East Bank Mississippi River Regional Trail Corridor

Master Plan

Saint Paul, Minnesota

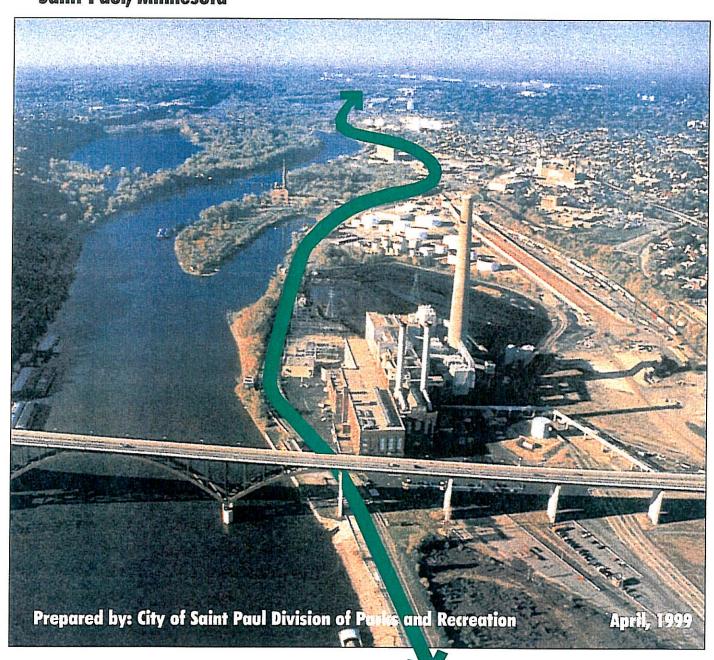


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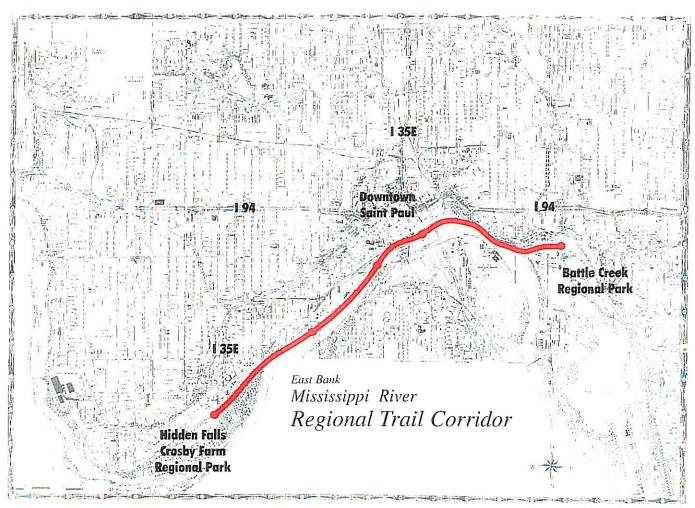
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Introduction

The East Bank Mississippi River Regional Trail Corridor in Saint Paul was established in 1995 by the Metropolitan Council. Once complete, the trail corridor will link Hidden Falls-Crosby Farm Regional Park with Battle Creek Regional Park. The need for a trail along the east bank of the Mississippi River has been identified in adopted city plans for more than 20 years, but a master plan for the trail has never been completed. While much of the east bank trail infrastructure and amenities are already in place, a significant gap exists within the corridor. Fortunately, the realignment and reconstruction of Shepard Road provides an opportunity to close that gap by making right-of-way from Old Shepard Road available for trail development. An intermodel Surface Transportation Efficiency Act (ISTEA) grant has been secured for development of this segment.

This plan includes the eleven elements identified for regional parks and open space system master plans in the Metropolitan Council Parks and Open Space System Development Guide/Policy Plan. The plan is specifically intended to meet the criteria required by the Metropolitan Council and once adopted, will make the City eligible to apply for funding to implement the plan.



Location Map

Boundaries and Acquisition Costs

The East Bank Mississippi River Regional Trail Corridor, bounded on the west by Hidden Falls-Crosby Farm Regional Park and on the east by Battle Creek Regional Park, is 5.9 miles in length. Since all of the land within the trail corridor is already in public ownership (see maps in appendix A), no acquisition costs are anticipated. The Mississippi River runs through Saint Paul in an east-west fashion. Existing development along the east bank corridor is largely industrial in nature as it moves from the west through downtown and eastward. Fortunately, much of the trail infrastructure and amenities are already in place. Once a rather significant gap in the trail is filled, the trail will connect to downtown and with other existing trails to provide an important transportation and recreational function.

