

TECHNICAL MEMORANDUM

TO: Interested Parties
FROM: Robert R. Torzynski, AICP, Bicycle/Pedestrian Program Manager
DATE: November 7, 2007
RE: On-Street Bicycle Facilities Opportunities Assessment

Objective

To examine the street network in the Rochester Transportation Management Area (TMA) for opportunities to incorporate bicycle accommodations per the accepted range of on-street bicycle facility types emphasizing low-cost applications and strategic improvements, including roads identified in Phase I of the Regional Trails Initiative. See Exhibit 1 on page six for a map of the Genesee-Finger Lakes Region and the Rochester TMA.

Key project work tasks included:

- Documenting accepted on-street bicycle accommodations and treatments
- Identifying Rochester TMA roadways to be included
- Developing a comprehensive inventory of available roadway attributes
- Assessing opportunities to apply on-street bicycle accommodations and classifying accommodations as near-, mid-, or long-term
- Producing a technical memorandum documenting accepted accommodations and treatments
- Producing a technical memorandum assessing opportunities to apply accepted accommodations and treatments based on further evaluation

This Technical Memorandum identifies prospective on-street bicycle accommodations for Collector-level and above classified roads included in the Regional Trails Initiative – Phase 1 (which covers the Rochester TMA) based on rural/urban classification, posted speed, pavement width, shoulder width, number of lanes, and AADT. In addition, the selected roadway segments were classified as near-, mid-, or long-term recommendations for further evaluation based on the suitability ratings developed by the Rochester Bicycling Club (RBC) in 2006.

Note: the level of analysis undertaken for this assessment is not sufficient for implementation purposes; project-specific analysis will be needed to advance any of the potential opportunities identified. Following the project-specific analysis, the preferred improvements based on this analysis will be implemented by the appropriate municipality or transportation agency as GTC does not build, operate, or maintain transportation facilities.

Process

The GTC *Technical Memorandum: Overview of Accepted On-Street Bicycle Accommodations and Treatments* provides an overview of the current accepted national, state, and local bicycle facility standards, guidelines, and practices. It also provides information on liability as it relates

to bicycle facilities and the accommodation of bicycling in our transportation system. This information serves as a basis for recommending bicycle facility treatments for the Rochester TMA roadway system.

The *Rochester TMA Roads Suggested for Improvement* included as Table 7 within the GTC *Regional Trails Initiative – Phase I* (RTI) were chosen as the roadway segments for this assessment. The RTI identified specific roadway segments for improvement and include an on-road rating of the suitability of each roadway segment for bicycling made by members of the RBC during the year 1998. According to the RTI, these roads identify “gaps between existing trails or between existing trails and proposed new trails, as well as gaps between major origins or destinations and existing or proposed new trails.” The network identified within the RTI was again rated for suitability during 2006 by the RBC including Collector-level and above roadways within the Rochester TMA. The network excludes local streets, but otherwise includes most of the roads within the Rochester TMA that are legally available for bicycle riding.

The inventory of TMA roadway attributes includes location information (centerline files), posted speed limit, suitability rating (from the RBC 2006 suitability rating), rural/urban classification, and – depending on the roadway segment – roadway geometrics, traffic volume, vehicle mix (e.g., percent of trucks), and roadway conditions. However, as a result of multiple jurisdictions owning and operating the roadways within the TMA, the data is incomplete and inconsistent for the network as-a-whole. In order to ensure consistent analysis, posted speed limit and each route’s rural/urban classification served as the basis for identifying potential accommodations and treatments to be applied.

The assessment of opportunities to provide on-street bicycle accommodations was based on the FHWA *Selecting Roadway Design Treatments* publication Group B/C bicyclist (Average Skill Adults/Children) design guidance for several reasons. First, the majority of bicyclists consist of Group B/C individuals and providing accommodations for these bicyclists will enhance safety and further encourage bicycling as a mode of travel. Second, although the FHWA does provide recommended roadway treatments for Group A bicyclists (Highly Skilled Adults), the FHWA guidance requires information on sight distance and traffic mix (trucks, buses, and recreational vehicles) to determine accommodations for Group A bicyclists. This information is not available throughout the TMA. Finally, the recommended treatments to accommodate Group A bicyclists (such as extensive utilization of wide curb lanes) are not always consistent with the recommended treatments for Group B/C cyclists (such as bike lanes) and would do little to encourage and/or support the majority of bicycle users.

