opportunity to work closely with your school, your community, and your local government to create a healthy lifestyle for children and a safer, cleaner environment for everyone."¹⁹
- A Safe Routes to School program has been in existence in Rochester, NY since 1984 (although, it wasn't technically called a Safe Routes to School program until recently). "Through cost-effective use of existing resources and planning, the routes that children walk to school are systematically confirmed and upgraded each year, providing the necessary infrastructure of a safe community".²⁰ For additional information on Rochester's Safe Routes to School Program, please see the case study at the end of this Action Item Appendix.
- Additional information on the Safe Routes to Schools program can be found at: http://www.nhtsa.gov/people/injury/pedbimot/bike/saferouteshtml/overview.html#b, http://www.walkinginfo.org/saferoutes_training.htm, and at www.walktoschoolusa.org/srts.cfm. Another resource is a manual on the Kids Walk-to-School program that "aims to get children to walk and bicycle to and from school in groups accompanied by adults."²¹ This manual can be found at: www.cdc.gov/nccdphp/dnpa/kidswalk/pdf/kidswalk.pdf.
- P7: Works towards development of a "Complete the Streets" Program
 - The "Complete the Streets" program works to see that every road that is developed is complete, meaning that it accommodates all modes of travel. The concept behind a "Complete the Streets" program is that every road and street be routinely made safe

¹⁸ Pedestrian and Bicycle Information Center, *Walkability Checklist*, <<u>http://www.walkinginfo.org/cps/checklist.htm</u>>, 2/4/05.

¹⁹National Highway Traffic Safety Administration, Safe Routes to School Overview,

<<u>http://www.nhtsa.gov/people/injury/pedbimot/bike/saferouteshtml/overview.html#b</u>> (7/16/2004)

 ²⁰ Case Study: Long Term Mapping of Safe Routes to Schools – Rochester, New York, Author: Jeff Olson, R.A. – Trailblazer; Information provided by: Andy Wheatcraft, Rochester City School District, p. 1.
 ²¹ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking,

²¹ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, *Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners*, May 2002, p.26.

and friendly for bicycling and walking (where these modes of travel are allowed) as well as for vehicles.

- "Completing the streets means routinely accommodating travel by all modes (on all roads). This will expand the capacity to serve everyone who travels, be it by motor vehicle, foot, bicycle, or other means. A complete street in a rural area may look quite different from a complete street in a highly urban area. But both are designed to balance safety and convenience for everyone using the road."²²
- "Complete streets provide choices to the people who live, work and travel on them. A _ network of complete streets improves the safety, convenience, efficiency and accessibility of the transportation system for all users."²³
- Complete Walkability and Bikeability Checklists in your community. The Pedestrian and Bicycle Information Center (www.walkinginfo.org or www.bicyclinginfo.org) offers the two checklists to help you determine how walkable and/or bikeable your community is. Copies of the checklists can be found at the end of this Appendix.

P8: Require developers to include pedestrian facilities:

- In an effort to encourage the development of pedestrian facilities within the MPO, municipalities should investigate requiring commercial and housing developers to include pedestrian amenities/facilities, namely sidewalks, when building (through zoning code, development regulations, permit processes, etc.).
- Municipalities need to talk with developers about bicycle and pedestrian facilities _ before development is occurring, as it may be possible to find money for facilities at that point. Trying to add sidewalks at a later date will be a more difficult task both in terms of space and finances once a development is in place.
- The Village of Baldwinsville is currently examining the possibility of requiring developers to provide sidewalks when new housing projects are built. Village representatives noted that the safety factor (i.e., getting children out of the street, especially during the winter months) is reason enough to make sidewalks a requirement of new development.²⁴ The superintendent of public works stated that "We need to make it part of the requirement package for new development, the same as they do with roads. Developers would have to abide by that and put sidewalks in their plans."²⁵
- Encouraging municipalities and developers to connect dense residential areas with _ sidewalks could improve the walkability of a municipality.
- In addition, the concept of the town center (i.e. the creation of centralized green spaces) could be utilized or developed at the neighborhood level, creating small parks of green within and among neighborhoods.
- Identify attractions and destinations for pedestrian travel through the development of a list of pedestrian destinations and suggested connections between these destinations for pedestrians (i.e. hospitals, colleges, schools, parks, etc.).

²² America Bikes, Complete the Streets for Safer Bicycling and Walking, <http://www.americabikes.org/bicycleaccomodation_factsheet_completestreets.asp>, 2004.

²³ Bikehouston.org, America Bikes Urges Cities, States to "Complete the Streets," <<u>http://www.bikehouston.org</u>>, 1/22/04, (9/2004).
²⁴ T. Leo, The Post Standard, *Baldwinsville May Require Installation of Sidewalks*, 9/9/04.

²⁵ Ibid.

- P9: Implement pedestrian crash countermeasures as needed
 - The United States Department of Transportation Federal Highway Administration has an excellent Safety website. Within this website are several programs, including pedestrian and bicycle safety programs. To reach the pedestrian safety information, go to the following web site <u>http://safety.fhwa.dot.gov/programs.htm</u>, and click on Pedestrian Safety. Under the *Knowledge* heading there are *Crash Types* and *Countermeasures* where several resources exist that denote types of pedestrian crashes, how to prevent them, and countermeasures to assist in alleviating these crash types.
- P10: Ensure that local communities are aware of NYSDOT Pedestrian Engineering Instruction
 - The NYSDOT is required to follow Engineering Instruction (EI) 04-011: *Procedural Requirements for Pedestrian Accommodation*, for every project they work on (OCDOT fills out EI 04-011 when State and Federal funds are utilized on a project). The EI is effective with all projects for which design approval is requested after May 31, 2004. The EI does not provide a change in existing policy, but provides the procedures for conforming to the existing policy.
 - This EI should be disseminated to local municipalities so that it can be filed with their respective public works departments.
 - Please see a copy of EI 04-011 at the end of this Action Item Appendix.
 - When planning new pedestrian facilities or upgrading or reconstructing existing roadways to accommodate pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians. According to the *Transportation Planning Handbook*, published by the Institute of Transportation Engineers, "bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for pedestrian trips and one quarter-mile to three miles for bicycle trips."²⁶ In addition, the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* notes that "the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile."²⁷ With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.

 ²⁶ John D. Edwards, Jr., P.E., Editor, *Transportation Planning Handbook*, 2d ed., Institute of Transportation Engineers, Washington, D.C., 1999, p. 604.
 ²⁷ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways*

²⁷American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, AASHTO, Washington, D.C., 2001, p. 96.

Trails and Greenways Action Items:

T1: Develop regional trail system

- A regional trail system an provide recreational and self-powered transportation opportunities for local residents as well as tourists. In the MPO area there are several existing trails, such as the Erie Canalway Trail that currently runs from DeWitt to the east into Madison County, as well as from Camillus to the west into Cayuga County. Connecting the Canalway Trail through the remainder of Onondaga County (mainly through the City of Syracuse) would provide an east-west bicycle and pedestrian corridor through the MPO area. Additionally, a regional trail system should work to incorporate other trails throughout the area (the Onondaga Lake Trail, the Creekwalk, etc.), to create a linkage between existing and proposed trails, as well as to connect local trails to regional trails.

Other important items for local municipalities to discuss relevant to the creation of a regional trail system include:

- Determining the best/fastest way to link trails by completing the easiest and/or least costly portions of trails first could assist in generating excitement amongst communities.
- Reviewing existing easements (i.e. trolley, feeder canals and old/abandoned railroad tracks) for possible trail locations and connections would be a good place for municipalities to start.

T2: Increase number of trailheads

- A trailhead is "any point, designated by a land management agency, at which a trail user can enter or exit from a shared-use path or a recreation trail. Designated trailheads may also include elements such as parking, restrooms, kiosks, and other built facilities. Gates, bollards, or other trail entrance designs may be used to prevent access of motorized trail users, but they should not prevent access to wheelchair users or handcycle riders. These elements should be designed so that access to the pedestrian trail is not compromised."²⁸
- Increasing the number of trailheads on existing and proposed trails within the MPO area could provide more vantage points for people to access local and regional trails. Locating amenities at these trailheads may encourage more use of the trails.
- Additionally, municipalities should try to develop trail access directly into town centers and connect to urban networks so that recreational trips can be accomplished without requiring the use of an automobile.²⁹

T3: Trail amenities (signage, benches, etc.)

- Like T2, an increase in the number of signs, benches and other amenities could provide a greater likelihood that people will use existing and proposed trails within

 ²⁸ US Department of Transportation Federal Highway Administration, *Designing Sidewalks and Trails for Access, Best Practices Design Guide, Part II of II*, September 2001, p.12-25.
 ²⁹ The New York State Bicycle and Pedestrian Plan, *The Next Generation... Transportation Choices for the 21st*

²⁹ The New York State Bicycle and Pedestrian Plan, *The Next Generation… Transportation Choices for the 21st Century*, 1997, pg. 13

the SMTC planning area. Such trail amenities add to the aesthetics of a trail and may also aid in increasing tourism and economic development in the MPO area.

- In addition, making use of signage on trails (maps, kiosks, web site, etc) to direct trail-users to trail amenities, and shopping/commercial districts, etc. outside of the trail could also result in a boost in local economy.
- T4: Trail connection projects
 - Although there are trails currently slated for development, most likely there will be some local trails that do not become connected to regional trails in the MPO area. To provide connections between as many trails in the MPO areas as possible, smaller local trails should be developed in a manner that would connect them to the larger regional network of trails whenever possible. As a result, a greater expanse of trail network could be created. "Expanding a trail system can bring exercise and self-powered transportation opportunities to a greater number of potential users and can help spread usage over a larger system, which may help reduce the growing congestion on existing shared-use trails."³⁰
 - Determining the best/fastest way to link trails by completing the easiest and/or least costly portions of trails first could assist in generating excitement amongst communities. Successful trails "provide shorter connections between trails and neighborhoods, parks, recreation facilities, libraries and commercial and work sites."³¹
 - Reviewing existing easements (i.e. trolley, feeder canals and old/abandoned railroad tracks) for possible trail locations and connections would be a good place for municipalities to start.
- T5: Regional trail promotion program
 - There are several trails and recreational areas found throughout the MPO area. To provide adequate promotion of such facilities, a promotional program could be created that promotes trails as transportation facilities as well as recreational areas throughout the MPO area, including local, county, and state facilities.

 ³⁰ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners, May 2002, p.21.
 ³¹ Ibid.

Connections with Transit Action Items:

TRAN1: Increase the usage of bicycle racks on buses

- Beginning in 1997. Centro started to retrofit their passenger buses with bicycle racks in an effort to encourage increased transit usage combined with bicycling. Today, the vast majority of Centro's fleet is equipped with bike racks that are attached to the front of their buses. Although nearly all of Centro's fleet is equipped with bike racks, the racks are not being utilized as often as they could be. Promoting the existence of bike racks on the buses could increase ridership for Centro by tapping into a new market of bus riders with bicycles.
- "Used individually, bicycling and transit provide low-cost mobility and place fewer demands on local roads and highways to carry everyday trips. Used in combination, bicycles and public transportation provide millions of Americans with enhanced access to work, shopping, services, and family and friends."³²
- For more general information on bike racks buses. on to go http://www.bicyclinginfo.org/transit/onbusses.htm.

TRAN2: Increase ADA access at bus stops

- According to the Department of Justice Code of Regulations ADA Standards for Accessible Design, every station, bus stop, bus stop pad, terminal or other transportation facility, shall comply with applicable provisions of 4.1 through 4.35, sections 5 through 9 and the applicable provisions of this (the Transportation Facilities) section³³ of the Code of Federal Regulations (28 CFR Part 36). The ADA provisions ensure that all persons will be able to use intermodal facilities.
- Additional information on access to transit can be found at: http://www.walkinginfo.org/transit/access.htm.

