City of Minneapolis
Department of Community Planning & Economic Development - CPED

ABOVE THE FALLS

MASTER PLAN UPDATE

CITY OF MINNEAPOLIS
CPED – LONG RANGE PLANNING DIVISION
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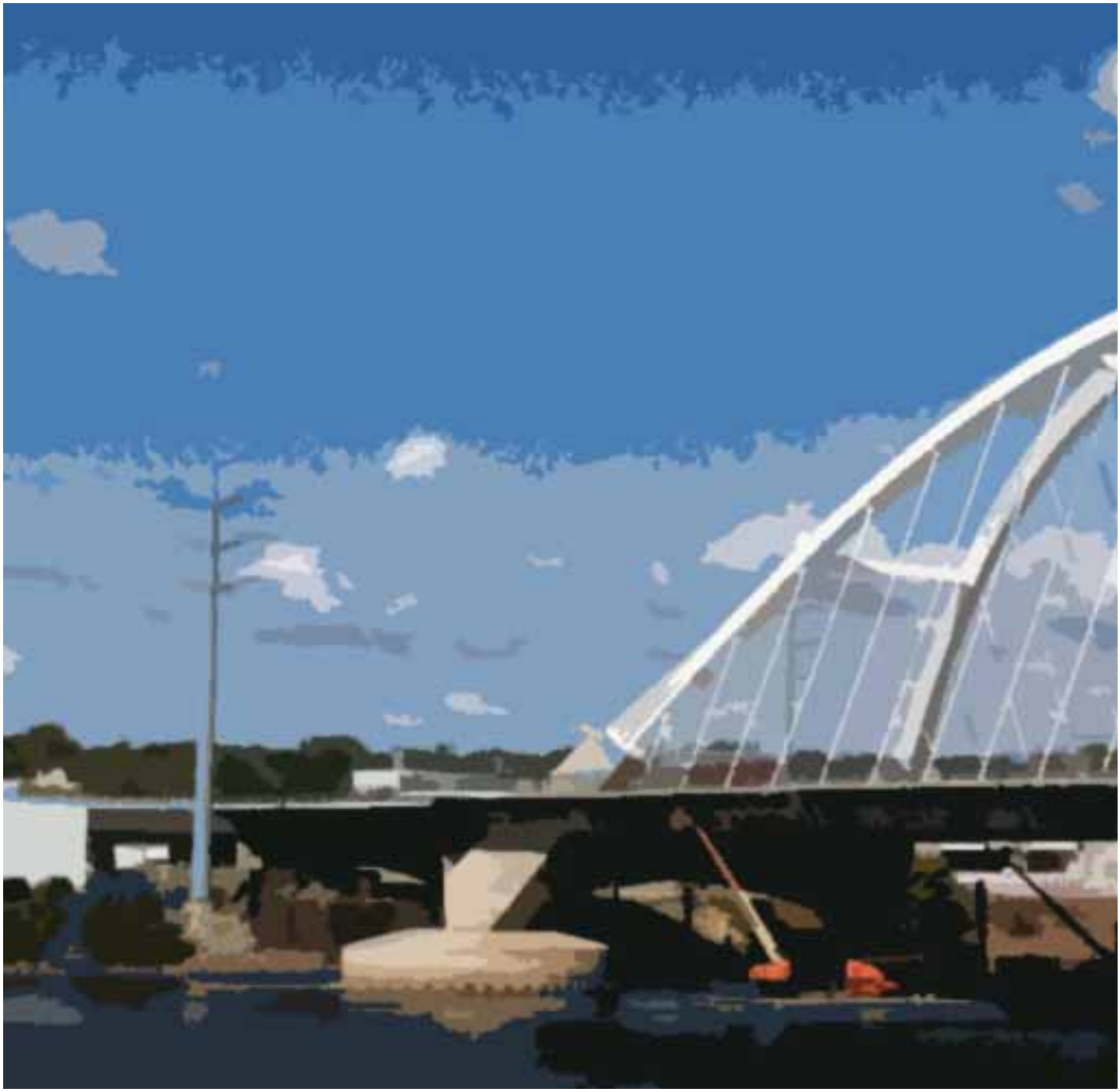
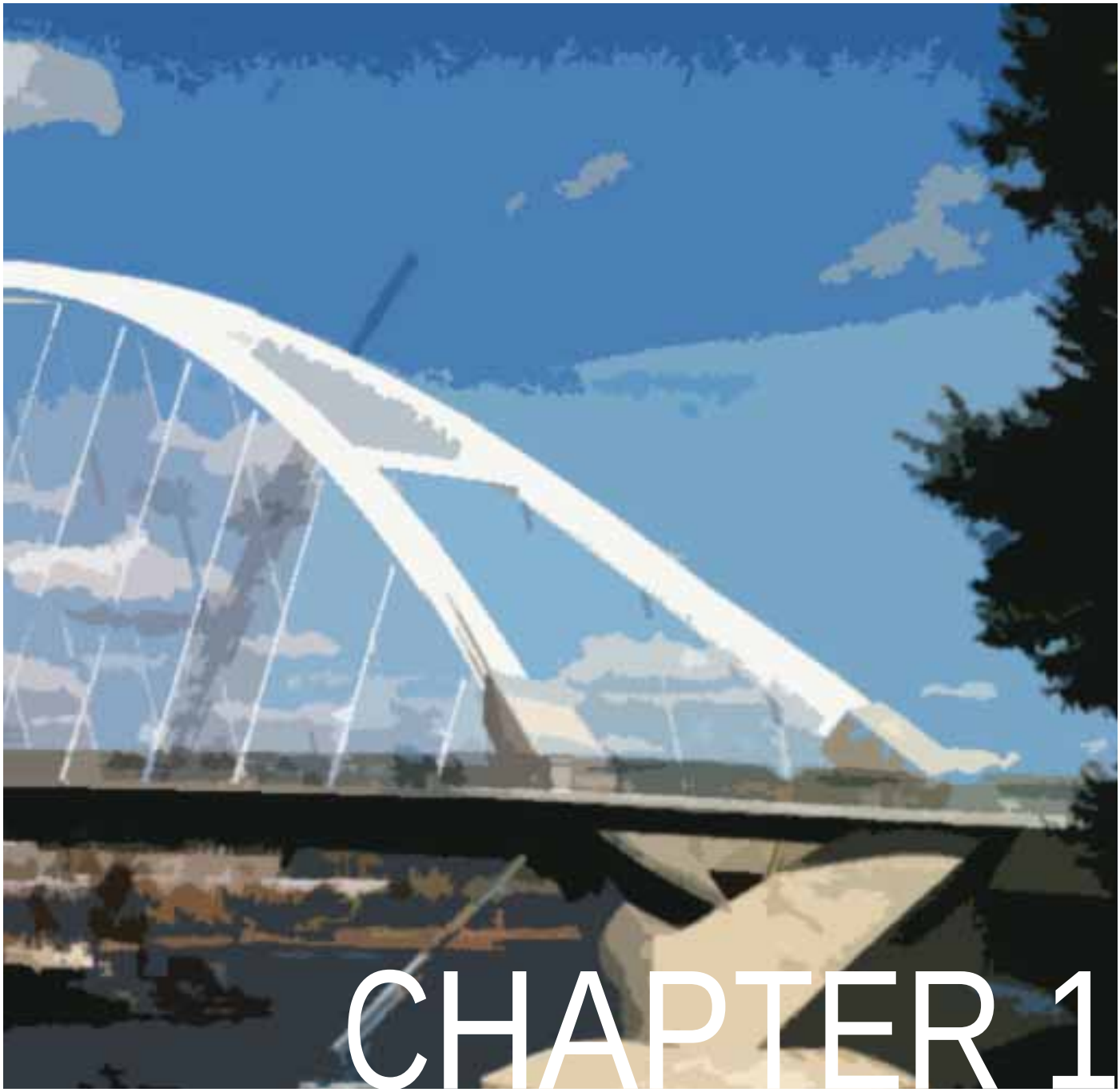
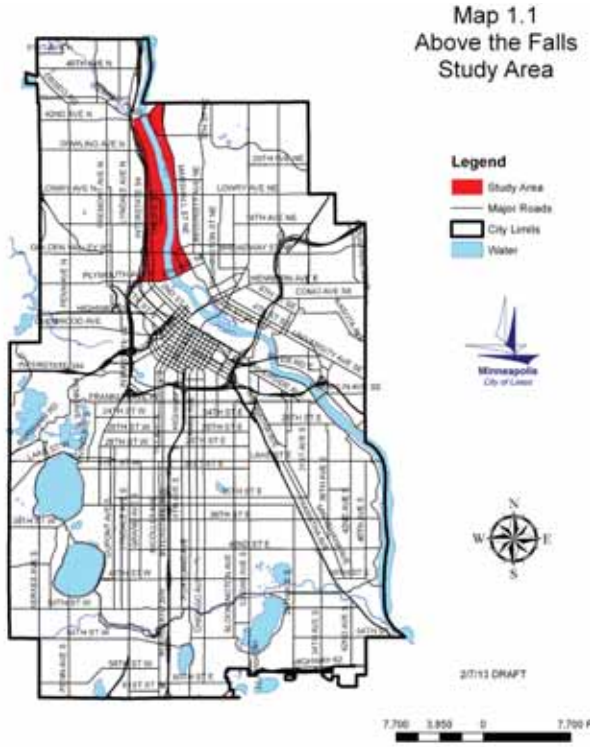




CHAPTER 1

Introduction and Summary



Map 1.1
Above the Falls
Study Area

ABOVE THE FALLS VISION

Vision: Develop a regional park amenity and support compatible new development along Minneapolis' upper riverfront.

In 2000, the City of Minneapolis and the Minneapolis Park & Recreation Board jointly adopted a bold vision for the upper Mississippi riverfront, defined as the area north of Plymouth Ave N on the west side of the river, and 8th St. NE on the east side. The Above the Falls plan envisioned new parks, trails, and transformational redevelopment of the adjacent land uses.

In the time since the plan's adoption, significant progress has been made towards achieving that vision, especially in terms of park and trail improvements. However, much remains to be accomplished. In 2009, the Minneapolis City Council renewed its commitment to this area by directing staff to pursue a review and update of the plan. At the same time, the Minneapolis Park & Recreation Board (MPRB) initiated a high profile and ambitious initiative to refresh the park vision for the same area. The resulting vision, known as RiverFirst, was approved by the Park Board in 2012.

The Above the Falls Master Plan Update reflects a renewed vision of the original Above the Falls Master Plan, focused on "developing the Mississippi riverfront into a regional park amenity in north and northeast Minneapolis." Likewise, this plan update supports addressing land use conflicts, improving environmental quality, and supporting new investment – in order to leverage the unique and valuable asset that is the Mississippi River.

This plan update does have some key differences from the original, however. The most significant changes focus on future land use, based on market and feasibility analysis, and a renewed appreciation for uses that were initially dismissed in the original plan. The parks component of this plan retains the broad vision and goals of the original while incorporating significant new parks elements from RiverFirst. The plan update continues to reflect a desire for positive change that will benefit the residents of North and Northeast Minneapolis, as well as the city as a whole.

This plan update also focuses on a more robust implementation section with clearer action steps and accountability. It is an important tenet of this plan update that the vision must not only be a positive one, but must be realistic and achievable using available resources and within a given time frame. While the plan update continues to take the long term view of the original visionary document, it focuses more attention on nearer term implementation, as actions now will set the stage for what is possible later.

GUIDING PRINCIPLES

The guiding principles that form the foundation for this plan are largely consistent with the original. They are outlined below:

- **Provide public access to the river.** Consistent with the model elsewhere in the city of providing public parks and trails along and around water bodies, this plan affirms support for a continuous riverfront Regional Park system to be constructed along both banks for the entire length of the study area, providing parkway and trail connections from the central riverfront all the way to the northern city limits.
- **Create linkages to neighborhoods and parkway system.** Described in the original plan as "Riverway Streets," and referred to here as "greenway street" consistent with RiverFirst, these are enhanced connections along existing streets on both sides of the river, providing attractive, safe, and meaningful connections from neighborhoods to the riverfront. Riverfront parks and trails must be accessible for everyone if they are to be of value to the community.
- **Support environmental restoration.** The river and river corridor serve numerous other purposes besides being a

public amenity. The ecological function of the river corridor relates to water quality and supply, plant and wildlife habitat, migratory flyways, and the strength of our region as a whole. The plan provides guidance for addressing contamination and degradation, and strengthening these natural functions.

- **Link the upper riverfront to the Grand Rounds parkway system.** The parkways surrounding the Chain of Lakes connect to the lower and central Mississippi riverfront but stop short of the upper riverfront. This plan outlines an approach for remedying this situation by constructing new parkway along the west riverbank, and by extending and enhancing existing street networks on both sides of the river.
- **Realize the potential for community and economic development.** The original plan and subsequent analysis make it clear that the existing mix of uses along the riverfront is not capitalizing on the riverfront's potential for amenities. Additionally, a number of adjacent neighborhoods struggle with disinvestment and lack of positive economic activity. Furthermore, comparing this to other areas of the city that are more amenity-rich and prosperous raises substantial equity concerns. Realizing some of this unmet potential has a great possibility of raising this area up through improved conditions and opportunities.
- **Establish design guidelines and standards**. Regardless of the mix of uses along the riverfront, it is apparent that existing development patterns need to be improved if the area is to increase in value. To be consistent with the overall vision for the area, this plan must present a clear picture of expectations for urban design. Furthermore, to be most effective, these standards should address ways to retrofit and improve existing properties in addition to guidance for new construction.

PLAN OVERVIEW

Mirroring to a significant extent the original plan, this plan addresses a wide range of topics for the study area. The chapters in the plan are briefly described below:

- **Chapter 1** – Introduction and Summary. Provides an overall introduction to the plan, vision, and guiding principles. Summarizes major recommendations and the general implementation strategy.
- **Chapter 2** – Context. Summarizes the history and background of the area. Includes an overview of existing conditions in the study area. Lists major constraints and opportunities, and describes the planning process.
- **Chapter 3** – Policy Issues. Summarizes some of the major policy issues addressed by the plan, including the decisions to be addressed.
- **Chapter 4** – Supporting Analysis. Describes and presents the findings from the technical analyses undertaken as research for this plan update, including the health impact, market, economic and fiscal, and land availability analyses.
- **Chapter 5** – Land Use and Urban Design. This chapter presents an evaluation of the land uses by subarea, including the recommended future land use. Also included are urban design standards for the various types of future land use, designed to complement the riverfront park.
- **Chapter 6 – Parks and Trails Plan**. This outlines the long-term goals for the development by the MPRB of parks and trails within the Above the Falls Regional Park, incorporating substantial portions of the RiverFirst vision approved by the Park Board in 2012.
- **Chapter 7 – Environment and Infrastructure Plan.** To complement the vision for land use and parks, this chapter addresses environmental and infrastructure conditions and recommendations for investment and improvement.
- **Chapter 8 – Community and Economic Development.** This chapter references how the land use and other recommendations fit into the community and economic development approach for North and Northeast Minneapolis.
- **Chapter 9** - Implementation Plan. This summarizes the recommendations presented throughout the plan and presents a framework for implementation.
- **Appendices** include the technical reports produced throughout the planning process and a summary of outreach strategies. They also include the text of the Regional Park master plan update and the Health Impact Analysis, two closely related processes coordinated with this plan update.

IMPLEMENTATION STRATEGY

Because of the new policy and resource environment, the implementation approach for this plan must necessarily change to reflect a feasible path to progress. The original plan relied on geographic phasing, moving up the riverfront in large blocks, reflecting areas of concentrated public investment. It also relied heavily on the ability of the public sector to acquire and redevelop sites.

The new plan has a different focus, much more based on taking advantages of opportunities as they emerge. Additionally, it acknowledges that there are some compelling vision elements of the original plan that do not currently have a path to implementation, but might in the future. This is reflected in a new two tiered approach to implementation, reflecting the need to balance vision and feasibility. The implementation strategy for this plan is divided into two main categories: the Priority Plan and the Vision Plan.

The Priority Plan represents a series of achievable goals for redevelopment and parks along the upper riverfront. It has identifiable resources, tools, and implementing agencies. While the components of the Priority Plan may still take a substantial amount of time to complete, implementation can begin in the very near term.

The Vision Plan represents a more ambitious image of change for the upper riverfront. The larger scale concepts here require resources, tools, and conditions that are not currently available and may require significant effort to obtain.

It is not the intent of the plan to be limited just by current conditions, but rather to be realistic about what it will take to move towards a transformational vision. It is suggested that the plan should be revisited at least once every 10 years to ensure the framework is still robust and relevant to the vision for the upper riverfront.