Notwithstanding the previous discussion, every road should at a minimum meet the FHWA design treatment recommendations for Group A cyclists. The recommendations within this report address the average (Group B/C) cyclist. Since the prioritization within this report are based in part on the RBC (experienced cyclist) ratings, the recommended improvements will improve conditions along the routes these cyclists perceive to require improvement although they go beyond what an experienced rider would need to feel comfortable riding along these segments.

The FHWA recommended design treatments for providing accommodations for Class B/C cyclists are included within Appendices C, E, and G of the *Selecting Roadway Design Treatments* publication. The information required to determine the recommended treatment for a specific roadway segment using these Appendices includes: Average Motor Vehicle Operating Speed, Average Annual Daily Traffic (AADT) Volume, the roadway’s Urban/Rural Classification, vehicle

mix, and whether on-street parking is allowed along the roadway. Site distance, included within the FHWA tables, does not affect recommended treatments to accommodate average skill cyclists.

Appendices C, E, and G within the FHWA *Selecting Roadway Design Treatments* publication can be summarized within the following decision tree:

On-Street Bicycle Facility Opportunities for Group B/C Bicyclists (Average Skill Adults/Children) within Rural and Urban Areas ¹

1. Rural² Areas
 - a. Average MV operating speed
 - i. Less than 30 mph 4' shoulder
 - ii. 30-40 mph 4' shoulder³
 - iii. 41-50 mph 6' shoulder
 - iv. Over 50 mph
 1. <2000 AADT 6' shoulder
 2. 2000 or more AADT 8' shoulder

2. Urban² Areas
 - a. Average MV operating speed
 - i. Less than 30 mph
 1. 10,000 or less AADT 14' wide curb lane
 2. > 10,000 AADT 5' bike lane
 - ii. 30-40 mph
 1. 10,000 or less AADT 5' bike lane³
 2. > 10,000 AADT w/o On-Street Parking 5' bike lane³
 3. > 10,000 AADT with On-Street Parking 6' bike lane
 - iii. 41-50 mph
 1. < 2,000 AADT w/o On-Street Parking 5' bike lane
 2. < 2,000 AADT with On-Street Parking 6' bike lane
 3. 2,000 or more AADT 6' bike lane
 - iv. Over 50 mph
 1. w/o On-Street Parking 6' bike lane
 2. with On-Street Parking n/a

Notes:

1. Adapted from Selecting Roadway Design Treatments to Accommodate Bicycles, FHWA, 1992, Appendices C, E, and G
2. Rural roads consist of those facilities that are outside of small urban areas as designated by the U.S. Census, and also outside urbanized areas, as defined in Federal-aid highway law (Section 101 of Title 23, U.S. Code). Rural/Urban classification for the Rochester TMA are as approved by the FHWA for the year 2000.
3. Additional width may be required due to vehicle mix if the road is subject to the regular presence of trucks, buses, and/or recreational vehicles.

A review of the decision tree illustrates three sets of data, not available throughout the TMA, that are required to complete the determination of the appropriate accommodation and treatment along each roadway segment: vehicle mix, average vehicle *operating* speeds, and *on-street parking*. These data, along with crash rates, traffic volume, scheduled roadway reconstruction, and the limitations imposed by the geometric features of the roadway, which are beyond the scope of this study, should be considered in studying the feasibility for any particular improvement along the listed roadway segments.

The analysis of the available roadway data results in recommendations that need to be refined as potential projects advance but illustrate the types of accommodation and treatment that should be considered along each roadway segment. The assessment matrix also identifies the factors that would need to be considered in order to determine the specific treatment that would best meet the FHWA guidelines for a particular roadway segment but that are not available at the level of a regional analysis. For example: Facility Opportunities stated to be 5- to 6-foot BL (AADT, Parking) means that the appropriate treatment would include either a five-foot wide bike lane *or* a six-foot wide bike lane, depending on whether or not the Average Annual Daily Traffic along the roadway exceeded the set criteria (in this case, 10,000 ADT) and whether or not parking is allowed along the roadway.

By analyzing the roadways included in the RTI recommendations utilizing the criteria described above, a matrix is created showing each street/highway name, the limits to the segment, affected jurisdictions, the 1998 suitability rating, 2006 suitability rating, urban/rural classification, posted speed limit, available data, and facility opportunities and considerations. The table, included within Appendix I to this Final Report, also includes a column that indicates prioritization for further study.