2 Stewardship Plan

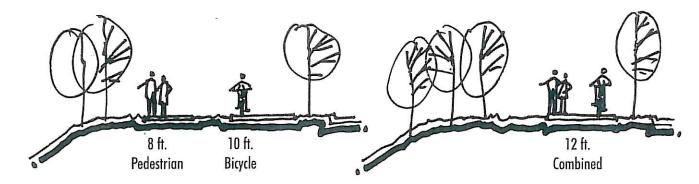
The City of Saint Paul will own and maintain the trail corridor and will be responsible for its safe and orderly operation. The Saint Paul Division of Parks and Recreation will advise the appropriate law enforcement agency, the Saint Paul Police, of its ownership and will request their cooperation in maintaining public safety throughout the corridor. There are no non-recreational uses or collection of revenues from such uses planned for the trail corridor at this time. Should such uses occur in the future, revenues will be utilized consistent with the adopted Recreation Open Space Development Guide/Policy Plan.

3Demand Forecast

Projections provided by the Metropolitan Council indicate that annual use of the East Bank Mississippi River Regional Trail Corridor from Hidden Falls-Crosby Farm Regional Park to Battle Creek Regional Park is estimated to be 230,000 visits until a trail crossing is completed over the I-35E bridge. After completion of the bridge crossing, the estimated annual visits will increase to 300,000. In addition, the access from Eagle Parkway between downtown and the riverfront will likely contribute 30,000 annually once it is complete as part of the reconstruction of new Shepard Road and construction of the new Science Museum.

4 Development Concept

The regional trail will provide separated paths for pedestrians (8 ft) and bicyclists (10 ft), where possible, to provide a safe, and attractive route for commuters and recreation users. However, there are locations where separated paths may not be feasible given the width of available right-of-way or other existing conditions. In instances where separated paths are not possible, a single 12 ft treadway will be provided and efforts will be made to ensure that trail design encourages slower speeds for safe operation by all users.

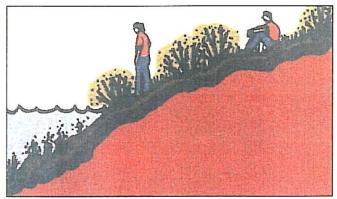


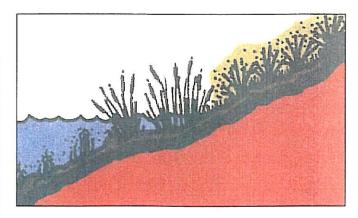
The trail corridor will be lighted and appropriate directional and safety signage will be installed. Trail lighting will be provided according to the following scenarios:

- where the trail is adjacent to the road it will be lighted by the roadway lighting system
- where the trail is located away from the road, additional lighting will be installed to achieve a fully lighted corridor.

Wayside locations with benches for resting and viewing the river will be provided along the corridor as well as drinking fountains. Parking will be available for users who drive to the trail and will be provided at limited sites along the route, specifically at the Lower Landing site and also possible along the new Shepard Road Parkway between Randolph and Chestnut Streets. There are no restroom facilities included for the trail at this time, however, when the Upper Landing site is developed it will more than likely include food service and restroom facilities.

There is a strong interest in restoring the shoreline along the Mississippi River to a more natural state. Efforts on the part of Greening the Great River Park, in cooperation with the City, call for this area to be maintained in a 50 percent natural vegetative state to protect the riparian corridor for migratory birds and provide a reserve of biological diversity. In keeping with that theme, it is anticipated that native vegetation that is easy to maintain will be dominant along much of the trail, especially in the areas beyond downtown.





