

On-Street Bicycle Facility Opportunities Review (UPWP Task 6530)

Executive Summary

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.

Project Approach

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

The GTC *Technical Memorandum: Overview of Accepted On-Street Bicycle Accommodations and Treatments* describes the bicycle facility treatments included within the final *Technical Memorandum: On-Street Bicycle Facilities Opportunities Assessment*. The treatments are derived from the Federal Highway Administration (FHWA) publication "Selecting Roadway Design Treatments to Accommodate Bicycles" (1992) for the average-skilled bicyclist.

Posted speed limit and rural/urban classification served to screen the roads for treatments to be applied. The near-, mid-, or long-term implementation window for each prospective improvement was based on the suitability ratings developed by the Rochester Cycling Club (RCC) in 2006. Those roadways with a suitability rating of "poor" were classified as near-term, those with a suitability rating of "fair" were classified as mid-term, and those with a suitability rating of "good" were classified as long-term.

Alternative measures such as average annual daily traffic (AADT) and crash rates could be used for this purpose; however, data for these attributes were either not available in a standard format across the Rochester TMA or would have required significantly greater data collection than the project scope allowed.

Findings

- The facility opportunities (accommodation and treatments) fall into three general categories: bike lanes, wide curb lanes, and paved shoulders
- Five- to six-foot wide bike lanes could accommodate bicyclists along roadways in the Rochester TMA with posted speed limits of 35 to 45 miles per hour, depending on AADT and whether or not on-street parking is provided.
- Five-foot wide bike lanes or wide curb lanes (14-foot) could accommodate bicyclists along many of the roadways in the Rochester TMA with posted speed limits of 25 to 35 miles per hour, depending on AADT and pavement width.
- Four-foot shoulders could accommodate bicyclists along many rural roadways in the Rochester TMA.
- General recommendations can be provided at a regional scale based on limited information; however, specific recommendations for a particular segment of roadway will require additional investigation of operating speeds, the presence or absence of on-street parking, and the limitations imposed by the geometric features of the roadway, which are beyond the scope of this study.
- Roadways should be selected for further evaluation based on a variety of factors including, but not limited to, crash rates, traffic volume, and scheduled roadway reconstruction.

Products

1. *Overview of Accepted On-Street Bicycle Accommodations and Treatments* technical memorandum which 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.
2. *On-Street Bicycle Facilities Opportunities Assessment* technical memorandum which 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 RBC in 2006.