The stratification of the suggested accommodations into near-, mid-, and long-term prioritization for further study was based on the 1998 suitability ratings and the 2006 suitability ratings. Roadway segments rated "poor" or "fair/poor" were recommended for near-term study, those rated "fair" recommended for mid-term study, and those rated "fair/good" or "good" recommended for long-term study. The near-term recommendations for further study are identified in Table 1 on page five.

Summary

This memorandum provides an assessment of the roadway network in the Rochester Transportation Management Area (TMA) for opportunities to apply bicycle accommodations and/or treatments within the accepted range of on-street bicycle facility types. The near-term recommendations for further study are consistent with the FHWA publication *Selecting Roadway Design Treatments to Accommodate Bicycles* (1992), and are prioritized based on roadway condition (suitability), connection to multi-use trails, and importance to the TMA-wide bicycle facilities network.

Table 1

**On-Street Bicycle Facilities Opportunities
Near Term Recommendations for Further Study**

| Street/Highway Name | Jurisdiction | Facility Opportunities |
|-----------------------------------|------------------------------------|--------------------------------|
| Baird Road | Perinton | Wide Curb Lane, 5' Bike Lane |
| Culver Road | Rochester, Irondequoit | 5-6' Bike Lane |
| Dewey Avenue (SR 18) | Greece, Rochester | 5-6' Bike Lane |
| East Henrietta Road (SR 15A) | Rochester, Brighton, Henrietta | 5-6' Bike Lane |
| East Ridge Road | Rochester, Irondequoit | 5-6' Bike Lane |
| Elmwood Avenue | Brighton, Rochester | 5-6' Bike Lane |
| Empire Boulevard (SR 404) | Rochester, Irondequoit | 5-6' Bike Lane |
| Fairport Road (SR 31F) | Pittsford, Perinton | 5-6' Bike Lane |
| Highland Avenue | Brighton, Rochester | 5-6' Bike Lane |
| Hudson Avenue | Rochester, Irondequoit | 5-6' Bike Lane |
| Hylan Drive | Henrietta | 5-6' Bike Lane |
| Jefferson Avenue | Perinton | 5-6' Bike Lane |
| Jefferson Road (SR 252) | Henrietta | 5-6' Bike Lane |
| Jefferson Road (SR 252 and SR 96) | Pittsford, Perinton | 5-6' Bike Lane |
| Lake Avenue | Rochester | 5-6' Bike Lane |
| Lake Road (SR 19) | Brockport, Clarkson | 4' or 6' SH, 5-6' Bike Lane |
| Lehigh Station Road (SR 253) | Henrietta | 5-6' Bike Lane |
| Long Pond Road | Greece | 5-6' Bike Lane |
| Marsh Road | Perinton, Pittsford | Wide Curb Lane, 5' Bike Lane |
| Monroe Avenue (SR 31) | Rochester, Brighton, Pittsford | 5-6' Bike Lane |
| Mount Read Boulevard | Greece, Rochester | 5-6' Bike Lane |
| Panorama Trail | Penfield | Wide Curb Lane, 5-6' Bike Lane |
| Penfield Road | Penfield, Perinton | 5-6' Bike Lane |
| State Route 15 | Brighton, Henrietta, Rochester | 5-6' Bike Lane |
| State Route 96 | Pittsford, Perinton | 5-6' Bike Lane |
| State Route 441 | Penfield, Brighton | 5-6' Bike Lane |
| St. Paul Boulevard | Irondequoit | 5-6' Bike Lane |
| State Street/Exchange Street | Rochester | 5-6' Bike Lane |
| Turk Hill Road | Perinton | Wide Curb Lane, 5-6' Bike Lane |
| Washington Road (SR 153) | East Rochester, Pittsford | 5-6' Bike Lane |
| West Ridge Road (SR 104) | Rochester, Greece, Parma, Clarkson | 5-6' Bike Lane |
| Westfall Road | Brighton, Rochester | 5-6' Bike Lane |

Technical Resources

Guide for the Development of Bicycle Facilities, American Association of State and Highway Transportation Officials, 1999 edition.

Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025, Genesee Transportation Council, December 2004.

Regional Trails Initiative Final Report and Action Plan, Phase 1 – Rochester TMA, Genesee Transportation Council, August 2002.

Selecting Roadway Design Treatments to Accommodate Bicycles, Federal Highway Administration, 1992 (FHWA-RD-92-073).

