Minnesota River Bluffs Extension and Scott County Connection Regional Trail Master Plan

This plan was prepared in partnership by:
Scott County Parks & Trails
Carver County Parks

The mission for Scott County parks and trails is to enhance the health and spirit of our residents and guests by creating a sustainable system that connects people to the natural world.

The purpose of the Parks and Recreation Department is to provide a variety of quality recreational experiences, services, and lands that meet the needs of the residents of Carver County and Carver County Regional Park users.

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Background

Introduction

The extension of the Minnesota River Bluffs Regional Trail and the Scott County Connection corridor (Map 1) master planning process provides a vision for the Union Pacific Railroad Chaska Industrial Lead corridor (and the existing Kenneth Frey Trail in the City of Carver) as a multi-use trail that provides a major connection to the Carver County and Scott County regional trail systems. The master plan outlines the development requirements and operations costs associated with constructing and managing an approximately 4.2 mile long regional trail facility. The master planning process is designed to identify issues and opportunities, outline the costs and identify public need and interest in the proposed trail project.

In 2007 Union Pacific Railroad (UP) filed a Notice of Exemption with the Surface Transportation Board to abandon 5.3 miles of railroad between Merriam Junction in Scott County and the United Sugars processing plant in Chaska of Carver County. The abandonment was requested following the collapse of a bridge structure in the spring of 2007, and the lack of commerce to support the costs of replacing the bridge and continuing service.

Scott County Regional Railroad Authority Board (SCRRA), Carver County Regional Railroad Authority (CCRRA), Metropolitan Council, and the cities of Carver and Chaska entered into a joint powers agreement (JPA) in January 2008 to discuss UP corridor reuse opportunities, identify issues with the corridor, file abandonment documents with the Surface Transportation Board, and develop a negotiating position for acquisition of the corridor. The JPA recognized trail use as one of several uses that could be supported on the rail corridor, providing a significant trail connection between Scott and Carver counties.

The Surface Transportation Board considered UP's filing for abandonment in 2008, but agreed to a negotiating period between UP and the JPA to transfer ownership of the corridor under the federal rail banking "Interim Trail Use" program. The "Interim Trail Use" essentially freezes the abandonment process and preserves the corridor intact and designates it for trail and other public purposes. With the federal rail banking "Interim Trail Use" program, the SCRRA and CCRRA would own the corridor in fee title. However, the rail banking program also provides the opportunity for rail service to return at some point in the future.

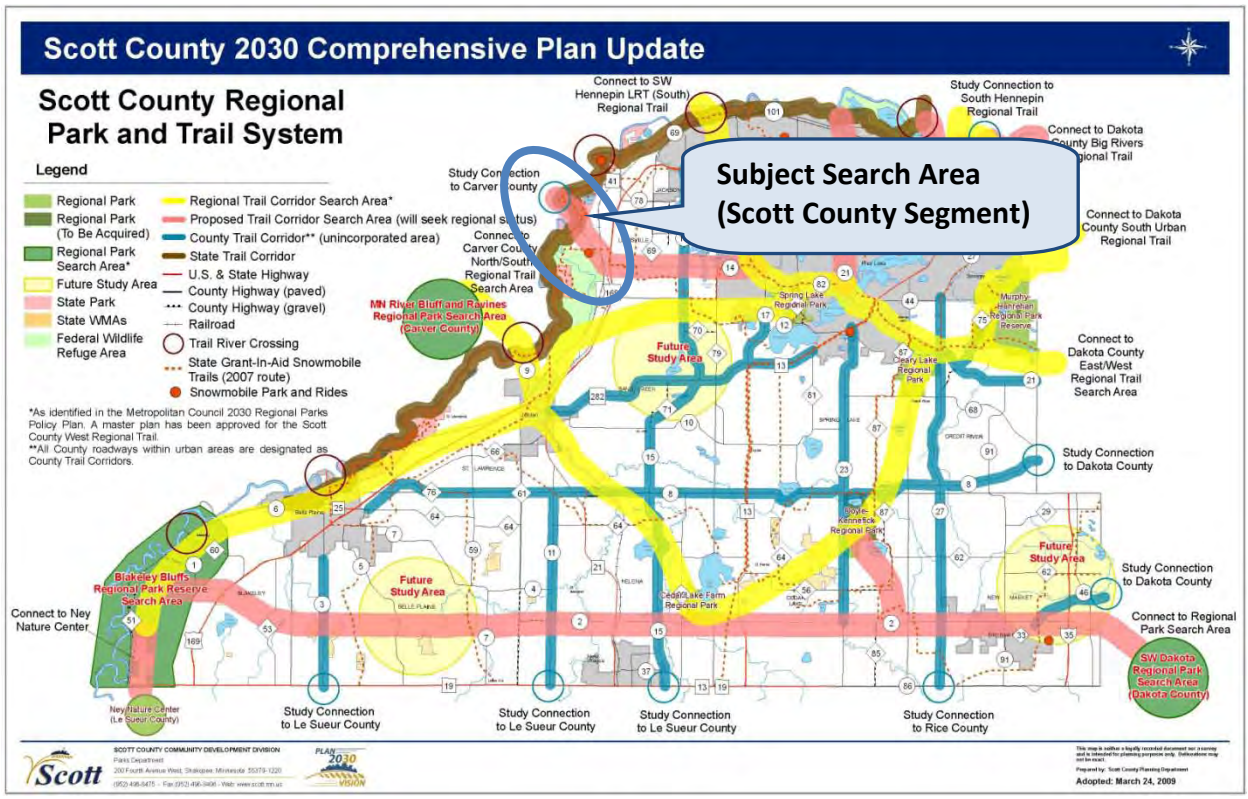
With the Minnesota River serving as a border and significant barrier between Scott and Carver counties, limited opportunities exist like the UP rail corridor to link the two communities. The need for a recreational connection between the two counties is apparent due to the abundance of publicly owned recreational and protected wildlife lands and planned recreational trails along both sides of the river. It is important to preserve this connection today before the opportunity is lost.

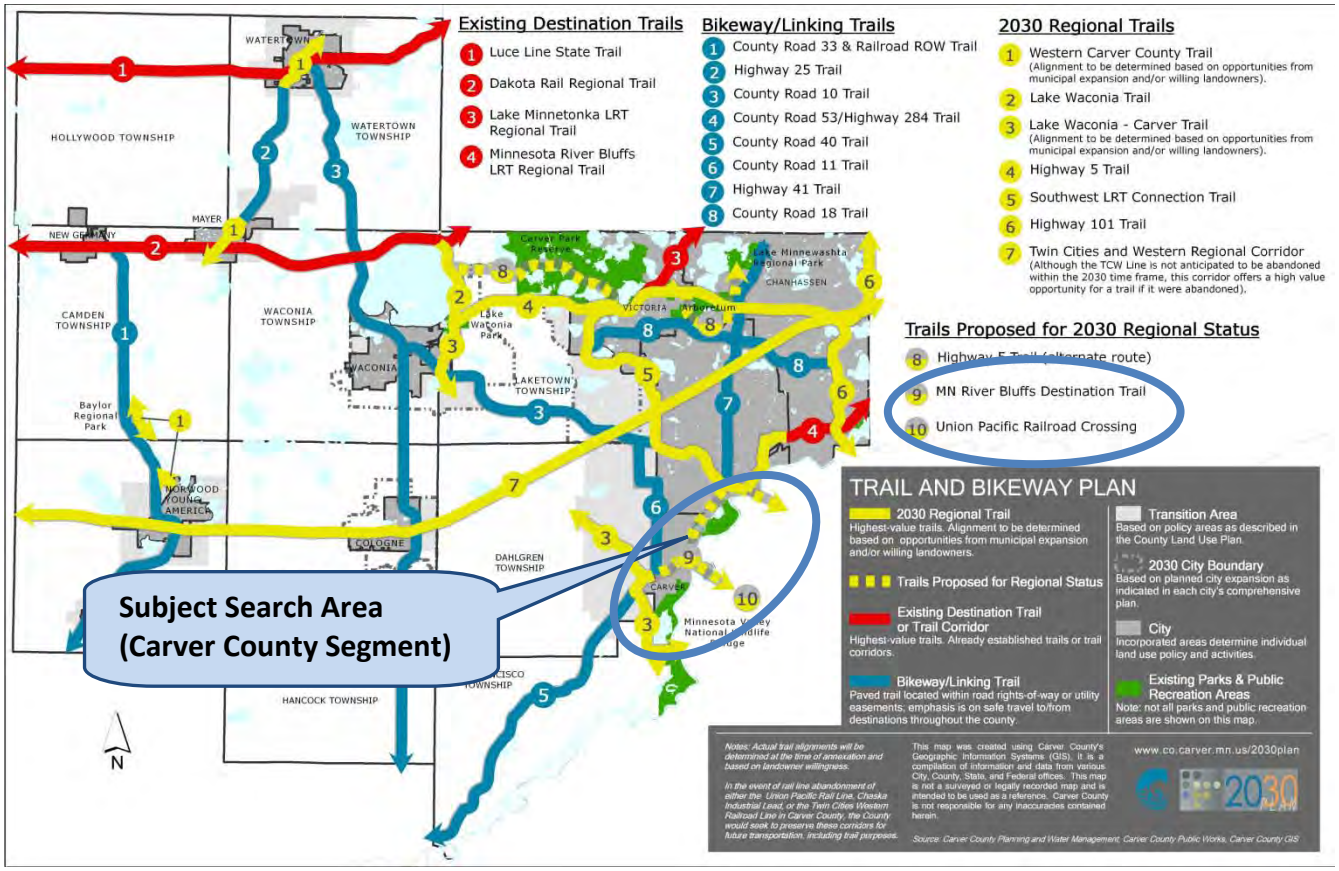
Planning Framework

The mission for Scott County parks and trails is to enhance the health and spirit of our residents and guests by creating a sustainable system that connects people to the natural world.

The purpose of the Parks and Recreation Department is to provide a variety of quality recreational experiences, services, and lands that meet the needs of the residents of Carver County and Carver County Regional Park users.