TRAN3: Improve bicycle access to the Regional Transportation Center

For individuals who would like to bike to the Regional Transportation Center (RTC), _ based on the SMTC Bicycle Suitability Map, roadway conditions around the area are not highly favorable for cycling. However, bicycle access is not prohibited, and the RTC does provide bicycle racks. Improving the surrounding roadways to improve bicycle access to the RTC may encourage more individuals to utilize their bikes to get to the RTC. In addition, for those who would like to take their bike on the train, Amtrak's policy is as follows: "Amtrak accepts a number of special items such as ... bicycles. In most cases there is a handling charge. Bicycles must normally be in containers provided by the passenger or Amtrak. Certain trains... can handle bicycles not in containers; a reservation for this space is usually required for which a nominal charge is made."³⁴

³² Federal Transit Administration, United States Department of Transportation, *Bicycles and Transit: A Partnership* that Works, http://safety.fhwa.dot.gov/fourthlevel/pdf/bikes_fta.pdf, 9/9/04, p.1.

³³ Department of Justice, Code of Regulations 28 CFR Part 36: Non Discrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities - ADA Standards for Accessible Design,

<<u>http://www.usdoj.gov/crt/ada/adastd94.pdf</u>>, revised July 1, 1994, (7/19/2004). ³⁴ Amtrak, *Amtrak System Timetable*, Spring/Summer 2004, p. 126.

TRAN4: Complete/expand the use of OnTrack

- OnTrack is a recreational rail shuttle service that was established by Syracuse, Binghamton & New York Railway in 1994. OnTrack currently connects the Carousel Center with Syracuse University and Armory Square in Downtown Syracuse. Service is currently limited to eight trains in each direction, Wednesday through Sunday, on a seasonal basis. OnTrack also operates special trains (Orange Express) for Syracuse University football and basketball games as well as for major concerts. The trains run from both Carousel Center and Armory Square to the Carrier Dome.
- A future extension is planned that would provide additional stops at the William F. Walsh Regional Transportation Center, the P&C Stadium and the Central New York Regional Market. Completion of this future extension could provide additional transportation choices for college students, families, and the general public.

TRAN5: Examine the possibility of further expansion of the existing transit system.

- Continue to create a more inclusive transit system by going beyond the traditional "hub and spoke" concept to include the circumference and outlying areas of the county.
- Expanding transit service throughout the suburbs (and possibly within the suburbs) could assist individuals traveling between suburbs for work that do not have access to vehicles.
- Although the creation of a more inclusive transit system would be beneficial to many without access to a vehicle, lack of enough ridership could prevent transit from expanding. Expansion of the transit system would have to be thoroughly examined as an option within the SMTC area.

Education Action Items:

ED1: Provide public education programs to increase awareness of pedestrian and bicycle laws, safety issues, and regulations (helmet law, etc.) for children and adults.

- The current public education programs should continued to be organized to increase awareness of bicycle safety issues and regulations (such as the bicycle helmet law). The programs could have joint sponsorship by the local law enforcement agencies, the Onondaga County Department of Health (OCDH) Traffic Safety Program, schools, and/or community/church organizations. Program elements often include sessions in elementary school classes, ranging from a teacher conducted program based upon a pre-approved lesson plan prepared by the sponsor, to special visits by police officers or OCDH Traffic Safety Program staff to teach the benefits of bicycle and pedestrian safety.³⁵
- Public and community awareness about safe bicycling/walking (safety, regulations, helmet law, sharing the road, etc.) should be increased. This can occur by increasing the number of participants in bike and pedestrian safety training programs. These programs can be facilitated by either local police agencies (bike rodeos are currently being held in the MPO area at schools), the OCHD Traffic Safety Program or bicycle and pedestrian certified instructors, such as instructors from the League of American Bicyclists. Safety training programs can be provided for children and/or adults of all abilities and experience.
- Increase number of adult participants in bike and pedestrian safety training programs
- Provide specific local law enforcement training program regarding traffic laws for bicyclists and motorists.
- Include bicycle and pedestrian safety information within Driver Education Courses
 - The New York Bicycling Coalition (NYBC) has recently moved toward this effort. "Building upon previous years of work at the regional level, the NYBC is launching a Share the Road Campaign targeted for Point Insurance Reduction Classes and Pre-Licensing Courses. Building upon previous regional efforts and with the continued cooperation and sponsorship of the Governor's Traffic Safety Committee, the NYBC will begin training Driver Education teachers on the finer points of bicycling and pedestrian safety, and versing the teachers and students on the rules that pertain to non-motorized travelers. There will be a section to the NYBC website <u>http://www.nybc.net</u> that pertains to Share the Road materials soon."³⁶
 - The Pedestrian and Bicycle Information Center's <u>www.walkinginfo.org</u> and <u>www.bicyclinginfo.org</u> websites provide helpful education related information under the *Education and Enforcement* heading.

ED2: Inclusion of safety education materials in routine public agency mailings, such as utility bills, driver education leaflets, etc. (also target large corporations, small business owner associations) and on public agency websites.

 ³⁵ Syracuse Metropolitan Transportation Council, *James Street Corridor Traffic Study*, FY 2000-2001, p. 81.
 ³⁶New York Bicycling Coalition, News, *E NY Bikes! Update December 3*, 2004,

<http://lists.nybc.net/pipermail/nysbikewalk/2004-December/000100.html>, (12/6/04).

- To better inform citizens on safety related issues, education materials could be circulated through public mailings. Such an effort would include the development of easy to read brochure materials explaining the safety issues, as well as buy-in and permission from utility companies, the Department of Motor Vehicles, etc. Local municipalities, various agencies and businesses can all get involved in the distribution of this safety material.³⁷
- Encourage local law enforcement agencies to provide public training programs that review and reiterate bicycle and traffic laws for bicyclists and motorists. The ultimate goal of such a program would be to increase awareness and safety while at the same time decreasing bicyclist/motorist conflicts.
- In addition, holding a specific local law enforcement training program regarding traffic laws for bicyclists, pedestrians and motorists would serve as a reminder to law enforcement of the laws and regulations surrounding the use of bicycles and walking.

ED3: Increase the number of local bike rodeos

- Bicycle rodeos are one way to involve children in bicycle safety programs. "A bike rodeo is usually a bicycle safety clinic featuring bike helmet fitting stations, bike safety inspections (and optionally quick tune-ups), and a safety lecture about the rules of the road (10 to 15 minutes). This is typically followed by a ride on a miniature "chalk street" course set up in a parking lot where young cyclists are shown where and how to apply the rules. Optional activities include prizes and drawings, and in some cases commercial activities such as booths set up by bike shops etc. The main focus of a bike rodeo is Cycling Safety for young cyclists, ages kindergarten to 14 or so."³⁸
- Although there are some bike rodeos currently being held in the MPO area, they are primarily held on a minimal basis (i.e., only in some school districts). It would prove beneficial to school aged children if bike rodeos were readily available at multiple locations. Local law enforcement agencies, municipal community groups, and public and parochial schools, could work together to provide bike rodeos at various locations throughout the MPO area.

ED4: Implement a community awareness campaign to better inform citizens of public resources and home and business owner responsibilities

- Educate business/home owners on street-level improvements/maintenance, especially sidewalk maintenance responsibilities (repairs, snow clearance, etc.) in municipalities where this is the property owners' responsibility.
- Such an effort could include the development of easily understandable brochure materials explaining sidewalk maintenance responsibilities. These could be distributed to schools, community centers, churches and commercial establishments as well as business associations.³⁹

³⁷ Syracuse Metropolitan Transportation Council, *James Street Corridor Traffic Study*, FY 2000-2001, p. 82.

³⁸ J. Andersen, *Bicycle Rodeos*, <<u>http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm</u>>, (9/13/04).

³⁹ Syracuse Metropolitan Transportation Council, *James Street Corridor Traffic Study*, FY 2000-2001, p. 82.

ED5: Educate municipalities on how to obtain funding for sidewalks and other pedestrian or bicycle facilities

- The Pedestrian and Bicycle Information Center provides useful background information on funding sources, as well as good places for communities to get started when trying to become educated on this subject. This information can be found at both <u>www.walkinginfo.org</u> and <u>www.bicyclinginfo.org</u> under the *Policy and Planning* Heading by clicking on "Funding sources." This information can be reached directly for pedestrian-related funding at: <u>http://www.walkinginfo.org/pp/funding/index.htm</u> and for bicycle-related funding at: <u>http://www.bicyclinginfo.org/pp/funding/index.htm</u>.
- In addition, Chapter 3, "How to Get it Funded," of *Increasing Physical Activity Through Community Design – A Guide for Public Health Practitioners*, published in May 2002 by the National Center for Bicycling and Walking, provides some good basic information on funding processes. "Most public road projects are conducted either through maintenance, or capital improvements programs, or by private developers as a condition of approval for their development. These areas are funded separately, and the approach to getting projects done should take that into account."⁴⁰

ED6: Create an inventory of existing trails and develop a regional trail map

- Develop a map of trails (walking and/or bicycling) throughout the region that is portable, easy to read and durable.
- Create a powerful and interactive website that provides trail maps, and inventory of existing trails and related information. This could be a joint effort created at the county level in conjunction with the county parks department, as well as at the City level with the City of Syracuse Department of Parks and Recreation.
- ED7: Educate public on Centro bike racks on buses
 - As noted in the Existing Conditions portion of this document, there are several individuals that are not aware of the availability of bike racks on Centro buses. Within the Greater Syracuse Metropolitan Area Bike Map is a panel on how to use the racks on Centro buses. Additional advertising by Centro may assist in spreading the word about the availability of this feature on the majority of Centro buses.

ED8: Involve and educate local residents, business people, etc. about the importance of safe pedestrian travel and connections.

- Setting up a program to educate local municipalities about the importance of safe pedestrian travel and connections could be of benefit to these communities, not only from a safety standpoint, but from an economic standpoint as well.
- "The truth is that most people DON'T think of themselves as pedestrians. This low awareness is one of the biggest obstacles that anyone who promotes walkable communities face. Low awareness comes at a high price. In the case of walkability, that means there are few advocates for a cause that is misunderstood—largely because most people do not see themselves as pedestrians. And when they don't

⁴⁰ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, *Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners*, May 2002, p.28.

recognize that they are pedestrians, they have low or no expectations of what their rights as pedestrians are."⁴¹

- Encouraging municipalities and developers to connect dense residential areas with sidewalks could improve the walkability of a municipality.
- When planning new pedestrian facilities or upgrading or reconstructing existing roadways to accommodate pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians. According to the *Transportation Planning Handbook*, published by the Institute of Transportation Engineers, "bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for pedestrian trips and one quarter-mile to three miles for bicycle trips."⁴² In addition, the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* notes that "the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile."⁴³ With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.
- For more information on the importance of safe pedestrian travel and connections, go to <u>www.walkinginfo.org</u> and click on the heading *Outreach and Promotion*. Similar information on the importance of safe bicycle travel can be found under the same heading at <u>www.bicyclinginfo.org</u>.

ED9: Obtain and share information from other communities about liability concerns as they relate to bicycling

Obtain and share information from other communities about liability concerns relative to the creation of new bicycle facilities. See the attached NYSDOT memorandum on bicycle tort liability at the end of this Appendix. Also, a detailed report on liability titled *Liability Aspects of Bikeway Designation – A Special Report*, was prepared for the Bicycle Federation of America (now known as the National Center for Bicycling and Walking) in April 1986. John W. English, a Legal Consultant, prepared the report.

⁴¹ Pedestrian and Bicycle Information Center, *First Things First*, <<u>http://www.walkinginfo.org/op/ftf.htm</u>>, 9/13/04.

 ⁴² John D. Edwards, Jr., P.E., Editor, *Transportation Planning Handbook*, 2d ed., Institute of Transportation Engineers, Washington, D.C., 1999, p. 604.
 ⁴³ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways*

⁴³American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, AASHTO, Washington, D.C., 2001, p. 96.

Enforcement Action Items:

ENF1: Institute a regular review course for law enforcement personnel about the rights and responsibilities of bicyclists and pedestrians

- A review course (similar to traffic school) on bicyclist and pedestrian rights and responsibilities for law enforcement personnel should be provided to officers in all municipalities (this could be a countywide course). The course would refresh the officers' knowledge of the rights and responsibilities afforded to bicyclists and pedestrians, as well as motorists.
- Additional information can be found at <u>www.bicycling.org</u> or <u>www.walking.org</u> under the heading *Education and Enforcement*.