Technical Memorandum: Overview of Current Accepted Bicycle Facility Standards, Guidelines, and Practices, Kristen Bennet, AICP, Genesee Transportation Council, February 7, 2005.

Appendix I

**On-Street Bicycle Facilities
Opportunities Assessment Matrix**

Monroe County

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|-----------------------------------|---|-------------------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Allens Creek Road | Edgewood Avenue to East Avenue (SR 96) | Pittsford, Brighton | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Archer Road (SR 252) | Beaver Road to Ballantyne Road | Chili | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Attridge Road | Buffalo Road (SR 33) to Chili-Riga Center Road (SR 33A) | Riga | fair, good | fair | R,U | 25 | S | 4' SH, WC, 5' BL (R/U, AADT) | Long Term |
| Baird Road | Whitney Road to Fairport Road (SR 31F) | Perinton | fair, poor | fair | U | 25 | S | WC, 5' BL (AADT) | Near Term |
| Ballantyne Road (SR 252) | Jefferson Road to Archer Road | Henrietta, Chili | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Bay Road | Lake Road to Empire Boulevard (SR 404) | Webster | good | fair, good | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Bay Street | Portland Avenue to North Goodman Street | Irondequoit | good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Beach Avenue | Greenleaf Road to Edgemere Drive | Greece | good | not rated | U | 25, 35 | S | WC,5-6' BL (S, AADT, Parking, VM) | Long Term |
| Beahan Road | Paul Road to Chili Avenue (SR 33A) | Chili, Gates | good | fair | U | 35 | WS | 5-6' BL (AADT, Parking, VM) | Long Term |
| Beaver Road (SR 252) | Archer Road to Chili Avenue (SR 33A) | Chili | good | fair | U | 25 | WSV | WC, 5' BL (AADT) | Long Term |
| Blossom Road | Route 590 to Browncroft Boulevard (SR 286) | Penfield, Brighton | fair, good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Brighton-Henrietta Town Line Road | Winton Road to West Henrietta Road (SR 15) | Henrietta, Brighton | good | fair, poor | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Brooks Avenue | Erie Canal to Chili Avenue (SR 33) | Gates | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Browncroft Boulevard (SR 286) | Old Browncroft Boulevard to Clark/Qualtrough Roads | Penfield | fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Bull Saw Mill Road | Mendon Center Road to West Bloomfield Road | Mendon | fair | not rated | R | 25 | S | 4' SH | Mid Term |
| Buffalo Road (SR 33) | Mount Read Boulevard to West Side Drive | Rochester, Gates, Ogden | fair, good | fair | U | 45 | WSV | 5-6' BL (AADT, Parking) | Long Term |
| Calkins Road | West Henrietta Road (SR 15) to Mendon Road (SR 64) | Henrietta, Pittsford | fair, good | fair, good | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Carter Road | Furman Road to Whitney Road | Perinton | fair | fair | U | 25 | S | WC, 5' BL (AADT) | Mid Term |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|------------------------------|---|--------------------------------|------------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Carter Street | East Ridge Road to Norton Street | Irondequoit, Rochester | good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Castle Road | East Henrietta Road (SR 15A) to Winton Road | Henrietta | good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Chamberlain Road | Cheese Factory Road to Taylor Road | Mendon | not rated | not rated | N/A | N/A | N/A | N/A | N/A |
| Chili Avenue (SR 33A) | Genesee Street to Paul Road (SR 252A) | Rochester, Gates, Chili | fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Clifford Avenue | St. Paul Street to Culver Road | Rochester | fair, good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Colby Street | Washington Street (SR 36) to Lake Road (SR 19) | Ogden, Sweden | fair | fair | R | 25 | S | 4' SH | Mid Term |
| Commercial Street | Country Club Road to Washington Street | East Rochester | not rated | fair | N/A | N/A | N/A | N/A | N/A |
| Creek Street | Embury Road to Plank Road | Penfield | good | fair | U | 35 | WS | 5-6' BL (AADT, Parking, VM) | Long Term |
| Crittenden Road | East Henrietta Road (SR 15A) to West Henrietta Road (SR 15) | Brighton | fair | fair | U | 25 | S | WC, 5' BL (AADT) | Mid Term |
| Culver Road | Clifford Avenue to Monroe Avenue (SR 31) | Rochester | fair, good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Culver Road | Brookdale Park to East Ridge Road | Irondequoit | poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Dewey Avenue (SR 18) | Lyell Avenue to Stone Road | Greece, Rochester | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| East Avenue (SR 96) | East Main Street to Culver Road; Park Avenue to I-490 | Rochester | fair, good | fair | U | 35, 45 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| East Avenue (SR 96) | I-490 to Fairport Road (SR 31F) at St. John Fisher College | Brighton, Pittsford | fair | fair | U | 35, 45 | WSV | 5-6' BL (AADT, Speed, Parking, VM) | Mid Term |
| East Main Street | North Union Street to State Street | City of Rochester | fair | fair | U | 35, 45 | S | 5-6' BL (AADT, Speed, Parking, VM) | Mid Term |
