

Recommendations for Selection and Prioritization of On-street Bikeways

Northfield Area Task Force on Nonmotorized Transportation

June 25, 2009

Background

At the May 2009 meeting of the Northfield Park and Recreation Advisory Board (PRAB), the Northfield Area Task Force on Nonmotorized Transportation presented a resolution asking the city to implement in 2009 the on-street bikeways – bike lanes and routes – specified in the city’s Parks, Open Space, and Trail System Master Plan. Citing the fact that the on-street bikeways are not in the city budget and that the city is faced with the need to cut costs, the PRAB asked the Task Force to create a prioritized list of on-street bikeways and to confirm the selection of lanes and routes, making suggestions for changes to the plan where it makes sense to do so.

Below is a list that prioritizes what we consider to be the most important bike lanes and routes. Given the work that went into the Parks Master Plan, the Task Force has attempted to minimize changes to it. Additional information about on-street bikeways follows the list. Underlined items are recommended changes in the Parks Plan. See the Park Master Plan Map for additional on-street bikeways.

North-south axes/Carleton College/Sibley School/Spring Creek Park/Southern Business District

1. Bike Lanes: Nevada/9th/Maple Sts. from 1st St. to Jefferson Parkway
2. Bike Route: Jefferson Road from Woodley St. to County Road 1

East-West Axes/St. Olaf College/Downtown

3. Bike Lanes: St. Olaf Ave. between Lincoln St. and Highway 3 (bike route if lanes are not possible)
4. Bike Route: Linden St. from St. Olaf Ave. to 4th St.
5. Bike Route: 2nd St. from Lincoln St. to Oak St.
6. Bike Route: St. Olaf Ave. from Lincoln St. to St. Olaf College

Other Downtown/East Side/Pool

7. Bike Lanes: 5th St. - complete by continuing between Washington St. and College St. and between Water St. and Highway 3
8. Bike Route: 5th St. from College St. to Prairie St.

9. Bike Lane: Water St. - southbound only from 5th St. to Sumner St.
10. Bike Lanes: Sumner St. - between Water St. and Washington St.
11. Bike Lane: Washington St. (rather than Union St.) - northbound only from Sumner to 2nd St.
12. Bike Route: 7th St. - from Riverside Park to Prairie St.

Others

13. Bike Route: Lincoln St./Lincoln Parkway/Spring St. from Forest Ave. to St. Olaf Ave.
14. Bike Lanes: Woodley St. - between Highway 3 and Prairie St.
15. Bike Route: Prairie St. from Woodley St. to Oak St.
16. Bike Route: Woodley St. from Prairie St. to city limits

Implementing the On-street Bikeways

The Northfield Transportation Plan currently has the following implementation plan for on-street bikeways:

5.2.3 BIKEWAY DEVELOPMENT

It is anticipated that bikeways identified on the City's Parks, Open Space, and Trails System Plan would be achieved when pavement rehabilitation occurs on existing corridors, or as new development is proposed. Specific bikeway improvements will be prioritized based on pavement management needs. (Section 5, p. 11)

The Task Force on Nonmotorized Transportation recognizes the likely cost savings associated with the above plan. However, it asks the City to expedite implementation of on-street bikeways where costs are low (as with bike routes), where there are advantages to earlier implementation (as with higher-priority bikeways), and where outside funds are available. **Potential sources of outside funds are Safe Routes to Schools infrastructure grants, the Northfield Rotary, Friends of the Mill Towns Trail, and funds administered by the Mayor's Streetscape Task Force.**

Bikeway Signage

Bike lane and route signs offer the ability to include wayfinding or destination information that can be useful for cyclists. Locations listed in the goals above

would be good to include (Swimming Pool, Peggy Prowe Bridge, St. Olaf College, etc.). See the *MnDOT Bikeway Facility Design Manual* (p. 99) and other sources for ideas.

Duluth, Minnesota, has an extensive bike route system with signs such as this one:



Below is a bikeway sign from Portland, Oregon, with destination, distance, and time information.



Additional Information Relating to On-street Bikeways

Text from the Parks, Open Space, and Trails System Plan, Section 4:

Bikeways

On-road bikeways (i.e., bike lanes and bike routes) are paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic. Bikeways generally allow a cyclist to go faster than on many trails and offer more continuity in surfacing and intersections. Complementing shared-use trails or sidewalks with on-road bikeways enhances the overall trail system by making it more complete and user friendly. For advanced bicyclists and some in-line skaters, bikeways are important conduits to longer routes outside of the city limits.

The distinction between a bike lane and bike route is the level of exclusiveness and the setting. A **bike lane** is a designated portion of the roadway defined by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. A **bike route** is a shared portion of the roadway that provides some separation between motor vehicles and bicyclists. State statutes define a bike route as a “roadway signed for encouragement of bicycle use.” Most people would recognize a bike route as a paved shoulder with signage and drive lane striping. In Northfield, both bike lanes and routes are envisioned based on the character of a given route and expected level of use.

The *MnDOT Bikeway Facilities Development Manual* identifies four types of “on-road bikeways” (p. 64):

1. Bicycle Lane (Bike Lane):

A bike lane is a portion of the roadway or shoulder designated for exclusive or preferential use by people using bicycles. Bicycle lanes are distinguished from the portion of the roadway or shoulder used for motor vehicle traffic by striping, marking, or other similar techniques.

2. Paved Shoulder

3. Shared Lane

On any roadway where a bicycle may legally be operated, bicycles may need to share a travel lane with motor vehicles if the road does not have a bike lane, a paved shoulder or a separate shared-use path. A shared travel lane may be an appropriate bikeway on some low-speed, low-volume

streets or roads. Where a shared lane is intended to be part of a **bike route**, it should be signed as a bikeway to direct bicyclists and inform motorists. Standard travel lanes are typically 3.3 – 3.6 m (**11 – 12 ft**) wide, but may vary.

4. Wide Outside Lane

More on bike lanes from the same MnDOT manual (p. 76):

Bicycle lanes provide separation from traffic and accommodate bicycles better than shared lanes or wide outside lanes. Research indicates that bicycle lanes have a strong channelizing effect on motor vehicles and bicycles. Bicycle lane stripes remind motorists to expect bicycles and can increase bicyclists' confidence that motorists will not stray into their path of travel.

Bike Lanes, Sidewalks, and Shared-use Paths

Sidewalks and shared-use paths that parallel streets and highways are important parts of a city's system of nonmotorized transportation facilities. However, they do not eliminate the need for on-street bikeways, particularly on streets with lower motor vehicle speeds and many driveways and intersections. While riding a bicycle on the street puts the cyclist closer to motor vehicle traffic, it can offer advantages compared to riding on a sidewalk or shared-use path.

These are some advantages of bike lanes when compared to off-street facilities:

1. Increases visibility of cyclists to motorists, particularly at intersections
2. Reduces conflict between cyclists and pedestrians
3. Prepares motorists to expect cyclists
4. Costs less to implement
5. Provides a facility where sidewalks or paths do not exist or are off limits to cyclists (as in downtown areas)
6. Allows cyclists to travel at greater speed