Scott and Carver counties prepared this regional trail master plan jointly in accordance with all applicable local and regional goals and policies. Scott and Carver counties identified the need for a regional trail connection utilizing the Union Pacific railroad corridor and river crossing in their respective 2030 Comprehensive Plans. In 2010, this connection was included as a regional trail search corridor in the Metropolitan Council 2030 Regional Parks Policy Plan Update. This planned trail extension of the Minnesota River Bluffs Regional Trail and the Scott County Connection fulfills the objectives of local and regional planning documents. The trail is proposed to extend from Athletic Park in Chaska over the Minnesota River at the City of Carver and continue to Merriam Junction in Louisville Township. The existing Kenneth Frey Trail along the river levee in Carver is also included as part of this regional trail extension. The remainder of the Louisville search corridor in Scott County is not included in this plan and its connection to the rest of the Scott County will be explored at a future date.





The extension of the Minnesota River Bluffs Regional Trail and the Scott County Connection identified in this master plan will make the following connections to existing and planned regional parks and trails in Scott, Carver, and Hennepin counties:

Existing Regional/State Trail Connections

- Southwest Regional Trail Connection – Chaska to Victoria
- Minnesota Valley State Trail
- Minnesota River Bluffs LRT Regional Trail (via Southwest Regional Trail connection)
- Lake Minnetonka LRT Regional Trail (via Southwest Regional Trail connection)
- Scott County West Regional Trail (via Minnesota Valley State Trail Connection)

Future Regional Trails/Search Area Connections

- Minnesota River Bluffs Trail Extension Search Area (southern segment – Carver County)
- County Road 10 Regional Trail Search Area (Carver County)
- Louisville Trail Corridor Search Area (Scott County)
- Spring Lake Regional Trail Corridor Search Area (Scott County)

Existing Regional/State/Federal Park Connections

- Carver Park Reserve (via Southwest Regional Trail connection)
- Bryant Lake Regional Park (via Minnesota River Bluffs LRT connection)
- MN Valley State Recreation Area

- Minnesota Valley National Wildlife Refuge Rapids Lake Education & Visitor Center (via future extension of Minnesota Rivers Bluffs Regional Trail southern segment)

Future Regional Parks/Search Areas Connections

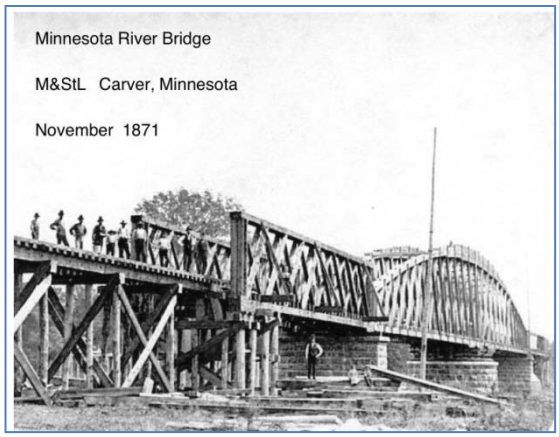
- Spring Lake Regional Park (via Louisville Trail Corridor Search Area)

As the search areas in the counties' comprehensive plans illustrate, the subject UP rail corridor serves as a key extension of the Minnesota River Bluffs Regional Trail. This extension connects the cities of Chaska, Carver, and Shakopee (via Southwest Regional Trail Connection and the Minnesota State Valley Trail) to the existing Minnesota River Bluffs LRT Trail in Chanhassen. Ultimately, this extension allows a future connection to the new visitor center at the National Wildlife Refuge, the Minnesota River Bluffs Regional Park search area, and a continuation of the envisioned trail to Belle Plaine along the Carver County side of the Minnesota River.

Current Conditions of Corridor

Typical View from Corridor

MN River Bridge Span



Original MN River Bridge Span

Demand Forecast

With the Minnesota River serving as a border between Scott and Carver counties, there are limited opportunities to connect the two counties. The need for a recreational link between Scott and Carver stands out due to the abundant recreational and publicly owned lands along the Minnesota River, a growing population base in the southwest metro, and changing trends in recreation. This section highlights some of the forecasted user demands and trends anticipated for the proposed Minnesota River Bluffs Extension and Scott County Connection.

Population

As of the most recent population estimates (2009), Scott County and Carver County have a combined population of 222,181 residents. This is a 39 percent increase from the 2000 US Census estimate. Population forecasts produced by the Metropolitan Council anticipate nearly 200,000 more individuals living within both counties by 2030. While these forecasts were developed before the recent economic recession occurred, the overall trend of population expansion is expected to continue in both Scott and Carver counties over several decades.

Studies performed by the Metropolitan Council indicate that 50 percent of regional trail users live within 0.75 miles of the trail, and 75 percent live within 3 miles of the trail. The 0.75-mile area around the trail is considered the core service area, and the 3-mile area around the trail is the primary service area (see Map 2). Three communities (Chaska, Carver, and Louisville Township) with a combined population of 28,500 are within the core service area. Seven additional communities are part of the primary service area. Long-term forecasts assume the trail will serve 150,000 residents within the primary service area communities, although this number does include residents beyond three miles from the trail. Completing the gap with a new trail bridge across the Minnesota River will be key to connecting residents on the Scott County side, accessing US Fish & Wildlife (USFW) Refuge lands and connecting trail systems of the two counties.

Trail Service Area - Population Estimates & Forecasts, 2000 to 2030					
City/Township	**Census 2000**	**Estimate 2009**	**Forecast 2010**	**Forecast 2020**	**Forecast 2030**
Core Service Area - communities within 0.75 miles of trail					
Carver	1,266	3,024	4,680	4,630	4,560
Chaska	17,603	24,177	27,600	33,000	35,700
Louisville Twp	1,359	1,361	1,390	1,500	1,700
Core Service Area Sum	**20,228**	**28,562**	**33,670**	**39,130**	**41,960**
Primary Service Area - communities within 3 miles of trail (excluding core service area)					
Chanhassen	20,321	23,629	27,500	34,500	38,000
Shakopee	20,568	34,691	39,500	48,500	52,000
Dahlgren Twp	1,453	1,544	2,200	14,000	16,600
Jackson Twp	1,361	1,623	1,420	1,500	1,670
Laketown Twp	2,331	2,143	1,800	830	0
San Francisco Twp	888	975	980	1,100	1,200
Sand Creek Twp	1,551	1,750	1,650	1,850	2,100
Primary Service Area Sum	**48,473**	**66,355**	**72,050**	**102,280**	**111,570**
Total Core and Primary Service Areas	**68,701**	**94,917**	**105,720**	**141,410**	**153,530**
County-wide					
All Scott County	**89,498**	**130,953**	**140,570**	**182,620**	**220,870**
All Carver County	**70,205**	**91,228**	**110,740**	**163,830**	**198,500**
Total Scott and Carver Counties	**159,703**	**222,181**	**251,310**	**346,450**	**419,370**

Source: 2000 US Census, Met Council 2009 Population Estimates, Met Council Population Forecasts (Regional Development Framework Revised as of December 31, 2009).

Survey Findings

Regional Survey Findings

Metropolitan Council coordinates annual surveys and user counts at all regional facilities with each Regional Park Implementing Agency. The following statistics on regional park and trail use were compiled as part of the *Annual Use Estimate of the Metropolitan Regional Parks System for 2009*:

- An estimated 38,062,600 visits were made to the Metropolitan Regional Parks System in 2009.
- Twenty-one percent of all visits in 2009 were to regional trails and 79 percent were visits to regional parks, park reserves and special recreation features.
- Although Anoka County Riverfront, Minneapolis Chain of Lakes, and Mississippi Gorge are regional parks, the majority of visits to these parks are for trail use. If the trail visits to Anoka County Riverfront, Minneapolis Chain of Lakes and Mississippi Gorge area were included in the trail totals, 38 percent of all 2009 visits were to trails.

- Fifty-five percent of all visits to regional parks and trails are considered "local" visits. A local visit is defined as a visit to a park or trail by a person who lives within the jurisdiction of the park agency that owns or operates that park or trail. Conversely, 45 percent of all visits to regional parks and trails are "non-local" visits, which clearly demonstrates that the system serves a regional audience.
- Approximately 69 percent of visitors at regional facilities within Scott County are local (i.e., Scott County residents). In Carver County, local visitation is 48 percent.
- Walking and biking are the top activities in the regional parks system, followed by swimming, jogging, picnicking and relaxing.

The following are the primary activities that attract users to the regional system. Similar to statewide statistics, the primary uses are trails activities (hiking/biking), water uses, and picnicking. Their popularity is also related to their availability, as these are generally the most common activities provided at regional and state parks.

Top Activities in the Regional Park System, 2009

Activity	Percent of Park Activity Occasion	Percent of Trail Activity Occasion	Percent of Total Visits
Walking/hiking	21%	30%	23%
Biking	10%	45%	18%
Swimming	16%	2%	13%
Picnicking	10%	0%	8%
Relaxing	9%	2%	7%
Jogging/running	5%	10%	6%
Playground use	7%	1%	6%
Dog-walking	5%	7%	5%
Sunbathing	6%	1%	5%
Fishing	6%	1%	5%
Boating	4%	0%	3%
Zoo visits (Como)	4%	0%	3%
In-line skating	2%	4%	2%
Camping	2%	0%	2%

Source: Annual Use Estimate of the Metropolitan Regional Parks System for 2009, Metropolitan Council

Overall, previous surveys in Carver and Scott counties show that residents value parks and trails for recreational opportunities. There also appears to be a strong connection to the use of parks and trails for open space preservation and environmental, wildlife and habitat protection. Residents are also generally satisfied with existing services, although the need for more services is also represented.

State Survey Findings

At the state level, the Minnesota Department of Natural Resources (DNR) continues to survey state park users and get an understanding for current and future needs. The top ten recreational activities for Minnesota adults are listed in the following table.

Top 10 Outdoor Recreation Activities of Minnesota Adults (population 20 years and older, participating annually)	
Activity	**Percent of population**
Walking	54%
Boating of all types	43%
Swimming or wading all places	41%
Driving for pleasure on scenic roads	37%
Picnicking	36%
Fishing of all types	30%
Biking outdoors of all types	29%
Visiting outdoor zoos	27%
Camping of all types	26%
Visiting nature center	25%

Source: 2008-2012 Statewide Comprehensive Outdoor Recreation Plan, Minnesota DNR

According to the 2008-2012 Statewide Comprehensive Outdoor Recreation Plan (SCORP), "a majority of residents—57 percent—believe outdoor recreation is a 'very important' part of their life and another 25 percent believe it is 'moderately important.' Outdoor recreation is at least moderately important to the vast majority of Minnesotans, but they often don't feel they have enough time to participate as often as they'd like. Expense, effort, outdoor pests and lack of companions all keep people from taking part in outdoor activities." The planned regional trail system may help address this concern of limited time availability for Scott and Carver County residents. Providing recreational opportunities close to home will increase the availability of outdoor recreation and reduce the amount of travel time required to access these facilities.