The following **goals** were identified by interest groups at the beginning of the planning process. The trail system should:

- be safe for all commuter and recreation users (walkers, bikers, skaters, joggers)
- provide separated paths, where possible
- be accessible for all users
- be a safe and efficient transportation corridor for those who commute and should be maintained to allow for the use in that manner
- provide safe and convenient connections to neighborhood parks, trails, and destinations
- provide a sense of safety by being busy enough to offer natural surveillance
- be landscaped with native vegetation that is easy to maintain
- be as close to the river as possible and offer opportunities for viewing and fishing. The shoreline should be restored to a more natural state and landscaped with native species
- provide amenities such as benches, lighting, directional and informational signage, restrooms, and parking

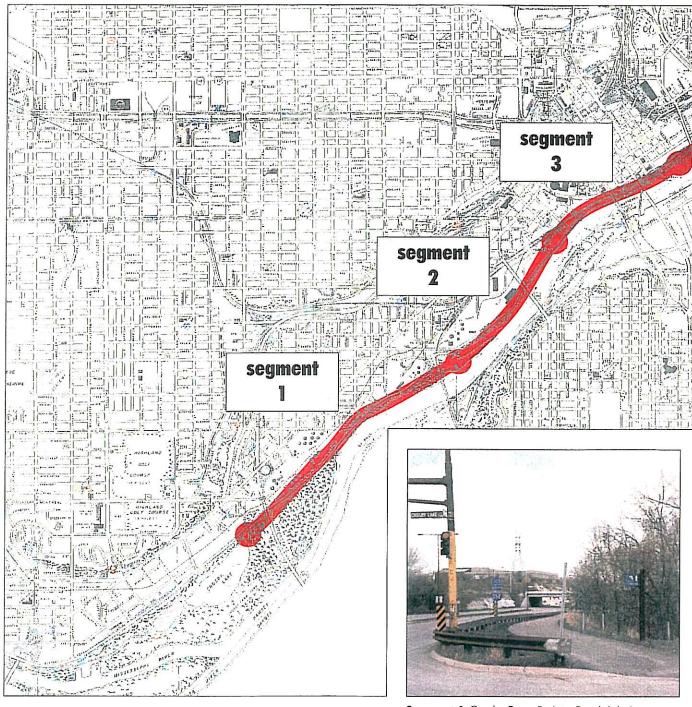
5 schedule/Cost

The incomplete portions of the trail are scheduled to be constructed in 2000-2002 and the anticipated cost for the project is \$4.15 M. Specific segments and projects along the trail and their costs are itemized below.

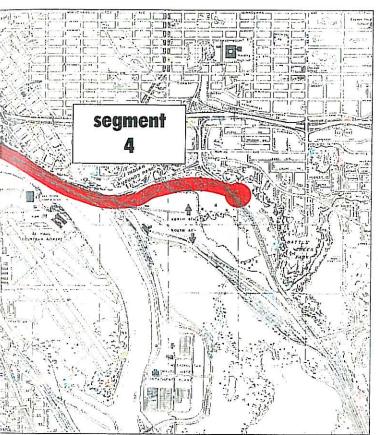
Trail Segment	Schedule	Cost
Segment 1: Crosby Farm Park to Randolph Avenue	completed	
Segment 2: Randolph Avenue to chestnut Street	2001-02	3.0M
Segment 3: Chestnut Street to Sibley Street	2001-02	.65M
Segment 4: Sibley Street to Childs Road* to the Fish Hatchery to Battle Creek Regional Park	*completed except Childs Road	
	2000	.5M

6 pportunities & Conflicts

For planning and design purposes, and for ease in discussing the trail corridor, it has been divided into four geographic segments west to east from upstream to downstream. Discussion of each trail segment includes a brief description of the opportunities and conflicts presented by each. The segments are identified geographically on the map below.

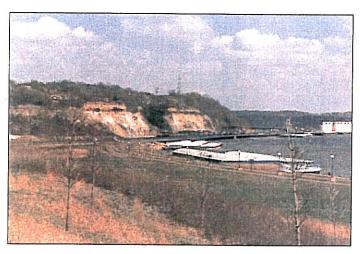


Segment 1 Crosby Farm Park to Randolph Avenue





Segment 2 Randolph Avenue to Chestneut Street



Segment 4 Sibley Street to Childs Road to the Fish Hatchery to Battle Creek Regional Park

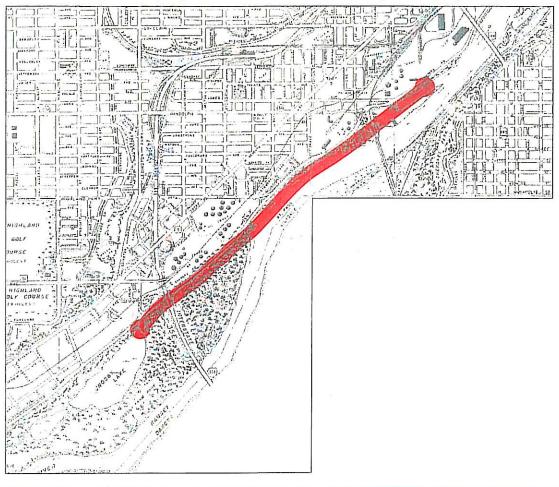


Segment 3 Chestnut Street to Sibley Street

Segment 1: Crosby Farm Park to Randolph Avenue

Description:

This portion of the regional trail was built in 1991. It runs parallel to and south of Shepard Road and continues to Randolph Avenue, about a 1.3 mile stretch. The existing off-road paved trail includes both a combined (10 foot) and separated (8 foot bike, 6 foot pedestrian) path. It is separated from vehicular traffic on Shepard Road by a landscaped boulevard and includes extensive plantings of native grasses and wild flowers. This portion of the trail is characterized by a somewhat rural, natural setting overlooking the wooded bluffs of the Mississippi River and separated from the developed urban environment which sits even higher up the bluff. The elevation of the trail is significantly higher than the river shoreline throughout this segment.







Opportunities:

a. Interstate 35E Bridge

When the Interstate 35E bridge is reconstructed in 2001 - 2004 it will feature a pedestrian/bicycle trail accross the Mississippi River. This is an opportunity to connect the East Bank Mississippi River Regional Trail with the existing trails in Lilydale/Harriet Island Regional Park, the existing Dakota County Big Rivers Trail, and the proposed North Urban Regional Trail.

The new bridge is planned to be constructed on the same alignment as the existing bridge, with the trail on the downstream side. The trail will connect to the existing Shepard Road trail on the downstream side of the Shepard Road exit ramp.

b. Riverview Transit Corridor

The Ramsey County Regional Rail Authority is exploring several alignment options for a transit corridor from the Minneapolis-Saint Paul International Airport to downtown Saint Paul. One of the proposed transit corridor alignments parallels Shepard Road, east from Highway 5, and then follows Old Shepard Road just east of Randolph Avenue into downtown. The transit right-of-way would be 35 feet wide and passenger stations and parking would take up additional space at intermittent locations along the corridor. There is adequate space to accommodate the transit corridor and combining the bicycle and pedestrian trail with the transit corridor would enhance the transportation function of the regional trail system. If the Shepard Road alignment of the Riverview transit corridor is chosen it will be designed to complement the existing trail system and provide safe and convenient connections to the transit line.

Conflicts:

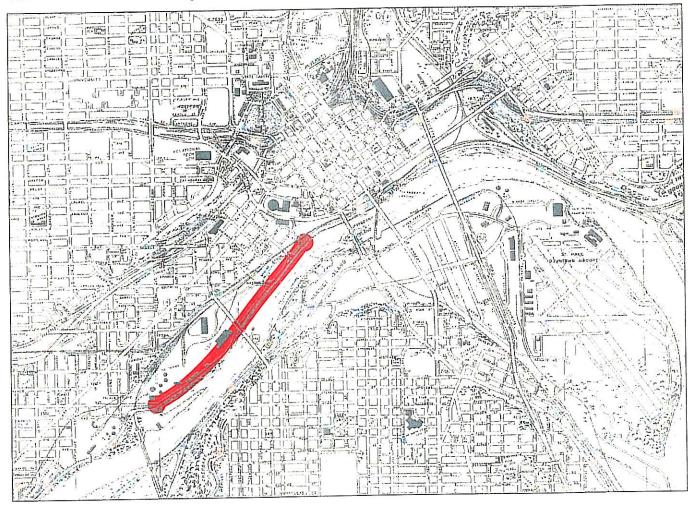
a. Vehicular Traffic at 35E bridge off/on ramps

Areas at ramps must be clear of any visual obstructions and well marked for pedestrians/bike users and drivers alike. The trail section beneath the Shepard Road/35E overpass needs to be widened by MnDOT to provide 12 ft clear for trail uses. In addition, strong consideration should be given to a request by Friend of the Parks & Trails to construct a trail underpass, or tunnel, beneath 35E, riverward of Shepard Road, thus avoiding trail conflicts with 35E on/off ramps.