SUMMARY OF RECOMMENDATIONS

The top recommendations from the Priority Plan are listed below. More detail can be found in Chapter 9:

Park and Trail Priorities

- Riverfront Trail System
- Habitat Restoration and Water Quality
- Farview Park Connections
- Scherer Park District
- Northside Riverfront Park

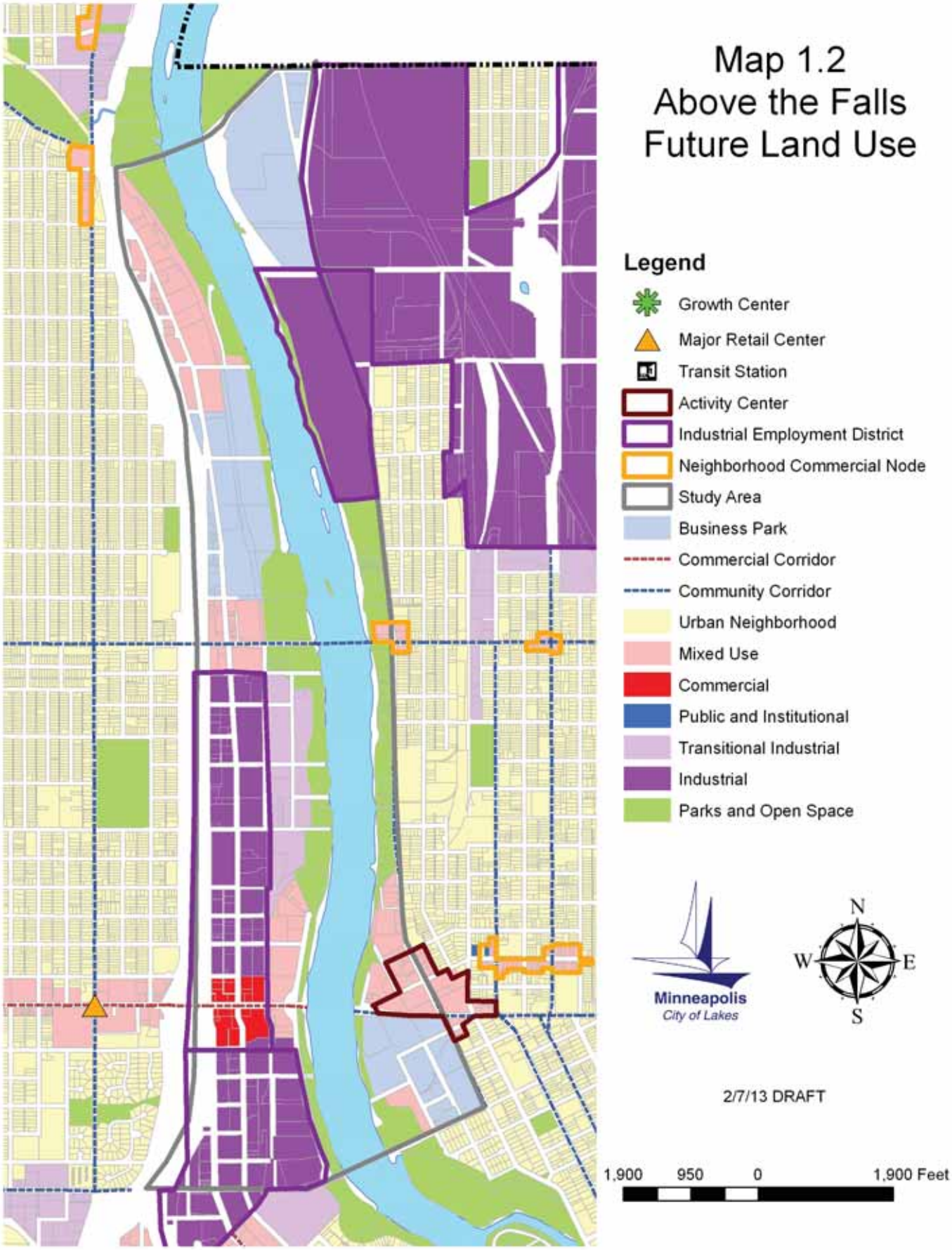
Development Priorities

- Upper Harbor Terminal redevelopment
- Grain Belt area development
- Zoning and regulatory guidance

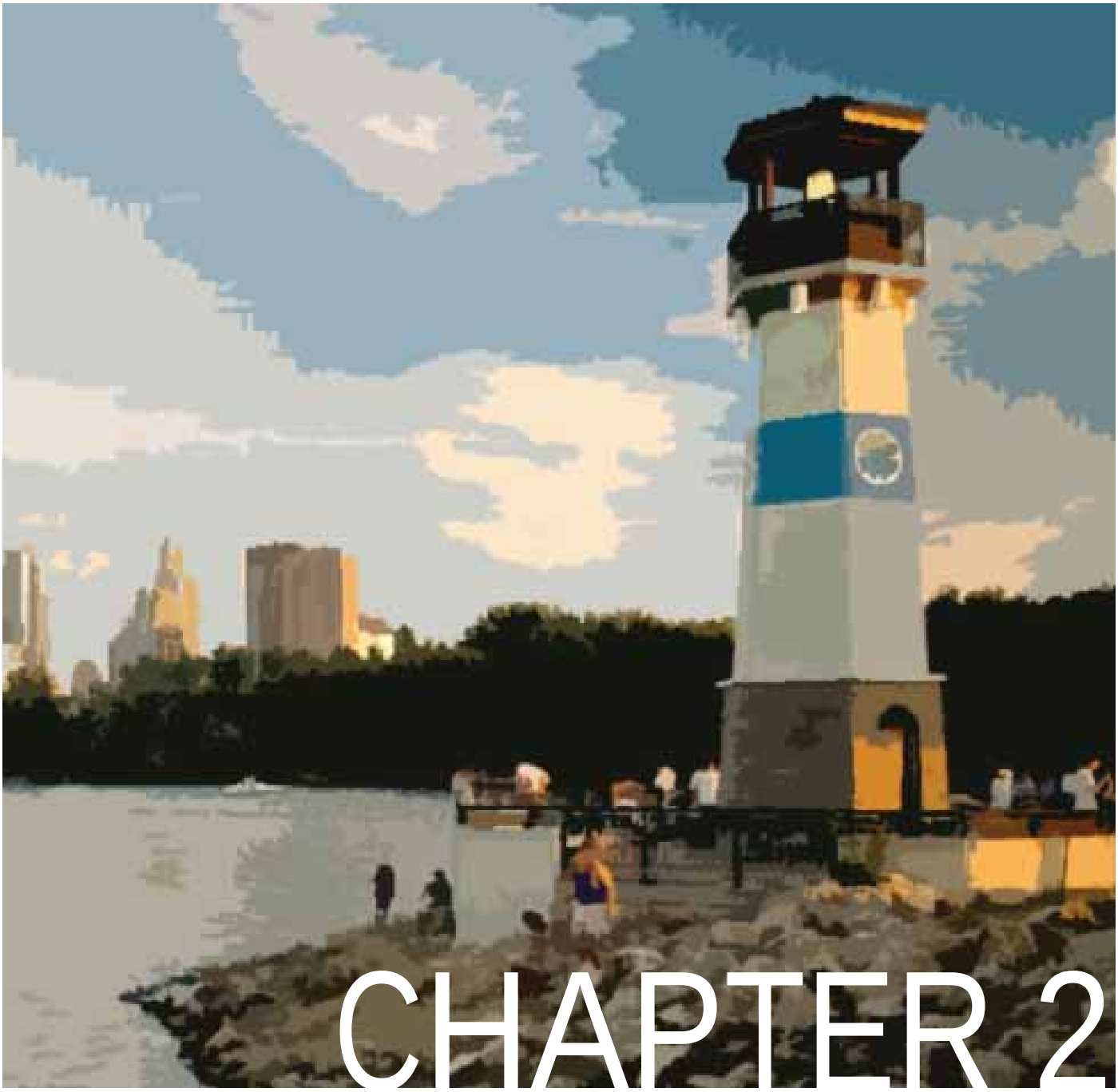
Other Priorities

- Organizational and resource development
- 26th Avenue North connection
- Marshall Street NE bicycle/pedestrian facilities
- BN rail bridge vacation/redevelopment

Chapter 9 also discusses the Vision Plan priorities. As described above, the implementation path and timeline for these is less certain, and will need to be reevaluated in the future.



Map 1.2: Future Land Use



CHAPTER 2

Context

HISTORY AND BACKGROUND

HISTORY OF THE AREA

The recorded history of this area begins as does much of Minnesota – with the native tribes of the area living along the corridor, their lives attuned to natural features and cycles. However, since the earliest years of European settlement, the history of this area has been largely an industrial one.

The area has been defined and shaped by a series of transportation corridors – from the earliest rough trails along the river corridor to the development of Interstate 94. The development pattern that is there today was largely built by the expanding city between the 1880s and World War I.

Railroads, drawn by the high value of goods in the downstream milling district, were among the first to establish connections through this area. By the 1870s, much of the area was served by rail – which continued to expand for several decades with competing mainline providers. The road network expanded as well, with the original Plymouth Avenue bridge completed in 1872. Growth followed, and Minneapolis repeatedly extended its corporate limits northward to incorporate new development.

One of the first industries in the area was lumber. Propelled by the success of lumber milling in the central riverfront, industrialists

extended operations northward to the upper riverfront. As they did not have access to water power, these new facilities were powered by steam – and eventually replaced the water powered ones. By the mid-1890s the west side lumber district extended all the way up to 44th Avenue North. This lumber was used to fuel the growth of the rapidly expanding city, which more than tripled in population from 1880 to 1890.

Within a decade, however, the Minneapolis lumber industry had suffered a precipitous decline as the forests of northern Minnesota were depleted, and by 1920 almost all had closed. Only a few remnants of this industry remain in this area.

There was a similar wave of activity with brickyards, fueled by access to local clay ideally suited to brick making. However, like lumber, this business declined as the resource was exhausted and was largely gone by 1940 – though some cement works remain today. This vacated a great deal of land near the upper limits of the city on the west bank, which was to allow for the eventual development of the North Mississippi Regional Park, which developed incrementally from the 1940s to the 1990s.

During a similar time, other industries grew and flourished. Of particular note on the east bank was the development of breweries, building on Old World expertise of immigrants and ample grain supply. The earliest brewing operations were started in the 1850s. The industry grew and expanded for several decades, but contracted again when a number of smaller brewers were bought up and consolidated in the 1890s and into the 20th century.

In the wake of these natural resource industries came a much more urban one: scrap metal. Drawn by rail access and vacant lands, this area became a center for scrap metal collection and processing, starting as early as 1885. Scrapyards proliferated in the area in the 1920s (American Iron – now Northern Metals – being the largest). With the abundance of metal scrap came other metal-related businesses, including foundries, fabricators, and machining industries.

The area had plentiful jobs, but few houses. Many workers reached the area via streetcar lines, such as one running along Washington Ave N. These were later replaced by buses.

Water navigation, due to the downstream falls, was limited for many years. This changed in 1937, with legislation au-

thorizing the creation of an upper Mississippi harbor via a series of locks and dams. The project began in 1948, and proceeded with a number of delays – eventually opening in 1963. However, there was no actual terminal site until 1967, when the city acquired a site near Dowling Avenue and began development of facilities at that location.

In the decades since, rail service has been supplemented by the development of Interstate 94, and the diversification of the industry mix in the area. The area remained industrial and intensified, as the central riverfront largely transitioned away from its industrial past. Waves of city involvement have supported reinvestment in some areas, especially those closest to downtown. At present, the study area contains a diverse mix of uses, with a strong concentration of industrial activity.

In adjacent neighborhoods, there has been a strong tradition of diversity. Historically, the north side has been largely Jewish and African American, and the northeast has been Eastern European, Scandinavian, and German. This has continued to change and diversify with waves of new immigrants. Strong ethnic traditions in the various immigrant populations have shaped these areas, through the housing, churches, businesses, and other institutions. Characteristic of this has been the mix of uses, especially on the northeast side. Throughout the history of these areas, they have remained largely blue collar and working class neighborhoods.

As traditional industrial uses have declined, a number of industrial buildings have been converted to space for creative uses, including arts and artist housing. The community has hundreds of working artists, live music, and many creative industries. The Northeast Arts District has its hub nearby, and the area has a variety of attractions, including restaurants, bars, shops, and galleries.

In more recent years, the diversity of the population has continued to grow and change. At present he student body at Edison High School, one of the nearby public high schools, has over 60 languages spoken at home - giving the area a global reach.

Except for some areas close to Downtown, the affordability of the traditionally blue collar neighborhoods has largely remained. This has become attractive to those seeking access to urban amenities at an accessible price, including everyone from new immigrants to young professionals. It is for this growing, changing population this area is being planned.

SUMMARY OF PREVIOUS PLANNING EFFORTS

One of the first plans for the area was the 1972 Mississippi/Minneapolis plan, which focused on sweeping change for the central riverfront. With regards to the upper riverfront, it proposed a high employment manufacturing area with quality structures and river edge setbacks at non-barging sites. Additionally, it proposed significant open space, river access, and trail development goals. This plan helped in the formation of the North Mississippi Regional Park, including changes to the proposed I-94 alignment to allow for river access in that area.

Over a dozen plans since 1972 have addressed the study area in some manner, including "The Upper River in Minneapolis" (1985), "Mississippi Corridor Neighborhood Coalition" (1994), and "Gateways to the River" (1997). The basic goals identified throughout these plans for the upper riverfront remain the same:

- Create continuous recreational trails along both banks of the river.
- Seek opportunities for public ownership of the riverbank.
- Enhance streets leading to and paralleling the river.
- Create locations for observing the river.
- Work toward a pattern of river-enhancing land uses.
- Restore true ecological function to the riverbanks.
- Remove unneeded railroad spurs.
- Improve river ecology and water quality.
- Reduce or eliminate sources of air, noise, or water pollution.
- Develop a coordinated effort at all levels of government to implement goals.

In December of 1997 the Minnesota Department of Natural Resources executed an agreement approving a grant to the Minneapolis Park and Recreation Board from the Legislative Commission on Minnesota Resources "to develop a master plan addressing green space and trail development, riverbank restoration, and stimulation of river-oriented land uses within a corridor along the east and west banks of the Mississippi River from Plymouth Avenue north to the Minneapolis city limits." The primary goal was for a parks plan to "provide the final link in the Mississippi riverfront green space system," but the scope of study also included "neighborhood economic revitalization and sustainable development through a gradual shift in land use toward light industrial parks and residential neighborhoods in conjunction with greenways and riverfront trail systems," and "environmental questions regarding possible soil contamination by previous and current land uses and the restoration of the ecological integrity and stability of the riverbanks." This process resulted in the development of the 2000 Above the Falls Master Plan.

Adopted by both the Minneapolis City Council and the Minneapolis Park and Recreation Board in 2000, Above the Falls represented "a bold vision for developing the Mississippi riverfront into a regional park amenity in North and Northeast Minneapolis." It sees the upper river as a unique asset that is magnificent in both scope and character. But the plan notes that the river is relatively unavailable to City residents, and is similarly underutilized as a tool for attracting new growth and investment. It recommends the development of a regional park facility along both banks of the upper riverfront from Plymouth Avenue to the Camden Bridge. It calls for complementary redevelopment of adjacent areas to support the new park and leverage its value.

This vision entails a long term, major land use transition which would replace much of the existing industrial landscape with new residential neighborhoods. The existing mix of largely industrial uses, especially on the west bank, was deemed incompatible with the new parks, and therefore the plan presented a detailed and ambitious plan for complete land use transformation – with many areas changing from industrial to residential The plan also envisioned a new scenario which concentrated jobs in higher value and more dense clusters, and opened up space for residential, commercial, and mixed

use areas along the parkway

The plan acknowledged that the transformation was a long term proposition. It included a phasing plan, along with directions to create a new implementing agency to move things forward.