ENF2: Increase enforcement of sidewalk maintenance responsibilities

- Local law enforcement personnel should work to enforce sidewalk maintenance _ responsibilities (within municipalities where it is the responsibility of the property owner to keep their sidewalk clear) to those property owners that fail to keep their sidewalks clear of snow, ice and other debris that hinder pedestrian movement. This is especially true in winter months in cities and villages where children walk to school in the road because sidewalks have not been cleared. A targeted enforcement program during the first two or three weeks after it snows could prove to be a useful reminder to property owners to clear their sidewalks. Such a program could start by distributing pamphlets to property owners at the end of fall, reminding them that it is their responsibility to keep their sidewalks clear. Such pamphlets could also be distributed at Town and Village Halls or via Town and Village newsletters. Once it snows, code enforcement officers could issue warning citations for a few weeks to property owners that do not clear their sidewalks. This process would then be followed up by issuing tickets to those individuals that do not comply with snow removal, even after warning citations have been distributed. A final step would be snow removal by the municipality that is charged to the property owner's taxes.
- Additional information can be found at <u>www.walkinginfo.org</u> under the heading *Community Problems and Solutions* in the "Neighborhood Walking Guide."

ENF3: Increase enforcement of specific bicycle and pedestrian laws

- Upon completion of a review course (noted in ENF1), local law enforcement personnel should work to complete a targeted enforcement day or week specifically connected to the enforcement of bicycle and pedestrian laws. As part of a local policing effort, officers could issue informational flyers upon observation of unsafe practices (i.e., riding without a helmet, bicyclists traveling against traffic, pedestrians walking on the wrong side of the road where no sidewalk is available).⁴⁴ This could then be followed with the issuing of traffic tickets after the period of distribution of informational flyers is through. With increased enforcement, potential conflicts that may arise between motorist and bicycle/pedestrian could be reduced.

⁴⁴ Syracuse Metropolitan Transportation Council, *James Street Corridor Traffic Study*, FY 2000-2001, p. 81.

ENF4: Increase use of bicycles by police, public safety officers

- Typically, as police presence is increased in a neighborhood or community, residents' perception of safety is increased. Officers who patrol on bicycles are highly visible in the community. Currently, both the City of Syracuse Police Department and the Onondaga County Sheriff's Department have officers who utilize bicycles. Increased use of bicycles by public safety personnel would be most cost efficient in more dense urban settings and during traditionally non-inclement weather months (i.e. late spring, summer, and early fall).
- Encouraging increased visibility of police presence on trails within the MPO area would provide trail users with a greater feeling of safety as well.

ENF5: Provide a liaison between local law enforcement and the bike community

- In an effort to create a better public relationship between law enforcement agencies and the bicycling public, a liaison could be established between the bicycling community (through bike clubs) and law enforcement agencies. The liaison could discuss public issues and concerns, such as pedestrian and bicycle-based concerns, with the agencies and then report back to the bicycling community and vice-versa.

Encouragement Action Items:

ENC1: Encourage municipalities to complete, develop, design and fund bike/pedestrian facilities

- If residents of a community believe that bike/pedestrian facilities should be developed in an area, then municipalities should be encouraged to cooperate and provide such facilities as needed. Bike/pedestrian facilities provide residents with an increased quality of life and can also provide health and safety benefits. Also, incentives could be provided to developers to incorporate bicycle and pedestrian facilities in their designs (also see P8).
- Especially encourage municipalities to incorporate sidewalks/pedestrian paths/bike facilities within construction and reconstruction projects.
 - When planning new bicycle and pedestrian facilities or upgrading or reconstructing existing roadways to accommodate bicyclists and pedestrians, one of the items for transportation planners and engineers to consider is the typical trip length of pedestrians and bicyclists. According to the Transportation Planning Handbook, published by the Institute of Transportation Engineers, "bicycle and pedestrian trips are typically characterized by short trip distances: approximately one-quarter mile to one mile for pedestrian trips and one quarter-mile to three miles for bicycle trips."45 In addition, the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets notes that "the pedestrian most likely will not walk over 1 mile to work or over 0.5 mile to catch a bus, and about 80% of the distances traveled by the pedestrian will be less than 0.5 mile."⁴⁶ With the majority of bicycle and pedestrian trips covering short distances, land use patterns play a critical role in the current and future development and use of bicycle and pedestrian facilities.
- ENC2: Promotion of existing local open space and recreational opportunities
 - Municipalities should promote the recreational opportunities they have available for community residents (i.e., swimming pools, parks, trails) through fliers, advertising within the community, etc. This promotion may assist in increasing the number of visitors to designated locations.
- ENC3: Initiate "Safe Routes to Schools" programs at area schools
 - See Action Item P6.

ENC4: Increased promotion of existing bicycle and walking encouragement programs

- This can help to positively promote pedestrian travel (create a demand for pedestrian travel), as well as transit travel and travel by bike

⁴⁵ John D. Edwards, Jr., P.E., Editor, *Transportation Planning Handbook*, 2d ed., Institute of Transportation Engineers, Washington, D.C., 1999, p. 604.

⁴⁶American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways* and Streets, AASHTO, Washington, D.C., 2001, p. 96.

- Bicycle and pedestrian related programs such as Bike Month, Walk Your Child to School Day and Recycle-a-Bicycle should be promoted throughout the area. In addition, programs such as Buffalo's "Blue Bicycle" program should be researched to determine if such a program would be feasible in the Syracuse area. These programs increase bicycle and pedestrian awareness and associated safety information within communities. For more information on the specific programs noted, please see the following websites:
 - National Bike Month (Bike-to-Work Week): <u>www.bikemonth.org</u>
 - Walk Your Child to School Day: <u>www.walktoschool-usa.org</u>
 - Recycle-a-bicycle: <u>www.recycleabicycle.org</u>
 - o Buffalo's Blue Bicycle Program: <u>www.buffalohealthytransportation.org</u>
 - "The Blue Bicycle Program, a bike-lending program modeled after those in Toronto and Europe, was announced during a celebration of Alternative Transportation Day on September 29, 2004 in Buffalo, NY. Anybody could become a member of the Blue Bicycle program for \$25 a year or six hours a year of volunteer service in fixing and maintaining the bicycles. Members could borrow the bikes from racks at designated "hubs" for up to a day. They can be ridden anywhere and returned at any "hub". The pilot program being launched in April (2005) will be on a modest scale with 30 to 40 bicycles at "hubs" focused around a main street "spine".⁴⁷ For more information, visit the website noted above.
- For general information on outreach and promotion for bicycling and walking, see <u>www.walkinginfo.org</u> and click on *Outreach and Promotion*.

ENC5: Encourage employers to provide incentives to bike or walk to work

- As a way to promote alternative transportation, employers could provide incentives to their employees to bike or walk to work. Such incentives may include:
 - A decrease in parking expenditures incurred by employers and their employees
 - Increased employee health
 - Employer provided dinner or lunch to employees who bike or walk to work the most over a period of time.

ENC6: Increased bike storage (bike racks and/or lockers)

- "Secure bicycle parking can help encourage more cycling. Many bicycle journeys end somewhere other than at the bicyclist's home, which may mean leaning bicycles against store windows or trees or locking them to sign posts or parking meters."⁴⁸ Increasing bicycle parking and storage may encourage more people to bike within their community, as they would have a place to safely store their bike once they have reached their destination.

 ⁴⁷ Greater Buffalo-Niagara Regional Transportation Council Newsletter, '*Blue Bicycle' Lending Program to be Launched*, Winter 2004, p.5-6.
 ⁴⁸ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking,

⁴⁸ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, *Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners*, May 2002, p.20.

- "More than 1.5 million bicycles are reported stolen every year in the United States and fear of bicycle theft is recognized as a significant deterrent to bicycle use. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings."⁴⁹
- Currently in the SMTC MPO area, there are minimal locations for bicycle parking. To date, the majority of bicycle parking locations are on the local college campuses, a few libraries and near a few buildings in downtown Syracuse. A survey of bicycle parking locations was not completed within individual municipalities. To remedy this issue, municipalities could provide additional bicycle parking facilities like bicycle racks and bicycle lockers at major destinations, such as along main streets, schools/universities, shopping districts, libraries, municipal, and other public buildings.
- Cooperative countywide design and purchasing of bike accessories (i.e. bike racks, traffic signal equipment, signage, etc.) may assist with the financial aspect of providing bicycle parking and storage.
- A portion of the Pedestrian and Bicycle Information Center's website is dedicated to bicycle parking and can be found at <u>www.bicyclinginfo.org/de/park.htm</u>. This site notes the basics of bicycle parking, general bicycle parking costs, manufacturers of bike parking and storage facilities and also includes an excellent Bike Parking Guide developed by the Association of Pedestrian and Bicycle Professionals (APBP).

ENC7: Establish a bike/ped coordinator at the county and city levels (and eventually within each municipality).

- The NYSDOT has a bicycle and pedestrian coordinator designated at each regional office. This recommendation suggests that a similar position be created at the County Department of Transportation level as well as within the City of Syracuse. Or, these tasks could be added to an already existing position, or this position could be shared between the County and City. At both the County and City, this person would be responsible for handling bicycle/pedestrian related planning activities, which could include reviewing design plans for bicycle and pedestrian facilities or responding to questions or concerns from the public relative to bicycle/pedestrian transportation.
- In the future, similar bicycle/pedestrian coordinator positions could eventually be established at the municipal level. Some municipalities within the MPO already have a Parks and Recreation Department or Planning Department that may be able to absorb a position like this (or perhaps an individual already exists for this purpose). In municipalities where a similar position does not already exist, the bicycle/pedestrian coordinator position could be filled by a volunteer, or paid individual. This person could also have other responsibilities. This position permits a "point of contact" for residents and calls for accountability on the part of each municipality.

⁴⁹ Pedestrian and Bicycle Information Center, *Bicycle Parking*, 9/7/04, <<u>http://www.bicyclinginfo.org/de/park_basics.htm</u>>

ENC8: Continue widespread distribution of SMTC bike maps

- Continued distribution of the free Greater Syracuse Metropolitan Area Bike Map, which is primarily for the use of bicycle commuters, can aid in encouraging individuals to ride their bikes by giving them a tool to determine which roads are most suitable for travel by bike. In addition, the map provides excellent information on sharing the road safely, as well as sharing trails safely. An excellent educational tool for cyclists, the map also points out how to use the bike racks on Centro buses.
- The map has already been distributed through the Onondaga County library system, malls, and the county and city park systems.

ENC9: Promote walking and bicycling trails

- The promotion of walking and bicycling trails throughout the MPO area can assist in encouraging residents to utilize these local recreational facilities, and perhaps eventually use them for transportation purposes as well.
- Holding events at the grand opening of a new trail or new segment of trail, such as holding a community party on the trail, can create excitement about these facilities.

ENC10: Encourage increased visibility of police presence (i.e. bike patrol on trails, law enforcement officers on bicycles)

- Increased visibility of police, law enforcement agencies and/or officers, and security officials may assist in encouraging people to bike or walk more often.

ENC11: Place suggestion boxes at trailheads

- Placing suggestion boxes at trailheads allows trail users to leave their comments about the facility they are using.
- The suggestion box can be used as a tool for trail-goers to create a wish list of locations for new trail development or to offer improvement suggestions to trail(s) for the future. Suggestion boxes should be strategically placed at key locations already being visited by park personnel on a regular basis. Suggestion boxes should be emptied and the contents reviewed every 2-3 months. Inviting trail-users to provide input on the facilities they are using will provide for better trails, and increased use of those trails.

ENC12: Promote bus/mass transit by encouraging elementary schools to use the public transit system for some field trips

- Introducing children to the public transit system at a young age can provide them with a sense that the mass transit system is clean and safe, and easy to use.

ENC13: Encourage Centro to provide buses with bike racks at large community events

- Encouraging Centro to provide buses with bike racks at large community events for the purpose of teaching interested individuals how to use the bike racks would assist in spreading the word about the availability of these racks on the majority of Centro buses. The more people that are aware that this opportunity exists, the more users the bike racks/buses will draw. Centro may benefit with additional ridership.