| East Henrietta Road (SR 15A) | Mount Hope Avenue (SR 15) to Lehigh Station Road (SR 253) | Rochester, Brighton, Henrietta | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| East Ridge Road | St. Paul Street to Kane Drive | Rochester, Irondequoit | good, fair, poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|----------------------------|---|------------------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| East River Road | West Henrietta Road (SR 15) to Jefferson Road (SR 252) | Brighton, Henrietta | good, fair | fair | U | 25 | WSV | WC, 5' BL (AADT) | Long Term |
| East River Road | Lehigh Station Road to Scottsville-Rush Road (SR 251) | Henrietta, Rush | good | fair | R, U | 25 | S | 4' SH, WC, 5' BL (AADT, R/U) | Long Term |
| Edgemere Drive | Beach Avenue to East Manitou Road | Greece | good | not rated | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Elmgrove Road (SR 386) | Straub Road to Buffalo Road (SR 33) | Greece, Gates | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Elmwood Avenue | East Avenue (SR 96) to Lattimore Road | Brighton, Rochester | good, poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Empire Boulevard (SR 404) | Culver Road to Irondequoit Bay Basin | Rochester, Irondequoit | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| English Road | North Greece Road to Dewey Avenue (SR 18) | Greece | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Erie Station Road (SR 253) | East Henrietta Road (SR 15A) to East River Road | Henrietta | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Fairport Road (SR 31F) | East Avenue (SR 96) to Erie Canal | Pittsford, Perinton | fair, poor | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Fishers Road | Pittsford-Victor Road (SR 96) to Monroe/Ontario County Line | Perinton | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Five Mile Line Road | Whalen Road to Whitney Road | Penfield, Perinton | good, fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| French Road | East Avenue (SR 96) to Edgewood Avenue | Pittsford, Brighton | good, fair | poor | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Frisbee Hill Road | Manitou Road (SR 261) to Flynn Road | Parma, Greece | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Genesee Street | Brooks Avenue to West Main Street (SR 33) | Rochester | good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Golf Avenue | Marsh Road to Washington Road (SR 153) | Pittsford, Perinton | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Highland Avenue | Monroe Avenue (SR 31) to South Goodman Street | Brighton, Rochester | poor | poor | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Holt Road | Klem Road to Ridge Road (SR 404) | Webster | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Hudson Avenue | Norton Street to Titus Avenue | Rochester, Irondequoit | good, poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|-----------------------------------|---|---------------------------|------------------|-------------|----------------|--------------|-------------|---|----------------------------------|
| Hylan Drive | Jefferson Road (SR 252) to I-390 Interchange | Henrietta | poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Jackson Road | Ridge Road (SR 404) to State Road | Webster, Penfield | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Jefferson Avenue | Fairport Road (SR 31F) to Ayrault Road | Perinton | poor | poor | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Jefferson Road (SR 252) | Winton Road to Brighton-Henrietta Town Line Road | Henrietta | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Jefferson Road (SR 252 and SR 96) | Sutherland Street to Marsh Road | Pittsford, Perinton | poor | fair | U | 35, 45 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| King's Highway | Lakeshore Boulevard to East Ridge Road | Irondequoit | fair | fair | U | 25, 35 | S | WC,5-6' BL (S, AADT, Parking, VM) | Mid Term |
| Knickerbocker Road | Mendon Road (SR 64) to Jefferson Road (SR 96) | Pittsford | not rated | fair | U | N/A | N/A | N/A | N/A |
| Kreag Road | Pittsford-Victor Road (SR 96) to Ayrault Road | Perinton | good | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Lake Avenue | Beach Avenue to Lyell Avenue | Rochester | fair, poor | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Lake Road | Bay Road to Monroe/Wayne County Line | Webster | good, fair | good, fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Lake Road (SR 19) | East Avenue to Brockport-Spencerport Road (SR 31) | Brockport, Sweden | good, fair, poor | fair | R, U | 35 | WSV | 4' or 6' SH, 5-6' BL (R/U, AADT, Parking, VM) | Near Term |
| Lake Shore Boulevard | St. Paul Boulevard to Colebrook Drive | Irondequoit | good | fair | U | 25, 35 | S | WC,5-6' BL (S, AADT, Parking, VM) | Long Term |
| Latta Road (SR 18) | Long Pond Road to Manitou Road (SR 261) | Greece, Parma | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Lattimore Road | Elmwood Avenue to Kendrick Road | Rochester | not rated | fair | N/A | N/A | N/A | N/A | N/A |
| Lehigh Station Road (SR 253) | West Henrietta Road (SR 15) to Middle Road | Henrietta | poor | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Lehigh Station Road (SR 253) | Pinnacle Road to Clover Street (SR 65) | Henrietta, Pittsford | good, fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Lincoln Road | Commercial Street to Fairport Road (SR 31F) | East Rochester, Perinton | not rated | fair | U | N/A | N/A | N/A | N/A |