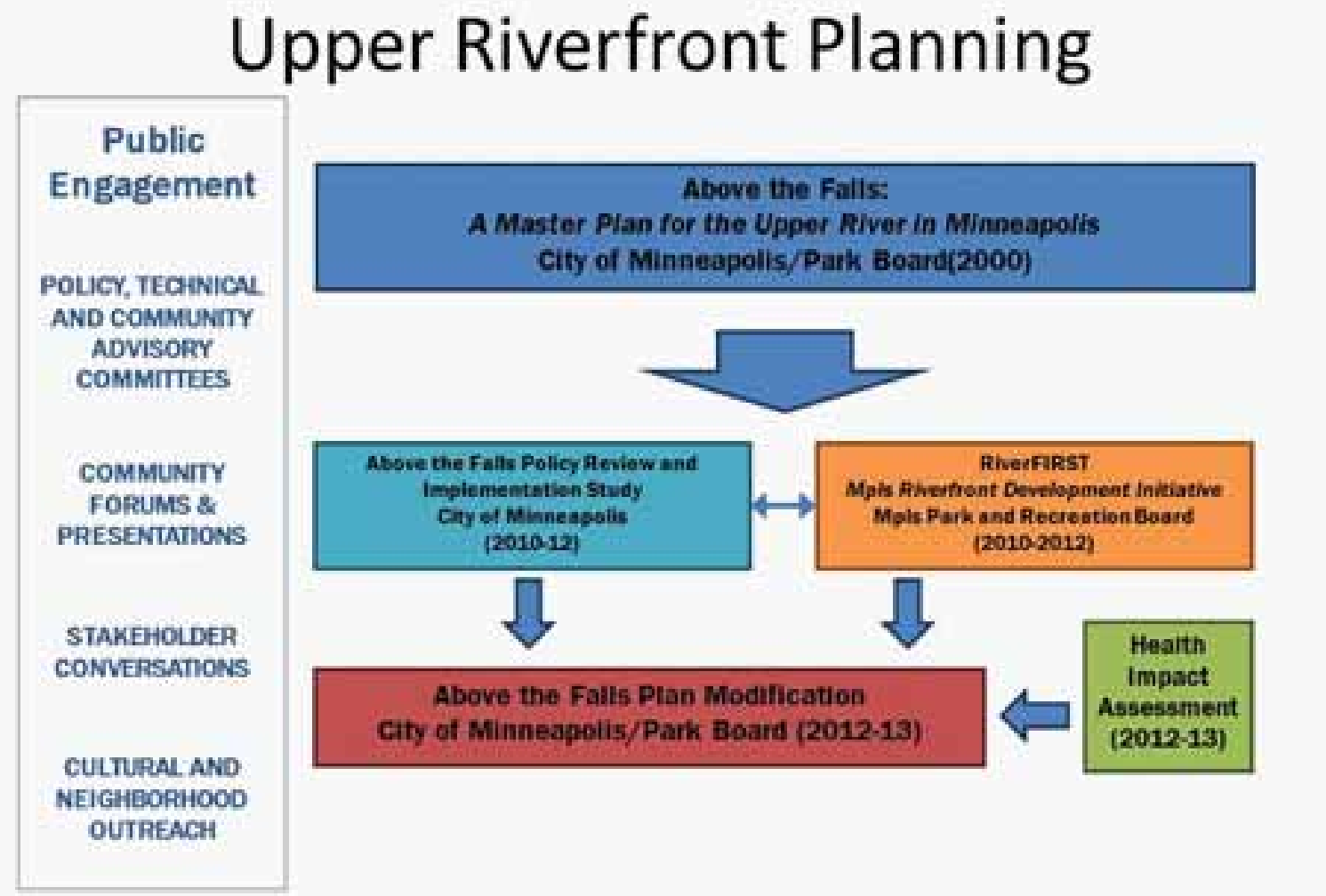
A number of the Above the Falls Plan's recommendations, especially as outlined in its Phase I recommendations, have been implemented. These are summarized in the Implementation Plan chapter, and serve as a basis for the next steps in implementation.

PLANNING PROCESS

ABOVE THE FALLS POLICY REVIEW AND IMPLEMENTATION STUDY

At the ten year anniversary of the Above the Falls plan adoption, there was an ongoing, and even renewed, sense of urgency to advance its implementation. There was also, however, significant concerns about the sweeping redevelopment called for in the plan because of its impact on existing businesses and the shrinking supply of industrial land. The City Council turned these concerns into direction to City staff through conditioning the adoption of its new comprehensive plan with the following direction:

"Direct staff to include the following considerations as part of the Above the Falls rezoning study to be conducted after



adoption of The Minneapolis Plan for Sustainable Growth: (1) Explore policy and regulatory strategies for providing existing property owners clearer expectations about the phasing of long-range land use transitions; and (2) analyze and report back to the Council on the potential impacts of the land use guidance in the Above The Falls study area related to the extent and phasing of the proposed long-range transition from industrial to non-industrial development."

Staff responded to this direction with the development of the Above the Falls Policy Review and Implementation Study (ATF PRIS). This process addressed questions about the redevelopment vision of the Above the Falls Plan through an evaluation of its policy basis. It formed the basis for this plan update, specifically regarding changes to land use and development guidance.

The ATF PRIS has three phases:

- **Phase I: Analysis.** Review and augment the analytical basis for evaluating the land use and development recommendations of the Above the Falls Plan, including an updated survey of existing conditions and several technical analyses. Product included recommendations concerning plan modification.
- **Phase II: Plan Revision.** Based on the results of Phase I, staff undertook a plan update to modify the land use and development guidance. This also included incorporating the updated vision from parks and trails developed though the RiverFirst process led by the Minneapolis Park and Recreation Board (MPRB).
- **Phase III: Implementation Actions.** Following the adoption of the Above the Falls Plan Update, staff will undertake actions to advance plan implementation. See the Implementation Plan chapter for details.

The project has being managed by City staff, working in collaboration with MPRB and featuring broad public and stakeholder engagement. Key stakeholders include Above the Falls Citizen Advisory Committee (AFCAC), Mississippi Riverfront Partnership (MRP), neighborhood and business organizations, property owners, and many others. A cross-functional City-MPRB collaboration is serving as a technical advisory committee to the project. Initial presentations to stakeholders began in December 2009.

From the start it was stated that, while there are strongly divergent views on the guidance of the ATF Plan, the outcome of this study was not pre-determined, and recommendations have been shaped through ongoing research and public input. Furthermore, the purpose was not to completely replace the existing plan but to make needed modifications to ensure it provided clear and feasible guidance that could be implemented in the coming years, and provide certainty to area stakeholders.

RIVERFIRST

The parks components of the Above the Falls master plan are shaped significantly by the RiverFirst vision for the upper Mississippi riverfront. RiverFirst emerged from an international design competition hosted by MPRB, with the goal of reinvigorating community energy and imagination around the upper riverfront. The competition was a 6-month process which awarded the commission to the KVA/TLS consultant team out of 55 entries from around the world. The resulting Minneapolis Riverfront Development Initiative (MR|DI) was a visionary planning effort for the Minneapolis Upper Mississippi River corridor that included extensive research and analysis, design inquiry, community outreach, and consensus building.

The KVA/TLS concept, RiverFirst, offers a dynamic vision for a renewed and revitalized Upper River corridor through a proposed series of eight areas of opportunity, focusing on establishing parks as an economic development engine, knitting both sides together, and refocusing the city toward one of the great rivers of the world. The recommendations focused on eight areas of opportunity, six of which are in the Above the Falls study area (the other two are in the Central Riverfront area, outside the scope of this plan).

At the Park Board's meeting on March 14, 2012, following stakeholder engagement process and a standard 45-day comment period, the Board approved the RiverFirst vision and authorized staff to pursue next steps, including contracting with the design team for further work on select RiverFirst projects. At this time the Board also directed staff to use RiverFirst as a basis for coordinating with the City of Minneapolis to update the Above the Falls master plan and Above the Falls Regional Park master plan. The RiverFirst priority projects are reflected in the Regional Park master plan appended to this document. The update to the parks element of this plan triggers a required modification to the Regional Park plan. More information about RiverFirst can be found in Appendix E.

The update to the parks element of this plan triggers a required modification to the regional parks plan, as the expanding upper riverfront park and trail network is a regional park. More information on this is available in Chapter 6.

HEALTH IMPACT ASSESSMENT

During the earlier stages of the Above the Falls Plan update, there was an opportunity to add onto the analysis a health impact assessment (HIA). A HIA is a public engagement and decision-support tool used to assess the health impacts of proposed planning and policy changes. It uses an objective and scientific approach, and engages affected stakeholders in the process. A HIA develops recommendations to improve health outcomes associated with those proposals. The fundamental goal is to ensure that health impacts and inequities are considered in decision-making processes. Since much of the intent of the original plan was to improve the well-being of residents and neighborhoods near the riverfront, it was a good match for the area and project.

The Minneapolis Department of Health and Family Support conducted the Health Impact Assessment (HIA) in collaboration with a range of project partners. Funding for the HIA came from collaboration between the Robert Wood Johnson Foundation, Pew Charitable Trusts and the Blue Cross Blue Shield Foundation. The HIA was initiated in January 2012, and focused on the health implications of proposed land use changes along the Mississippi riverfront in North and Northeast Minneapolis. Results from the HIA have been incorporated into recommendations throughout the plan, including elements related to physical activity, safety, economic well-being, and others.

The finalized goals developed for the HIA were to:

- Elevate health considerations during the ATF Plan revision process
- Maximize potential health benefits and mitigate identified risks of proposed changes
- Receive input from diverse stakeholders including groups not reached previously
- Serve as a catalyst for accelerated redevelopment efforts along the Upper Mississippi Riverfront in Minneapolis

COORDINATION AND OUTREACH

The simultaneous planning efforts by the City and MPRB required ongoing, close coordination to ensure they produced combined, consistent results and recommendations. Staff involved in the process met together regularly. Additionally, most large public outreach efforts were conducted as joint meetings, to allow people to learn about the progress of each in context to the others and to provide combined input and comments. The final element was the production of this joint plan update, and the shared commitment to implementing its recommendations.

Community outreach for this process was extensive, and was conducted in several phases, reflecting the various elements of the plan update. The process relied upon the Above the Falls Citizen Advisory Committee (AFCAC) as the primary interface with the community, but included many other groups and outreach methods as well.

The process relied on a variety of means to get the word out to the public about the process and opportunities for input. Outreach methods included:

- Extensive email outreach via staff and project partners
- Several direct mail pieces to all property owners within the study area
- Press releases and other media contacts, resulting in many new stories
- Attending a variety of community special events and regular meetings to provide updates and distribute information
- Updated website information and online content, including surveys, blogs, and Facebook updates
- One-on-one contacts and meetings with key stakeholders

A summary for all the outreach involved in the plan is available in Appendix A. Information on the main phases of outreach is provided below.

MINNEAPOLIS RIVERFRONT DESIGN INITIATIVE AND RIVERFIRST

In the spring of 2011, the Minneapolis Park and Recreation Board established the Minneapolis Riverfront Development Initiative (MR|DI) as a special project to transform the winning proposal from the Minneapolis Riverfront Design Competition to a visionary plan and implementation strategy for development of parks and open space along the Minneapolis upper riverfront. The RiverFirst design team refined the vision through extensive community engagement involving input from the public and three stakeholder committees: Steering, Technical and Advisory.

Other engagement included the following:

- Six large, scheduled public meetings were held;
- The design team and MR|DI representatives met with over 100 individuals and half as many organizations in key communities and areas of relevant expertise;
- A community input survey taken by more than 600 people;
- Promotion and participation occurred in more than 30 community events throughout Minneapolis;
- Three additional public meetings held in association with the City of Minneapolis and the Minneapolis Riverfront Partnership;
- More than 40 presentations and meetings were held with neighborhood associations, community-based non-profit organizations, agencies and other stakeholder groups;
- Seven paid part- and full-time "youth ambassador" interns represented the MR|DI at more than 35 community event; and
- The debut of "River Is," a figurative gathering of people's thoughts about the Mississippi today and for the future.

POLICY REVIEW AND IMPLEMENTATION STUDY

The City-led Policy Review and Implementation Study was a much more technical exercise than the design competition. Likewise, the public outreach was more focused on responding to the findings. The outreach was focused around reporting on the findings and soliciting feedback. Outreach during this period included:

- A series of three large public forums was held in 2010 and 2011 to report out on the research and interim findings, as they were developed by staff and consultants.
- Numerous focus group discussions and key stakeholder interviews were set up as needed, including developers, property owners, residents, businesses, and others.
- To complement the resident-oriented community input survey circulated by the Park Board, a business survey (and series of related site visits) was conducted to gain more information on existing conditions, and received over 50 responses.
- Developer roundtables were set up to discuss development feasibility, and included over a dozen high profile local developers with expertise in the area.
- Regular meetings were held with the Riverfront TAC and AFCAC to keep them updated on the research, and to involve them in shaping the public process.

ABOVE THE FALLS PLAN UPDATE STAGE

In 2012, a number of combined meetings and outreach efforts, including the Health Impact Assessment process, summarized findings and outcomes from earlier phases and launched into review of draft projects and recommendations to be included in the update. Outreach during this phase included:

- A second series of three large public forums was held in 2012, coordinated with AFCAC and other partners.

- More than 50 outreach meetings total regarding the ATF plan update, including more than 30 meetings with groups other than elected officials or agency/non-profit staff (community organizations, churches, schools, seniors, etc.)
- Targeted outreach, with Hispanic, Southeast Asian, African American, youth, senior, and persons with disabilities populations. The Hispanic, Southeast Asian, and persons with disabilities meetings included simultaneous translation into Spanish, Lao, and sign language, respectively.

This was concluded via a series of public outreach efforts and official public hearings in late 2012 and early 2013, to review the plan content through the official comment period. This included a round of meetings targeting the ten impacted neighborhoods, and more specific outreach to underrepresented populations. A summary of the extensive comments received during that period and responses are in Appendix A.

EXISTING CONDITIONS SUMMARY

STUDY AREA

Interstate 94 sets the western boundary of the study area. The eastern extent of the study area is Marshall Street NE. Since the area is so shallow on the east bank, the analysis did include land east of Marshall to the parallel Burlington Northern rail spur to provide context. However, there are few specific recommendations for this inland area in either the original plan or this update.

The northern boundary of the plan is the Camden Bridge at 43rd Avenue North and 37th Avenue NE. Although part of the Upper River, North Mississippi Regional Park is covered by its own master plan and therefore is not included in this one. Investigation of circulation and traffic patterns extends outside the study area for land use. The southern boundary is the Plymouth Avenue N/8th Avenue NE Bridge.

Much of the study area is within the boundaries of the Mississippi National River and Recreation Area, a 72 mile long river park under the jurisdiction of the National Park Service. It also lies along the Mississippi River flyway of migratory birds.

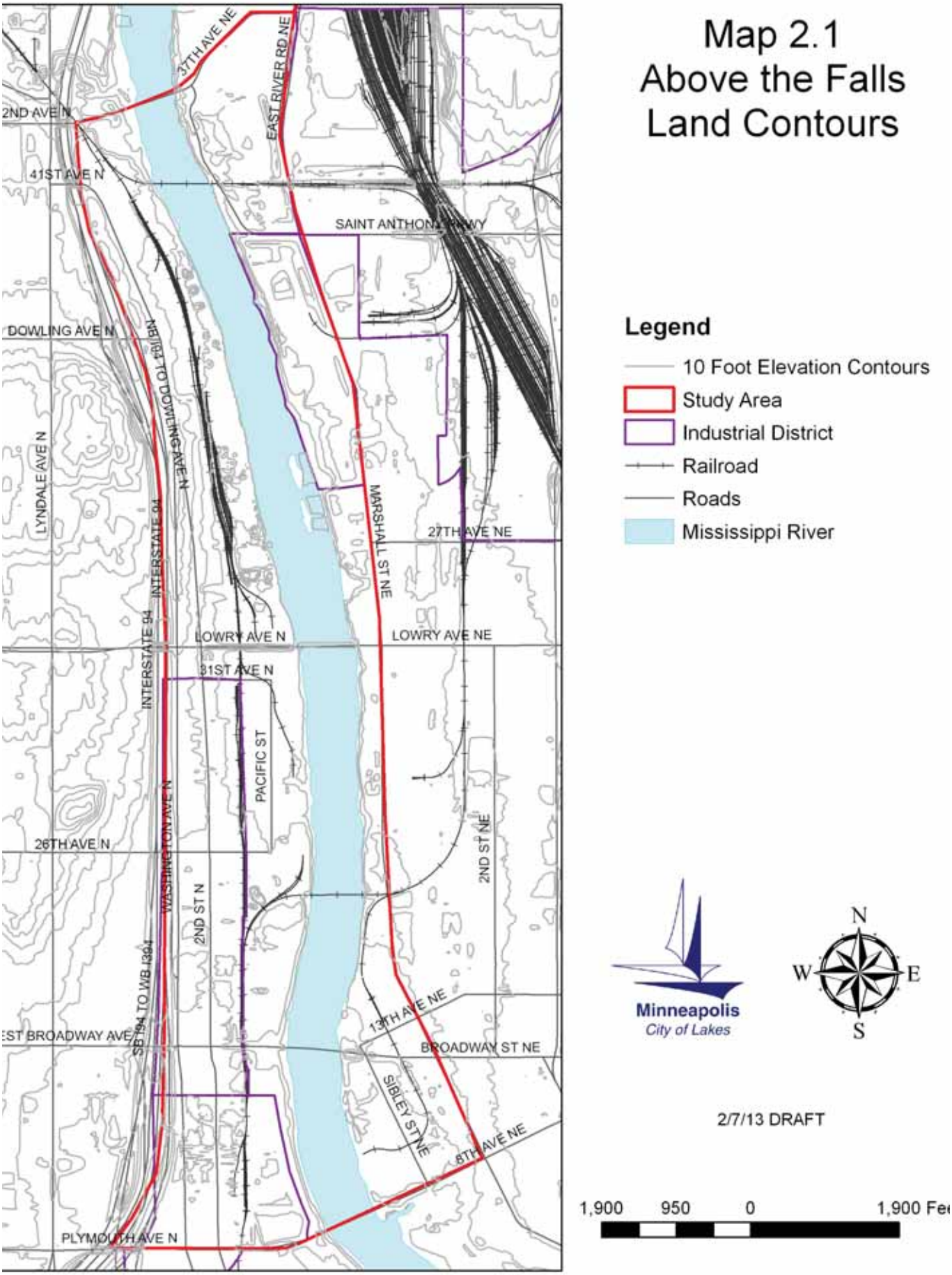
The study area contains approximately 2,000 acres of land.