Trends in Outdoor Recreation

A number of recent studies have shown a decline in nature-based recreation at the state and national level. In Minnesota, declines have been recorded in fishing, hunting, state park visitation, and state bicycle trail use. The 2007 Minnesota State Parks Research Summary Report found participation declines are most prevalent in age groups 45 and younger. The trend in declining outdoor recreation use can have lasting impacts, as this study found the

strongest association with adult park use is the direct experience with parks as a child. Thus, the decline in childhood visitation today may lead to reduced adult visitation decades later.

Studies at the national level stress this same concern for declining use in outdoor recreation. The 2009 Outdoor Recreation Participation Report (Outdoor Foundation) found declines in youth participants, women aged 21-25 (who prefer to recreate indoors), and minority groups. Increased technology, less free time, costs, and accessibility all factored in to the reduction of participation. However, the survey also found more Americans participating in outdoor activities in 2008, likely due to the changing economy where many people are choosing to take shorter vacations closer to home and a return to a simpler lifestyle. Activities like camping, hiking and mountain-biking experienced increases in participation. The study found gateway activities such as fishing, bicycling, running/jogging, camping, and hiking tend to lead to participation in other outdoor activities.

Other non-recreational trends may also impact the regional trail system. Nationwide, concerns for climate change, energy independence, active living, and sustainability have led many to explore ways of driving less and using other forms of transportation. This has led to a desire for more trails and bikeways to serve both short distance and commuter trips. The aging society is also having a significant impact on changing needs for recreation. The Baby Boomer generation is currently using the regional park system at rates that are higher than their actual proportion of the metropolitan area population; visitation by people over the age of 60 is expected to increase as this generation ages. Facilities will need to be kept up to Americans with Disabilities Act (ADA) standards, and more opportunities for low-impact and educational learning opportunities will need to be provided to meet the needs of this growing user base.

Parks and Trails Legacy Plan

This proposed regional trail master plan is consistent with the strategic directions identified in the recent statewide *Parks and Trails Legacy Plan*. This regional trail will "connect people to the outdoors" (strategic direction 1), taking advantage of the wonderful views and surrounding public park lands to allow trail users a unique connection to nature in a developing area. This master plan also addresses priorities to "acquire land, develop opportunities" as defined in strategic direction 2. These priorities include "making high-priority trail connections and filling critical gaps," and "focus on near-home, convenient opportunities near regional centers and areas of shortage." Two regional park agencies working together on this plan and ensuring a consistent trail experience beyond boundaries also satisfies strategic direction 4: "coordinate among partners."

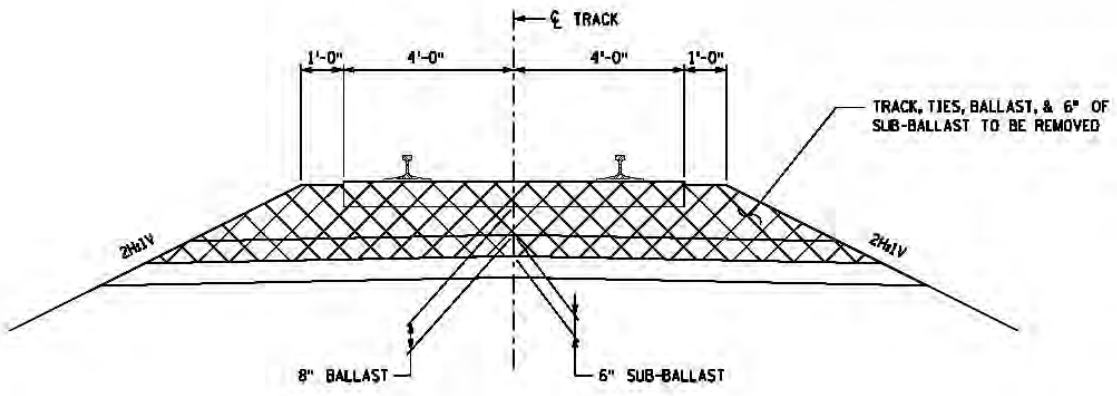
Development Concept

TKDA completed an evaluation of the Union Pacific Railroad Company's (UP) Chaska Industrial Lead in 2008 (see Appendix B) to determine the level of effort required to transform the rail line from its current condition into a multi-use trail. The investigation focused on modifications to the existing railroad cross section and on evaluation, rehabilitation, and/or replacement of the major bridge locations on the line. Special attention was required to address the unique hydraulic situation at the main bridge over the Minnesota River (MP 36.17). The investigation indicated that re-use of the existing line for a multi-use trail is possible, and most of the existing bridges can be utilized (via retrofitting) for trail use.

Trail Design

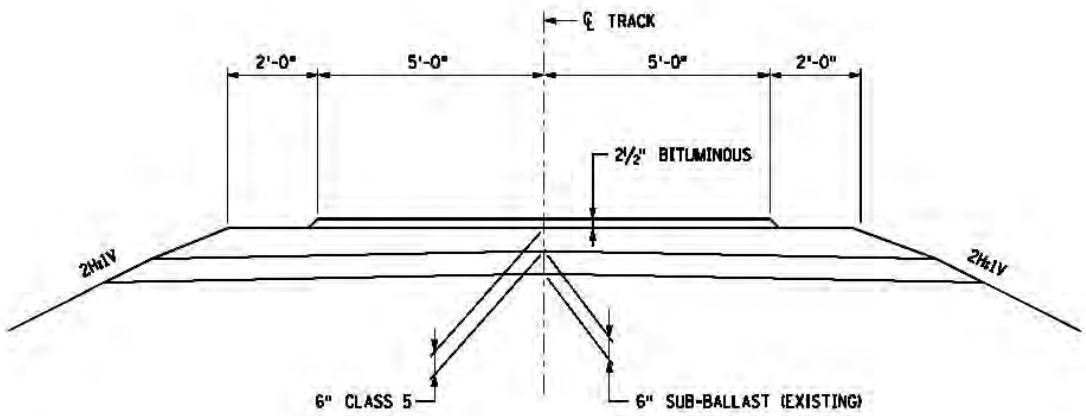
The proposed 3.7-mile trail (within the rail corridor) will be designed in accordance with applicable American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, 1999, and Minnesota Department of Transportation's, Minnesota Bikeway Facility Design Manual, 2007. The trail will be ten feet wide with a minimum two-foot clear-zone on each side. The trail will have a bituminous or crushed rock agricultural lime surface. A bituminous trail surface is the preferred long-term surface treatment because it is durable, dependable and is cost effective through its life cycle as compared to other surface treatments. Bituminous trails offer a wide variety of trail uses including bicycling, walking, running, and in-line skating, which are all popular regional trail activities. However, a crushed rock or agricultural lime surface may be used as an interim trail improvement. Sections that may be prone to flooding should be designed to limit deterioration of the surface.

The steel rails and ties will be removed by Union Pacific as part of the purchase agreement. The remaining railroad grade is suitable for reuse as a pedestrian trail with a few modifications. The proposed trail section will have a 10-foot-wide paved (or interim unpaved surface) trail section with 2-foot unpaved shoulders on both sides, for a minimum trail width of 14 feet. Currently, the railroad grade is approximately 10 feet wide. In order to accommodate a 14-foot-wide trail section, the entire ballast section and a portion of the subballast under the ties may be removed, crushed or regraded. Typical removal will include 8 inches of ballast and 6 inches of subballast under the ties. Based on typical railroad grade construction, the proposed removals would eliminate the entire ballast section, leaving only a portion of the subballast on which to construct the trail section, as shown in the following figure.



Typical Section – Proposed Removal

The typical reconstructed trail section is shown below and consists of a 2.5-inch-thick minimum bituminous trail section, 10 feet wide, supported on 6 inches of compacted Class 5 aggregate fill.



Proposed Typical Trail Section

The reconstructed trail section will effectively lower the profile of the embankment by approximately 12.5 inches along its entire length, excluding the vicinity of the bridges and the area containing the City of Carver levee. The removal will help offset the fill required for the proposed raise in trail profile required to raise the replacement structure for the collapsed bridge (MP 37.14) above the 100-year flood elevation. The elevation of the portion of the railroad embankment that serves as a part of the Carver levee will not be lowered as a result of this project. In addition, trail design and construction activities will need to be coordinated with the City of Carver for the area co-located within the Carver levee and regional trail in order to ensure that construction activity does not negatively impact the integrity of the levee.

An alternative to removing the ballast material may be considered. The ballast will be evaluated for the potential to be crushed to a suitable engineering specification to be reused on-site as a base material for the bituminous trail.

There are three at-grade road crossings along the proposed trail segment. All are on local streets with low traffic volumes. Road crossings will primarily be designed using trail crossing striping and signage consistent with Mn/DOT standards. In addition to safety signing, roadway crossings will have surface paint marking the trail location.

- **First Street West, Chaska**: Cul-de-sac that provides access to Athletic Park, one private property, and existing SW Regional Trail. Proposed trail will utilize existing regional trail crossing.
- **Main Street East, Carver**: Existing railroad crossing above Main Street East will be removed and trail rerouted to an at-grade crossing at entrance to Riverside Park.
- **145th Street West, Louisville Township**: At-grade crossing to connect proposed trail to existing parking lot at Louisville Swamp Refuge Unit. Roadway has limited access to undeveloped properties at location of trail crossing.

Bridge Reuse Analysis

The Union Pacific railroad corridor currently has nine bridge/culvert structures. Seven structures are within the corridor that may be reused for the proposed regional trail. In order to better understand the challenges associate with reuse, the JPA retained the services of TKDA Engineers to study select bridges. The following is a summary of the results and a brief description of the structures. The "MP" stands for "mile post", which is how the bridges are named. See Appendix C for location of structures and images.