ENC14: Encourage local municipalities to research and/or develop an overall master plan for their respective municipality

- Encourage municipalities that do not have a community master plan in place to research and/or develop an overall master plan for their community. A community master plan typically provides information on the current state of a community as well as projected conditions for that community.

"A master plan usually includes a collection of narrative, maps and data pertinent to the development of a community. It is a collection of policies, goals and recommendations about how the community should change (or not change) through time. A master plan will mean different things for different communities. Typically a community would want a master plan to establish an overall vision and direction for a community's future development. It can serve as a guide to orderly growth in a community and provide the rational basis for zoning and land use regulation. It can also assist a community in understanding current conditions and trends and their implications. A master should be updated or altered when conditions have changed sufficiently to reexamine existing policies, recommendations and related regulations. It should also change when there is a common sense that the plan is not taking the community in the direction it wants to go. Revisions should typically take place every 5-10 years. Sections can be revised as you go (and between major updates). Major zoning changes should trigger review of related master plan recommendations."⁵⁰

- Good planning starts by having a plan in place to follow. For municipalities that do not have a mater plan for their community and area, researching the development of an overall master plan would be a good place to start.

⁵⁰ Portsmouth Planning Board, *Master Plans 101*,

<<u>http://www.cityofportsmouth.com/masterplan/masterplanslideshow.pdf</u>>, August 3, 2002, (9/8/04).

Economic Development Action Items:

ECO1: Once trails are connected, provide signage to lead trail-goers to shopping/eating/historical districts

- Place signs on trails that direct tourists to popular destinations, such as shopping districts, restaurants/bars, museums and other cultural sites in a community. Directing trail-goers to local areas of interest outside of trails could ultimately result in a boost in local economy.
- As noted in the Issues portion of this document, "countless communities across _ America have experienced an economic revitalization due in whole or in part to trails and greenways. Trails and greenway systems have become the central focus of tourist activities in some communities and the impetus for kick-starting a stagnating economy,"⁵¹
- Bicycle and pedestrian based tourism could benefit the SMTC region. The Erie _ Canalway Trail, the Onondaga Creekwalk, and the Loop the Lake Trail are the types of facilities that can play an important role in regional economic development. Throughout the country, bicycle and pedestrian tourists are making considerable contributions to local economies. "In some locations, the contribution made by these non-motorized tourists can be as much as tourists using motor vehicles. Studies show that where bicycle and pedestrian tourism is fostered and promoted, and where investments are made in bicycle and pedestrian facilities, the economic impact may be even greater. A thriving tourist industry, in turn, can attract and revitalize businesses, create jobs, and increase public revenue."⁵²
- The development, upkeep, and promotion of bicycle and pedestrian facilities can create a positive image in a community as well as a perceived increase in quality of These in turn have an effect on the local economy. Well-connected and life. established bicycle facilities may encourage others to move to the SMTC MPO area and may encourage developers to locate their businesses here.

ECO2: Provide/increase bike parking and storage (racks, lockers, etc.) in and around commercial areas.

- "Secure bicycle parking can help encourage more cycling. Many bicycle journeys end somewhere other than at the bicyclist's home, which may mean leaning bicycles against store windows or trees or locking them to sign posts or parking meters."⁵³ Increasing bicycle parking and storage may encourage more people to bike within their community, as they would have a place to safely store their bike once they have reached their destination.
- "More than 1.5 million bicycles are reported stolen every year in the United States _ and fear of bicycle theft is recognized as a significant deterrent to bicycle use. The

⁵¹ Rails to Trails Conservancy, Economic Benefits of Trails and Greenways (Fact Sheet), 2/4/2004,

http://www.trailsandgreenways.org/resources/benefits/topics/econrev.asp (2004), p.2.

⁵² National Center for Bicycling and Walking, *The Economic Benefits of Bicycle- and Pedestrian-based Tourism*, and the Economic Impacts of Trail Development, 2/5/2004,

<<u>http://www.bikewalk.org/assets/Reports/economic_impact.htm</u>> ⁵³ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking, Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners, May 2002, p.20.

availability of safe and convenient parking is as critical to bicyclists as it is for motorists and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings."54

- Currently in the SMTC MPO area, there are minimal locations for bicycle parking. To date, the majority of bicycle parking locations are on the local college campuses, a few libraries and near a few buildings in downtown Syracuse. A survey of bicycle parking locations was not completed within individual municipalities. To remedy this issue, municipalities could provide additional bicycle parking facilities like bicycle racks and bicycle lockers at major destinations, such as along main streets, schools/universities, shopping districts, libraries, municipal, and other public buildings.
- Cooperative countywide design and purchasing of bike accessories (i.e. bike racks, _ traffic signal equipment, signage, etc.) may assist with the financial aspect of providing bicycle parking and storage.
- A portion of the Pedestrian and Bicycle Information Center's website is dedicated to _ bicycle parking and can be found at www.bicyclinginfo.org/de/park.htm. This site notes the basics of bicycle parking, general bicycle parking costs, manufacturers of bike parking and storage facilities and also includes an excellent Bike Parking Guide developed by the Association of Pedestrian and Bicycle Professionals (APBP).
- Please also see the Bicycle Parking and Amenities in the Design Guidelines portion of this document.

ECO3: Ensure that bike/ped facilities are well lit, maintained and signed as appropriate within commercial areas (as well as in neighborhoods)

- To increase safety, facilities that are well lit, maintained and signed provide an added sense of security for patrons using a commercial area, as well as individuals walking within their own communities.
- Lighting: A properly well-lit neighborhood (especially in urban areas that have a perception of existing criminal activity) for pedestrians means that sidewalks along both sides of a street are lit so that people can see where they are walking at night and no dark areas exist where criminals may lurk. In combination with good lighting, working towards a more crime-free neighborhood and redesigning your neighborhood to prevent crime may be necessary to make your neighborhood a safer place to walk at night.55
- Maintenance: When sidewalks and walkways are not properly maintained (i.e., sidewalk is cracked, upheaved, covered with snow/ice) walking can be difficult, especially for the elderly, those pushing strollers and people that use canes, crutches, wheelchairs or walkers. Reporting a sidewalk problem may prevent someone from falling and becoming injured and may prevent a claim or possible lawsuit against you, vour neighbors, or vour community.⁵⁶

⁵⁴ Pedestrian and Bicycle Information Center, *Bicycle Parking*, 9/7/04,

<<u>http://www.bicyclinginfo.org/de/park_basics.htm</u>> ⁵⁵ Pedestrian and Bicycle Information Center, *Community Problems and Solutions – Neighborhood Walking Guide*, <<u>http://www.walkinginfo.org/cps/guide_issue6.htm</u>>, (9/9/04). ⁵⁶ Ibid.

Signage: "Successful paths have clear destination and directional signing."⁵⁷ Signs can provide important information that can improve road safety. By letting people know what to expect, there is a greater chance that they will react and behave appropriately.⁵⁸

ECO4: Educate business owners, municipalities, and planning boards about the economic benefits of providing safe bike/ped facilities and amenities

- Educate business owners, municipalities, planning boards about economic benefits of providing user-friendly and safe bicycle and pedestrian facilities and amenities.
- -Get business owners "on-board" with the importance and economic benefit of safe pedestrian travel so that they develop walkways, accessible sidewalks, etc., in their commercial districts.
- Also see ED8 and ECO5. _

ECO5: Encourage municipalities to require developers/new businesses to include bike/ped amenities and/or facilities in their designs

- Encourage towns and villages to investigate requiring commercial and housing developers to include pedestrian amenities/facilities, namely sidewalks, when building (through zoning code, development regulations, permit processes, etc.).
- Municipalities need to talk with developers about bicycle and pedestrian facilities _ before development is occurring, as it may be possible to find money for facilities at that point. Trying to add sidewalks at a later date will be a more difficult task both in terms of space and finances once a development is in place.
- The Village of Baldwinsville is currently examining the possibility of requiring _ developers to provide sidewalks when new housing projects are built. Village representatives noted that the safety factor (i.e., getting children out of the street, especially during the winter months) is reason enough to make sidewalks a requirement of new development.⁵⁹ The superintendent of public works stated that "We need to make it part of the requirement package for new development, the same as they do with roads. Developers would have to abide by that and put sidewalks in their plans."60
- Encouraging municipalities and developers to connect dense residential areas with sidewalks could improve the walkability of a municipality.
- In addition, the concept of the town center (i.e. the creation of centralized green spaces) could be utilized or developed at the neighborhood level, creating small parks of green within and among neighborhoods.
- Identify attractions and destinations for pedestrian travel through the development of a list of pedestrian destinations and suggested connections between these destinations for pedestrians (i.e. hospitals, colleges, schools, parks, etc.).

⁵⁷ W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess, National Center for Bicycling and Walking,

Increasing Physical Activity Through Community Design: A Guide for Public Health Practitioners, May 2002, p.22. ⁵⁸ Pedestrian and Bicycle Information Center, *Design and Engineering – Engineering Treatments (Signs and*

Signals), <http://www.walkinginfo.org/de/curb1.cfm?codename=43f&CM maingroup=Signals%20and%20Signs>, (9/9/04). ⁵⁹ T. Leo, The Post Standard, *Baldwinsville May Require Installation of Sidewalks*, 9/9/04.

⁶⁰ Ibid.

ECO6: Market mass transit to bicyclists (i.e. bicycle racks on Centro buses)

- "Bicyclists represent an important weekend or off-peak market, when transit ridership is typically lower and capacity is underutilized. In addition, providing secure parking for bicycles at transit stops and stations is less expensive than providing parking for automobiles."⁶¹ Marketing mass transit to bicyclists could increase the number of riders and variety of transit users that are currently utilizing transit.
- Improving bicycle access has the potential to draw in new transit riders. Transit companies could market the connection that transit can make for cyclists, noting that "access to transit allows bicyclists the opportunity to make longer trips. Where physical conditions prevent a continuous bicycle trip, public transportation can provide a link to previously inaccessible destinations."⁶²
- The Federal Transit Administration has published a good resource paper on this topic, titled: *Bicycles and Transit: A Partnership that Works*, that can be accessed at: <u>http://safety.fhwa.dot.gov/fourthlevel/pdf/bikes_fta.pdf</u>

ECO7: Create attractive financial incentives to ride and utilize the transit system.

- In addition to the transit company itself providing financial incentives (such as occasional free transit passes to ride the transit system) to encourage transit use, employers could also offer such incentives to encourage their employees to utilize transit. Employers could offer free or discounted passes to employees. This could cut down on commuting-related stress, reduce the need for parking, and lessen employee costs of traveling. Allowing employees to adjust their schedules to mesh with transit times would allow for more employees to take advantage of such an opportunity.⁶³

 ⁶¹ Federal Transit Administration, United States Department of Transportation, *Bicycles and Transit: A Partnership that Works*, <<u>http://safety.fhwa.dot.gov/fourthlevel/pdf/bikes_fta.pdf</u>>, 9/9/04, p.2.
 ⁶² Ibid.

⁶³ New Jersey Department of Transportation, *Smart Moves for Business – Transit Service Promotion*, 1998, <<u>http://www.njcommuter.com/html/transerv.htm</u>>, 9/8/04.

APPENDIX E ATTACHMENTS

- Reasons for Highway Shoulders and Benefits of Urban Bike Lanes to Other Road Users
- Bikeability Checklist
- NYSDOT Memorandum on Bicycle Tort Liability
- Walkability Checklist
- Long Term Mapping of Safe Routes to Schools: Rochester, NY
- Procedural Requirements for Pedestrian Accommodation (Engineering Instruction 04-011)

Reasons for Highway Shoulders

Prepared by Michael Ronkin, Bicycle and Pedestrian Program Manager & Members of the Preliminary Design Unit Oregon Department of Transportation

Before the 1971 "Bike Bill" was passed, and the terms "shoulder bikeways" or "bike lanes" were commonly used, the Oregon Highway Division advocated (1) building paved shoulders when constructing roads and (2) adding paved shoulders to existing roads. These were often referred to as "safety shoulders." There are good reasons for this term.