GEOLOGY AND SOILS

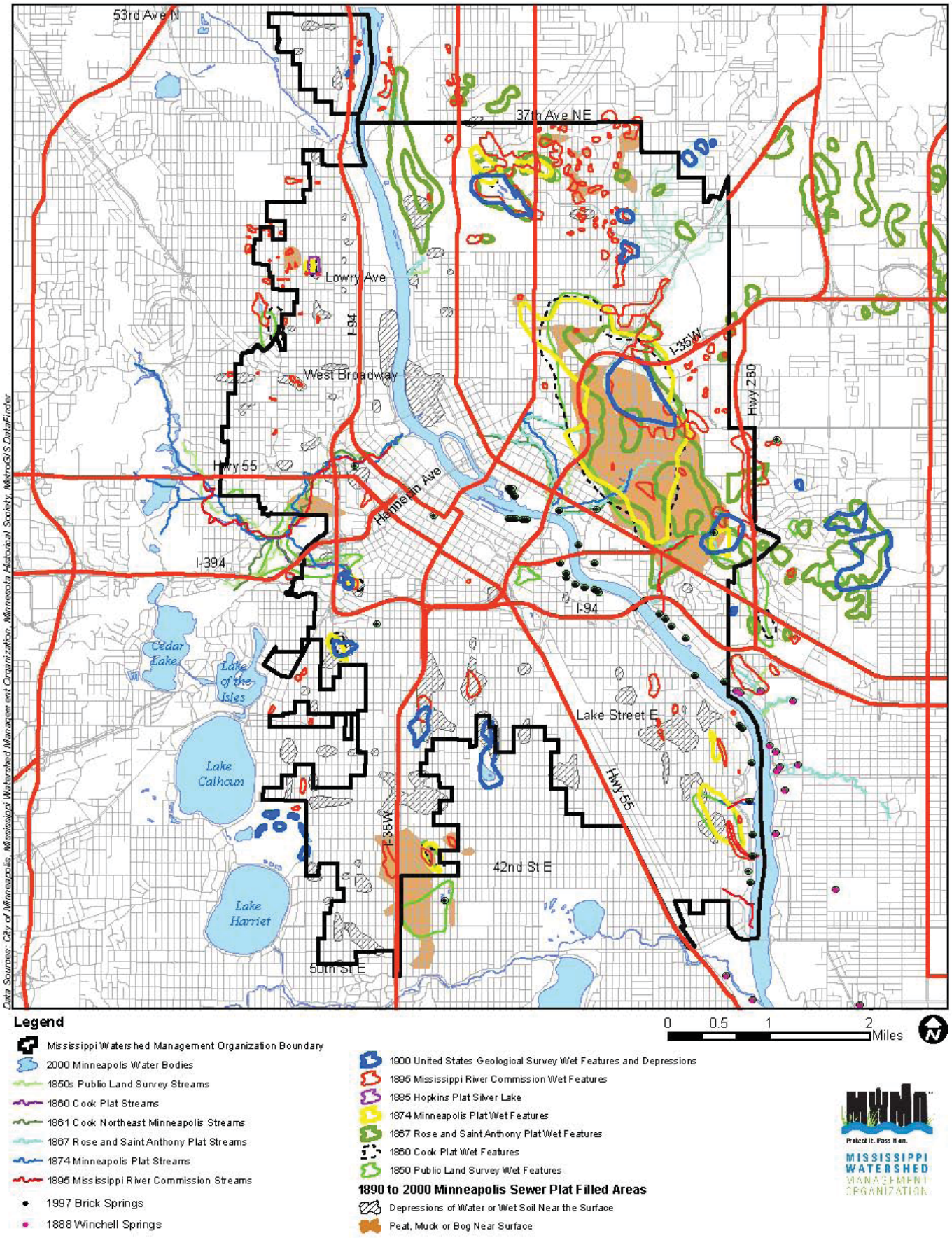
The Mississippi River in Minneapolis has three distinct geographical zones: the gorge below the falls, the Falls of St. Anthony, and the area above the falls; which have for planning purposes been correspondingly labeled the Lower Gorge, Central Riverfront, and Upper River. Plymouth Avenue Bridge serves as the dividing line between the Central Riverfront and the Upper River. The Lower Gorge displays visible evidence of the falls collapse and recession over the millennia, as softer sandstone was undercut by the force of the water flowing over the harder limestone riverbed. The different geology of the gorge and falls areas from the Upper River is revealed in the geography above ground, with early accounts of the area before urbanization noting the clear distinctions in topography and vegetation. Only a few hundred yards upstream from the present location of the falls, the limestone that forms the bluffs and falls ends. In contrast to limestone bluffs, the area above the falls is characterized by deep sand terraces, remnants of former channels and floodplains left from the time when the ancient river swelled with glacial melt.

The topography of this terrace is most apparent on the west side of the river where the bank is low, only a few feet above the water, giving way to a mostly level plain that steps up to a glacial outwash west of the interstate. In most areas, the east bank is higher and the slope from the river steeper, up to 25 feet above the average water level, but also generally flat land above the bluff line – with the exception of the area immediately north of the Plymouth Avenue Bridge. This difference in elevations shows the cut and deposit action of the river, with its slight meander to the east between the outfall of Shingle Creek and the Burlington Northern railroad bridge.

Shingle Creek and Bassett Creek enter the river from the west bank and mark important topographic boundaries for the Upper River. The Plymouth Avenue Bridge was built just north of Bassett Creek, while Shingle Creek meets the Mississippi

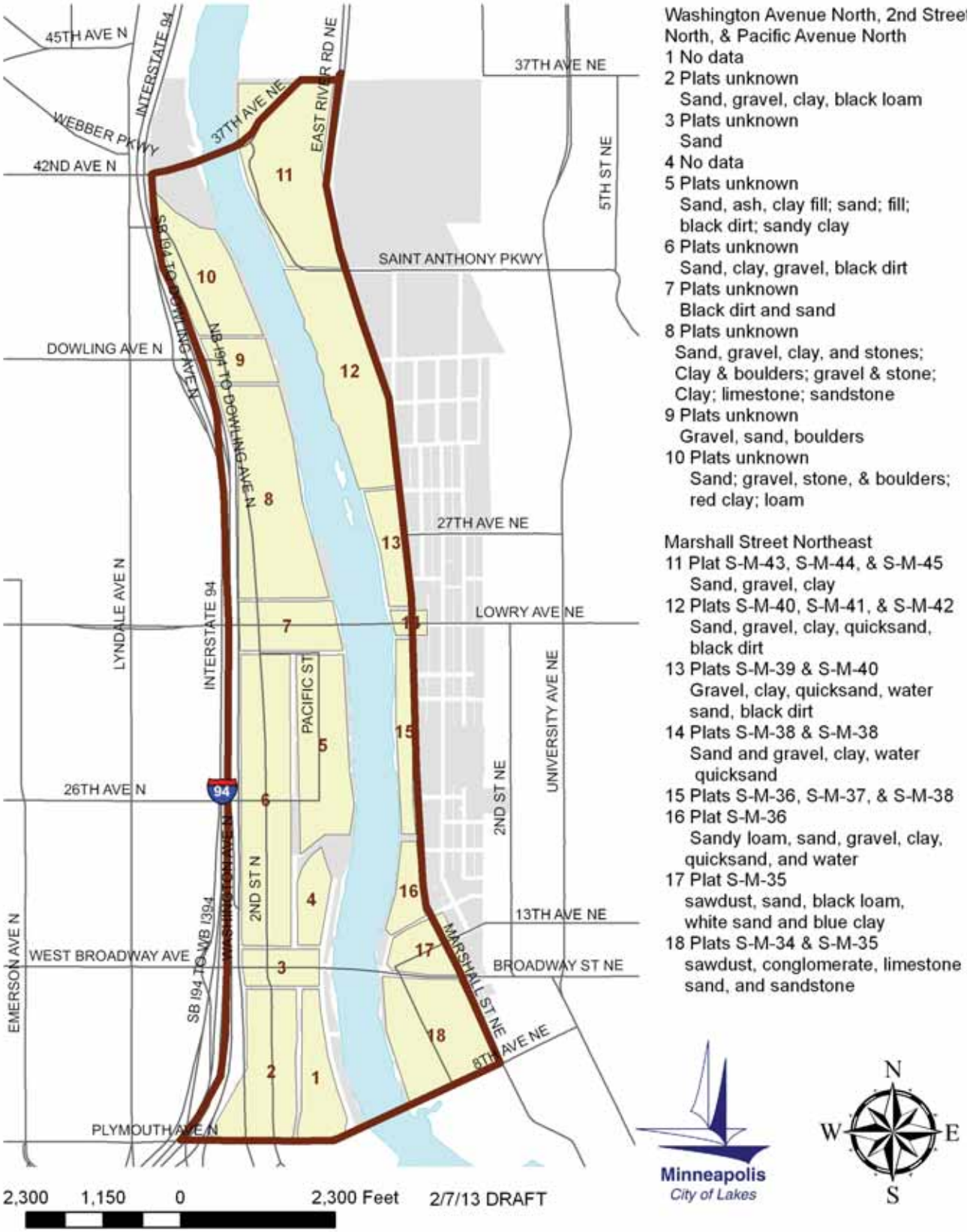


Map 2.1: Contours



Map 2.2: Aggregation of Historically Mapped Water Features, Springs, Wet Soils and Depressional Areas

Map 2.3: Above the Falls Soil Conditions



Washington Avenue North, 2nd Street North, & Pacific Avenue North

1 No data
2 Plats unknown
Sand, gravel, clay, black loam
3 Plats unknown
Sand
4 No data
5 Plats unknown
Sand, ash, clay fill; sand; fill; black dirt; sandy clay
6 Plats unknown
Sand, clay, gravel, black dirt
7 Plats unknown
Black dirt and sand
8 Plats unknown
Sand, gravel, clay, and stones; Clay & boulders; gravel & stone; Clay; limestone; sandstone
9 Plats unknown
Gravel, sand, boulders
10 Plats unknown
Sand; gravel, stone, & boulders; red clay; loam

Marshall Street Northeast

11 Plat S-M-43, S-M-44, & S-M-45
Sand, gravel, clay
12 Plats S-M-40, S-M-41, & S-M-42
Sand, gravel, clay, quicksand, black dirt
13 Plats S-M-39 & S-M-40
Gravel, clay, quicksand, water sand, black dirt
14 Plats S-M-38 & S-M-38
Sand and gravel, clay, water quicksand
15 Plats S-M-36, S-M-37, & S-M-38
16 Plat S-M-36
Sandy loam, sand, gravel, clay, quicksand, and water
17 Plat S-M-35
sawdust, sand, black loam, white sand and blue clay
18 Plats S-M-34 & S-M-35
sawdust, conglomerate, limestone sand, and sandstone

Map 2.3: Above the Falls Subarea Soil Conditions

immediately north of the Camden Bridge. Downstream of Camden Bridge, the Canadian Pacific Railroad Bridge marks the end point of the dredged channel maintained by the Corps of Engineers. There are no surface streams on the east side in the study area, and no major creeks were documented at the time of European settlement. Historically, a small stream flowed into the Mississippi River near the intersection of Marshall Street NE and Lowry Avenue NE. This has been converted to a large utilitarian outflow point for stormwater at present.

Site alterations throughout the study area have included dredging, importation of fill to level and stabilize ground, as well as placement of bulkheads and other structures along much of the bank. Historically, some wetlands existed on both banks. The area around Xcel's Riverside Plant on the east bank and the central industrial area on the west bank have been filled and graded in years past, so no longer are considered wetlands or flood areas. Many of the largest wetlands inland have been transformed over time into large rail yards for the major rail lines serving this area. The one remaining flood plain in the study area is on the site of the Park Board's proposed Scherer Park.

Storm sewers carry surface runoff from North and Northeast Minneapolis to 33 outfalls along the river.

Most of the land on the east side of the riverfront is flat. Where there are bluffs on the east bank of the river, the ground is typically fairly flat between the top of the bluff to Marshall Street. On the west side of the river, the land is fairly flat from Plymouth Avenue to 26th Avenue. North of 26th Avenue the grades become progressively steeper up to around 36th Avenue, where the grades start to diminish up to the North Mississippi Regional Park.

The current path of the Mississippi River is different from its historic path, which carved out a deep valley in the bedrock. This underground valley crosses from the east side of the river to the west side of the river north of downtown Minneapolis, before traversing the Heritage Park development, Bassett Creek Valley, and the City's Chain of Lakes in South Minneapolis. This is an important feature today because the soils that have filled in this underground valley are typically clays and other wetland soils that do not support development without additional structural investment. See below for a map of depth to bedrock. Conversely, there are areas on the west side of the river where the limestone bedrock comes essentially to the surface—which is great from a structural perspective, but may impact development where an underground level is desirable.

A look at the soils along this stretch reveals some of its history – elements like ash and sawdust reveal industrial byproducts that were used as fill in years past. Apart from contamination and some questionable areas of fill, soils on the west side of the river are relatively stable and suitable for development—with the possible exception of area south of West Broadway. The east bank, particularly the middle section, includes more problematic soils. This can cause problems and add to water infiltration and structural costs. Chapter 7 contains more information about soil contamination.

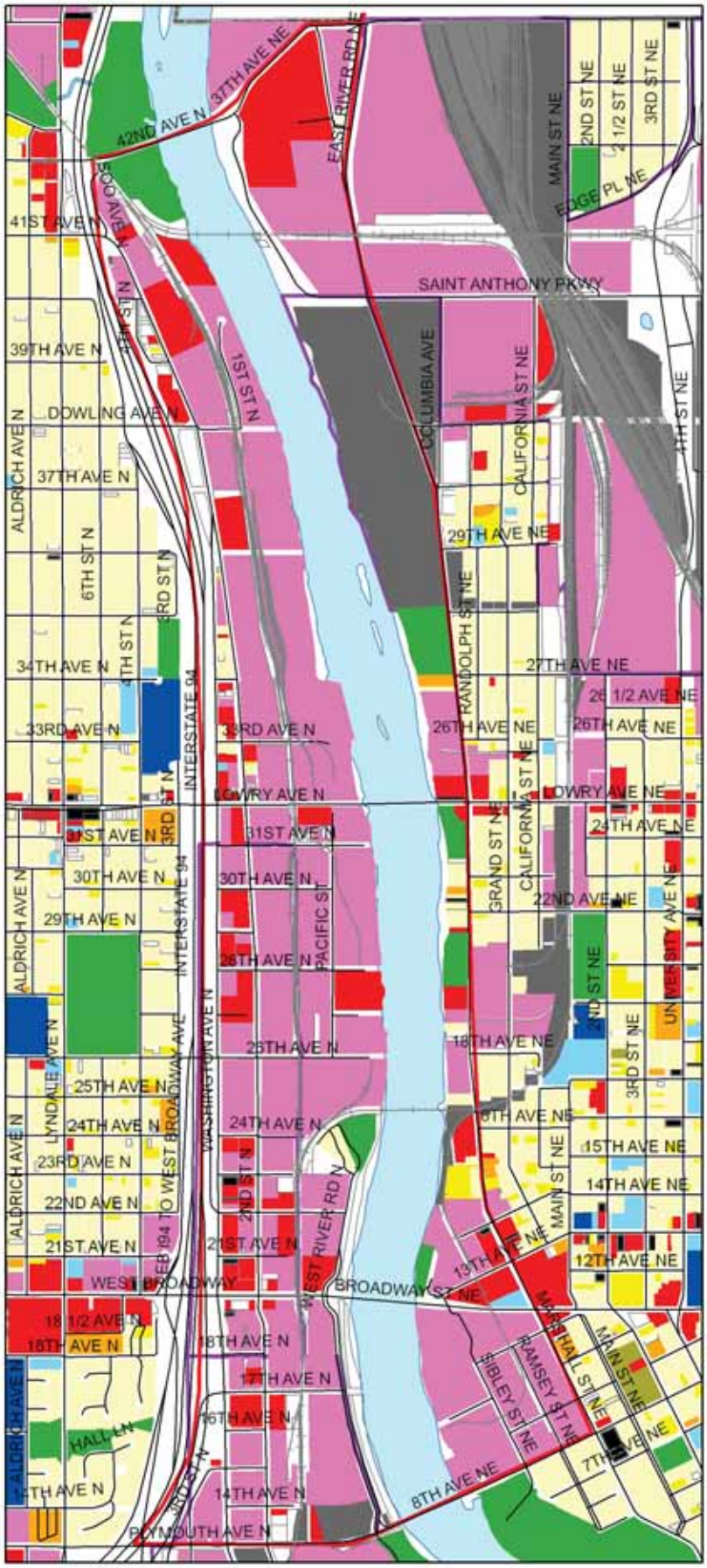
As development plans move forward, a more detailed site analysis of soil conditions will be helpful to avoid a project coming to a halt when this information is belatedly discovered. Chapter 4 takes a closer look at the costs associated with site cleanup.