- **MP 37.35, 164' long, constructed in 1958**
  This bridge crosses a backwater and floodway area. The bridge is in relatively good structural condition and could be retrofitted for trail use. Estimated costs to retrofit the bridge for purposes of a multi-use trail are $100,000.

- **MP 37.14 (collapsed), previously 136' long, constructed in 1947**
  This is the site of the collapsed bridge and derailment. The bridge was removed as part of the cleanup. This area is experiencing river bank erosion and would need to be armored as part of any bridge replacement. Estimated costs to replace the bridge and modify the river embankment are $670,000.

- **MP 36.77, 540' long, constructed in 1954**
  This bridge also crosses a backwater and floodway area. The bridge is in relatively good structural condition and could be retrofitted for trail use. However, the bridge is susceptible to backwater flooding during high water flood events. Estimated costs to retrofit the bridge for purposes of a multi-use trail are $320,000.

- **MP 36.17, Minnesota River Bridge, 600' long, constructed in 1917**
  The TKDA bridge report discusses the five segments A-E of the bridge (see Appendix B for detailed information). This bridge was the priority focus for the study due to its visual deterioration and the log jams that occur below it. It was thought that these log jams potentially cause greater risk of flooding to the City of Carver.

  TKDA studied hydraulic conditions, reviewed underwater inspection reports, and conducted visual inspections of this bridge. TKDA concluded the following:
  1. The main portion of the bridge segments C, D, and E have structurally deteriorated to the point that it is not suitable for retrofitting as a trail or transportation bridge.
  2. Due to scouring and undermining of the piers, the bridge will collapse someday. It should be removed prior to the change in ownership of the corridor.
  3. Removing the bridge and piers will help to reduce the cause of log jams at this site.
  4. Blockage of the river from log jams does not have a significant impact on flood elevations at higher water levels (as it follows other floodways upstream).

  Although the bridge analysis indicated that segments A and B are in fair to good structural condition, it is not proposed that the trail would utilize these bridge structures. Rather the trail will follow the levee elevation across Main Street East in Carver and over to the existing Kenneth Frey Trail. This eliminates the need for infrastructure and helps with the sustainability of the trail. Union Pacific will be responsible for removing (and funding the removal of) the Minnesota River Bridge (segments A-E), as defined in the purchase agreement.

  Estimated costs for construction of a new bridge spanning the main river channel for purposes of a multi-use trail is $2,235,000.

- **MP 35.30, Unnamed Stream**
  This is a culvert serving outflow of a stream. No major issues or improvements to this culvert are anticipated.

- **MP 35.10, Local Ditch**
  This is a culvert serving flow of a ditch. No major issues or improvements to this culvert are anticipated.

- **MP 34.75, West Chaska Creek**
  This bridge is adjacent to Athletic Park and the First Street West cul-de-sac in Chaska. Additional analysis is needed to determine if this bridge will be utilized for trail purposes. Preliminary planning work indicates that the trail alignment could be configured to not utilize this bridge, and instead follow First Street West to connect to the existing SW regional trail. It will be determined during the construction planning stage if this bridge will be utilized for trail purposes. The Carver County Regional Railroad Authority will be responsible for any agreements for reuse, modifications, maintenance or removal.

Kenneth Frey Trail Segment

It is proposed that the Kenneth Frey city trail be incorporated in this regional trail master plan. This roughly 0.5-mile long trail connects to the Union Pacific Railroad right-of-way and follows the levee system in Carver. The trail alignment is consistent with the Carver County Comprehensive Plan and Metropolitan Council 2030 Parks Policy Plan for extending the Minnesota River Bluffs Regional Trail.

The current alignment shifts the trail off of the levee and returns to Main Street West where both Main Street West and the trail cross Spring Creek. An alternate alignment would continue the trail across Spring Creek connecting the trail from the east bank of the levee to the west bank of the levee via a bridge. Connecting the east and west banks of the levee by bridge works to maintain the aesthetic quality of the trail next to the Minnesota River as well as improve trail function by having this trail segment separated from Main Street West. Up to an acre of land would need to be acquired from the adjacent land owner to install the trail bridge. It is proposed that the existing 8-foot wide city trail would be reconstructed to 10 feet wide in the future to be consistent with regional trail design standard. Reconstruction work would take place at a time when the trail surface is in need of replacement. Map 5D shows the Kenneth Frey Trail in the City of Carver and the alternate trail connection.

Other Elements

Access, signage, vegetative screening, overlooks, and rest areas are important elements of regional trails. Their proper design, stewardship and placement add aesthetic and functional value to the trail. Trailheads are important elements because they provide the amenities visitors need to prepare for trail use and a location for visitors to access the trail. Potential parking lot and trailhead access points have been identified at Athletic Park in Chaska and the existing US Fish & Wildlife Louisville Swamp Refuge Unit parking lot in Louisville Township. A potential trailhead is also identified in the City of Carver at either Riverside Park, Depot Park, or Broadway Street. Additional trailheads will be provided via the Southwest Regional Trail and existing Minnesota River Bluffs Regional Trail connections.

Waste receptacles, portable latrine facilities, and other site amenities may also be provided. Upon permit approval, each community will be responsible for installing and maintaining any signature features on the extension of the Minnesota River Bluffs Regional Trail and Scott County Connection in their community. Signature features may include landscape features, benches or tables, bicycle racks, restroom facilities, trash receptacles, and space for people to prepare before getting on the trail. Carver County and Scott County will coordinate with communities who wish to construct trail elements in the rail corridor.

The extension of the Minnesota River Bluffs Regional Trail and Scott County Trail Connection corridor passes through scenic river valley and bluffs settings. There are a number of locations where scenic overlooks could be constructed along the trail to allow trail users to admire the views from a location other than on the trail itself. Bridges or adjacent areas are often good locations for overlooks because they are elevated and can provide better views.

Proper signage along the trail is important for safety and wayfinding. Traffic control signs, such as stop signs and street name signs at bridges and intersections will be installed along the trail. Informational and directional signage will be consistent with other park signage.

Cost Estimates

Cost evaluations are presented in terms of anticipated 2008 construction costs from the TKDA bridge study. The costs are based on historical unit-cost data for bridge and roadway components with an inflationary factor applied and represent the minimum recommended level of effort required for a full transformation of the rail line. The evaluation supports the following conclusions:

- The Scott County portion (approx. 2 miles) is estimated at $1,350,000 and will require the following:
    - Bridge replacement at MP 37.14 and channel protection: $670,000
    - Bridge repair and retrofit of MP 36.77: $320,000
    - Bridge repair and retrofit of MP 37.35: $100,000
    - Road crossings striping and signage at 145th Street: $7,000
    - Rail retrofit, embankment improvements and trail construction: $253,000
- The Carver County portion (1.6 miles plus existing 0.5 mile Kenneth Frey Trail) is estimated at $380,000 and will require the following:
    - Road crossings striping and signage at First Street and Main Street East: $14,000
    - Rail retrofit, embankment improvements and trail construction: $165,000
    - New Bridge at Spring Creek in Carver (alternate alignment only): $176,000
    - Trail reconstruction on the levee at Carver: $25,000
- Full transformation of the portion of the line from Athletic Park to Merriam Junction (3.7 miles) from its existing condition into a multi-use trail will cost approximately $3,758,000. In addition to the items described above, this cost includes the Minnesota River bridge replacement (MP 36.17) at a cost of $2,235,000.

Removal and retrofit costs are based on the Mn/DOT State Aid average bid tab costs. It is assumed that the Mn/DOT bid tab item for removal of rip rap is equivalent to the proposed removal of the ballast and subballast sections. The retrofit trail section shall consist of 6 inches of compacted Class 5 base and a minimum 2.5 inches of bituminous surface. The bituminous trail shall be 10 feet wide. The compacted Class 5 section shall be 14 feet wide. Mark-ups for contingency, engineering, construction administration, and inflation are included in the removal and retrofit costs.

Development Timeline and Funding Sources

Carver County Segment

With existing trail segments completed at both ends of the extension of the Minnesota River Bluffs Regional Trail between the cities of Carver and Chaska (from the Minnesota River bridge to Athletic Park), the proposed 1.6-mile regional trail segment will be available for development once property ownership is transferred from Union Pacific to the Carver County Regional

Railroad Authority. Carver County will obtain a permit from the rail authority to construct the trail. However, funding for trail development has not been programmed at this time. Carver County will actively pursue recreation and transportation funding opportunities for development of the regional trail. Primary funding sources include federal transportation programs (transportation enhancement and surface transportation program), state legacy amendment funds, and Metropolitan Council programs and implementing agency allocations. Local sources include general fund appropriations as part of the Park Improvement Program.

Minnesota River Crossing

Due to the size and cost of the Minnesota River crossing needed to replace the former railroad bridge, the Regional Railroad Authorities, Carver County and Scott County will work collaboratively to identify funding sources for its construction. Regional, state and federal funding sources will likely be the primary source due to the regional interconnectivity this bridge will provide.

Scott County Segment

Since the 2-mile planned regional trail segment within Scott County (from the Minnesota River Bridge to Merriam Junction) is not long enough to exclusively provide a destination for trail users, this trail segment will likely have a long-term development timeline that will not be completed until a connection point has been established. The connection to Carver County will be contingent upon completion of the Minnesota River bridge (timeline described above).

Within Scott County, the trail is planned to connect to the Louisville trail corridor search area, which has generally been described as a trail that follows County Road 14 east to the Scott West Regional Trail along County Road 17. US Trunk Highway 169 creates a major barrier to connect the UP rail line trail segment to the proposed regional trail along County Road 14. A future interchange has been identified at TH 169 and County Road 14, but this interchange is unlikely to be built within the next 10-20 years. Considering the many obstacles with crossing a major arterial and the difficult grades along the river bluffs, it is unlikely that a regional trail crossing will be provided separate from the interchange project. As a result, this connection will likely not occur until completion of the interchange.