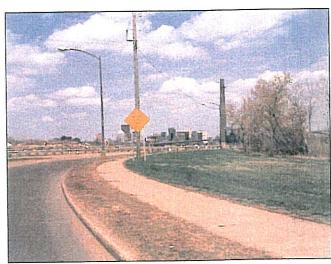
Segment 2: Randolph Avenue to Chestnut Street

Description:

This segment of the trail is approximately 1.8 miles in length and once complete, will include separated paths that parallel the Mississippi River into downtown Saint Paul. Fortunately, the realignment and reconstruction of Shepard Road provides an opportunity to complete this segment by making right-of-way from Old Shepard Road available for trail development.







Opportunities:

a. Old Shepard Road

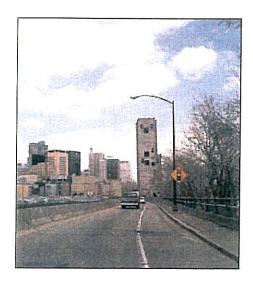
When construction of Shepard Road is complete in 2001, the portion between Randolph Avenue and Chestnut Street will be realigned away from the river and closer to the bluff. Old Shepard Road right-of-way will be transferred from Public Works to Parks and Recreation and will be redeveloped for trail purposes.

Two property owners on Old Shepard Road at James Avenue, Ashland Chemical and Saint Paul Port Authority, will to need to use Old Shepard Road right-of-way to gain access to New Shepard Road. This is because their existing vehicular access from James Avenue will be eliminated when Shepard Road is realigned. The existing bridge over the railroad tracks at Randolph offers adequate right-of-way for vehicular access for these two business and for the trail corridor. It is not necessary, for vehicular access purposes, to provide a roadway any further east than the Port Authority's property. However, for security and maintenance purposes and also to provide an emergency vehicle route, the trails will be constructed to support vehicular use.

The Randolph to Chestnut segment affords a wealth of opportunity for trail development. The corridor is located immediately adjacent to the Mississippi River within a unique flood plain system. Much of the adjacent land to the north of the trail corridor is industrial in nature, however, a large portion of the area, known as the Upper Landing site, is vacant. A number of ideas for its use are being discussed and they vary from mixed use housing development to an open space park area. While no plans have been formally adopted, whatever is finally developed there will surely be a vast improvement over its former use as a scrap yard, and will be an asset to the adjoining trail corridor.

In addition, new signalized intersections at both Randolph Avenue and Chestnut Street will provide an opportunity for trail users to make a safe entrance to, or exit from, the trail system.

There is a strong need to enhance the existing unattractive concrete shoreline along the river between Randolph and Sibley and also to remove the concrete flood wall there. Where space allows, the shoreline will be restored to a more natural state and will be planted with native floodplain vegetation. In addition, efforts on the part of Greening the Great River Park call for this area to be maintained in a 50 percent natural vegetative state to protect the riparian corridor organization migratory birds and provide a reserve of biological diversity.



b. Upper Landing

The Upper Landing, a triangular piece of land between the river and the bluff northeast of the High Bridge up to Chestnut Street, is owned by the city and is currently vacant. Redevelopment ideas are being generated and considered. The trail will parallel the Upper Landing and where appropriate, provide direct connections.

The City is reconstructing Chestnut Street in 1999 to a parkway configuration, including trail connection from Shepard Road to Kellogg Boulevard funded by the City and a MN DNR regional trail initiative program grant. This new route will be known as Eagle Parkway, providing access to downtown, the new Science Museum, and the RiverCenter. There is a railroad crossing at Chestnut so trail users entering or existing must cross the tracks. While the railroad crossing does not conflict with the trail itself, it does present concerns about safe access, particularly since this trail connection is intended to serve an important transportation function and access to downtown Saint Paul is critical for those intending to use the trail for commuting purposes. Adequate signage and warnings will be in place to alert trail users of the at-grade train crossing to ensure that the connection to and from downtown is safe. As part of the Shepard Road realignment and reconstruction, wider, more decorative walkways are planned for Chestnut Street between the river and Ryan Avenue.

c. Head House

There is considerable interest in restoring the "Head House" which is adjacent to the trail corridor near Chestnut Street. The Head House is owned by the Saint Paul Housing and Redevelopment Authority and is on the National Register of Historic Places. It was used years ago in the operation of loading grain into barges moored along the river. If and when it is restored, it will likely be used as a destination attraction, such as an interpretive center, adding another point of interest along the trail.

d. Northern States Power

Both NSP and the city agree that the concrete flood wall along Shepard Road should be removed as part of a shoreline restoration project during the construction of the trail. The replacement wall or berm should be constructed landward of the trail corridor to provide separation between the corridor uses and NSP's property, and to maximize views of the river while still affording flood protection.