LAND USE AND ZONING

The existing land use in the study area, as represented in the 2009 citywide comprehensive plan, is shown on Map 2.4. The west bank is predominantly industrial with some commercial and a few isolated residential areas. The east bank is mainly industrial at northern and southern ends, but largely lower density residential in the middle with a mix of other uses.

Residential areas are generally low density – less than 20 dwelling units per acre. These are characterized generally by single family and duplex homes, with some multi-family properties. Parkland exists along stretches of the river on both sides at northern and southern ends, but only on isolated sites in the middle. The largest concentrations of heavy industry are in the central and southern areas on the west bank.

The current zoning reflects the existing land use much more than the future land use guidance. Existing industrial areas are largely zoned industrial (ranging from I1 to I3), matching existing land use. Residential zoning on the east bank coincides with existing residential, but is generally higher density than the existing single and duplex pattern in this area. The shoreland overlay district impacts at least the first row of parcels all along both sides of river. There are some pockets of the Industrial Living Overlay District (ILOD) where residential development has occurred in formerly industrial areas.



Map 2.4
Above the Falls Existing Land Use

Legend

Existing Land Use

- Low-Density Housing (up to 20 DU/acre)
- Medium-Density Housing (20-50 DU/acre)
- High-Density Housing (50-120 DU/acre)
- Very High-Density Housing (>120 DU/acre)
- Congregate Living
- Commercial
- Mixed Use
- Public/Institutional
- Cultural/Entertainment
- Transportation/Communication/Utilities
- Industrial
- Parks/Open Space
- Vacant
- Study Area
- Railroad
- Industrial District
- City Boundary
- Water

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Map 2.4: Existing Land Use

There are also areas of I3 zoning on the west bank in central area and port area, reflecting existing heavy industrial uses, as well as on the site of the Xcel Riverside Plant.

This difference between adopted land use and zoning needs to be addressed. This updated plan will present policy guidance and implementation steps to make them consistent with one another.

OWNERSHIP

Although there is still a substantial amount of privately owned land, an ownership map of the upper riverfront shows numerous tracts of publicly owned lands, including railroads and utilities. The largest publicly owned pieces are (1) the park system on both banks and (2) the Minneapolis Upper Harbor Terminal area on the west bank.

Railroads own track on both banks along much of study area, as well as rail yards on the east bank. Additional rail spurs are located on easements. Xcel Energy, a public utility, owns a large area on the northern part of east bank around their Riverside Plant; there are a couple other smaller utility-owned sites on west bank. As is typical for an interstate, there is a significant amount of public right-of-way along the I-94 corridor.

The public ownership in this area provides an opportunity to influence a significant amount of land with a relatively few property owners. This will be addressed in the plan's implementation section, as it was in the original plan.

PROPERTY VALUES AND CONDITION

Looking at the value and condition of property provides clues as to the level of investment and value in the property - and whether they are attractive for future redevelopment. Property value per square foot, building to land value ratio, and building condition each give insight into these issues.

The highest values per square foot are in some of the residential areas, as well as some commercial and industrial buildings on the southern end of the east bank. The lowest values per square foot are along rail corridors and at the upper harbor terminal – presumably because both have relatively little value for uses other than what is currently on them, unless the sites are changed considerably. Accurate reassessments of these property values are less frequent, as they do not pay property taxes. The industrial sites range generally from medium to low value per square foot, with the exception of the Xcel Energy property. Smaller commercial/industrial sites right near I-94 also appear to be worth more per square foot.

The building to land value ratio, shown on Map 2.6, follows a very similar pattern to the value per square foot pattern in the study area.

In the study area, it is notable that the condition of buildings tends to be average to poor, with very few buildings in the better condition categories. This is true both in residential and industrial areas, not following the overall patterns of value in the other maps. This data suggests both (1) aging buildings with few new structures in the area, and (2) relatively low level of investment in properties. A closer look at sites will determine which of these factors is predominant. However, it seems likely that this area has not experienced a lot of investment in the properties in recent years, even if the buildings and uses (residential, commercial, industrial and otherwise) remain viable.

HISTORIC RESOURCES

There is just one historically designated group of properties in the study area: The Grain Belt Brewery campus, located along Marshall St NE, 13th Ave NE, 14th Ave NE, and Broadway St NE, is locally designated and on the National Register. This former brewery has been rehabilitated in conformance with historic guidelines, and is currently used for a range of adaptive reuses, including office space, a library, and artist studios.

The City has been involved in three recent historic resource inventories that included properties within the Above the Falls study area.

In 2004, the *Northeast Minneapolis Historic Resources Inventory* provided a reconnaissance survey of historic resources in a 4,564 acre area which included over 12,000 buildings. The survey found 38 individual properties and one historic district which were good candidates for additional research and documentation for potential local designation or listing in the

Map 2.5
Above the Falls Business Clusters

Legend

Land Use by Category

- auto service/parts
- business services
- construction/bldg materials
- creative
- metal/metalwork
- other commercial
- other industrial
- park
- printing/paper goods
- professional services
- religious/institutional
- residential
- restaurant/bar
- transportation
- utility
- vacant
- Industrial District
- Study Area
- Railroad
- Water

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Map 2.5: Business Clusters

National Register. However, these were almost entirely outside the boundaries of the Above the Falls study area.

The northeast study identified for additional investigation a pumping station on publicly-owned land on the northernmost portion of the east bank in Minneapolis. A few additional properties were identified (including a cluster of worker housing), but they were east of Marshall Street NE, so not directly impacted by the study's recommendations.

In 2007, the *Upper Mississippi Harbor Development Architectural/Historic Survey* documented the history and significance of structures along the upper riverfront related to barging and industry. It concluded that there were a number of structures that may contribute to an upper river historic district, due to the significance of the area to the city's history. It recommended further research on some specific features, additional historic interpretation of that era, preservation and/or adaptive reuse when possible, and

In 2009, *Historic Resources Inventory: Northside Industrial Area* covered an area bounded by Plymouth Avenue on the south, the Mississippi River on the east, Interstate 94 on the west, and the Minneapolis city limits on the north. The purpose of the survey was to identify properties within the study area that potentially meet criteria for historic designation under the City of Minneapolis Heritage Preservation ordinance and/or the National Register of Historic Places (National Register). The survey area covered approximately 500 acres comprised of 337 parcels. Six properties were identified for further investigation as they possessed strong potential for local designation or the National Register.

Following on the 2007 survey, the west side study also called out a number of riverfront industrial elements as a potential "Upper Harbor Historical District." Although the properties do not meet the 50-year threshold for National Register designation, the study argued that "the resources have achieved exceptional importance because of their role in the industrial development of the city… [and] are the only remaining industry intrinsically tied to the Mississippi River in the city of Minneapolis; as such they are resources that are fragile, with a future jeopardized by their industrial use and riverfront location."

The study recommended the Upper Harbor Historic District as a collection of properties that should be considered for local designation and for the National Register in the areas of Commerce, Industry, Maritime History, Transportation, and Engineering. Possible components of a district might include the properties along the west side of the river between Lowry Avenue and including the railroad bridge. Many of these were older industrial buildings dating from the late 19th and early 20th century that are still being used for their original purposes, although many of the specific businesses have changed. Designation has not yet occurred, in part, because the properties do not meet the age requirement for designation in the National Register. This recommendation will need to be taken into consideration in the implementation plans for the area.

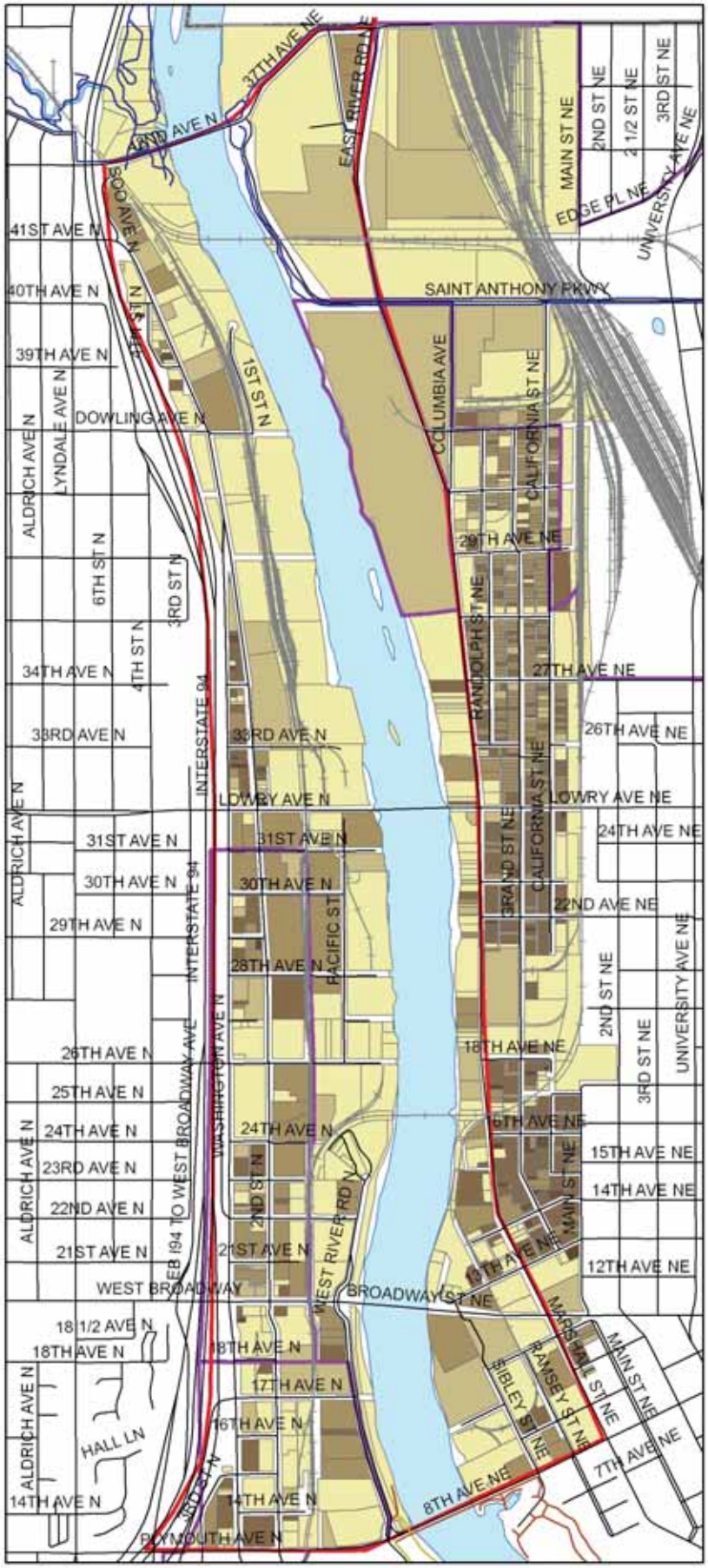
As noted in the historic resource surveys, it is likely that Above the Falls study area has unidentified archaeological remains given the river's importance in transportation and settlement in both pre-contact and post-contact history. Appropriate archaeological assessment and/or survey should be conducted prior to ground-disturbing activities that have the potential to disturb intact archaeological resources.

DEMOGRAPHICS

The population of the neighborhoods adjacent to the upper riverfront is highly diverse. The historic immigrant base of this area has changed over time, with the influx of new waves of residents to the city. Also consistent with its past, the neighborhoods (with the exception of some areas close to Downtown) have remained largely blue collar – with median incomes lower than average.

In recent years, the population has declined slightly. This is in part due to the recession and accompanying foreclosure crisis, which has disproportionately impacted these neighborhoods, especially on the north side. A number of homes still stand vacant, and home values have declined significantly. Additionally, these areas are primarily low density – and like similar areas of the city, declining average household sizes (a national trend) can mean declining population, even if there is no increase in vacancies.

In terms of economic activity, there are related stresses on the residents here. Unemployment rates, which are closely correlated with race, are significantly higher than average. Businesses serving the immediate community are fewer and less successful than some areas of the city.



Map 2.6
Above the Falls
Ratio of Building Value to Land Value

Legend

Bldg to land ratio

- Less than 1
- 1 - 2
- 2 - 4
- 4 - 10
- More than 10
- Study Area
- Railroad
- Industrial District
- City Boundary
- Water

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Map 2.6: Ratio of Building Value

These issues are important in several ways. One is that it highlights the strong equity issues that underlie the plan to redevelop the upper riverfront. The nearby populations have more challenges than many other areas – and also less in terms of amenities and positive economic opportunities. From the perspective of assisting this underserved area, the upper riverfront gains importance as a key opportunity.

On a more positive note, the lower values of real estate signal an opportunity. Lower land costs mean that it is more affordable to acquire property for parks or other development. Lower home costs mean that housing is relatively affordable, even without subsidy. And the higher than average unemployment rates suggest the potential for a local worker base for new or expanding industries.

PUBLIC HEALTH

Public health issues in this area are a significant concern, due to a range of economic and environmental factors. The following summarizes some of the major public health concerns.

Obesity

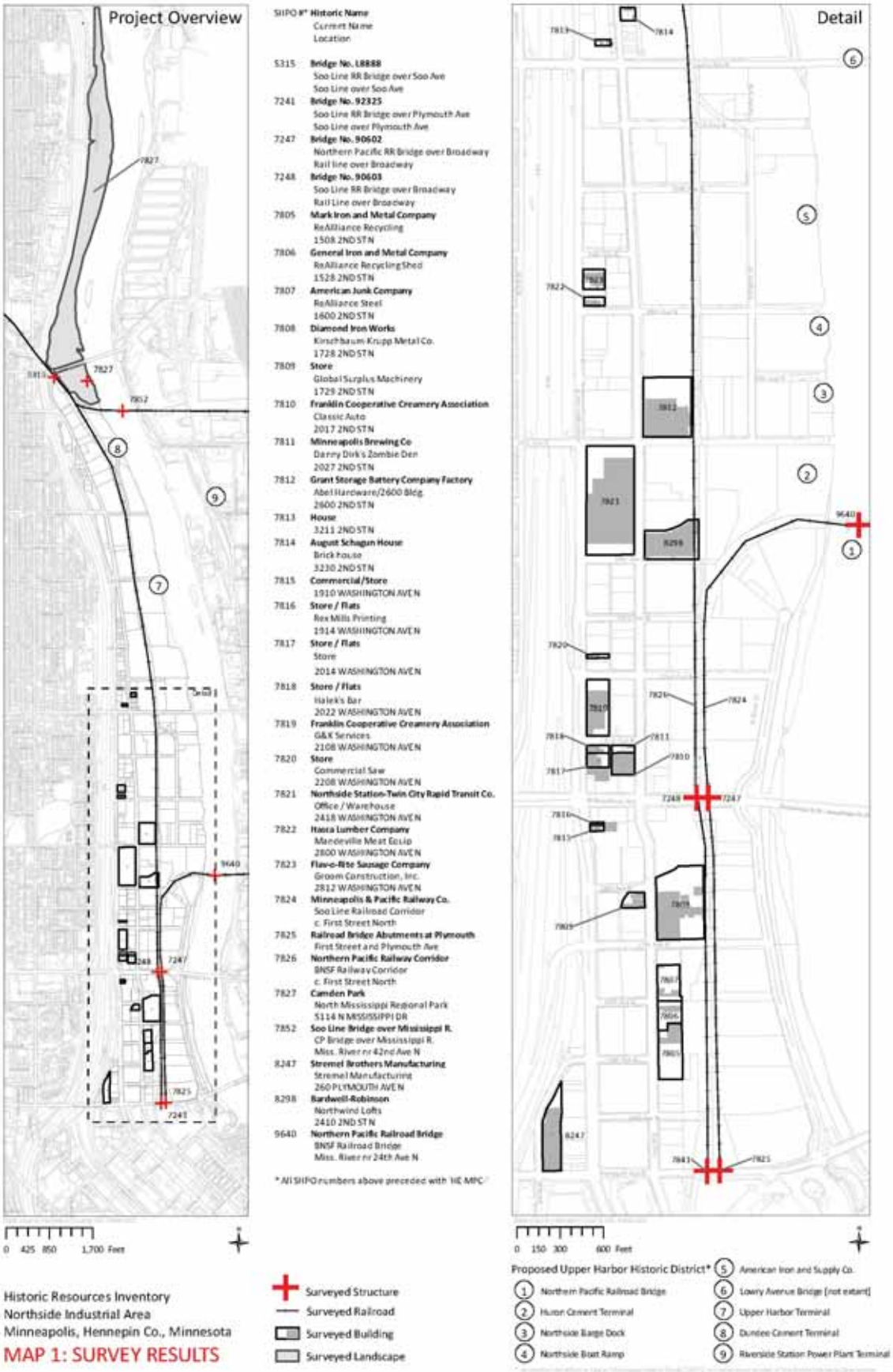
The ATF plan has the potential to have a positive impact on an area that currently has relatively limited access to the regional park areas compared to other areas of the city and that experiences disproportionate rates of obesity. According to the SHAPE Survey residents of Camden-Near North communities report height and weight values that are considered obese significantly more than adults in other areas of the city. Thirty percent of adults in the Camden and Near North communities are considered obese compared with 16 percent of adults in other areas of the city. The communities along the Northeast Riverfront have prevalence rates of obesity similar to the city overall. Not only does the North Side of Minneapolis experience disparities in obesity compared to the rest of the city, the data clearly underscore the potential benefit of increasing access to parkland to increase affordable opportunities for physical activity for residents who live in and around the ATF area.