Due to these infrastructure needs resulting in a long-term timeline, this plan recommends Scott County explore a new connection for the proposed regional trail segment south to the city of Jordan (see search area identified in Map 1 - Study Area and Overview). A trail connecting the UP rail trail segment to the city of Jordan would: a) provide a connection for Jordan to northern Scott County and Carver County (currently no such connection exists); b) could also serve as a paved extension of the Minnesota Valley State Trail south to Jordan; and c) is seen as a trail connection that could be completed in a 5-10 year timeframe. Potential opportunities to extend the trail south include two railroad corridors, public lands within the DNR and USFW refuge areas, Valley View Drive, and the TH 169 corridor. Future planning and funding sources for this potential trail connection will be explored by Scott County.

Conflicts & Mitigation

Use of the Railroad Corridor

The Union Pacific Railroad corridor is 100 feet wide in most places and will be rail banked under the "Interim Trail Use" condition by the Surface Transportation Board until such time as it would be determined that future rail transportation is not a consideration. Neither rail authority has plans at this time to reestablish rail transportation. However, if rail or another form of transportation would be established it is planned that the trail would remain in the rail corridor. Within the 100 foot width the rail authorities will permit or issue easements for utilities lines and trails. Carver and Scott County Regional Railroad Authorities will permit a 14-foot wide trail to be constructed on the rail grade. When other utilities are authorized in the rail corridor, agreements for these utilities will cause the trail to be protected or repaired if the trail is disturbed.

Surrounding Land Uses

The majority of the railroad corridor designated for trail use is surrounded or bounded by public lands owned by the US Fish & Wildlife (USFW) Refuge, Minnesota Department of Natural Resources (DNR), City of Carver, and City of Chaska. The railroad corridor runs parallel to County Road 40 in Carver and Chaska, but maintains a 100-200 foot separation in most areas. There are a few privately owned parcels between County Road 40 and the railroad corridor within Carver County, but these parcels have limited opportunities for development due to topography and setback constraints. Where necessary, Carver County Regional Railroad Authority will install boundary marking signage as a way to delineate regional railroad authority property from private property and lands identified as the US Fish & Wildlife Refuge.

Within Scott County, the railroad corridor passes through land guided for commercial/industrial uses as it moves away from DNR and USFW owned lands along the Minnesota River. The Renaissance Festival and a mining operation are the predominant uses within this area. Traffic on 145th Street is primarily generated from the Renaissance Festival (seasonally) as the main entrance into the event. Traffic patterns may change should the other private properties be mined in the future. However, trail conflicts with vehicle traffic are limited to one crossing at 145th Street, which is beyond (west of) the current Renaissance Festival entrance.

Adjacent property owners (and in particular, the DNR and USFW) have expressed support for the development of this regional trail.

Property Values

Several studies assessing the effect of trails on property values have been conducted for trails throughout the United States. The studies showed trails have no negative impact on either the marketability of property or its value. There was a belief among some, typically between 20 and 40 percent of a study sample, that there was a positive impact on marketability and value. Some homeowners adjacent to trail corridors have begun marketing the sale of their homes specifically to trail users, as shown to the right.

Aesthetic Design

The trail design may incorporate a paved asphalt or unpaved aggregate surface with two-foot shoulders on both sides of the trail. The shoulders are required for safety purposes. Specific plantings, fencing, trestle design and other amenities will be identified during the design phase of the project.

Parking

Parking lot and trailhead access points have been identified at Athletic Park in Chaska and the existing US Fish & Wildlife Louisville Swamp Refuge Unit parking lot in Louisville Township. A trailhead site will also be provided at Riverside Park, Depot Park, or Broadway Street in Carver. Additional analysis is needed to further determine which site would be best suited for a trailhead. Additional trailheads will be offered via the Southwest Regional Trail and existing Minnesota River Bluffs Regional Trail connections.

Trail Surface

The master plan recommends that the regional trail ultimately be paved the entire length. However, in the best interest of completing the trail, an aggregate surface may be considered as an interim solution if adequate funding is not available to pave the entire trail. Several factors led the decision making process for determining trail surface. They were: 1) past public input efforts and county guidelines; 2) the obligation of both counties to provide a diversity of opportunities on its trail network; 3) consistency with existing and planned paved segments of local and regional trails in Carver and Scott counties; 4) costs associated with construction and maintenance of the trail surface; and 5) eligibility for federal funding for paved surface.

Bituminous trails, despite the higher construction cost, provide a durable maintenance resistant surface that reduces erosion issues, is reliable during freeze thaw cycles, and is not susceptible to tire rutting caused by maintenance vehicles or heavy trail use. A bituminous surface expands the use of the trail to other wheeled uses such as in-line skating, skateboards and scooters. The

surface is also dependable and smooth for activities of walking and hiking, which is a benefit to those who are less mobile.

In addition to use, maintenance, and costs, historical and forecasted flood levels will be considered in determining trail surface. Historically, sections of the railroad corridor have experienced flooding, and certain segments of the trail could be underwater at major flooding events. The trail surface should be designed to reduce the impact (deterioration, reconstruction, maintenance) of anticipated flooding.

Appropriate Uses of the Trail

Both Scott and Carver counties allow walking, running/jogging, bicycle riding, in-line skating, skateboarding, kick scooters, bird watching, and dog walking on regional trails. Motorized vehicles not allowed include, but are not limited to, motorized scooters, all-terrain vehicles, golf carts, motorcycles, automobiles, trucks, sport utility vehicles, and snowmobiles. The trail planned for non-motorized pedestrian and cycling activities is too narrow to accommodate other parallel activities on the same former rail grade. Parallel activities requiring separation from pedestrian and cycling activities would include equestrian, ATV and mountain biking type activities.

Snowmobiles

There are a number of snowmobile trails that are maintained through the DNR's state trail system along the Minnesota River (on the Scott County side) that already accommodate snowmobile demand. An existing snowmobile park-and-ride is located off of Trunk Highway 41 near the river bridge. A snowmobile connection into Carver County is provided via the TH 41 corridor. Carver County and Scott County support snowmobiling on existing snowmobile trails within their counties. Excepting designated snowmobile trails, snowmobile use is not permitted within the cities of Chaska and Carver. This master plan does not support snowmobiling on the extension of the Minnesota River Bluffs Regional Trail and the Scott County Connection.

Equestrian Use of the Trail

Carver County and Scott County support equestrian use on existing equestrian trails. Carver County and Scott County are not proposing equestrian use on the proposed regional trail segments due to existing nearby equestrian trails, the existence of urban development in Carver and Chaska, and limited space on the existing rail bed to accommodate two trail surfaces. The Minnesota Valley State Trail in Scott County has nearly 30 miles of horseback riding trails along the non-paved segments of the trail south of Chaska. Equestrian use is also allowed in Carver Park Reserve and on the Luce Line trail in Carver County.

Dog Walking

Dogs are allowed on all Carver County and Scott County trails. Dog-walkers are required to keep their dogs on leashes no longer than six feet and must clean up after the pets. These policies will also be in effect for the subject trail segments.

Encroachments

Except by permit or lease, encroachments within the Union Pacific Rail corridor are not permitted by the Carver County Regional Rail Authority or Scott County Regional Rail Authority. Unauthorized encroachments are unlawful and are not allowed.

Natural Resource Inventory & Management

Existing Conditions

The former rail corridor will be owned and managed by the Carver County Regional Railroad Authority (CCRRA) and the Scott County Regional Railroad Authority. Operations and maintenance of the former rail corridor have been assigned to the Carver County Division of Public Works – Parks Department and the Scott County Parks and Trails Department.

The existing rail bed has a compaction rate similar to a typical bituminous roadway. Paving the rail bed to construct the regional trail should not increase the rainfall runoff volume, discharge rate, or pollutant loading to the land adjacent to the railroad right-of-way. Wetlands, surface water, and groundwater are not anticipated to be impacted beyond existing conditions, but further analysis will be completed during the design phase of trail construction to assess all potential impacts. Provisions will be made to avoid or minimize impacts to wetlands as part of trail development. If impacts are unavoidable, all required mitigation will be provided. Existing vegetation beyond the 14-foot trail corridor will be preserved to provide a buffer for the infiltration of runoff from the surface of the trail.

Natural Resources Management Plan

Scott County and Carver County will be responsible for maintaining a 14-foot wide trail corridor, generally located on the existing rail bed within the Union Pacific corridor. The middle ten feet of the trail corridor will consist of a paved or crushed rock trail. On each edge of the trail, two-foot (minimum) shoulders will be maintained. Overhead vegetation within the 14-foot trail corridor will be trimmed to sufficient height to allow users, maintenance and emergency vehicles unobstructed use. In instances where vegetation overhangs from outside the trail corridor, staff will trim the vegetation to keep it clear of the trail users. Areas outside of the 14-foot trail corridor are considered low maintenance areas. Native and non-invasive plant species are encouraged for visual screening, wildlife and shade purposes.

Land cover, native plant communities, and rare features (documented in the Natural Heritage Information System) are shown in Map 3 and Map 4. Many of the mapped sensitive features are located within existing DNR and USFW refuge lands adjacent to the railroad 100-foot corridor. However, some features may encroach within the rail corridor and impacts should be avoided through best management practices. Both counties will explore collaboration and cost-sharing opportunities with the Minnesota Department of Natural Resources and US Fish & Wildlife Refuge to provide consistent management of vegetation and enhance native plant communities and habitats within the corridor and adjacent public lands.

Stewardship Plan

The railroad corridor has not been in use for over two years, and as such is beginning to show signs of inactivity. However, the corridor's appearance remains consistent with the surrounding properties which are predominantly within a natural state. In most areas between Athletic Park and Merriam Junction, the corridor's vegetation blends in with its surroundings and it is difficult to determine the property boundaries. This natural setting will provide an exceptional experience for future trail users and should be maintained.

The railroad rails, ties and the main Minnesota River bridge (MP 36.17) will be removed from the corridor as part of the purchase agreement by the Regional Rail Authorities at Union Pacific's cost. In addition, the previously collapsed bridge (MP 37.14) has been removed. The removal of these bridges reduces access to the current corridor south of the Minnesota River, and access via state parkland for maintenance purposes should be explored. The entire corridor will be posted as closed to public use by Scott County and Carver County until the trail is developed. The remaining bridges will be inspected periodically for any significant damage or deterioration.

Both Scott County and Carver County will perform minimal maintenance (weed control, brush removal, diseased tree removal) in the corridor on an as needed basis. Each County currently has limited budget capacities to perform such work and should explore opportunities with both counties and the neighboring public landowners (the Minnesota Department of Natural Resources and US Fish & Wildlife Refuge) to provide collaborative management of vegetation and invasive species within the corridor.

