North Liberty Trails Network Plan

Recommended for approval August 6, 2009 by the North Liberty Parks and Recreation Commission
Deanna Kerschen
Kerry Fitzpatrick
Dan Skemp
Jami Maxson
Steven McCann
Shelby Behrens
Carmen Noska

Adopted August 25, 2009 by the North Liberty City Council
Mayor Tom Salm
Colleen Chipman
Terry Donahue
Gerry Kuhl
Chris Hoffman
James Wozniak
Trails Network Plan Proposal for North Liberty

Report Summary
The trails plan presented in this document includes a network of off-road trails and wide sidewalks, the latter generally located along major streets (see box below). Major recommendations are as follows, explained in more detail in the following paragraphs:

1. **Trail and Wide Sidewalk Widths.** Off-road trails and trails providing principal connections to neighboring jurisdictions should be 10 feet in width, and wide sidewalks on the trails network should be 8 feet in width.

2. **Trail Maintenance.** A policy of maintaining all facilities included in the trails network, including snow removal and renovation/replacement but not adjacent mowing should be adopted.

3. **Other Sidewalk Widths.** Sidewalks along major streets not in the trails network should be developed with a 4 foot width on one side and a 6 foot width on the other.

It is anticipated that most of the trails in the proposed network will be constructed by developers as a part of the development process.

History and Background
For some years, the city of North Liberty has been requiring sidewalks of varying widths along city streets. Along designated major streets (see box at left) and sometimes along other streets considered likely to carry significant pedestrian traffic, sidewalks have been somewhat wider, at least along one side of the street. Today, 4, 5, 6, and 8 foot wide sidewalks may be found because of varying policies over time. With adoption of the City Design Standards, the city standardized its sidewalk width requirements at:

- Local (non-major) Streets: 4 feet on both sides, and
- Major Streets: 4 feet on one side, and 8 feet on the other.

This practice coincided with increasing popularity and federal recognition that trails are a desirable quality-of-life feature and may be a significant element of “complete” transportation networks across the country. Trails may take several forms, the most common being:

- Off-road facilities such as the main 10 foot wide North Liberty north-south trail connecting to Coralville, separated from streets and usually located along former rights-of-way or flood plains;
- Wide paved shoulders, most common along rural roadways, such as the those planned by Johnson County;
Wide unstriped outside travel lanes that provide extra room for bicycles and automobiles to occupy the same general area;

- Bike lanes striped within the width of street paving; and

- Wide sidewalk facilities such as those found throughout North Liberty.

This report reexamines trails and wide sidewalks policies, with the following general questions in mind:

- Should wide sidewalks be considered “trails?”
- Who is responsible for maintenance of wide sidewalks both in place and planned?
- Is the current standard for wide sidewalks adequate and appropriate?

Notably, this report does not address the needs of what might be thought of as the highly-experienced rider, who rides faster and is more comfortable interacting directly with vehicular traffic. Facilities for those riders, such as marked or unmarked wide curb lanes and other special on-street markings such as “sharrows,” can and should be addressed separately.

Existing Trails in North Liberty

Throughout this text the term “trail” is used in its most generic sense – a wide paved multi-purpose surface for use by casual pedestrians, bicyclists, skaters, runners and others. Trails are differentiated from sidewalks in that they are wider and located where more users are expected and directed.

It is safe to conclude that wide sidewalks can and do function as trails in North Liberty. While there is a potential for drivers not expecting fast-moving riders on wide sidewalks crossing driveways, it is suggested here that adequate signage and popular awareness of a well-publicized trails network will minimize that risk, and it should be noted that the majority of locations recommended along major streets have minimal numbers of back-out driveways.

To identify a trails network for the city, it is important to first have a reasonably complete and accurate knowledge of existing facilities. In the summer of 2008 a survey of existing sidewalks and trails was conducted for the city by the Johnson County Council of Governments (JCCOG), and the results are shown in Exhibit A. Most important for the purposes of this report are the locations and potential connectivity of the widest sidewalks.

Trails Maintenance

An important consideration in designating a trails network is that of ongoing maintenance and upkeep, as well as long term replacement. Sidewalks over 6 feet in width can become expensive, time consuming, and difficult to maintain, especially for residential home-owners. This report strongly suggests that city maintenance be provided for the 8 foot-wide sidewalks that are part of the trails

The Parks Department is mainly responsible for trails maintenance in North Liberty. Trails narrower than 8' are not desirable because they require a narrow snow blade not used for most other locations. Trails over 8' in width would probably only be plowed to 8' because a second trip of the plow for only an extra foot or two would be not be economical.
network. With that recommended obligation in mind, an attempt was made to identify a complete trails network that includes most of the existing 8 foot walks, provides good connectivity, and minimizes maintenance responsibilities for staff.

For reference, a map of trails and wide sidewalks currently maintained by the city is shown on Exhibit B. Approximately 9 miles are currently city-maintained.

City maintenance of trails on the trails network is recommended to include snow removal and repair and replacement of the trail surface. Adjacent property owners would still be required to mow the grass within the right-of-way between the property line and the street curb.

**Trail Connections**
Exhibit C shows features considered to be important for access from the trails network, including schools, civic facilities, commercial areas, and parks. In addition, Johnson County plans to establish a trail facility entering North Liberty on Dubuque Street from the south and on Mehaffey Bridge Road from the north, so connections need to be established both through North Liberty and to the North Liberty trail network. Loops are planned whenever possible to provide a variety of accessible locations and to maximize snow clearing efficiency.