Once realigned Shepard Road is opened to traffic, NSP will have access to its property from the new Shepard Road at Washington Street. However, NSP will continue to need periodicvehicular access to the two screen-houses located along the river to conduct routine maintenance. It is anticipated that pick-up truck type vehicles would need access, not large commercial vehicles. The proposed trail through this stretch will be constructed to accommodate maintenance and emergency vehicles and would therefore be adequate to provide access for NSP's maintenance activity at the screen houses. NSP stated it no longer needs access along this portion of the river for barges.

Conflicts:

a. Access road (on old Shepard) to Ashland Oil and Port Authority site at James Street.

Trail and road must co-exist within the old Shepard Road right-of-way. Although the right-of-way narrows in this segment, the 50 foot minimum width needed for trail corridor use is available.

b. Access to screen houses

Access to "screen houses" will be provided to accomodate small vehicles for service and maintenance needs.

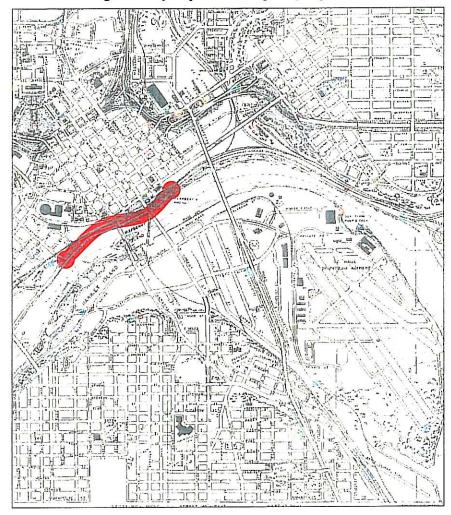
c. Upper landing

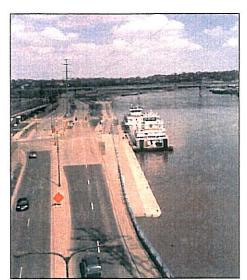
- 1. Development plan is not known at this time. Trail corridor design can accommodate buffers if needed, but it is more likely that adjacent development will be compatable and access to the trail will be an amenity.
- 2. Connection to Eagle Parkway trail must be completed though upper landing to provide downtown connection. This is being designed into plans for Eagle Parkway and New Shepard Road.

Segment 3: Chestnut Street to Sibley Street

Description:

This portion of the trail is located in an urban setting and is the front door to Saint Paul's Riverfront. Unfortunately, the corridor narrows significantly as it moves downstream due to a limited amount of land in the public right-of-way, particularly between Wabasha and Robert Street bridges, where it is likely that there will not be sufficient right-of-way to provide completely separated bike and pedestrian paths.







Opportunities

a. Science Museum of Minnesota

The Science Museum of Minnesota would like to see the trail pulled back from the river's edge at Chestnut Street to allow a pond or wetland to be created near the river that could serve as an amenity and a learning tool for the museum and the public. This would also allow the Science Museum to have a presence along the river, adjacent to the new museum, and provide river access for educational exhibits and programming. The property which the Science Museum is interested in using is publicly owned. Therefore, any redevelopment of that site will be in partnership with the city. The Science Museum is working with MNRRA to develop "way side" exhibits along the river's shoreline. Efforts of others doing interpretation along the river should be coordinated: city, museum, Port Authority, MNRRA, Corps, MN Historical Society. The new Science Museum, RiverCentre, and arena will provide an opportunity to draw a significant number of people to the river's edge from downtown and that development along the river's edge should be significant enough to encourage people to walk down the bluff.

b. Connection to the west side of the river

Now that the Wabasha Street Bridge is complete and reopened to traffic, it once again connects the east and west banks of the river. Because there is a significant topographic change between the trails along the river and the bridge at the top of the bluff, a staircase from the river to the bluff will likely be constructed to facilitate pedestrian traffic from one side of the river to the other. Bicyclists can use the Chestnut-Eagle or Sibley-Jackson connections into downtown to cross the bridge.