Public Services

The Minnesota River Bluffs Regional Trail Extension and Scott County Connection is located adjacent to existing developed public lands which can provide access to the trail and have services of parking, information and water. The trail will not need additional services to become operational. Should neighboring communities' desire to construct signature features, additional utilities and roads may need to be developed to accommodate the improvement.

To ensure maximum safety possible for trail visitors and its neighboring residents, Scott and Carver Counties will work closely with local public safety organizations to monitor trail use and take preventative measures to deter unauthorized activity. Police, fire and emergency services are provided by the Scott County Sheriff's Office, Shakopee Fire Department and Allina Ambulance, respectively, on the Scott County side. On the Carver County side, services are provided by Carver County Sheriff's Department, City of Chaska Police and Fire Departments, and the City of Carver's Fire Department.

Boundaries & Acquisition Costs

The proposed abandonment of the Union Pacific/Chaska Industrial Lead corridor is a 5.3 mile long railroad corridor that extends from Merriam Junction in Louisville Township over the Minnesota River to Carver and Chaska, ending at the United Sugars property. The corridor has a typical 100-foot right-of-way. The corridor has been valued at $3.9 million by Union Pacific. Through a joint powers agreement, the Scott County Regional Railroad Authority (SCRRA) and Carver County Regional Railroad Authority (CCRRA) have agreed to purchase the corridor from Union Pacific for 2 million dollars under the federal rail banking "Interim Trail Use" program, with Union Pacific donating the remaining $1.9 million value. Funding sources for the purchase include local contributions (Scott and Carver Counties and Chaska) and regional contributions through the Metropolitan Council Environmental Services and Regional Parks Acquisition Opportunity Fund. Of the entire corridor, 3.7 miles from Athletic Park in Chaska south to Merriam Junction will be utilized for future regional trail use. The rail corridor segment within Chaska from Athletic Park east to United Sugars plant is not being proposed for regional trail use. Instead, this segment will be preserved for transportation, utility and other public purposes that may include a local trail.

The purchase price for the 5.3 mile of the Union Pacific Railroad line is estimated to be $2,000,000. The price equates to $377,358 per mile. It is planned that 3.7 miles of the Union Pacific Railroad corridor would be utilized as a regional trail.

The Union Pacific/Chaska Industrial Lead corridor is wide enough to construct a multi-use trail on the existing rail bed without the need of additional land. Due to the removal of the Main Street Bridge in the City of Carver and the trail realignment to maintain a level grade, an easement for trail use through parcels owned by the City and US Fish & Wildlife Service will be needed. Other agreements may be needed with the US Fish & Wildlife and cities of Chaska and Carver for use of their existing levee, parks, and facilities for trailheads or rest areas.

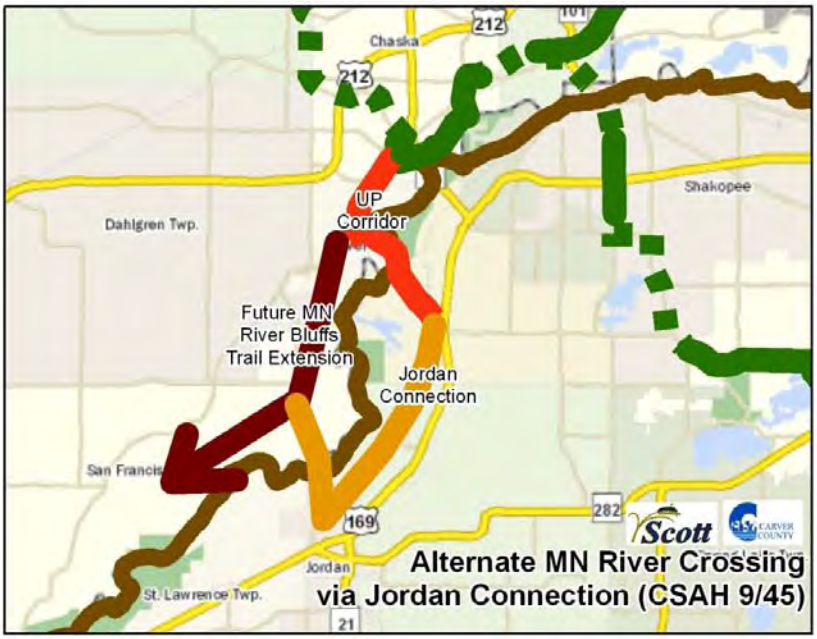
Railroad Parcels to be Acquired for Regional Trail Corridor
(Note: These parcels include a number of reversionary parcels)

County	Parcel Identification Number	Note
Scott	070005000	Portion of parcel only
	070005010	
Carver	019-309990500	Portion of parcel only
	019-039990600	
	019-209990100	

Interim Trail Use Designation

The subject railroad corridor is being preserved through the federal rail banking "Interim Trail Use" program. Under this program, trails are supported as an interim use while the overall corridor stays intact to accommodate a return to rail service (public or private), should someday a need or demand exist. It is possible that commuter-rail/busway transit may eventually claim the facility after a period of several years. The physical infrastructure (rails, ties, MN River Bridge) will be removed prior to trail construction by Union Pacific, so major investments would be needed to return the corridor to rail service. Should a conversion to rail service occur, the financial investment for the regional trail will be reimbursed through sale of the land. The useful life of all trail infrastructure is also expected to be met before any return to rail service will occur.

While a return to rail service is not anticipated at this time, it is important to protect the regional trail investment and explore alternative routes for the trail should there ever be a conflict with rail and trail uses. These alternate routes maintain the significant connection being made at the MN River Crossing and will continue to satisfy the recreational needs along the MN River Valley. First, should the rail bed be reconverted to rail service, there may be potential for both a trail and railroad within the 100-foot right-of-way. Second, an alternative route could be made via the existing river crossing at CSAH 9/45 in Jordan. In Scott County, the Jordan trail connection (shown below) could extend the trail to the river crossing, where it could connect to the MN River Bluffs Regional Trail extension in Carver County. These alternatives should be included in any future discussions of the conversion of the UP corridor to rail or other uses.



Operations & Maintenance

Both Scott and Carver counties have adopted a set of ordinances that define the rules and regulations of their regional parks and trails in order to provide for the safe and peaceful use of the parks, trails, and corresponding facilities. Scott County's Park Ordinance, Number 29, will be enforced for all users and activities within the Scott County portion of the proposed regional trail. Likewise, Carver County Park Ordinance Chapter 91 will be enforced in Carver County. These ordinances are fairly similar and the change in jurisdiction should not impact regional trail users.

Trail maintenance will be performed via the following schedule. Maintenance costs are anticipated to be $5,000 for Carver County and $5,000 for Scott County annually (2010 dollars) once the regional trail is developed. Operations and maintenance expenditures will be budgeted by each county for personnel and equipment. Both counties will explore collaboration and cost-sharing opportunities with each other, the municipalities, the Minnesota Department of Natural Resources, and US Fish & Wildlife Refuge to find cost efficient methods to provide operations, maintenance, and public safety services within the proposed regional trail corridor.

Trail Maintenance Schedule	

On-going	• Vegetation – mow shoulders (maintain 2-3 feet clearance) and blow or sweep trail surface
	• Litter and debris cleanup
	• Trash removal
	• Use/Safety inspections
	  • ROW encroachment inspections
	  • Verify safety for trail users (no fallen/hanging branches, slippery spots, etc.)
	  • Graffiti/Vandalism
	  • Inventory surface failures (cracks, dips, crumbling edges)
	  • Drainage/Culvert clearings

Annual	• Vegetation
	  • Noxious weed control as needed
	  • Trim trees/shrubs to maintain clearance
	  • Other annual resource management activities
	• Trail surface sweeping (Spring)

Two+ Years	• Asphalt crack repair – every five years where needed • Sealcoating – every ten years • Overpass/Underpass structure inspections – every two years • Signs and lane/crossings striping – replace as needed

Public safety will be monitored by both the Carver County Sheriff's office and Scott County Sheriff's office for issues and activities within their corresponding service areas. Both agencies are responsible for patrolling its county parks and trails. A Sheriff's Deputy or a Community Service Officer will respond to calls for service needs on the trail. Community Service Officers are uniformed, non-sworn officers. In addition to responding to calls for service, the 911 First Responder system will answer any emergency call made from the trail. Cooperation with the other emergency service agencies will also be encouraged to ensure safety for all trail users.

It is not anticipated that the regional trail will generate any revenue for either agency once the trail is developed. Funding sources to cover on-going operations and maintenance costs for the extension of the Minnesota River Bluffs Regional Trail Extension and the Scott County Connection include general operating funds from Scott County Parks and Trails and Carver County Parks. A portion of operating and maintenance costs will be funded by the Metropolitan Council and distributed to Carver and Scott counties consistent with MN Statute 473.351. Corridor preservation funding from Carver County Regional Railroad Authority and Scott County Regional Railroad Authority may be available to preserve railroad land, repair and replace structures, construct drainage facilities, maintain vegetation, issue leases and permits, and address other issues as it pertains to the preservation of the former rail corridor.

Special Needs

In joint planning for the extension of the Minnesota River Bluffs Regional Trail and Scott County Connection, Carver and Scott counties are committed to providing activities, access and resources for all trail visitors, including persons with disabilities and members of special population groups and will do so throughout planning, development, and operation and maintenance activities of the trail. Both Scott County and Carver County support equal access for all users to its park and trail facilities. Trail facilities will be designed to meet or exceed guidelines established by the Americans with Disabilities Act. This regional trail segment is envisioned to accommodate a wide-range of user groups with varying abilities and offers access to many populations. With relatively flat grades established from the previous use as a railroad corridor, there is ample opportunity for trail visitors of all abilities to use the trail.

Ensuring that recreational opportunities are affordable and accessible (by various modes of transportation) to all citizens is an existing policy within Carver County's 2030 Comprehensive Plan. Under current policy, Carver County Parks will not charge a fee for use of the trail, making it affordable to all populations. Scott County's current policies also strive to keep public park, trail, and open space facilities affordable for all residents. Scott County will extend the no fee use of the trail due to its major connections to other state and regional trails.