**Width Determination**
If no wide sidewalks existed and a new trails network could be created from scratch, 10 foot wide sidewalks would likely be proposed as the ideal; however, it can be seen in Exhibit A that 8 foot sidewalks already exist in many logical trail locations, and no 10 foot sidewalks currently exist. In order to avoid a network of mismatched and inconsistent sidewalk widths, wide sidewalks identified in the trails network are recommended to be built to a width of 8 feet.

It is anticipated that developers will construct most of the 8 foot wide trails shown on the proposed network as a condition of new development approval by the city; however, some network sections may need to be built without that assistance. When considering the potential for state or federal trails funding, it should be noted that trails must be at least 10 feet wide to qualify for funding under several programs administered by the Iowa DOT. Federal or state funding is best pursued for the Highway 965 project, the Dubuque Street to Mehaffey Bridge Road connector, and other logical 10 foot locations that may be identified.

**Other Wide Sidewalks**
As noted above, sidewalks wider than 6 feet are difficult and perhaps unreasonable to be maintained by adjacent residential owners. In recognition of this, and to provide a logical differentiation between wide walks on the trails network and those not on the network, the major streets sidewalk design standard for major streets not a part of the trails network needs to be modified to require a 4 foot sidewalk on one side of the street and a 6 foot sidewalk (rather than the 8 foot standard currently adopted) on the other. A summary of the sidewalk design standards is:
• Trail network major streets: 4 feet wide on one side, and 8 feet wide on the other.
• Other major streets: 4 feet wide on one side, and 6 feet wide on the other.

The Trail Corridors Network
This report identifies a trails network as shown in Exhibit D. This network of approximately 22.3 miles provides good connectivity throughout the city to important destinations while minimizing future maintenance costs for the city. It takes advantage of existing infrastructure so that a robust looped network can be developed with relatively few new connections and built upon as development and redevelopment occurs. It provides a backbone network for citizens of North Liberty to enjoy family outings and possibly to save gasoline by making some pleasure trips and chores attainable without an automobile. Last, it provides for appropriately scaled sidewalks both within and outside the trails network.

The trails network map is a planning document that identifies general locations, and can be thought of as a “corridor map.” Once approved, specific plans for locating each segment of trail will need to be developed. Importantly, it should be thought of as a “living” document that can and should be updated and modified over time as conditions change.

Maintenance responsibilities for the city will be increased from approximately 9 miles to approximately 22.3 miles when the entire network is implemented. This is a significant additional responsibility for the Parks Department, and must be considered during future budget deliberations.

Priority Connections
Exhibit E illustrates a logical sequence for trail development and acceptance by the city of maintenance responsibilities, including the following elements:

First Priorities. These projects can be completed quickly and easily, and provide a substantial impact.
1. Cherry Street. This connection, generally from Highway 965 to Penn Meadows Park, provides a vital east–west connection from Penn Meadows to the main off-street trail, to the library and recreation center, under 965, to Liberty Center and Quail Ridge Park.
2. Dubuque Street/Mehaffey Bridge Road. This connection through town provides a critical link in the planned Cedar Rapids to Iowa City trail. Johnson County plans to establish the rural sections of this trail on Dubuque Street and Mehaffey Bridge Road within the next several years. This trail will also connect with the Cherry Street first priority trail to provide access to the North Liberty system.

Second Priorities. These projects are somewhat larger in scope than the first priorities, and may take somewhat longer to budget and accomplish.
3. Penn Street/Alexander Way. A substantial amount of wide sidewalk already exists in this loop, missing mainly at the Pelling frontage along Penn Street and at undeveloped commercial lots on the west side of Alexander Way. Maximum utility could be provided with a relatively limited expenditure.
Third Priorities. This lowest grouping of priorities addresses the longer-range projects dependent on other circumstances to fall into place.

4. Muddy Creek Trail. This separated trail has been discussed in the past as a joint project with Coralville.

5. Penn Street West. This extension of the Penn Street trail west across Interstate 380 is anticipated to be constructed with the eventual project to widen the overpass bridge.

6. Dubuque Street Connector. This project connects the existing trail on Dubuque Street to the Highway 965 trail, once that project is completed.

With Development. Trail corridors in this category are anticipated to be constructed as new development or major street reconstruction projects occur. In some cases, such as along Kansas Avenue, some of the wide sidewalk is already in place, but the city should delay accepting maintenance responsibilities until reasonable maintenance loop routes can be developed.

With 965 Project. A trail extension is planned as part of the Highway 965 reconstruction project.
Exhibit A
North Liberty Trails Plan
Sidewalk Width Survey

- 8FootSidewalks
- 6FootSidewalks
- 5FootSidewalks
- 4FootSidewalks
- 3FootSidewalks
- City Parks
- Corporate Limits

0.25 Miles
Exhibit B
North Liberty Trails Plan
City Maintained Trails & Walks

Currently Maintained: 8.8 Miles
This section is to be rebuilt as a sidewalk with 965 reconstruction.

Exhibit D
North Liberty Trails Plan
Trails Plan

- Commercial Trail Destinations
- Rec Center/Library
- School
- Trail Corridors
- City Maintained Facilities
- City Parks
- Corporate Limits

- 0.25 Miles
Exhibit E
North Liberty Trails Plan
Trail Priorities

Priorities
- Existing & Maintained
- First
- Second
- Third
- With Development
- With 965 Project

Legend:
- City Corridors
- City Maintained Facilities
- City Parks
- Corporate Limits

Total Network: 22.3 Miles