The following reasons are what AASHTO has to say about the benefits of shoulders in three important areas: safety, capacity and maintenance. Most of these benefits apply to both shoulders on rural highways and to marked, on-street bike lanes on urban roadways. See other side for other benefits specific to urban areas.

<u>Safety</u> - highways with paved shoulders have lower accident rates, as paved shoulders:

- Provide space to make evasive maneuvers;
- Accommodate driver error;
- Add a recovery area to regain control of a vehicle, as well as lateral clearance to roadside objects such as guardrail, signs and poles (highways require a "clear zone," and paved shoulders give the best recoverable surface);
- Provide space for disabled vehicles to stop or drive slowly;
- Provide increased sight distance for through vehicles and for vehicles entering the roadway (rural: in cut sections or brushy areas; <u>urban</u>: in areas with many sight obstructions);
- Contribute to driving ease and reduced driver strain;
- Reduce passing conflicts between motor vehicles and bicyclists and pedestrians;
- Make the crossing pedestrian more visible to motorists; and
- Provide for storm water discharge farther from the travel lanes, reducing hydroplaning, splash and spray to following vehicles, pedestrians and bicyclists.

<u>Capacity</u> - highways with paved shoulders can carry more traffic, as paved shoulders:

- Provide more intersection and safe stopping sight distance;
- Allow for easier exiting from travel lanes to side streets and roads (also a safety benefit);
- Provide greater effective turning radius for trucks;
- Provide space for off-tracking of truck's rear wheels in curved sections;
- Provide space for disabled vehicles, mail delivery and bus stops; and
- Provide space for bicyclists to ride at their own pace;

<u>Maintenance</u> - highways with paved shoulders are easier to maintain, as paved shoulders:

- Provide structural support to the pavement;
- Discharge water further from the travel lanes, reducing the undermining of the base and subgrade;
- Provide space for maintenance operations and snow storage;
- Provide space for portable maintenance signs;
- Facilitate painting of fog lines.

Benefits of Urban Bike Lanes to Other Road Users.

Urban streets have to satisfy many needs: various modes use them, and they provide local access to a community as well as mobility for through traffic. Many of the benefits of shoulders listed on the first page also apply to bike lanes in urban areas, whether they were created by restriping or by widening the road. Some street enhancements cannot be measured with numbers alone, as they offer values (e.g. trees) that simply make a community better. The following discussion should be viewed in this context. Bike lanes can provide the following benefits:

For Pedestrians:

- Greater separation from traffic, especially in the absence of on-street parking or a planter strip, increasing comfort and safety. This is important to young children walking, playing or riding their bikes on curbside sidewalks.
- Reduced splash from vehicles passing through puddles (a total elimination of splash where puddles are completely contained within the bike lane).
- An area for people in wheelchairs to walk where there are no sidewalks, or where sidewalks are in poor repair or do not meet ADA standards.
- A space for wheelchair users to turn on and off curb cut ramps away from moving traffic.
- The opportunity to use tighter corner radii, which reduces intersection crossing distance and tends to slow turning vehicles.
- In dry climates, a reduction in dust raised by passing vehicles, as they drive further from unpaved surfaces.

For Motorists:

- Greater ease and more opportunities to exit from driveways (thanks to improved sight distance).
- Greater effective turning radius at corners and driveways, allowing large vehicles to turn into side streets without off-tracking onto curb.
- A buffer for parked cars, making it easier for motorists to park, enter and exit vehicles safely and efficiently. This requires a wide enough bike lane so bicyclists aren't "doored."
- Less wear and tear of the pavement, if bike lanes are restriped by moving travel lanes (heavier motor vehicles no longer travel in the same well-worn ruts).

For Other Modes:

- <u>Transit</u>: A place to pull over next to the curb out of the traffic stream.
- <u>Delivery vehicles</u> (including postal service): a place to stop out of the traffic stream.
- <u>Emergency vehicles</u>: Room to maneuver around stopped traffic, decreasing response time.
- <u>Bicyclists:</u> Greater acceptance of people bicycling on the road, as motorists are reminded that they are not the only roadway users;
- <u>Non-motorized modes</u>: An increase in use, by increasing comfort to both pedestrians and bicyclists (this could leave more space for motorists driving and parking).

For the Community (Livability factors):

- A traffic calming effect when bike lanes are striped by narrowing travel lanes.
- Better definition of travel lanes where road is wide (lessens the "sea of asphalt" look).
- An improved buffer to trees, allowing greater plantings of green canopies, which also has a traffic calming effect.

Bikeability Checklist

How bikeable is your community?

Riding a bike is fun!

Bicycling is a great way to get around and to get your daily dose of physical activity. It's good for the environment, and it can save you money. No wonder many communities are encouraging people to ride their bikes more often!

Can you get to where you want to go by bike?

Some communities are more bikeable than others: how does yours rate? Read over the questions in this checklist and then take a ride in your community, perhaps to the local shops, to visit a friend, or even to work. See if you can get where you want to go by bicycle, even if you are just riding around the neighborhood to get some exercise.

At the end of your ride, answer each question and, based on your opinion, circle an overall rating for each question. You can also note any problems you encountered by checking the appropriate box(es). Be sure to make a careful note of any specific locations that need improvement.

Add up the numbers to see how you rated your ride. Then, turn to the pages that show you how to begin to improve those areas where you gave your community a low score.

Before you ride, make sure your bike is in good working order, put on a helmet, and be sure you can manage the ride or route you've chosen. Enjoy the ride!









U.S. Department of Transportation

Go for a ride and use this checklist to rate your neighborhood's bikeability. How bikeable is your community?

Location of bike ride (be specific):

Rating Scale:

many some good very good problems problems 6

excellent

1. Did you have a place to bicycle safely?

a) On the road, sharing the road with motor vehicles?

- ☐ Yes ☐ Some problems (please note locations):
 - □ No space for bicyclists to ride
 - □ Bicycle lane or paved shoulder disappeared
 - □ Heavy and/or fast-moving traffic
 - □ Too many trucks or buses
 - No space for bicyclists on bridges or in tunnels
 - Poorly lighted roadways
 - Other problems: ____

2. How was the surface that you rode on?

\Box Good \Box Some problems, the road or path had:

Potholes

awful

- □ Cracked or broken pavement
- Debris (e.g. broken glass, sand, gravel, etc.)
- Dangerous drain grates, utility covers, or metal plates
- Uneven surface or gaps
- Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
- Bumpy or angled railroad tracks
- □ Rumble strips
- Other problems: _____

b) On an off-road path or trail, where motor vehicles were not allowed?

☐ Yes ☐ Some problems:

- □ Path ended abruptly
- □ Path didn't go where I wanted to go
- Path intersected with roads that were difficult to cross
- □ Path was crowded
- Path was unsafe because of sharp turns or dangerous downhills
- Path was uncomfortable because of too many hills
- □ Path was poorly lighted
- Other problems: ____

Overall "Safe Place To Ride" Rating: (circle one)

1 2 3 4 5 6

Overall Surface Rating: (circle one)

1 2 3 4 5 6

3. How were the intersections you rode through?

\Box Good \Box Some problems:

- Had to wait too long to cross intersection
- Couldn't see crossing traffic
- □ Signal didn't give me enough time to cross the road
- □ Signal didn't change for a bicycle
- Unsure where or how to ride through intersection
- Other problems:

Overall Intersection Rating: (circle one)

1 2 3 4 5 6

Continue the checklist on the next page...

4. Did drivers behave well?



Overall Driver Rating: (circle one)

1 2 3 4 5 6

5. Was it easy for you to use your bike?

Yes Some problems:

- No maps, signs, or road markings to help me find my way
- □ No safe or secure place to leave my bicycle at my destination
- □ No way to take my bicycle with me on the bus or train
- □ Scary dogs
- □ Hard to find a direct route I liked
- Route was too hilly
- Other problems:

Overall Ease of Use Rating: (circle one)

1 2 3 4 5 6

6. What did you do to make your ride safer?

Your behavior contributes to the bikeability of your community. Check all that apply:

- □ Wore a bicycle helmet
- Obeyed traffic signal and signs
- Rode in a straight line (didn't weave)
- Signaled my turns
- □ Rode with (not against) traffic
- Used lights, if riding at night
- Wore reflective and/or retroreflective materials and bright clothing
- Was courteous to other travelers (motorist, skaters, pedestrians, etc.)

7. Tell us a little about yourself.

In good weather months, about how many days a month do you ride your bike?

- □ Never
- Occasionally (one or two)
- Frequently (5–10)
- □ Most (more than 15)
- Every day

Which of these phrases best describes you?

- An advanced, confident rider who is comfortable riding in most traffic situations
- An intermediate rider who is not really comfortable riding in most traffic situations
- A beginner rider who prefers to stick to the bike path or trail

How does your community rate? Add up your ratings and decide.

(Questions 6 and 7 do not contribute to your community's score)

1	26-30	Celebrate! You live in a bicycle- friendly community
2	21-25	Your community is pretty good, but there's always room for improvement.
3	16-20	Conditions for riding are okay, but not ideal. Plenty of opportunity for improvements.
5	11-15	Conditions are poor and you deserve better than this! Call the mayor and the newspaper right away.
Fotal	5-10	Oh dear. Consider wearing body armor and Christmas tree lights before venturing out again.

Did you find something that needs to be changed?

On the next page, you'll find suggestions for improving the bikeability of your community based on the problems you identified. Take a look at both the short- and long-term solutions and commit to seeing at least one of each through to the end. If you don't, then who will?

During your bike ride, how did you feel physically? Could you go as far or as fast as you wanted to? Were you short of breath, tired, or were your muscles sore? The next page also has some suggestions to improve the enjoyment of your ride.

Bicycling, whether for transportation or recreation, is a great way to get 30 minutes of physical activity into your day. Riding, just like any other activity, should be something you enjoy doing. The more you enjoy it, the more likely you'll stick with it. Choose routes that match your skill level and physical activities. If a route is too long or hilly, find a new one. Start slowly and work up to your potential.

Now that you know the problems, you can find the answers.

community's



1. Did you have a place to bicycle safely?

a) On the road?

No space for bicyclists to ride (e.g. no bike lane or shoulder; narrow lanes) Bicycle lane or paved shoulder disappeared Heavy and/or fast-moving traffic Too many trucks or buses No space for bicyclists on bridges or in tunnels Poorly lighted roadways

b) On an off-road path or trail?

Path ended abruptly Path didn't go where I wanted to go Path intersected with roads that were difficult to cross Path was crowded Path was unsafe because of sharp turns or dangerous downhills Path was uncomfortable because of too many hills Path was poorly lighted

What you can do immediately

- pick another route for now
- tell local transportation engineers or public works department about specific problems; provide a copy of your checklist

score

- find a class to boost your confidence about riding in traffic
- slow down and take care when using the path
- find an on-street route
- use the path at less crowded timestell the trail manager or agency
- tell the trail manager or agency about specific problems

What you and your community can do with more time

- participate in local planning meetings
- encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads
- ask your public works department to consider "Share the Road" signs at specific locations
- ask your state department of transportation to include paved shoulders on all their rural highways
- establish or join a local bicycle advocacy group
- ask the trail manager or agency to improve directional and warning signs
- petition your local transportation agency to improve path/roadway crossings
- ask for more trails in your community
- establish or join a "Friends of the Trail" advocacy group

2. How was the surface you rode on?

Potholes

Cracked or broken pavement Debris (e.g. broken glass, sand, gravel, etc.) Dangerous drain grates, utility covers, or metal plates Uneven surface or gaps Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings) Bumpy or angled railroad tracks Rumble strips

3. How were the intersections you rode through?

Had to wait too long to cross intersection Couldn't see crossing traffic Signal didn't give me enough time to cross the road The signal didn't change for a bicycle Unsure where or how to ride through intersection

- report problems immediately to public works department or appropriate agency
- keep your eye on the road/path
 pick another route until the problem is fixed (and check to see that the problems are fixed)
- organize a community effort to clean up the path
- work with your public works and parks department to develop a pothole or hazard report card or online link to warn the agency of potential hazards
- ask your public works department to gradually replace all dangerous drainage grates with more bicyclefriendly designs, and improve railroad crossings so cyclists can cross them at 90 degrees
- petition your state DOT to adopt a bicycle-friendly rumble-strip policy
- pick another route for now
- tell local transportation engineers or public works department about specific problems
- take a class to improve your riding confidence and skills
- ask the public works department to look at the timing of the specific traffic signals
- ask the public works department to install loop-detectors that detect bicyclists
- suggest improvements to sightlines that include cutting back vegetation; building out the path crossing; and moving parked cars that obstruct your view
- organize community-wide, on-bike training on how to safely ride through intersections

Improving your community's score...