The Carver County Division of Community Social Services provides a wide variety of services that reach out to assist the population of Carver County. Services include transportation assistance, child, adult and senior services. Carver County provides reduced park entrance fees for qualified park users through the Park Pass Assistance program.

Citizen Participation

Scott County has had on-going dialogue with local officials, affected agencies, and landowners along the existing railroad corridor since the discussions for abandonment of the corridor began. Since the corridor is already well defined, the trail will be utilizing the existing rail bed, and existing land uses that the proposed corridor traverses are non-intensive, there are no major concerns that have been identified amongst these groups. The US Fish &Wildlife Service, a major landowner along the rail corridor, has stated support of the use of the corridor as a regional trail. Louisville Township has also stated support for the trail and has incorporated it into recent trail planning documents. The Scott County Parks Advisory Commission recommended approval of this master plan at their November 3, 2010, meeting. The Scott County Board of Commissioners approved this plan at their December 21, 2010 meeting.

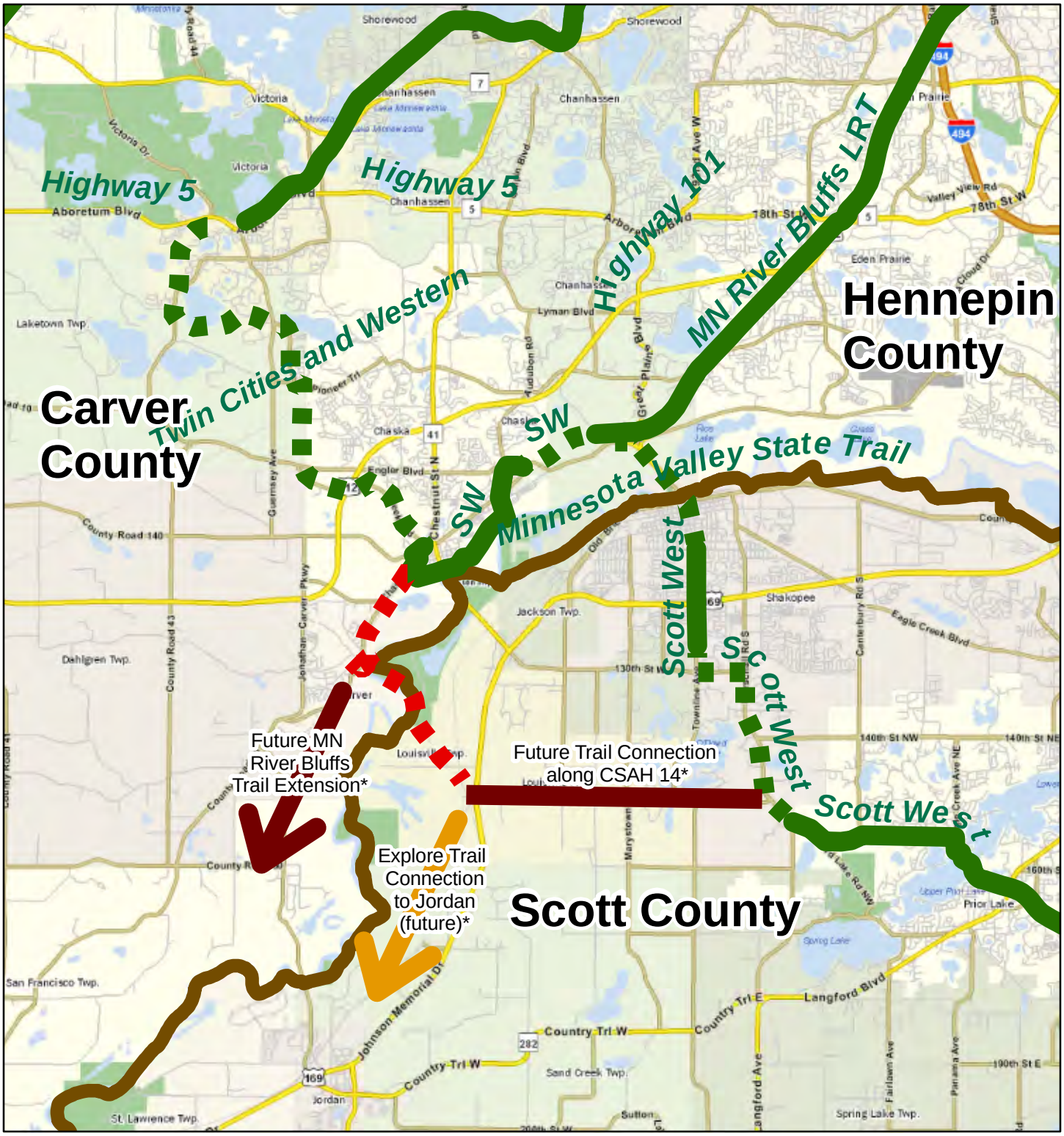
Carver County has also maintained dialogue with staff and officials of the Cities of Chaska and Carver concerning the Union Pacific Railroad corridor and the extension of the Minnesota River Bluffs Regional Trail. Initial support for the proposed trail was brought forward through the development of the County Comprehensive Plan which was reviewed by agencies and members of the public before adoption. In addition, this trail master plan has been reviewed by the City of Carver's Park Commission and City Council, City Council of Chaska, the Carver County Park Commission, and approved by the Carver County Board on December 21, 2010.

A resolution of support for this regional trail has been granted by the City Chaska. The US Fish & Wildlife Refuge Service has provided a letter of support. These supporting documents are included in Appendix A.

Public Awareness

Once the regional trail segment is completed, promotion and marketing the use of the regional trail is important to both Scott and Carver Counties. Both counties will notify local and regional residents of the trail development through press releases to the media, publications such as the Scott County SCENE and the Carver County Parks Trailhead, and park related mailings, brochures and newsletters. Other methods to promote the use of the trail will include each county's website and the addition of the regional trail within all park and trail system maps and active living and biking on-line mapping resources, including GoCarverGo, GoScottGo, and Cyclopath.

As development and construction plans are proposed, public information meetings will be held as a means to inform the public, to collect input and to have dialogue on ideas and potential conflicts. The most prevalent construction project for this trail segment will likely be the Minnesota River bridge crossing. This bridge will require a significant public involvement process as design plans, environmental considerations and cost estimates are determined. Scott and Carver Counties will be committed to working with residents and other agencies once the design process commences for the river bridge.



Scott

CARVER COUNTY

Study Area and Overview

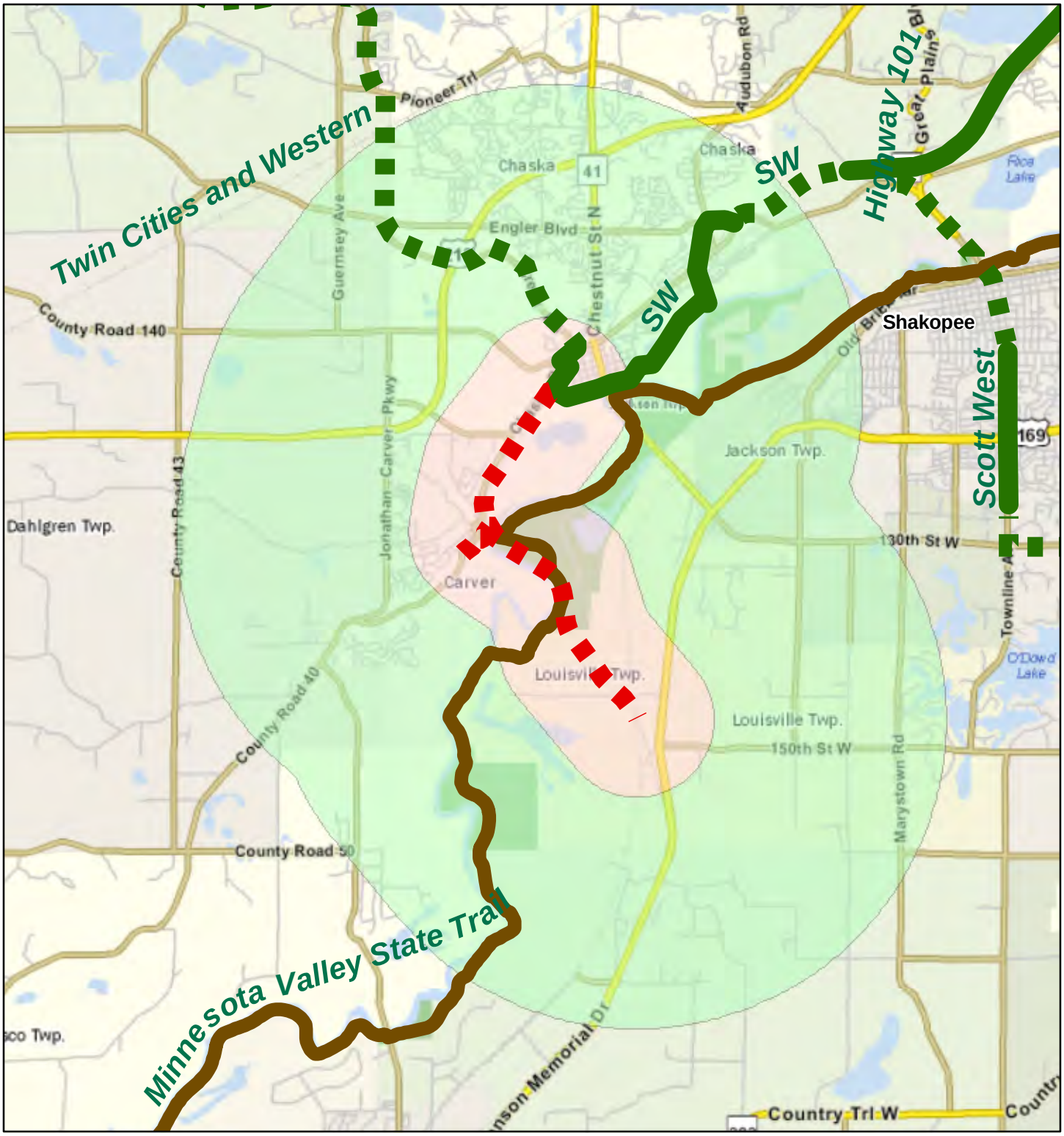
MN River Bluffs Regional Trail Extension & Scott County Connection

Map 1

Legend

- Existing Regional Trails
- Planned Regional Trails
- Study Area
- Existing State Trail

*Future trail connections are not part of this study.