| Linden Avenue | Route 441 to Washington Road (SR 153) | Pittsford, East Rochester | not rated | fair | U | N/A | N/A | N/A | N/A |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|---------------------------------------|--|---------------------|------------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Long Pond Road | Spencerport Road (SR 31) to Latta Road (SR 18) | Gates, Greece | good, poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Lyell Avenue/Spencerport Road (SR 31) | Glide Street to Elmgrove Road (SR 386) | Rochester; Gates | good, fair | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Lyell Avenue | Broad Street to Lake Avenue | Rochester | fair | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Maiden Lane | Dewey Avenue (SR 18) to North Avenue | Greece | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Manitou Road | West Ridge Road (SR 104) to Buffalo Road (SR 33) | Greece, Gates | good, fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Marsh Road | Pittsford-Victor Road (SR 96) to Great Embankment Park | Perinton, Pittsford | poor | fair | U | 25 | S | WC, 5' BL (AADT, Parking) | Near Term |
| Mendon Center Road | Calkins Road to Mendon Ponds Park | Pittsford, Mendon | good, fair | fair | R, U | 25 | S | 4' SH, WC, 5' BL (R/U, AADT) | Long Term |
| Monroe Avenue (SR 31) | Highland Avenue to Erie Canal | Brighton, Pittsford | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Mount Read Boulevard | Latta Road (SR 18) to Buffalo Road (SR 33) | Greece, Rochester | good, fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| North Avenue | Maiden Lane to West Ridge Road (SR 104) | Greece | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Panorama Trail | Atlantic Avenue (SR 286) to Penfield Road | Penfield | poor | poor | U | 25, 35 | S | WC, 5-6' BL (S, AADT, Parking, VM) | Near Term |
| Pattonwood Drive | St. Paul Boulevard to O'Rourke Bridge | Irondequoit | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Penfield Road | Panorama Trail to Old Penfield Road | Penfield | poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Phillips Road | Klem Road to Ridge Road (SR 404) | Webster | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Pittsford-Palmyra Road (SR 31) | Erie Canal to Mason Road (Hamlet of Egypt) | Pittsford, Perinton | good, fair | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Redman Road | West Ridge Road (SR 104) to Roosevelt Highway (SR 18) | Clarkson, Hamlin | good | fair | R | 25 | WSV | 4' SH | Long Term |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|------------------------------|--|--------------------------------|------------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Ridge Road (SR 404) | Gravel Road to Holt Road | Webster | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| Ridgeway Avenue | Elmgrove Road (SR 386) to Mount Read Boulevard | Greece, City of Rochester | fair | fair | U | 25, 35 | S | WC,5-6' BL (S, AADT, Parking, VM) | Mid Term |
| Rush-Lima Road (SR 15A) | Rush Road to Plains Road | Rush | fair | fair | R | 35 | WSV | 4' or 6' SH | Mid Term |
| State Route 15 | Elmwood Ave to Calkins Road | Brighton, Henrietta, Rochester | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| State Route 18 | Collamer Road to Bennett Road | Hilton, Parma | good | fair | U | 25, 35 | WSV | WC,5-6' BL (S, AADT, Parking, VM) | Long Term |
| State Route 31 | Washington Street (SR 36) to Redman Road | Ogden, Clarkson | good, fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| State Route 96 | Erie Canal to Monroe/Ontario County Line | Pittsford, Perinton | poor | fair | U | 45 | WSV | 5-6' BL (AADT, Parking) | Near Term |
| State Route 253 | Scottsville Road (SR 383) to East River Road | Wheatland, Henrietta | good | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| State Route 404 | Bay Road to Hard Road | Webster | good, fair | good | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Long Term |
| State Route 441 | Watson Road to East Avenue (SR 96) | Penfield, Brighton | fair, poor | fair, poor | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| State Route 590 | Titus Avenue to Culver Road (Sea Breeze) | Irondequoit | not rated | fair | N/A | N/A | N/A | N/A | N/A |
| St. Paul Boulevard | Lakeshore Boulevard to Titus Avenue | Irondequoit | good, fair, poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Salt Road | State Road to Penfield Road (SR 441) | Penfield, Webster | good | fair | R, U | 25 | S | 4' SH, WC, 5' BL (AADT, R/U) | Long Term |
| Schlegel Road | Webster Road (SR 250) to Salt Road | Webster | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| South Avenue | Averill Street to St. Paul Street | Rochester | fair | fair, poor | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| South Clinton Avenue | Downtown Rochester | Rochester | fair, poor | poor | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| State Street/Exchange Street | Lyell Avenue to Court Street | Rochester | good, poor | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| Stone Road | Mendon Road (SR 64) to Clover Street (SR 65) | Pittsford | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |

Appendix I

Monroe County (continued)

| Street/Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|--------------------------|--|------------------------------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Stone Road | Dewey Avenue (SR 18) to Stonewood Drive | Greece | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Stony Point Road | Buffalo Road (SR 33) to Washington Street (SR 36) | Ogden | good, fair | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Sweden-Walker Road | Colby Street to Brockport-Spencerport Road (SR 31) | Sweden | good | fair | R, U | 25 | WSV | 4' SH, WC, 5' BL (AADT, R/U) | Long Term |
| Taylor Road | Chamberlain Road to Mile Square Road | Mendon | not rated | not rated | N/A | N/A | N/A | N/A | N/A |
| Thomas Avenue | Pattonwood Drive to St. Paul Boulevard | Irondequoit | not rated | not rated | N/A | N/A | N/A | N/A | N/A |
| Thornell Road | Jefferson Road (Route 96) to East Street | Pittsford, Perinton | good, fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Tobin Road | Clover Street (SR 65) and Reeves Road | Pittsford, Perinton | not rated | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | N/A |
| Turk Hill Road | Whitney Road to Macedon Center Road (SR 31F) | Perinton | fair, poor | fair | U | 25, 35 | S | WC, 5-6' BL (S, AADT, Parking, VM) | Near Term |
| Vintage Lane | Dewey Avenue (SR 18) to Route 390 | Greece | good, fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |
| Washington Road (SR 153) | Linden Avenue to North Main Street (SR 96) | East Rochester, Pittsford | poor | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Near Term |
| West Ridge Road (SR 104) | Lake Avenue to Lake Road (SR 19) | Rochester, Greece, Parma, Clarkson | fair, poor | fair, poor | U | 45 | WSV | 5-6' BL (AADT, Parking) | Near Term |
| Westfall Road | South Clinton Avenue to Mount Hope Avenue (SR 15) | Brighton, Rochester | poor | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Near Term |
| Wilder Road | Bennett Road to Manitou Road (SR 261) | Parma | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Winton Road | Westfall Road to Stone Road | Brighton, Henrietta | good, fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Long Term |

Appendix I

Livingston County (TMA areas only)

| Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|---------------------|-------------------------------------|--------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| State Routes 5 & 20 | Genesee Street to Bronson Hill Road | Avon | fair | Fair | R | 45 | SV | 6' SH* | Mid Term |

*Road designated rural based on FHWA classification, however, improvement to urban standards (5-6' bike lane) should be considered within/adjacent to the Village of Avon.