(continued)

What you can do immediately

4. Did drivers behave well?

Drivers: Drove too fast Passed me too close Did not signal Harassed me Cut me off Ran red lights or stop signs

5. Was it easy for you to use your bike?

No maps, signs, or road markings to help me find my way

No safe or secure place to leave my bicycle at my destination

No way to take my bicycle with me on the bus or train Scary dogs Hard to find a direct route I liked

Route was too hilly

6. What did you do to make your ride safer?

Wore a bicycle helmet Obeyed traffic signals and signs Rode in a straight line (didn't weave) Signaled my turns Rode with (not against) traffic Used lights, if riding at night Wore reflective materials and bright clothing Was courteous to other travelers (motorists, skaters, pedestrians, etc.)

- report unsafe drivers to the police
 set an example by riding responsibly; obey traffic laws; don't
- antagonize drivers
 always expect the unexpected
- work with your community to raise awareness to share the road

· plan your route ahead of time

bike; never leave it unlocked

learn to use all of your gears!

control department

report scary dogs to the animal

find somewhere close by to lock your

- What you and your community can do with more time
- ask the police department to enforce speed limits and safe driving
- encourage your department of motor vehicles to include "Share the Road" messages in driver tests and correspondence with drivers
- ask city planners and traffic engineers for traffic calming ideas
- encourage your community to use cameras to catch speeders and red light runners
- ask your community to publish a local bike map
- ask your public works department to install bike parking racks at key destinations; work with them to identify locations
- petition your transit agency to install bike racks on all their buses
- plan your local route network to minimize the impact of steep hills
- establish or join a bicycle user group (BUG) at your workplace
- go to your local bike shop and buy a helmet; get lights and reflectors if you are expecting to ride at night
- always follow the rules of the road and set a good example
- take a class to improve your riding skills and knowledge
- ask the police to enforce bicycle laws
- encourage your school or youth agencies to teach bicycle safety (on-bike)
- start or join a local bicycle club
- become a bicycle safety instructor





Need some guidance? These resources might help...

Great Resources

STREET DESIGN AND BICYCLE FACILITIES

American Association of State Highway and Transportation Officials 444 North Capitol Street, NW, Suite 249 Washington, DC 20001 Tel: (202) 624-5800 www.aashto.org

Institute of Transportation Engineers 1099 14th Street, NW, Suite 300 West Washington, DC 20005-3438 Tel: (202) 289-0222 www.ite.org

Association of Pedestrian and Bicycle Professionals (APBP) P.O. Box 23576 Washington, DC 20026 Tel: (202) 366-4071 www.apbp.org

Pedestrian and Bicycle Information Center (PBIC) UNC Highway Safety Research Center 730 Airport Road, Suite 300 Campus Box 3430 Chapel Hill, NC 27599-3430 Tel: (919) 962-2202 www.pedbikeinfo.org www.bicyclinginfo.org

Federal Highway Administration 400 Seventh Street, SW Washington, DC 20590 www.fhwa.dot.gov/environment/bikeped/index.htm

EDUCATION AND SAFETY

National Highway Traffic Safety Administration 400 Seventh Street, SW Washington, D.C. 20590 Tel: (202) 366-1739 www.nhtsa.dot.gov/people/injury/pedbimot/bike/

League of American Bicyclists 1612 K Street NW, Suite 401 Washington, DC 20006 Tel: (202) 822-1333 www.bikeleague.org

National Bicycle Safety Network www.cdc.gov/ncipc/bike/default.htm

National Safe Kids Campaign 1301 Pennsylvania Ave NW, Suite 1000 Washington, DC 20004 Tel: (202) 662-0600 www.safekids.org

PATHS AND TRAILS

Rails to Trails Conservancy 1100 17th Street SW, 10th Floor Washington, DC 20036 Tel: (202) 331-9696 www.railtrails.org National Park Service Rivers, Trails and Conservation Assistance Program 1849 C Street, NW, MS-3622 Washington, DC 20240 www.ncrc.nps.gov/rtca/rtca-ofh.htm

HEALTH

Centers for Disease Control and Prevention Division of Nutrition and Physical Activity 4770 Buford Highway, NE Atlanta, GA 30341-3724 www.cdc.gov/nccdphp/dnpa Tel: (770) 488-5692

National Center for Injury Prevention and Control Childhood Injury Prevention 4770 Buford Highway, NE Atlanta, GA 30341 www.cdc.gov/ncipc

ADVOCACY AND USER GROUPS

Thunderhead Alliance 1612 K Street, NW, Suite 401 Washington, DC 20006 Tel: (202) 822-1333 www.thunderheadalliance.org

League of American Bicyclists 1612 K Street, NW, Suite 401 Washington, DC 20006 Tel: (202) 822-1333 www.bikeleague.org

National Center for Bicycling and Walking 1506 21st Street, NW, Suite 200 Washington, DC 20036 Tel: (202) 463-6622 www.bikewalk.org

Surface Transportation Policy Project 1100 17th Street, NW, 10th Floor Washington, DC 20036 Tel: (202) 466-2636 www.transact.org

OTHER USEFUL RESOURCES

Bikes and transit: www.bikemap.com

Bicycle information: www.bicyclinginfo.org

Bicycle-related research: www.tfhrc.gov/safety/pedbike/pedbike.htm

Bicycling Magazine: www.bicycling.com/

Bicycle touring: Adventure Cycling Association P.O. Box 8308 Missoula, MT 59807 (800) 755-2453 (406) 721-8754 www.adv-cycling.org

MEMORANDUM DEPARTMENT OF TRANSPORTATION

TO: J. Olson, Bike/Ped Program, 206-4

FROM: E. M. Kerness, Asst. Counsel, Office of Legal Affairs, 509-5 OLV-

SUBJECT: BICYCLE TORT LIABILITY

DATE: February 15, 1994

Section 1231 of the Vehicle and Traffic Law provides:

"Every person riding a bicycle upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by this title, except as to special regulations in this article and except as to those provisions of this title which by their nature can have no application."

Section 1231 of the Vehicle and Traffic Law provides that every person who rides a bicycle on a roadway has the same rights as a driver of a motor vehicle. In other words, a bicyclist has the same rights to utilize the State roadways as the driver of a motor vehicle.

In addition, Section 1231 and other sections of the Vehicle and Traffic Law also impose on bicyclists additional requirements, i.e. driving on right, etc.

My review of the law indicates that the same legal liability principles for motor vehicles apply to bicycles. The State or municipality (hereinafter referred to as State) is obligated to maintain its roadways in a reasonably safe condition. The duty to maintain the roadway in a reasonably safe condition extends to all users of the highway and bicyclists are entitled to the same protection as drivers of other vehicles so long as it is perceivable that they are users of the highway. If the State or municipality knows that bicycles use the roadway, they have an obligation to maintain it in a safe condition for cyclists. This obligation exists regardless of whether the roadway is marked "bicycle route".

The State is required to consider the safety of bicyclists in determining whether a road is reasonably safe for a bicyclist. Certain defects which may be trivial to a car may well create a hazard to a cyclist. Therefore, the State has an ongoing duty to inspect such roads for such conditions.

As a general rule, if a dangerous condition is the proximate cause of the bicycle accident, the State, with notic > of its existence, will be liable if it failed to remedy the condition. In addition, absent actual notice, the courts at times find the State liable if the State had constructive notice of the condition (if the condition existed for such a period of time that the State should have had knowledge of it). Thus, in all such cases, liability is created irrespective if the road is signed a bicycle route or not.

I hope this memo is of assistance to you and your stiff. If further information is desired, please advise.

EMK:cb ENK0564

Walkability Checklist

How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall.

After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.







Partnership for a Walkable America





U.S. Department of Transportation


Take a walk and use this checklist to rate your neighborhood's walkability.

How walkable is your community?

LOCATION OF WA	K



1. Did you have room to walk?

☐ Yes ☐ Some problems:	
□ Sidewalks or paths started and	stopped
Sidewalks were broken or crac	ked
Sidewalks were blocked with p shrubbery, dumpsters, etc.	oles, signs,
🗖 No sidewalks, paths, or should	ers
Too much traffic	
Something else	
Locations of problems:	
Rating: (circle one)	
1 2 3 4 5 6	

2. Was it easy to cross streets?

□ Yes □ Some problems:

- 🗖 Road was too wide
- □ Traffic signals made us wait too long or did not give us enough time to cross
- □ Needed striped crosswalks or traffic signals
- Parked cars blocked our view of traffic
- Trees or plants blocked our view of traffic
- □ Needed curb ramps or ramps needed repair
- Something else

Locations of problems: _____

Rating: (circle one)

1 2 3 4 5 6

3. Did drivers behave well?

Yes Some problems: Drivers...

- Backed out of driveways without looking
- \Box Did not yield to people crossing the street
- Turned into people crossing the street
- Drove too fast
- □ Sped up to make it through traffic lights or drove through traffic lights?
- Something else _____
 Locations of problems: _____
- Rating: (circle one)

 $1 \ 2 \ 3 \ 4 \ 5 \ 6$

4. Was it easy to follow safety rules? Could you and your child...

Tes Yes	🗆 No	Cross at crosswalks or where you could see and be seen by drivers?
Yes	🗆 No	Stop and look left, right and then left again before crossing streets?
I Yes	🗖 No	Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
I Yes	🗆 No	Cross with the light? Locations of problems:
Rating: (circle one) 1 2 3 4 5 6		

5. Was your walk pleasant?

Yes	Some unpleasant things:
	Needed more grass, flowers, or trees
	Scary dogs
	Scary people
	Not well lighted
	Dirty, lots of litter or trash
	Dirty air due to automobile exhaust
	Something else
	Locations of problems:
Rating: (circ	le one)

1 2 3 4 5 6

How does your neighborhood stack up? Add up your ratings and decide.

1	26-30	Celebrate! You have a great
2 3	21-25	Celebrate a little. Your
4		neighborhood is pretty good.
	16-20	Okay, but it needs work.
5	11-15	It needs lots of work. You deserve
Total	5-10	better than that. It's a disaster for walking!

Now that you've identified the problems, go to the next page to find out how to fix them.

Now that you know the problems, you can find the answers.