Air Quality and Asthma

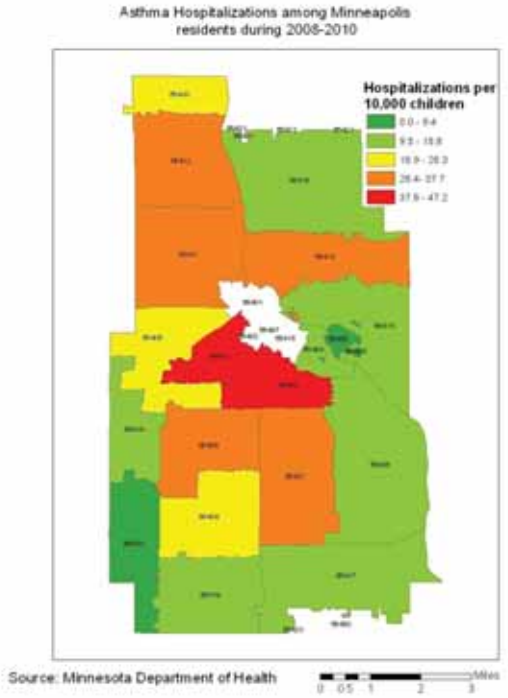
According to the Minnesota Pollution Control Agency (MPCA), the level of air quality in Minneapolis is generally good-to-moderate, except during the warmest months. In 2011, Minneapolis experienced 4 days during which the level of air quality was considered "harmful for sensitive groups," and zero days in either of the unhealthy categories.

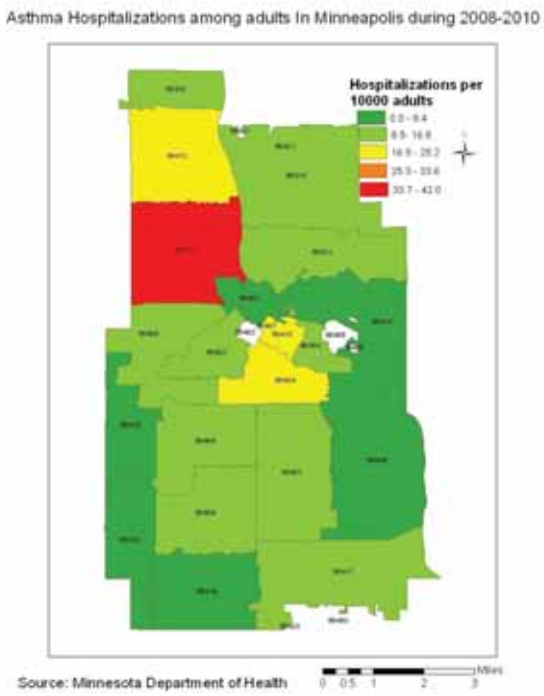
The ATF area is host to at least four sites with known air pollution-related issues. The MPCA has twelve air-quality monitoring sites in the metropolitan area, two of which are located in Minneapolis. One site is located Downtown and another site in South Minneapolis. No monitoring sites are currently located in the ATF area. In September 2012 with the North Minneapolis Air Monitoring Project, plans were developed to begin to monitor air quality at a site located in North Minneapolis.

The effects of particulate matter and ozone air pollution caused by vehicle and industry emissions have been shown to lead to negative health outcomes like asthma. The worst rates of asthma in Minneapolis among children are in a non-industrial area in South Minneapolis and the worst rates among adults are located in and around the ATF area.



Map 2.7: Historic Resources





An important confounding factor to consider in understanding asthma rates is that they are not only related to ambient air pollution; rather they are also affected by indoor air quality. The fact that asthma rates among adults are highest in the ATF area could be linked to elevated levels of ambient air pollution, if one assumes that adults spend more time outdoors than children. Until local data are available, the extent of harm of ambient air pollution on human health in the ATF area will be difficult.

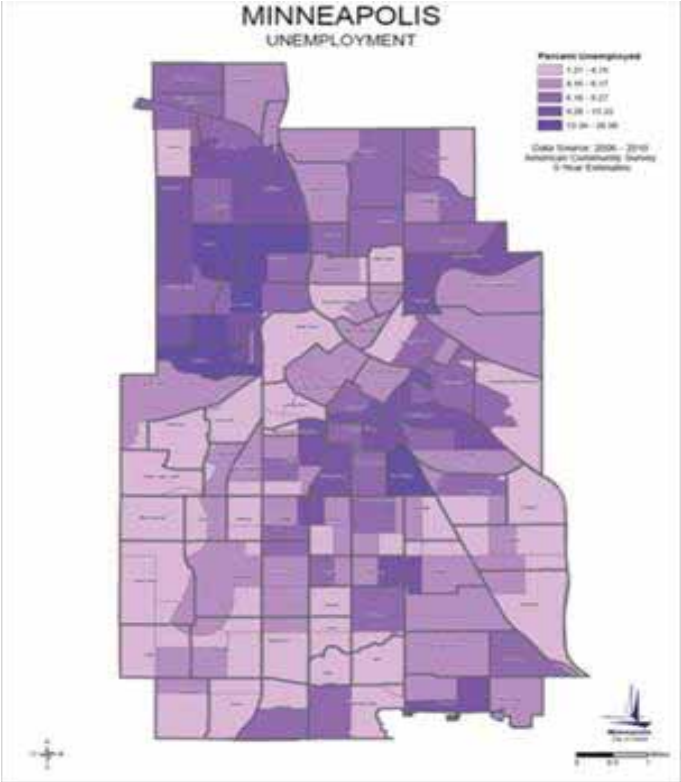
Noise Pollution and Health

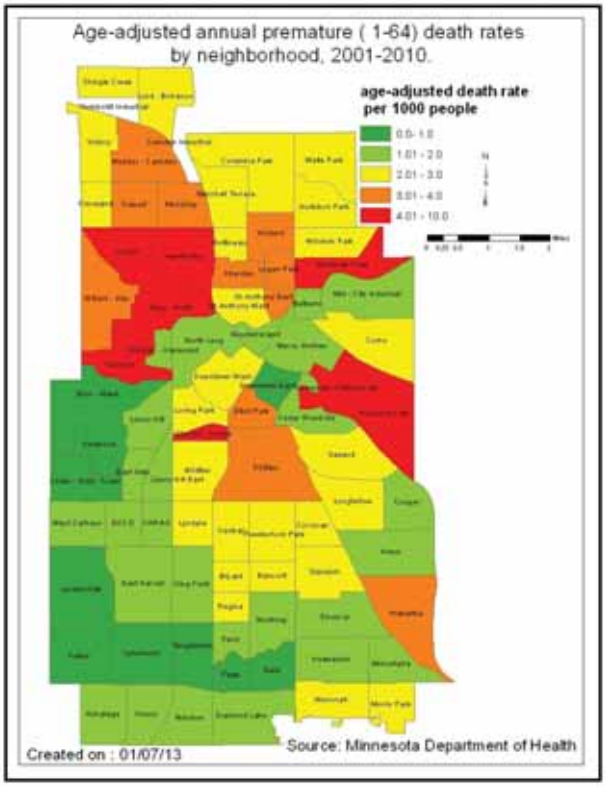
Air is constantly filled with sounds, yet most people would probably not say that they are surrounded by noise. For some, the persistent and escalating sources of sound can be considered an annoyance. This "annoyance" factor is what has negative consequences on health. Studies have shown direct links between noise and health. Problems related to noise include stress related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity.

Noise levels for the most part have not been monitored consistently in the ATF area. An independent study conducted by David Braslau & Associates within the ATF zone looked at the noise levels caused by a nearby industry. The Riverview Townhomes are located less than 100 feet from a large, concrete-making factory. The 2011 study showed that the factory noise levels frequently exceeded night and daytime standards for noise pollution.

Unemployment and Premature Mortality

Unemployment is associated with premature mortality, cardiovascular disease, hypertension, depression and suicide. Minneapolis-Saint Paul-Bloomington is sixth in the nation in terms of metropolitan areas with the highest rates of unemployment among Blacks/African Americans. According to a 2011 Economic Policy Institute Report, the Black-to-White unemployment ratio in Minneapolis-Saint Paul-Bloomington is the second worst in the nation behind Milwaukee. The ATF neighborhoods, particularly the neighborhoods along the west bank with a large proportion of Black/African American residents, experience some of the highest rates of unemployment in the city. Hawthorne and Jordan neighborhoods, which are delimited by two main Riverway streets, West Broadway and Lowry Avenue, have the highest unemployment rates among ATF neighborhoods, between 13 and 26 percent, compared to 6.4 percent citywide. Based on 2010 Census data, premature age-adjusted death rates are 1.5 times higher in the ATF area compared to outside the ATF area.





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Sense of Community

Extending the network of safe biking and walking trails along the Riverfront and into the surrounding neighborhoods could improve the sense of community and social cohesion within the ATF area and surrounding neighborhoods. Increased social connection has a variety of health impacts, ranging from reducing stress, ameliorating morbidity and mortality, and supplying access to emotional and physical resources. Based on SHAPE 2010, adults who live in the Near North and Camden Communities, reported lower levels of community connectedness compared with Minneapolis overall. They were much less likely than respondents from other parts of the city to agree that their community is a good place to raise children and they were more likely to distrust their neighbors. Regarding barriers to walking for North Side residents , the top two barriers were "too busy or not enough time" followed by concerns about crime and personal safety.

BUSINESSES

The industrial areas along the upper river contain a diverse mix of industries in terms of scale, impact, product, jobs, and other factors. Potential advantages for industrial uses located here include: central location, multi-modal transportation access to suppliers and customers, access to major utilities, and existing industrial zoning. Most parcels are occupied by active business interests with few noted vacancies visible or advertised. Indeed most land identified as vacant is actually being used for parking and/or outdoor storage for a nearby use.

There are some identifiable clusters of like industries, as shown on Map 2.5. These include

- Construction and building materials – lumber, concrete, plumbing, windows/doors, etc. suppliers and installers
- Creative industries – including arts, music, communications, etc.; these are especially prevalent on the east bank
- Metal and metalwork – ranging from metal recycling to precision machining

- Printing – printers, paper suppliers, sign makers, etc.
- Auto service and parts – parts suppliers, repair shops, custom facilities, gas stations
- Other aggregations include business and professional services, bars and restaurants, and religious congregations

The major category of "green" businesses is focused on recycling; this includes scrap metal processing, concrete crushing, yard waste/compost sites, and paper recycling operations. These tend to be heavy users of the transportation network, including road, rail, and barge. Many have outdoor storage.

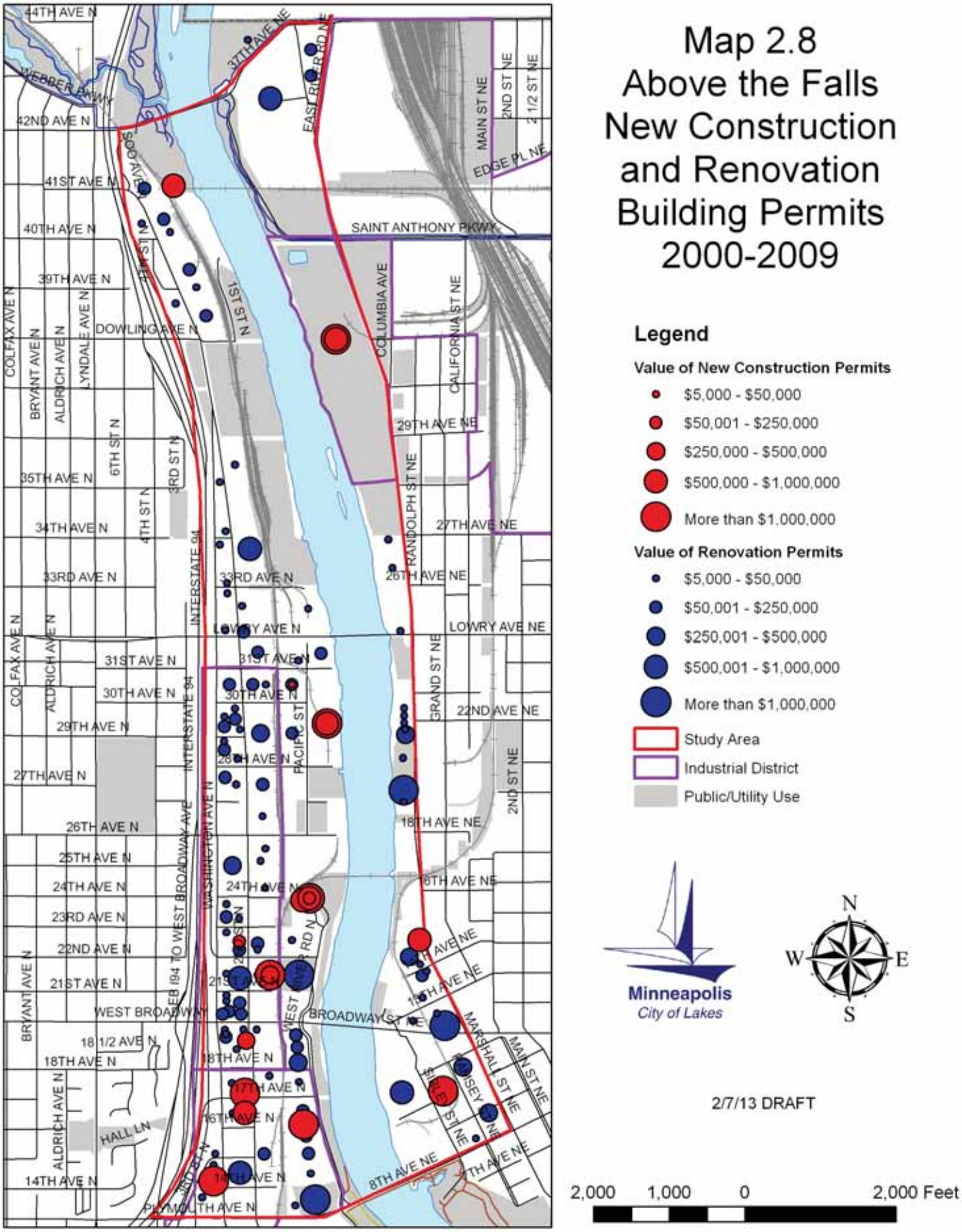
There are some high-profile industry headquarter as well, including Coloplast and Graco. Exploring their supplier networks and markets may provide insight into directions for economic growth.

At present, there appears to be little formal organization of businesses along the riverfront. This posed a challenge during the outreach portion of this plan update. A business survey was administered by phone and in person to collected needed information. Results are summarized in Appendix A.

INVESTMENT SINCE 2000

Since the passage of the Above the Falls Plan in 2000, investment in the study area has been more or less comparable to the rest of the city. The following is a list of some of the major property investments made in the study area during that time.