Ontario County (TMA areas only)

| Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|----------------------|--|------------------------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Buffalo Street | Main Street (SR 332) to North Pearl Street | Canandaigua | fair | fair | U | 25 | S | WC, 5' BL (AADT) | Mid Term |
| County Road 16 | Parrish Street to South Bristol/Canandaigua Town Line | Canandaigua | good | fair | R, U | 25 | S | 4' SH, WC, 5' BL (AADT, R/U) | Long Term |
| Fishers Road | Ontario/Monroe County Line to Main Street Fishers | Victor | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| High Street | West Main Street (SR 96) to Valentown Road | Victor | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Main Street (SR 332) | Buffalo Street to State Routes 5 & 20 | Canandaigua | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| Mertensia Road | State Route 96 to County Road 41 | Farmington | not rated | fair | N/A | N/A | N/A | N/A | N/A |
| New Michigan Road | County Road 41 to County Road 30 | Farmington, Canandaigua | good, fair | fair | R, U | 25 | S | 4' SH, WC, 5' BL (AADT, R/U) | Long Term |
| North Street | State Route 332 to the Civic Center | Canandaigua | good | fair | U | 25 | S | WC, 5' BL (AADT) | Long Term |
| Parrish Street | Pearl Street to Main Street (SR 332) | Canandaigua | not rated | fair | N/A | N/A | N/A | N/A | N/A |
| State Route 332 | North Street to Gateway Drive | Canandaigua, Farmington | fair | fair | U | 35 | WSV | 5-6' BL (AADT, Parking, VM) | Mid Term |
| State Route 364 | Lakeshore Drive to Gorham/Canandaigua Town Line | Canandaigua | fair | fair | U | 35 | S | 5-6' BL (AADT, Parking, VM) | Mid Term |
| State Routes 5 & 20 | Ontario/Livingston County Line through Town of Canandaigua | West and East Bloomfield, Ca | fair | good | R | 45 | WSV | 6' SH | Mid Term |

Appendix I

Ontario County, continued (TMA areas only)

| Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further study |
|------------------------|---|--------------------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| State Route 64 | Ontario/Monroe County Line to State Routes 5 & 20 | West and East Bloomfield | good | good | R | 35 | WSV | 4' or 6' SH (AADT, VM) | Long Term |
| State Route 96 | Ontario/Monroe County Line to County Road 8 | Victor, Farmington | fair | fair | U | 45 | WSV | 5-6' BL (AADT, Parking) | Mid Term |
| Turk Hill Road (CR 44) | Ontario/Monroe County Line to Pittsford-Victor Road (SR 96) | Victor | fair | poor | U | 25 | S | WC, 5' BL (AADT) | Mid Term |

Wayne County (TMA areas only)

| Highway Name | Limits | Jurisdiction | 2006 Rating | 1998 Rating | Rural or Urban | Posted Speed | Data Avail. | Facility Opportunities, (Considerations) | Prioritization for further Study |
|-----------------------------------|--|--------------|-------------|-------------|----------------|--------------|-------------|--|----------------------------------|
| Lake Road (Seaway Trail) (CR 101) | Wayne/Monroe County line to Ontario/Williamson Town Line | Ontario | good | fair, good | R | 35 | S | 4' or 6' SH (AADT, VM) | Long Term |
| State Route 104 | County Line Road to Ontario/Williamson Town Line | Ontario | good | fair | U | 45 | WSV | 5-6' BL (AADT, Parking) | Long Term |

- Key:**
- Limits shown within Appendix I represent the segment limits considered within the RTI *Improvement Recommendations*.
 - 2006 and 1998 ratings represent the on-road suitability ratings for bicycle riding as undertaken by the Rochester Bicycling Club (RBC). These ratings are provided as a public service, but road conditions may change. The GTC, its member agencies, staff, the Rochester Bicycling Club, and road rating volunteers accept no responsibility for personal injuries or property damage resulting from the use of the ratings.
 - Rural/Urban classification reflects FHWA 2000 classification of the Rochester TMA. Segments located along rural/urban boundaries are classified as "urban."
 - Data Available: W= Roadway width, which may include but not be limited to pavement width, shoulder width, and number of lanes; S= Posted speed limit; V= Traffic Volume.
 - Facilities Opportunities: 4' SH= 4-foot shoulder (rural roads); WC= 14-foot wide curb lane; 5-6' BL= 5-foot or 6-foot wide bike lane (urban roads).
 - Considerations include the factors that need to be considered to further refine the facility opportunities: AADT= average annual daily traffic volume, Parking= presence or absence of on-street parking; R/U= rural/urban designation of the segment; S= operating speed along the segment, VM= vehicle mix.