What you and your child can do immediately

What you and your community can do with more time

1.	Did you have room to walk?		
	Sidewalks or paths started and stopped Sidewalks broken or cracked Sidewalks blocked No sidewalks, paths or shoulders Too much traffic	 pick another route for now tell local traffic engineering or public works department about specific problems and provide a copy of the checklist 	 speak up at board meetings write or petition city for walkways and gather neighborhood signatures make media aware of problem work with a local transportation engineer to develop a plan for a safe
2.	Was it easy to cross streets?		walking route
2	Road too wide Traffic signals made us wait too long or did not give us enough time to cross Crosswalks/traffic signals needed View of traffic blocked by parked cars, trees, or plants Needed curb ramps or ramps needed repair	 pick another route for now share problems and checklist with local traffic engineering or public works department trim your trees or bushes that block the street and ask your neighbors to do the same leave nice notes on problem cars asking owners not to park there 	 push for crosswalks/signals/ parking changes/curb ramps at city meetings report to traffic engineer where parked cars are safety hazards report illegally parked cars to the police request that the public works department trim trees or plants make media aware of problem
э.	Did unvers benave weil?		
	Backed without looking Did not yield Turned into walkers Drove too fast Sped up to make traffic lights or drove through red lights	 pick another route for now set an example: slow down and be considerate of others encourage your neighbors to do the same report unsafe driving to the police 	 petition for more enforcement request protected turns ask city planners and traffic engineers for traffic calming ideas ask schools about getting crossing guards at key locations organize a neighborhood speed watch program
4.	Could you follow safety rules?		haven program
	Cross at crosswalks or where you could see and be seen Stop and look left, right, left before crossing Walk on sidewalks or shoulders facing traffic Cross with the light	 educate yourself and your child about safe walking organize parents in your neighborhood to walk children to school 	 encourage schools to teach walking safely help schools start safe walking programs encourage corporate support for flex schedules so parents can walk
5.	Was your walk pleasant?		children to school
A	Needs grass, flowers, trees Scary dogs Scary people Not well lit Dirty, litter Lots of traffic	 point out areas to avoid to your child; agree on safe routes ask neighbors to keep dogs leashed or fenced report scary dogs to the animal control department report scary people to the police report lighting needs to the police or appropriate public works department take a walk wih a trash bag plant trees, flowers in your yard select alternative route with less traffic 	 request increased police enforcement start a crime watch program in your neighborhood organize a community clean-up day sponsor a neighborhood beautification or tree-planting day begin an adopt-a-street program initiate support to provide routes with less traffic to schools in your community (reduced traffic during am and pm school commute times)
	Could not go as far or as fast as we wanted Were tired, short of breath or had sore feet or muscles Was the sun really hot? Was it hot and hazy?	 start with short walks and work up to 30 minutes of walking most days invite a friend or child along walk along shaded routes where possible use sunscreen of SPF 15 or higher, wear a hat and sunglasses try not to walk during the hottest time of day 	 get media to do a story about the health benefits of walking call parks and recreation department about community walks encourage corporate support for employee walking programs plant shade trees along routes have a sun safety seminar for kids have kids learn about unhealthy ozone

 have kids learn about unhealthy ozone days and the Air Quality Index (AQI)

Need some guidance? These resources might help...

Great Resources

WALKING INFORMATION

Pedestrian and Bicycle Information Center (PBIC) UNC Highway Safety Research Center 730 Airport Road , Suite 300 Campus Box 3430 Chapel Hill, NC 27599-3430 Phone: (919) 962-2202 www.pedbikeinfo.org www.walkinginfo.org



National Center for Bicycling and Walking Campaign to Make America Walkable 1506 21st Street, NW Suite 200 Washington, DC 20036 Phone: (800) 760-NBPC www.bikefed.org

WALK TO SCHOOL DAY WEB SITES

USA event: www.walktoschool-usa.org International: www.iwalktoschool.org

STREET DESIGN AND TRAFFIC CALMING

Federal Highway Administration Pedestrian and Bicycle Safety Research Program HSR - 20 6300 Georgetown Pike McLean,VA 22101 www.fhwa.dot.gov/environment/bikeped/index.htm

Institute of Transportation Engineers www.ite.org

Surface Transportation Policy Project www.transact.org

Transportation for Livable Communities www.tlcnetwork.org

WALKING COALITIONS

America Walks P.O. Box 29103 Portland, Oregon 97210 Phone: (503) 222-1077 www.americawalks.org

Partnership for a Walkable America National Safety Council 1121 Spring Lake Drive Itasca, IL 60143-3201 Phone: (603) 285-1121 www.nsc.org/walkable.htm



PEDESTRIAN SAFETY

National Highway Traffic Safety Administration Traffic Safety Programs 400 Seventh Street, SW Washington, DC 20590 Phone: (202) 662-0600 www.nhtsa.dot.gov/people/injury/pedbimot/ped

National SAFE KIDS Campaign 1301 Pennsylvania Ave. NW Suite 1000 Washington, DC 20004 Phone: (202) 662-0600 Fax: (202) 393-2072 www.safekids.org

WALKING AND HEALTH

US Environmental Protection Agency Office of Children's Health Protection (MC 1107A) Washington, DC 20460 Phone: 202-564-2188 Fax: 202-564-2733 www.epa.gov/children/ www.epa.gov/children/ www.epa.gov/airnow/ www.epa.gov/air/urbanair/ozone/what.html www.epa.gov/sunwise/uvindex.html www.epa.gov/otaq/transp/comchoic/ccweb.htm

President's Task Force on Environmental Health Risks and Safety Risks to Children www.childrenshealth.gov

Centers for Disease Control and Prevention Division of Nutrition and Physical Activity Phone: (888) 232-4674 www.cdc.gov/nccdphp/dnpa/readyset www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm

Prevention Magazine 33 East Minor Street Emmaus, PA 18098 www.itsallaboutprevention.com

Shape Up America! 6707 Democracy Boulevard Suite 306 Bethesda, MD 20817 www.shapeup.org

ACCESSIBLE SIDEWALKS

US Access Board 1331 F Street, NW Suite 1000 Washington, DC 20004-1111 Phone: (800) 872-2253; (800) 993-2822 (TTY) www.access-board.gov



Long Term Mapping of Safe Routes to Schools – Rochester, New York

Information provided by Andy Wheatcraft, Rochester City School District

Case Study Author: Jeff Olson, R.A. - Trailblazer

Background

Rochester, New York is the third largest city in New York State. The city's diverse urban school district serves more than 35,000 students in addition to over 5,000 students in private and parochial schools. Rochester has established a highly successful long term partnership for improving pedestrian transportation safety for children. A School Traffic Safety Committee, made up of representatives from the school district, law enforcement, transportation and safety organizations, coordinates a multi-faceted safety program. Through a cost-effective use of existing resources and planning, the routes that children walk to school are systematically confirmed and upgraded each year, providing the necessary infrastructure for a safe community. Unlike many new "Safe Routes to Schools" programs, Rochester has been managing this program continuously since 1984, and its roots go back to the 1960s. It is not the technology involved that makes this a "Best Practice," but the integrated process behind the maps which has created a long term success.

Solution

A precedent for the current School Traffic Safety Committee was originally set in 1965 when the City of Rochester Traffic Engineering Division, the Rochester Police Department and the Rochester City School District developed a program to plan safe walking routes to schools, to identify appropriate locations for crossing guards and control signs, and to provide traffic safety teaching in school classrooms. The program was reorganized in 1984 with an expanded partnership including the City, the School District, the Parochial Schools, the Monroe County Department of Transportation and Rochester Automobile Club / AAA. The program has earned a responsible and respected role in planning and training for safe student pedestrian activities and continues to provide leadership in educational programming.

The School Traffic Safety Committee was established to perform traffic, facility and educational functions supporting the safe passage of school students between their homes and schools. The Committee is charge with the following tasks:

- 1. Develop recommended policies and safe walking routes for school walk trip safety.
- 2. Provide periodic review of safe walk route conditions, supporting programs and policies
- 3. Coordinate the suggestions and concerns regarding school pedestrian safety
- 4. Serve as a provider, communicator and coordination group regarding pedestrian safety education, programs and improvements
- 5. Provide input to the decision making process for school facility improvements
- 6. Assist in developing recommended school bus/pedestrian service area boundaries based on proposed safe school routes

7. Maintain a good public relations program regarding school pedestrian safety

The program partners and structure includes the Rochester City School District, Monroe County Department of Transportation, Rochester Police Department, Automobile Club of Rochester / AAA, and the Roman Catholic Diocese of Rochester. The committee meets monthly. Analysis and study is performed in preparation of the monthly meetings. The School Traffic Safety Committee produces the following products:

Safe Walking Route Maps – Safe walking routes for children have been mapped for each of the 49 elementary schools in the City and for the 5 middle schools. The maps are updated annually and distributed to the schools in the fall of each year, along with a cover letter outlining safe walking habits, safe driving by parents and encouraging parent participation in the review of safe routes with their children. The letters are provided in both English and Spanish. The maps include the locations of all traffic signals and crossing guards. Students mark their routes on hand drawn maps, which the County translates into color coded Autocad files.

Educational Literature and Programs – The Rochester Automobile Club / AAA administers local programs at the schools and distributes safety literature to all elementary schools for their use. The delivery of the this service supports the Walk Safely to School Program.

Crossing Guard Locations - The Committee analyzes and recommends crossing guards for the City of Rochester. Recommendations are forwarded to the Police Department who coordinates the placement of the guard. Locations are noted and safe walking routes adjusted to reflect any changes in the Crossing Guard Locations.

Street Sign & Improvement Recommendations – The Committee recommends traffic improvements near or affecting schools and safe walking routes. The Committee reviews street parking regulations, street construction projects and other signals and signage. Changes are reflected on the safe walking route maps.

Post-Project Evaluation

It should also be noted that Rochester develops its maps based on the actual "feeder pattern" of children walking to each school, not based on specified radius and area surrounding each school. The feeder method reduces the number of locations which need to be reviewed each year, while the radius method would require all streets within a certain distance from the school to be evaluated. Recent improvements installed based on the Committee's ongoing process include installation of approximately eight (8) new flashing beacon school zone warning signs each year, installation of strong yellow-green warning signs at school crossings, annual placement of 160 school crossing guards and high-visibility crosswalks at certain locations.

Ongoing concerns include safety education for motorists regarding pedestrian rights of way, and the difficulty of enforcing school zone speed limits. While the City of Rochester has an active Traffic Calming program, installations near schools have been directly connected to the Walk Safe to School effort. However, in one case, a roadway narrowing project has been installed with pavement markings at Dr. Freddy Thomas Learning Center in order to enhance pedestrian

safety. .

After more than 15 years of effort, the City of Rochester has not had a student traffic facility or serious injury among children who walk to school. This is impressive, because it is estimated that approximately 90% of elementary school children walk or take the bus to school in Rochester. Detailed mode share data is not available, but anecdotal evidence indicates the high mode share and safety record are a combination of neighborhood-based school locations and the Safe Routes to Schools program. Rochester's Walk Safe to School Program was nominated by NYSDOT for the 1996 U.S. Secretary of Transportation Community Partnership Award, and deserves continued recognition as a model program.

References

1988 Administrative Regulations, School Safety Committee, Rochester, New York

Sample School Safety Map Provided by Rochester School Safety Committee

To:			New York State Department of Transportation ENGINEERING INSTRUCTION	EI 04-011	
Title: PROCEDURAL REQUIREMENTS FOR PEDESTRIAN ACCOMMODATION					
Distribution: □ Manufacturers (18) □ ⊠ Local Govt. (31) ⊠ ⊠ Agencies (32) □	Surveyors (33) Consultants (34) Contractors (39)	Approved: <u>/s/ P. J. Clark</u> Philip J. Clark, P Design Division	E, Deputy Chief Engineer	<u>02/06/04</u> Date	

ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective with all projects for which design approval is requested after May 31, 2004. Note: This is not a change in existing policy; rather it provides the procedures for conforming to the existing policy. Therefore, designers are encouraged to apply the procedural change prior to this date.
- This Engineering Instruction does not supersede any previous issuances.
- The information transmitted by this EI will be incorporated into a future revision of Highway Design Manual, Chapter 18 Facilities for Pedestrians and Bicyclists, the Scoping Procedure Manual, and the Design Procedure Manual.

PURPOSE: This EI defines the procedural requirements for pedestrian accommodation (i.e., facilities intended specifically for pedestrians).

TECHNICAL INFORMATION:

The goal of a transportation system is to provide safe and efficient mobility and access for all modes of travel, including pedestrian movement. Whether designing new transportation facilities, reconstructing or resurfacing existing ones, the presence of pedestrians should be investigated. If the need to accommodate pedestrians is determined to exist, facilities intended for them should be designed, constructed, and maintained in accordance with current guidelines and standards. The American Association of State Highway Transportation Officials' (AASHTO) *Guide for the Planning, Design, and Operation of Pedestrian Facilities* and the U.S. Access Board's *Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities* (ADAAG) provide technical guidance for determining the scope and design of pedestrian facilities. Pedestrian accommodations are facilities specifically intended for pedestrian use. Pedestrian facilities include crossings, refuge islands, pedestrian signs and signals, ITS, sidewalks, walkways, curb ramps, bus stops, call boxes, street furniture, etc.