- **Grain Belt**. The Grain Belt Brew House is a historic landmark that was renovated between 2000 and 2002 as commercial office space. The Wagon Shed and Shops Buildings were sold to the Minneapolis Public Library and were renovated as the Pierre-Bottineau Library. The Warehouse and Bottling House structures were sold to Artspace for use as commercial lease space. As of 2013, a developer is working on plans to rehabilitate the Office Building and construct additional housing.
- **Marshall River Run Housing Development.** The Marshall River Run project is a mixed income multifamily housing development constructed in 2005 with ownership and rental components. The rental component is a three story building with 74 housing units. It required pollution remediation and received TIF pay-as-you-go financing from the City of Minneapolis in addition to other gap financing. The ownership component was 11 market rate townhome units fronting on Marshall Avenue.
- **Edgewater Park.** The Master Plan for this park was approved in 1996 and the Minneapolis Park and Recreation Board constructed this park in May through October 2006 with funding from the Mississippi Watershed Management Organization (MWMO). Artistic elements highlighted in this project include: "Park Landmarks" that are interpretive nodes of Minneapolis and St. Paul along the river, signage interpreting cultural and historical stories, no-mow turf, porous concrete, pavers and gravel pave system, and a River Overlook with seating area.
- **Construction of Phase I trails and landscaping.** The Minneapolis Park and Recreation Board undertook trail and park construction in 2007 and 2008 on the west bank of the Mississippi between Plymouth Avenue and the Burlington Northern railroad bridge north of West Broadway Avenue. Bicycle and walking trails were constructed consistent with the model used elsewhere in the Grand Rounds system—along with riverbank restoration, stormwater management improvements, and other park development. Other improvements remain to be done in a second phase of construction.
- **Scherer Bros. property.** The riverfront property formerly owned by Scherer Brother Lumber Company is located on the east side of the river just north of Plymouth Avenue. The property, approximately 11 acres, was purchased in 2010 by the Minneapolis Park & Recreation Board. In 2012, MPRB completed extensive soils remediation and cleanup of the site. Plans to develop parkland are detailed below.
- **BF Nelson**. This 12 acre park received funding for design and construction to enhance the property. The earthwork, preliminary trail development and shoreline, wetland and native plan restorations were completed by mid-



Map 2.8: New Construction Building Permits

2012.

- **Lowry Bridge Replacement**. The replacement of the Lowry Avenue Bridge is expected to be complete in Fall 2012. The replacement of the bridge implements the Above the Falls plan because the design parameters of the ATF plan were used as criteria for evaluating the proposed bridge design.
- **Sheridan Memorial Park**. The park is located between the Grain Belt Campus and the river. MPRB has plans to develop park amenities including a memorial and flagpole honoring all U.S. veterans, a peace garden, a picnic area and river overlooks.
- **Phase 1 East Bank Trai**l. MPRB is working to acquire property and easements between Plymouth Ave. and the BNSF railroad bridge for this segment of the planned east bank riverfront parks and trails. In 2012, MPRB was granted $1 million in federal funding to design and construct the trail segment.
- **North Mississippi Regional Park**. This park, which is outside the Above the Falls Regional Park, has undergone additional phases of development since the ATF Plan was adopted.

- **Coloplast Headquarters Development.** The construction of the North American headquarters of Danish medical device company Coloplast is consistent adopted land use and development guidance. The 178,000 square foot facility provides jobs in sales, marketing, and research and development.
- **Additional Development Projects.** Other projects completed since ATF approval include the Graco expansion (which includes provision of an easement for a trail along the river), Riverview Homes, the Alley, and some North Washington Jobs Park projects (DHL, Stremel Manufacturing, and Standard Heating).

Map 2.8 shows new construction building permit activity that took place in the Upper River area between the plan's adoption in 2000 and the end of 2009. Around 50 permits were issued during this time period, worth around $85 million. Nearly 60% of the value was industrial, 30% was multi-family residential, and the remainder was a mix of single family, park, and commercial. This does not include building permits issued for renovation or expansion projects.

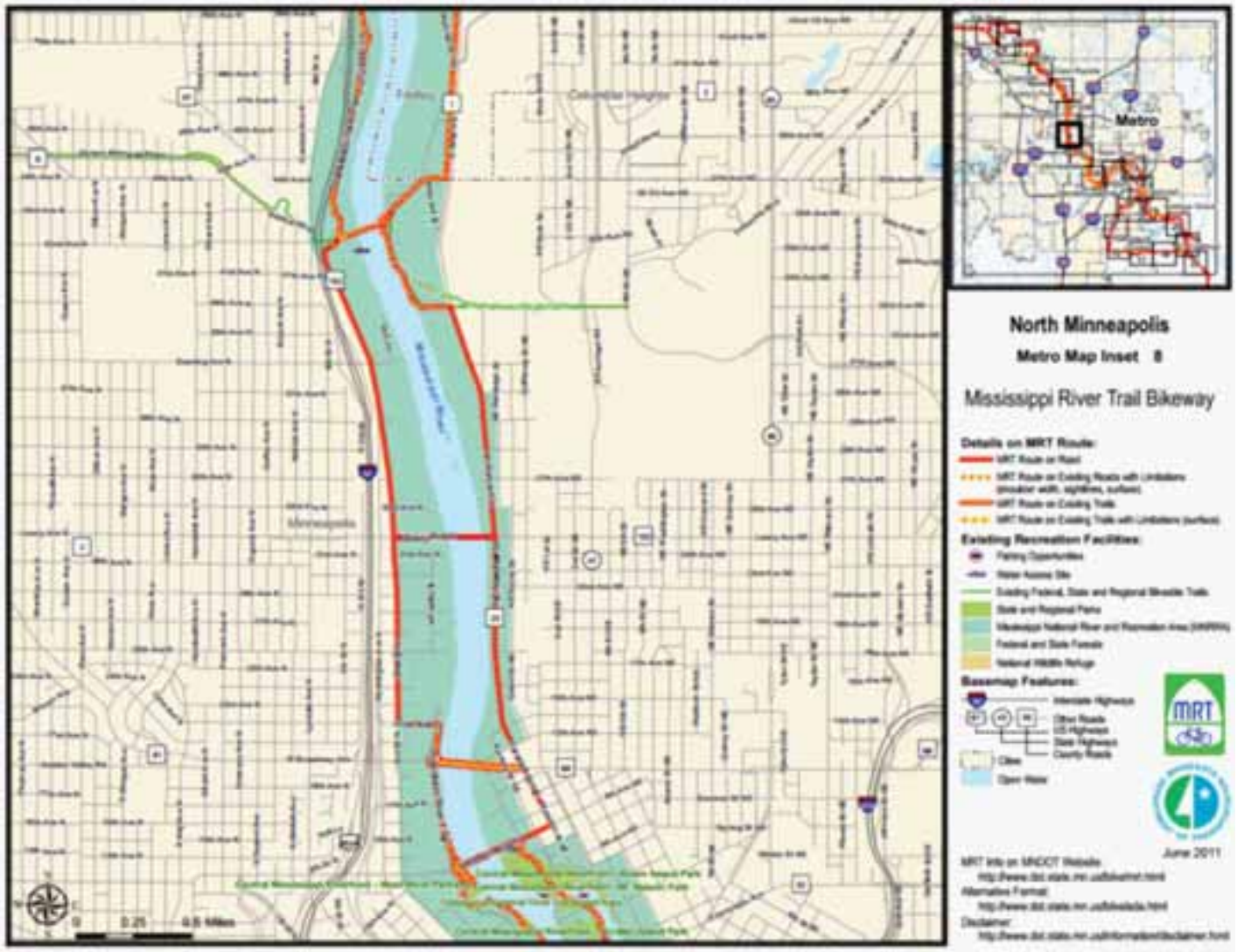
PARKS AND TRAILS

While the river itself is the largest amenity and physical feature of the study area, it is the system of public parks and trails within the Above the Falls Regional Park that allows residents and visitors to experience the river. As with other Mississippi River regional parks in Minneapolis, Above the Falls Regional Park combines distinct, named park components connected by linear park features and trails. These form the foundation of the Above the Falls Regional Park. Parks on the east bank include Marshall Terrace Park, Edgewater Park, Gluek Park, and Sheridan Memorial Park. Along the northern edge of the study area, the Grand Rounds includes Victory Memorial Parkway, Webber Parkway and St, Anthony Parkway, all connected via the Camden Bridge. Parks on the west bank include North Mississippi Regional Park, Webber Park, and Orvin "Ole" Olson Park. West River Road North, a City street, runs along the riverfront for a portion of the area with adjacent parkland and trails, as well as the location of MPRB headquarters.

The plan area contains one piece of public art designated by the City of Minneapolis. "Heart of the City," a statue created by Caprice Glaser in 2005, is located at 212 17th Avenue North. It is inspired by the shape of the city, and has images that express the mission of Animal Care and Control, whose facility is located on the same property. Outside the plan area, in BF Nelson Park, is "Pioneers," a large granite statue created by John K. Daniels in 1936 to represent three generations of a pioneer family.

The study area is anchored by parks at both ends: the Central Mississippi Riverfront Regional Park at the south, and North Mississippi Regional Park at the north.

Routes on both banks are designated routes for the Mississippi River Trail Bikeway, the state's first US Bicycle Route. On the west bank, the route follows 2nd Street North, while on the east bank it largely follows Marshall Street NE, joining St. Anthony Parkway on the northern end. At present, these are classified as on-street (and unsigned) routes, but this will change over time as improvements are made and routes shift to improved facilities.



Map 2.9: Minneapolis River Bikeway

TRANSPORTATION

The area is well-served by a range of multi-modal transportation options and facilities, suitable for moving both people and freight.

The historic street grid network is largely intact throughout the area, with the exception of large parcels on the northern end of the east bank related to rail yards and utilities, some larger superblocks on the west bank in industrial areas, and limited road connectivity over the Interstate 94 trench. There are road bridge crossings at Camden (42nd Avenue N to 37th Avenue NE), Lowry Avenue, West Broadway Avenue, and Plymouth Avenue N/8th Avenue NE.

Truck traffic in the Above the Falls area is connected to the regional transportation network via Interstate 94 with local access at West Broadway, Dowling Avenue, and 49th Avenue N. The route from Interstate 94 to Shoreham Yards (via Dowling Avenue-2nd Street N-Lowry Avenue-University Avenue-23rd Avenue NE-30th Avenue NE) is designated as part of the National Highway System as an Intermodal Connector. The local street network also includes truck routes on Washington Avenue, 2nd Street N, West Broadway Avenue, Lowry Avenue and Marshall Street NE.

The major north-south truck routes are Interstate 94 on the west bank and University Avenue on the east bank. Interstate 94 is one of the highest freight routes in general in the region, though volumes are higher north of Interstate 694 than south of it. Over the past ten years, the truck traffic volumes on Interstate 94 have increased, especially near the northern end of the study area. It is possible there is a link between the decline of barging and increased truck traffic, though many other factors are likely at work as well.

The two highest freight rail users in the area are Burlington Northern Santa Fe (BNSF) and Canadian Pacific (CP). The BNSF mainline runs north-south along the east side of the study area. It runs freight trains, as well as Amtrak, and Northstar

passenger service, resulting in 40 to 60 trains per day. The CP mainline runs east-west across the northern end of the study area, crossing the Mississippi River just south of the Camden Bridge.

Both railroad companies have spur lines that serve the upper riverfront. The CP spur extends along the west side of the river from the CP rail bridge to the Star Tribune printing facility. The CP spur is also used by the Twin City & Western Railroad (TC&W), a Class III private railroad. The BNSF spur extends along the east side of the river, crossing at a rail bridge a couple of blocks north of West Broadway. Both rail lines have nearby intermodal rail yards in Northeast Minneapolis. This convergence of rail facilities offers upper river businesses multiple options for rail freight transport.

There are currently three barging terminals in operation on the City's upper riverfront. Northern Metal Recycling, at 2800 Pacific Street, utilizes its terminal for export of recycled metals. The barging facilities of Aggregate Industries, at Pacific Street and 26th Avenue, are primarily utilized for the receipt of sand and gravel for utilization in the construction industry.

The third is the Upper Harbor Terminal (UHT), owned by the City of Minneapolis and operated by River Services. The current City contract with River Services runs through 2014. A variety of bulk commodities are received at the UHT. Almost all materials are received rather than shipped at the terminal. River Services reportedly stopped loading barges out of Minneapolis around five years ago in order to reduce costs. The terminal is served by a Canadian Pacific spur rail line that is also used by Twin City & Western Railroad (TC&W).

Barge transport to the upper riverfront is limited by the size of the lock and dam system. The three locks between Minneapolis and St Paul can accommodate only two-barge assemblages. This is in contrast to all of the other locks on the Mississippi River, which can accommodate assemblages of 9 barges at one time. Over the past five years, the amount of commodities passed through the Upper Locks at St Anthony Falls has declined by 47% based on overall tonnage. Questions remain whether the drop in barging traffic is due to a lack of competitiveness of this location as a shipping option, or its uncertain future. The City's plan is to close the terminal and redevelop the site.

Existing passenger transit service for the upper riverfront is fairly modest. This is consistent with the relatively low density of adjacent residential areas, and the relatively low job intensity of much of the industrial. The local transit routes serving the area include:

- **Route 11** – This route travels primarily north-south from the City of Columbia Heights to Downtown Minneapolis to South Minneapolis. It runs along California Street NE and 2nd Street NE in the vicinity of the study area. This route has around 47 trips on a typical weekday.
- **Route 32** – This route travels primarily east-west from Robbinsville through Minneapolis to Roseville. It runs along Lowry Avenue, 2nd Street N, and Marshall Street NE in the vicinity of the study area. This route has around 22 trips on a typical weekday.
- **Route 22** – This route travels primarily north-south from Brooklyn Center to Downtown Minneapolis to the VA Medical Center on Hiawatha LRT. It runs along Lyndale Avenue N in the vicinity of the study area. This route has upwards of 60 trips on a typical weekday.

Numerous express routes run along Interstate 94, but do not typically have local stops in this area. There are high frequency bus routes running north-south through Northeast and North Minneapolis (for instance Route 10 on Central Avenue NE and Route 5 on Fremont and Emerson). However, both of these are at least a mile from the riverfront, so they are probably not an attractive option for those living or working on the riverfront. Even Route 22, a closer option, is around half a mile from the riverfront. There are few frequent east-west bus routes passing through the area. For more information on transportation, see Chapter 7.

UTILITIES

The upper riverfront is well served by utilities, which have been developed over time to serve significant demand along the riverfront and beyond.

For electricity, the most prominent feature of the upper riverfront is the Xcel Riverside Plant, located on the east bank. This plant has been in operation for over a century, and has recently converted from coal to natural gas – positively impacting local air quality. As such, large high voltage power lines run along both sides of the river, serving not only the uses along the way but providing an important connection to Downtown and other parts of the city. In places, these high voltage power lines limit nearby development, particularly along the river.

The area is also served by a large high pressure gas line, running north to south with similar connectivity. This line is tapped in several locations to support lower pressure local gas networks throughout the study area. The most noticeable above ground facility is Center Point Energy's peak shaving plant, located near Pacific and 26th Avenue N on the west side of the river. This facility regulates gas usage during the highest demand times of the year.

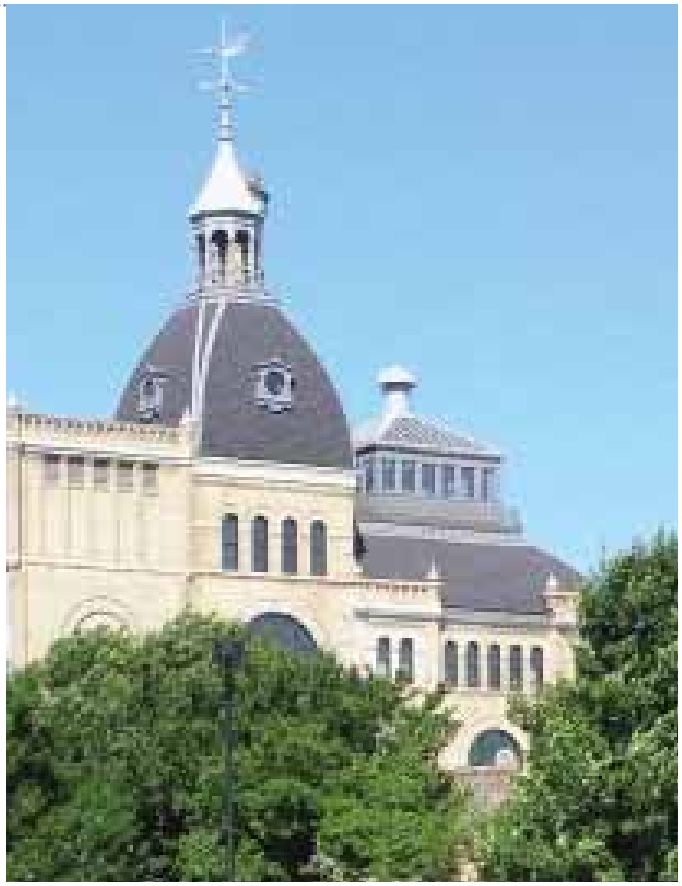
The source of water for the City's water supply infrastructure is the Mississippi River. It is drawn from the east side of the river just north of the city boundary, which is just outside the project study area. The river water is treated at that location and put into the City's water main infrastructure.