Conflicts:

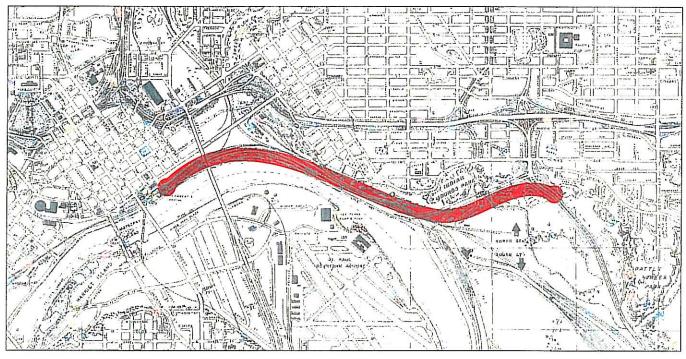
a. Wabasha to Robert Street

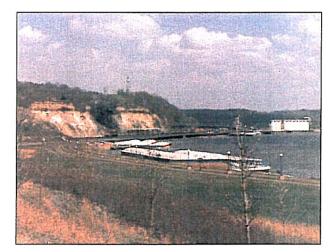
Unless the city's preferred plan to relocate the railroad further to the north is realized, there will only be enough room for a combined 12 foot wide trail in this section. It will include landscaping, benches, special paving, and lighting designed to provide a signal for trail users to slow down in this restricted area and to allow viewing of river activities, Harriet Island Regional Park and the new Wabasha Street Bridge.

Segment 4: Sibley Street to Childs Road to the Fish Hatchery to Battle Creek Regional Park

Description:

This portion of the trail is largely in place. While the western part provides separated paths and lighting, the trail narrows to a single lane as it approaches Childs Road. A parking lot is located at the lower landing portion as are benches and waste receptacles. This portion of the trail is right along the river's edge and begins in a fairly urban setting but takes on a more rural feel it moves eastward downstream. Many barges are moored along the river in this stretch of the trail and an industrial park and airport occupy the west bank of the river. There is a brief gap in the existing trail between a point just west of Childs Road and the Fish Hatchery. A planned Public Works project in the year 2000 will complete this gap with funding (\$5 million) provided through the city an ISTEA. The paved and lighted trail stops abruptly at the bridge that goes over the railroad right of way on Warner Road and where the exit for Childs Road from Warner Road is located. After this brief gap, the trail connects up at the Fish Hatchery and then continues on to Battle Creek Regional Park via a tunnel beneath Highway 61.









Opportunities

a. Connections to Sibley Street, Lowertown, and Phalen Creek Trail

Sibley and Jackson Streets will provide trail users with access into and out of downtown and Lowertown via railroad underpasses. Improvements to this infrastructure would enhance the appearance of this gateway. Since the trail will significantly increase the opportunity for individuals to commute to work, especially by bicycle, additional locations to store bikes for those commuting should be provided near the entryways into downtown or in convenient locations downtown.

Efforts are underway by The Friends of Swede Hollow and other private parties to connect the East Bank Regional Trail with the Phalen Creek segment of the BN Regional Trail which currently ends at Swede Hollow Park. If the efforts are successful this would provide an important link to the northeast part of the city and to the Munger Trail, which extends to Duluth, Minnesota.

b. Childs Road

While there is limited space in which to widen the trail as it approaches Childs Road, Saint Paul Public Works has the funding to do so and is currently working on a design. Much of the vehicular traffic at this location is semi-trucks accessing the industrial area on Childs Road. Even with a wider trail, adequate signage and warnings will need to be in place to alert trail users and drivers of the crossing to ensure that it is safe.

Conflicts

a. Railroad Crossing

The main conflict in making a trail connection with the Phalen Creek Trail is the need to cross railroad tracks to get to the existing trail along Warner Road. The cost of a bridge is prohibitive so an at-grade crossing, if any, is the likely solution. However, such improvements would not be made for several years. In the mean time, an on-street trail connection between the Phalen Creek Trail and the Mississippi River Trail will be available via a striped route following Fourth Street to Jackson Street to Shepard Road.

b. Lower Landing

The Lowertown Redevelopment Corporation is exploring the possibility of establishing a river garden at the lower landing. The siting of this facility would likely impact the existing trail system along Warner Road. The report, commissioned by the Lowertown Redevelopment Corporation, identifies five alternative concepts for the river garden, each of varying size and amount of amenities. Clearly, the larger the facilities and the greater number of amenities, the greater the impact on the existing trail system. In addition, the Lowertown Redevelopment Corporation is exploring the possibility of creating a marina at the Lower Landing. Depending upon the size of the marina and the number of slips, it could impact the alignment and width of the existing trail system.

c. Trucks/Traffic

Resolve conflicts between trail use and vehicular traffic at Childs Road, see above.