Shoulders are not substitutes for a well-designed pedestrian facility. There may occasionally be a need to design shoulders as walkways where space is constrained and there is a need to accommodate pedestrians. In this case, ADAAG requires that in order to "accommodate" pedestrians, accessible design standards are to be used to design the portions or segments of the shoulder that are intended to serve as walkways. This includes providing at least a 1.2 m width, maintaining a maximum cross slope of 2%, and maintaining surface conditions as required by ADAAG.

<u>Procedure:</u> The following procedure shall apply for all projects that are classified as new construction, reconstruction, bridge replacement, bridge rehabilitation, signal requirement contracts, safety, 3R, or 2R, as well as locally administered projects and work undertaken by Department Maintenance forces that is similar to the preceding project types. In addition, work along state highways approved through the highway work permit process also requires assessment of the need to accommodate pedestrians, but will follow a separate

El 04-011 Page 2 of 5

procedure. Guidance regarding the procedures for pedestrian accommodation in the Highway Work Permit process is being developed by the Main Office Traffic Engineering and Highway Safety Division.

- 1. A Pedestrian Generator Checklist (see Attachment A) shall be completed for all projects listed above. This checklist is a tool to be used by the project developer in coordination with the Regional Bicycle and Pedestrian Coordinator during the project's scoping stage of development. The checklist helps to determine if there is a need to accommodate pedestrians due to the project area context, or if a project falls under one of the three exceptional circumstances as described below under FHWA Design Guidance.
- 2. All completed Pedestrian Generator Checklists should be submitted to the Regional Bicycle and Pedestrian Coordinator for review. Projects with one or more "Yes" answers on the checklist indicate a potential need to accommodate pedestrians and the project designer should meet with the Regional Bicycle and Pedestrian Coordinator during project scoping to determine if there is a need to accommodate pedestrians. The completed Pedestrian Generator Checklist should be included as an appendix to the Design Approval Document.
- 3. If accommodation of pedestrians is not warranted, this should be documented in the Design Approval Document. One of the three "exceptional circumstances" as defined by FHWA and listed under FHWA Design Guidance below, should be stated in this documentation. Note: If it is determined that permanent pedestrian facilities are not warranted, occasional pedestrian traffic must still be safely maintained during construction. Project designers should consider pedestrian movement during construction activities even when a permanent facility is not warranted. See EI 01-019, Maintenance and Protection of Pedestrian and Bicycle Traffic for further information.
- 4. If accommodation of pedestrians is warranted, the manner in which this will be done should be discussed in the Design Approval Document. Pedestrian facilities should be commensurate with the project type. For example, within a signal requirement contract, the pedestrian accommodation may be as simple as a solid-red phase.

Project limits should be established to carry the pedestrian facility to logical termini.

5. If accommodation of pedestrians is warranted, but there are extenuating circumstances that prevent doing so, then a nonconforming feature explanation is required and should be documented as described in the Highway Design Manual, Chapter 5, Section 5.1. The Regional Bicycle and Pedestrian Coordinator should agree with the nonconforming feature explanation that documents the reason(s) for the omission of pedestrian facilities.

<u>FHWA Design Guidance:</u> In 2000, the Federal Highway Administration (FHWA) issued design guidance mandated by TEA-21 legislation. This guidance states that pedestrian facilities will be incorporated into all transportation projects unless "exceptional circumstances" exist. (For further information, see the following website: www.fhwa.dot.gov/environment/bikeped/design.htm.) Exceptional circumstances, as defined by FHWA, include the following:

1. Roads where pedestrians are prohibited by law. In this instance, a greater effort may be necessary to accommodate pedestrians elsewhere within the right-of-way or within the same transportation corridor.

El 04-011 Page 3 of 5

NYSDOT note: Pedestrian accommodations may be warranted on the rights-of-way of these roads to provide for safe crossing of pedestrians using existing or planned pedestrian facilities adjacent to the corridor.

Section 1229-a of the NYS Vehicle and Traffic Law states that pedestrians may travel along roads where pedestrian travel is otherwise prohibited in order to obtain assistance as a result of an emergency caused by an accident or breakdown of a motor vehicle. <u>Reasonable</u> routes should be provided for disabled persons to access call boxes installed along roadways where pedestrians are normally prohibited. For example, a structure or other highway element should not be designed in such a way that a disabled person would need to utilize the travel lane on a high-speed facility while crossing over or under the structure in order to access an emergency call box. However, facilities that are not normally intended for pedestrian use do not have to be designed in strict conformance with the standards for access by disabled persons. In the same example, the shoulder provided does not need to meet the 2% cross slope requirement for accessibility.

Facilities such as call boxes on roads where pedestrians are prohibited by law <u>are</u> intended for pedestrian use and must be fully accessible to disabled persons.

2. The cost of establishing pedestrian facilities would be excessively disproportionate to <u>the need</u> <u>or probable use</u>.

NYSDOT note: Probable use is the mix of pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to) within 800 m. (Note the term "generator" in this document refers to both generators and destinations.) When pedestrian generators exist in close proximity to the project area (within 800 m) and there is a probable use of the pedestrian facilities within the project area, then there is a need to accommodate pedestrians. Attachment A, the Pedestrian Generator Checklist, is a tool to help determine if pedestrian generators exist in the project area. See Procedure above.

Typically, excessively disproportionate is defined as exceeding 20% of the cost of the larger transportation project, but it should be determined on a project-by-project basis. Consensus should be reached between the Project Designer and the Regional Bicycle and Pedestrian Coordinator as to the reasonableness of providing pedestrian facilities within that particular project.

For additional information on designing for pedestrian accommodation, see Chapter 18 of the Highway Design Manual and the documents referenced in this Engineering Instruction. Consult the Regional Bicycle and Pedestrian Coordinator and/or the Regional Landscape Architect for assistance in designing to accommodate pedestrians.

3. The project exists in an area where sparsity of population or other factors indicate the absence of a need for pedestrian facilities.

NYSDOT note: If there are current plans for commercial, municipal, recreational, and/or residential development within or in close proximity to the project area (within 800 m) and the development is considered likely to promote more than occasional pedestrian traffic, there is a need to accommodate pedestrians. When future development occurs, it may be reasonable to require that the pedestrian accommodations be provided by the developers, in which case the highway work permit approval process becomes integral to the accommodation of pedestrians. In this case, the Department's

El 04-011 Page 4 of 5

project should not preclude the future opportunity for pedestrian accommodations, and should be designed to anticipate such accommodations.

Warranted pedestrian facilities should be incorporated as part of the Department's projects, regardless of the extent of facilities beyond the project area.

The Vehicle and Traffic Law governs how occasional pedestrians may walk along certain roadways where the Department's guidelines and procedures indicate facilities specifically intended to accommodate pedestrians are unnecessary. This provision of the Vehicle and Traffic Law does not constitute a "pedestrian accommodation", as defined under Technical Information above.

TRANSMITTED MATERIALS:

- Attachment A: Pedestrian Generator Checklist
- Attachment B: NYSDOT Bicycle and Pedestrian Policy.

BACKGROUND:

Pedestrian facilities are essential elements of the State's transportation system. Pedestrians should be afforded the ability to safely travel between pedestrian traffic generators such as homes, places of work, stores, schools, parks, etc. Pedestrian connections are also the critical transitions between different modes of transportation. As the population is aging, an increasingly large proportion of the State's population will rely on pedestrian accommodation and public transit as their primary means of transportation.

In October 1996, the Department adopted a bicycle and pedestrian policy (see Attachment B). The policy states, "NYSDOT must make bicyclists and pedestrians an integrated element of our intermodal transportation system." The policy also states that "facilities for pedestrians and bicyclists must be considered for incorporation into highway, bridge, and transit projects and integrated throughout NYSDOT's policy, planning, implementation, and operations efforts." Additionally, the Highway Design Manual Chapter 2, Section 2.6.16, Design Criteria, lists pedestrian accommodation as one of the seventeen (17) critical (controlling) design elements.

REFERENCES:

- 1. AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities published in 2004.
- 2. Accessible Rights-Of-Way: A Design Guide, A U.S. Access Board Publication, November 1999.
- 3. Accommodating Bicycle and Pedestrian Travel: A Recommended Approach, A US DOT Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure, FHWA 2000.
- 4. Alternative Treatments for At-Grade Pedestrian Crossings: An Informational Report by Nazir Lalani & the ITE Pedestrian & Bicycle Task Force, Institute of Transportation Engineers, 2001.
- 5. *Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)*, U.S. Access Board, Washington, D.C. (www.access-board.gov).
- 6. Designing Sidewalks and Trails for Access, Part 2, FHWA 2001.
- 7. Engineering Instruction 01-019 Maintenance and Protection of Pedestrian and Bicycle Traffic.
- 8. Engineering Instruction 97-002 Sidewalk Construction and Maintenance Policy for Projects and Highway Work Permits on State Highways.
- 9. *Facilities for Pedestrians and Bicyclists*, Chapter 18, NYSDOT Highway Design Manual, December 1996.
- 10. *Pedestrian Facilities User Guide: Providing Safety and Mobility*, FHWA-RD-01-102, March 2002. *www.walkinginfo.org/pdf/peduserguide/peduserguide.pdf*

El 04-011 Page 5 of 5

- 11. PEDSAFE USDOT's/FHWA's Pedestrian Safety Guide and Countermeasure Selection System at www.walkinginfo.org/de/pedsafe
- 12. Safety Effects of Marked Vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines at www.walkinginfo.org/pdf/r&d/crosswalk_021302.pdf

CONTACT:

Questions or comments may be directed via e-mail to Tricia Millington (pmillington@dot.state.ny.us) or Robert Lohse (rlohse@dot.state.ny.us) in the Landscape Architecture Bureau or by phone at (518)457-4460 or to Jim Ercolano (jercolano@dot.state.ny.us) or Eric Ophardt (eophardt@dot.state.ny.us) of the Pedestrian and Bicycle Program of the Passenger Transportation Division via email or phone at (518) 485-8291.

PEDESTRIAN GENERATOR CHECKLIST

Note: The term "generator" in this document refers to both pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to)

A check of yes indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.

1.	Is there an existing or planned sidewalk, trail, or pedestrian crossing facility?	YES□	NO□
2.	Are there bus stops, transit stations, or depots/terminals located in or within 800 m of the project area?	YES	NO
3.	Is there more than occasional pedestrian activity? Evidence of pedestrian activity may include a worn path.	YES	NO□
4.	Are there existing or approved plans for generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as schools, parks, playgrounds, places of employment, places of worship, post offices, municipal buildings, restaurants, shopping centers or other commercial areas, or multiuse paths?	YES□	NO□
5.	Are there existing or approved plans for seasonal generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as ski resorts, state parks, camps, amusement parks?	YES□	NO
6.	Is the project located in a residential area within 800 m of existing or planned pedestrian generators such as those listed in #4?	YES	NO□
7.	From record plans, were pedestrian facilities removed during a previous highway reconstruction project?	YES□	NO□
8.	Did a study of secondary impacts indicate that the project promotes or is likely to promote commercial and/or residential development within the intended life cycle of the project?	YES□	NO□
9.	Does the community's comprehensive plan call for development of pedestrian facilities in the area?	YES□	NO□
Note proj	e: This checklist should be revisited due to a project delay or if site conditions or local planning ect development process.	g changes duri	ing the

NYSDOT BICYCLE AND PEDESTRIAN POLICY

October, 1996

As part of our mission as an intermodal transportation agency, NYSDOT must make bicyclists and pedestrians an integrated element of our intermodal transportation system. Bicyclists and pedestrians are significant partners in NYSDOT's efforts, providing cost-effective solutions to our State's mobility, safety and environmental goals. The 1990 Census shows that more than 7% of New York State commuters bicycle or walk to work, so it is important for us to take the lead in making these modes safer and more "user friendly." As we move forward into the 21st Century, we have the ability to make our State's highways, structures and public transportation systems into one of the most efficient, intermodal transportation systems in the nation. To accomplish this, facilities for pedestrians and bicyclists must be considered for incorporation into highway, bridge and transit projects and integrated throughout NYSDOT's policy, planning, implementation and operations efforts.

Signed, ohn B. Daly Commissioner