Scott

CARVER COUNTY

N
W E
S

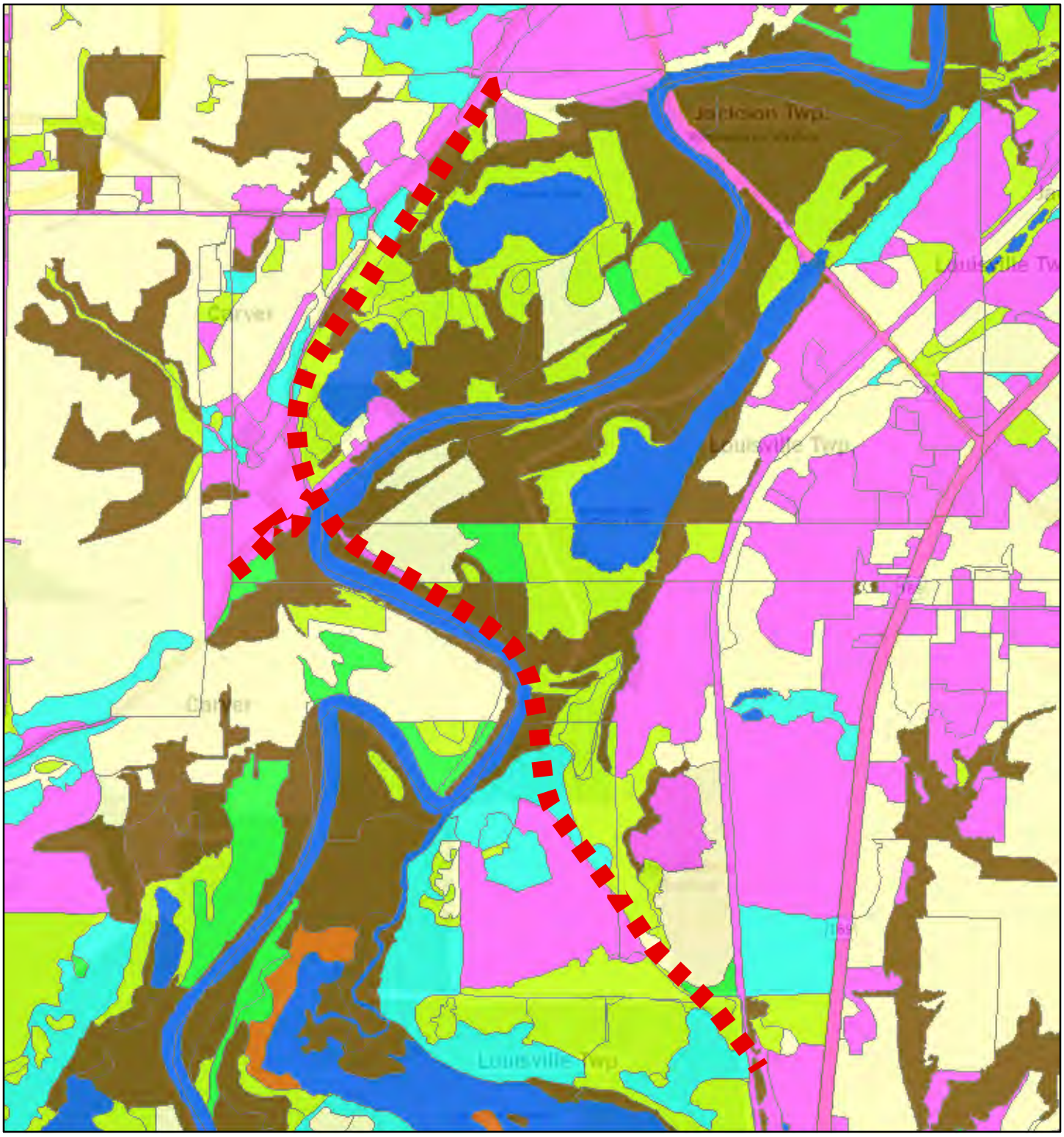
Legend

- Core Service Area 0.75 Miles
- Primary Service Area 3 Miles
- Existing Regional Trails
- Planned Regional Trails
- Study Area
- Existing State Trail

Primary Service Area

MN River Bluffs Regional Trail Extension & Scott County Connection

Map 2



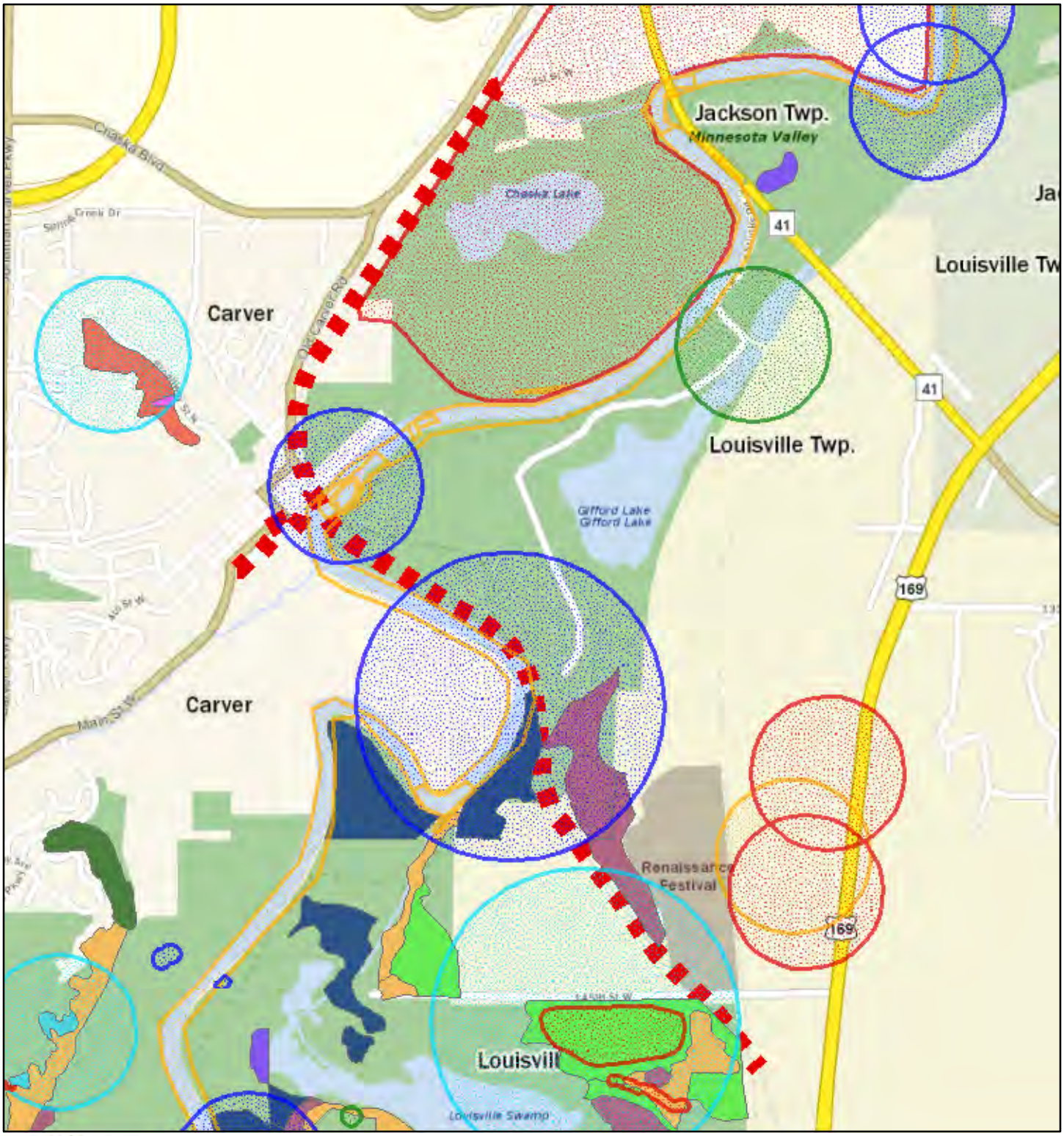
Generalized Land Cover (MLCCS)

MN River Bluffs Regional Trail Extension & Scott County Connection

Map 3

Legend

- Undefined
- Artificial surfaces and associated areas
- Planted or Cultivated Vegetation
- Forests
- Woodland
- Shrubland
- Herbaceous
- Nonvascular vegetation
- Sparse vegetation
- Water



Natural Resource Inventory

MN River Bluffs Regional Trail Extension & Scott County Connection

Map 4

Legend

Rare Natural Features (NHIS)
- Vertebrate Animal
- Community
- Invertebrate Animal
- Nonvascular Plant, Fungus
- Vascular Plant
- Animal Assemblage
- Geologic

Native Plant Communities (MCBS)
- Bulrush Marsh (Northern)
- Dry Sand - Gravel Oak Savanna (Southern)
- Dry Sand - Gravel Prairie (Southern)
- Other Water Body
- Pin Oak - Bur Oak Woodland
- Red Oak - Sugar Maple - Basswood - (Bitternut Hickory) Forest
- Silver Maple - (Virginia Creeper) Floodplain Forest
- Southern Mesic Maple-Basswood Forest
- Sugar Maple - Basswood - (Bitternut Hickory) Forest

Sources: Natural Heritage Information System & Minnesota County Biological Survey

Scott CARVER COUNTY

N W E S

1,200 600 0 1,200 Feet

Corridor Map (1 of 4)

MN River Bluffs Regional Trail Extension & Scott County Connection

Map 5A

Scott CARVER COUNTY

N W E S

1,200 600 0 1,200 Feet

Corridor Map (2 of 4)

MN River Bluffs Regional Trail Extension & Scott County Connection

Map 5B

Scott CARVER COUNTY

N W E S

1,200 600 0 1,200 Feet

Corridor Map (3 of 4)

MN River Bluffs Regional Trail
Extension & Scott County Connection

Map 5C

Scott CARVER COUNTY

N W E S

275 137.5 0 275 Feet

Corridor Map (4 of 4)

MN River Bluffs Regional Trail
Extension & Scott County Connection

Map 5D