7 Public Services

Sewer, power and water exist in corridor and will remain. These are available to support trailuse as necessary.

B operations

The trail will be operated, maintained, and patrolled by current Parks and Recreation staff, Police Department and Park Rangers. Since the trail will be located entirely within the city and owned by the city, existing city rules, regulations, and ordinances for its operation and maintenance will apply. Estimated costs for operation and maintenance are listed in the chart below.

Summer		Approximately \$2,500 per mil	
22 11	1 hr PW for 1 mile sweeping 1.33 hr PW for 1 mile mowing 2 hr PW for 1 mile weedwhipping 1 hrPW for 1 mile sweeping and/or blowing 17 hr PW for 1 mile checking 9 hrs PW a ton a mile	1 spring 11 times 11 times 11 times 150 times 1 mile	
Winte	D ⁴		Approximately \$800 per mile
.33 1 1	.33 hr PW for 1 mile plowing 1 hr PW for 1 mile sweeping 1 hr PW for 1 mile salting and sanding		

The city currently has an active recycling program and waste generated by trail users will be recycled in accordance with this program and applicable laws.

Gtizen Participation

The Parks and Recreation Commission hosted a meeting during the initial phase of the planning process with local neighborhood groups and interest groups about their ideas and to identify the issues and opportunities presented by the plan. That meeting was attended by representatives of the Saint Paul Parks and Recreation Commission, District 1 Community Council, Dayton's Bluff Center for Civic Life, National Park Service, Bicycle Advisory Board, Friends of the Parks, and the Minnesota Department of Natural Resources: trails and waterways.

Several meetings were held with those who own, use, or have an interest in the property adjacent to the trail to ensure that their access is adequate and that the operation of the trail will be compatible with the existing and proposed uses and will not create conflicts. Those meetings included the following organizations: Lowertown Redevelopment Corporation, Saint Paul Riverfront Corporation, Citizens for a Better Environment, Ramsey County Regional Rail Authority, Science Museum of Minnesota, Greening the Great River Park, Saint Paul Design Center, Irvine Park Association, Upper Landing Task Force, Urban Boatbuilders, Northern States Power, and Ashland Chemical.



Since much of the trail is already in place there is significant public awareness of it. Once the trail is expanded and important connections are made, it will be added to and publicized in city maps, brochures, and perhaps even on the Internet through the city's webpage. Also, the new trail will be promoted through the Metropolitan Council's existing awareness program and through its information and maps of area park and trail systems.



Access to the trail and the trail itself will be designed in accordance with the Americans with Disabilities Act requirements and with special needs users in mind. Convenient, accessible parking will be provided with ramps to the trails. Overlooks will be designed to accommodate all potential users of the facility.

Mississippi National River and Recreation Area/Critical Areas Coordination

The Mississippi River Regional Trail - East Bank Master Plan is consistent with Tier I and Tier II policies and standards as identified in the Comprehensive Management Plan of the Mississippi National River and Recreation Area. The designated regional trail is compatible with and will complement the riverfront environment and

surrounding land uses and will protect existing natural resources. Barriers to the river will be eliminated and public access to and along the river will be improved when abandoned right-of-way from Shepard Road is restored for open space and recreational uses. Every attempt will be made to provide separate paths in heavily used areas to reduce conflicts. Visitor safety and enforcement will be a priority in the specific design of the trail as will visitor accessibility.

Existing views of and from the river will be maintained and new scenic overlooks will likely be established. Much of the concrete shoreline will be restored to a more natural state and native and other compatible floodplain vegetation will be planted along the shoreline and pathways. In addition, efforts will be made to relocate existing utilities underground or in aboveground landscaped berms, where possible. The trail will function as a significant transportation corridor for pedestrians and bicyclists by providing important connections to downtown, neighborhood areas, and other regional parks and trails.

The new Science Museum of Minnesota will provide an opportunity to coordinate year-round recreation and interpretive activities associated with the river and encourage special events that draw people to the river and contribute to visitor understanding and appreciation of the river's natural and cultural features. There is an opportunity to rehabilitate and adaptively reuse the historic Head House structure located along the river for such purposes