A large distribution main runs through the study area from north to south on both the east and the west sides of the river. It is anticipated that this supply is adequate to accommodate most future development scenarios. The great majority of the other north-south streets in the study area have water mains that provide local service. Similar service is available for sanitary and storm sewer.

There is some high speed fiber optic technology in the area used by local industries. This could be further used as a resource for other tech businesses in the area.

CONSTRAINTS AND OPPORTUNITIES

The upper riverfront has both constraints and opportunities for redevelopment. Some features can be either a constraint or an opportunity, depending on approach and intent. This section provides an overview of some of the most significant.



EXISTING DEVELOPMENT PATTERNS

The existing pattern of land use has been built up over many decades, and is largely developed around industrial use. The large block size, continuity of rail access, and treatment of the Mississippi as a "working river" rather than as an amenity are all characteristic of this.

For the continuation of job-generating redevelopment, this is largely an opportunity. Limitations include some parcels which are smaller than what is currently preferred by office/industrial uses, and a sometimes unattractive public realm, which may discourage new investment unless it is upgraded.

For transformation to residential/mixed use development, this is more of constraint. If a plan to establish new riverfront neighborhoods is pursued, especially on the west bank, it will require the acquisition of a critical mass of property to ensure the new development has a livable context and does not function as an isolated island. Additionally, most industrial sites are being actively used, and relocating these businesses may be a difficult and expensive proposition. This is especially true due to changes in nonconforming use and condemnation laws since 2000, which make it harder to relocate an unwanted or unwilling business.

Infrastructure has been built up to serve the existing uses, including rail, highway, and utilities. In general, this is an opportunity, as the excess capacity in these systems makes it more feasible to do major new development. However, the presence of high voltage power lines above ground and main gas and water lines below may put some constraints on redevelopment, especially in scenarios that recommend moving or vacating right-of-way.

Barging usage on the west bank provides a particular constraint to new riverfront parks. It is clear that unless the barging is discontinued, public access to the riverfront in certain areas will be limited.

The east bank's development-related issues are on a far smaller scale, though they are still significant in terms of implementation. The most significant relates to the devel-

opment between Marshall Street NE and the river on the stretch that is guided to be fully park. There are a variety of uses, ranging from industrial to single family residential, on this narrow stretch of land. Furthermore, property rights ensure that there is at least some viable redevelopment scenario for all of these sites besides park. Land can be acquired for park if there are funds available, but if a development is proposed and there is no ability to purchase it for parkland, there are limited options for preserving it for park.

INFRASTRUCTURE BARRIERS

Especially on the west bank of the river, there are significant infrastructure barriers to connectivity with adjacent neighborhoods.

The most prominent barrier is Interstate 94, which divides the industrial riverfront development from the largely residential area in the rest of North Minneapolis. Crossings are available at overpasses spaced roughly every six blocks (two-thirds of a mile) at: Plymouth Avenue N, West Broadway Avenue, 26th Avenue N, Lowry Avenue, Dowling Avenue N, 41st Avenue N, 42nd Avenue N, 49th Avenue N, and 53rd Avenue N. At Broadway and Plymouth access is available to the river bank. At 41st, 49th, and 53rd, overpasses connect to the new North Mississippi Regional Park, with an additional underpass at 45th Avenue N.

This placement of Interstate 94 was largely by design, serving not only as a transportation route but as a buffer between the residential and industrial portions of North Minneapolis. It becomes a constraint on residential/mixed use development east of the interstate, since that area is cut off from the neighborhood fabric and amenities such as neighborhood parks, schools, and corner stores.

Additionally, the existing rail spurs on the west bank limit the ability to redevelop sites. This is particularly true in that rail crossings are highly regulated, and it is difficult to add at grade connections across rail lines that are not already in place. Since the rail spurs are still being actively used, and rail companies have special status under federal law, options are limited for removing these connections. On the positive side, for businesses that might use rail, this access provides an alternative to moving freight via truck, especially in times of increasing gas prices

The east bank also has some development barriers in terms of rail and industrial facilities, especially in the northern half of the study area. While it is anticipated that many of these will remain, opportunities for improved connectivity around and through these areas need to be considered.

PUBLIC LAND OWNERSHIP

A substantial portion of the land along the upper riverfront is publicly owned. As stated in the original Above the Falls Plan, over half of the linear riverfront of the upper river is publicly owned. This presents an opportunity for catalyzing development led by public action on these lands.

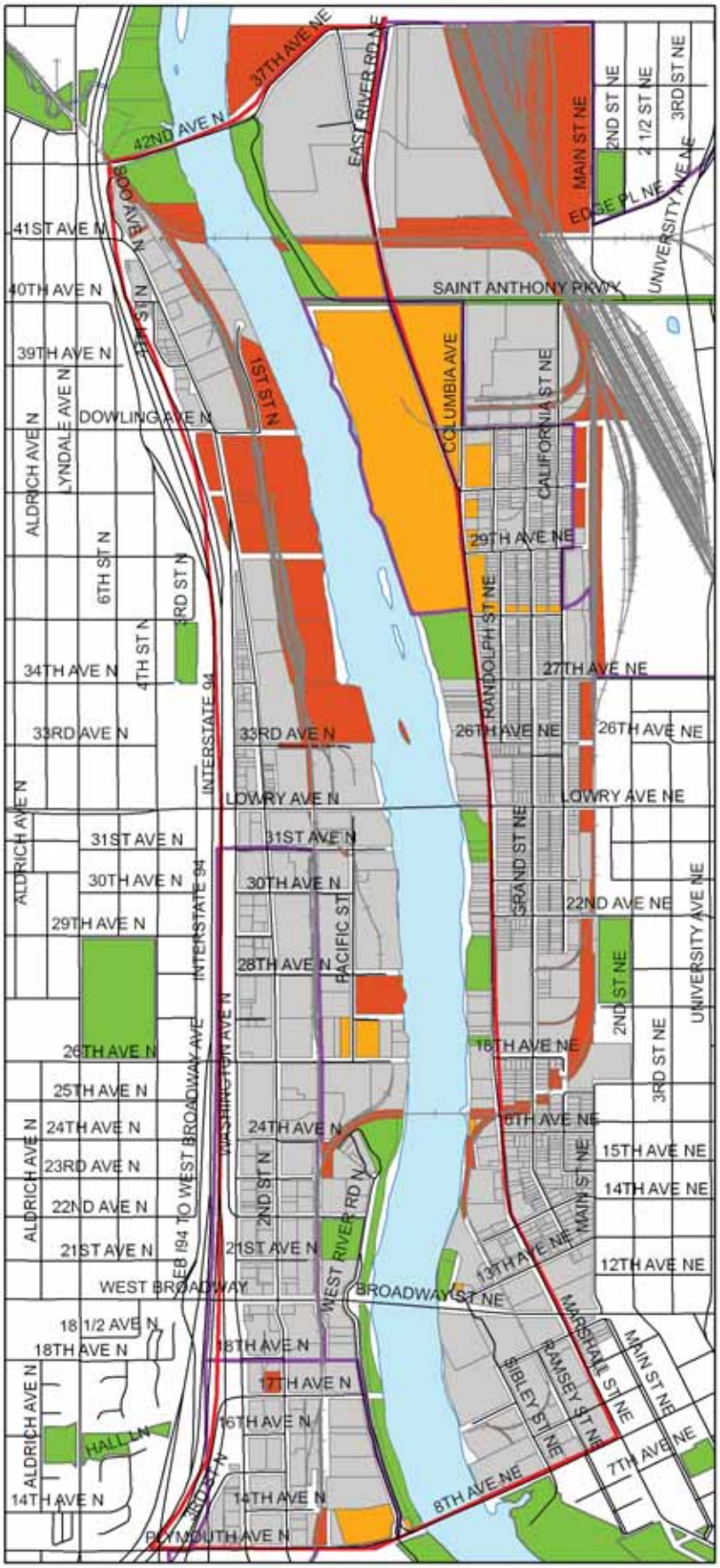
The most obvious is the land owned by the MPRB, which has been increased in recent years due to ongoing acquisition activities. The MPRB has already begun work on developing park frontage on several of these sites, and has plans to continue this.

The Upper Harbor Terminal is another key site. Currently slated to close, this City-owned site would be a prime location for a new riverfront park and compatible development. Hennepin County owns some land at the bases of the

Lowry Avenue Bridge, providing an opportunity for green space and stormwater management. Other sites, as shown on Map 2.10, can also be opportunities for redevelopment and parkland.

Additionally, a significant amount of the land is owned by quasi-public entities, including utilities and railroads. While the primary mission of these entities may not be compatible with all elements of the plan for the area, having relatively consolidated land holdings makes it easier to communicate regarding change and direction than in areas with more fragmented private ownership.

One specific, near term opportunity is public land owned by the City and MPRB at the Grain Belt site. Guidance for this area is discussed in more detail in Chapter 5.



Map 2.9
Above the Falls Land Ownership

Legend

Ownership

- private
- park
- transportation/public
- utility
- Railroad
- Study Area
- Industrial District
- Water

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CHAPTER 3

Policy Issues

At the core of the decision regarding the future of the riverfront lie a number of major policy issues. This chapter discusses them, along with the implications for planning and development.

COMMERCIAL NAVIGATION

As discussed in Chapter 7, commercial navigation has long been a feature of the upper riverfront. The Upper Harbor Terminal has now been in existence for over 40 years and in planning for decades more. However, as priorities have shifted and barge traffic has declined, it now seems likely the terminal will soon close and be redeveloped.

Barge transport is useful for low value, high volume bulk commodities, where speed of delivery is not important. It can also move fragile commodities safer than freight rail because the travel is smoother, resulting in less "spoilage" in shipments. It also has the lowest cost per ton of moving freight of any of the major freight networks. While barges are not typically energy efficient, the fact they are able to move commodities in bulk reduces fuel usage per ton compared to other modes.

However, barge transport to the upper riverfront is limited by the size of the lock and dam system. The three locks between Minneapolis and St Paul can accommodate only two-barge assemblages. This is in contrast to all of the other locks on the Mississippi River, which can accommodate assemblages of 9 barges at one time. Over the past five years, the amount of commodities passed through the Upper Locks at St Anthony Falls has declined by 47% based on overall tonnage. Questions remain whether the drop in barging traffic is due to a lack of competitiveness of this location as a shipping option, and its uncertain future, or whether better market positioning and site improvements might serve to increase volumes. Both may be true.

The US Army Corps of Engineers maintains and operates the lock and dam system, including dredging the river to create a navigable channel. Due to the above-referenced decrease of demand, and desire to cut costs overall, the Army Corps is currently proposing a reduction in service hours at the locks.

This policy issue is further complicated by the recent spread of Asian carp, an invasive species that poses a significant threat to native fish and other aquatic life. The closure (or reduced usage) of the lock and dam system has been considered a possible barrier to the upstream spread of the carp, since it is one of the few places along this stretch of the Mississippi substantial enough to block these high-jumping fish.

While at present there is no definite plan to close the locks, other means are being explored – including reduced lock hours, limitations for recreational craft using the lock (they have historically accounted for over half of lockages), and the construction of electrical and/or bubble barriers downstream of the lock. The possibility remains however, that there would eventually be the decision to close the lock and dam system to all traffic, effectively eliminating commercial navigation above the falls.

A related topic is dredging. At present, the Army Corps continues channel dredging. The City, by agreement, provides two sites for the dredge spoils – one on the upper harbor terminal site, the other near the Interstate 35W bridge downtown. If the lock and dam were closed, this dredging would most likely cease. On the positive side for development potential, the dredge sites would presumably be available for development. On the other side, the river would most likely silt in, and become too shallow for most boats.

The fact also remains that once the commercial barge terminal is removed, it is mostly likely gone permanently. If there was a future desire to reestablish this mode of transportation, it would likely be a very expensive and difficult proposition.

There are also costs associated with the terminal closure, besides the cost to transition it to a new use. The Metropolitan Council recently completed a study looking into the economic impacts of the closure. The study found that the closure would result in the permanent loss of 127 jobs in the Minnesota economy (direct and indirect), and cost Minnesota's economy $24.2 million over the 2012-2040 timeframe in terms of increased transportation costs. It would also result in an increase of 4,890 truck trips, concentrated during the work week, primarily in the 8.5 month period typically associated with barge shipment. It further concluded that there were a number of supply chain issues related to the commodities barged and stored here that have not been fully explored – such as the reliance on coal and fertilizer shipped through here.

Map 3.1
Above the Falls Upper Harbor Terminal Site

Legend

- Existing Parks
- Upper Harbor Terminal Site
- Railroad

Minneapolis
City of Lakes

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2/7/13 DRAFT

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Though these costs would not necessarily be large enough to outweigh potential benefits of redevelopment of the site, they should be taken into account in the decision process, especially during the closure and transition period. In particular, the increased pressure on other freight networks (including trucks) may result in additional congestion on area routes.

In general, research done for this plan supports the conclusion of the Above the Falls plan that the Upper Harbor Terminal facility can be closed at some point to pursue a higher value future that makes better use of the City's riverfront. This proposed course of action was accepted by the Metropolitan Council and MNDOT after City Council adoption of the plan. Additionally, barge terminals in St Paul are considered to have capacity to receive many of the shipments that currently go to Minneapolis.

Although City policy calls for the eventual closure of the Upper Harbor Terminal, there is reason to proceed cautiously. The property is extensive, and if it were not in active use it would need to be maintained by the City of Minneapolis. Securing the site in the first year of closure would cost an estimated $365,000, and the ongoing annual holding costs are estimated to be substantial.

The current lease of the site by River Services, by contrast, generates revenues to the City of Minneapolis, and absolves the City of all maintenance responsibilities and expenditures. This suggests that closure of the terminal should be timed to coincide with redevelopment of the site—and that there is a public interest in the viability of barging services in the interim.

The closure of the upper harbor terminal site presents an opportunity for both new development and new riverfront park, with room for a parkway connection. Ideally, reinvestment in this area may help spur private investment and redevelopment of adjacent privately owned sites. One important factor in redevelopment is that the site is somewhat constrained by the limited distance between the riverfront and rail line, which tapers further to the north end of the site. The balance of park and development on this site requires careful evaluation.

One additional issue is that the closure of the Upper Harbor Terminal does not necessarily mean the end of barging on the upper river. Two privately owned terminals may continue to barge goods, as long as this is an option. The restriction

or closure of the locks, would end all barging traffic.

Additional information on issues related to barging and the Upper Harbor Terminal can be found in Appendix B.

COMMUNITY AND ECONOMIC DEVELOPMENT

Many nearby neighborhoods in the study area are at present the subject of a range of community and economic development interventions. The redevelopment of the upper riverfront has tremendous potential to catalyze positive change in this area. However, to have the maximum impact, it needs to be considered within context of the existing policy and programmatic framework.

The clearest case for both community and economic development lies with the parks. The development of a major new amenity in the form of a regional waterfront park, parkway, and trail system has the potential to greatly benefit surrounding neighborhoods. Just as this has been an asset to other areas of the city, it can be here as well. The improvements will not only provide localized opportunities for recreation and gathering, but link to the larger Grand Rounds system.

While there is some loss of tax revenue associated with transferring land from private to public ownership, the City has deemed this a worthwhile tradeoff in exchange for the benefits to nearby property owners and others. Additionally, it is likely the reduction in property tax from parklands will be offset by significant gains in the values of properties in adjacent neighborhoods, that benefit from the increased amenity value of riverfront park access.

Furthermore, direct connections between the riverfront and neighborhoods have the potential to make the river more accessible to more people. One caveat is that the riverfront is a substantial distance (in some places, ½ mile or more) from existing neighborhoods on the west bank (the east bank being much more accessible); because of this, safe and appealing connections are needed to connect people to the riverfront.

New residential/mixed use development has the potential to support community development as well. As suggested in the original Above the Falls Plan, market rate riverfront communities could provide an attractive high-amenity type not currently available in nearby neighborhoods, diversifying and strengthening both the housing market and the demand for commercial and retail businesses. However, there is a potential caution to this – as the housing market is currently very weak and vacancies are high, additional units may not be a net positive in the near term – from either the perspective of the City or the developer. This is discussed in more detail in Chapter 8.

While affordable housing may be a more feasible near term alternative, it may not be the best match for this area either. Since there is already a concentration of affordable units in the area, this may have the undesirable impact of further concentrating poverty. Additionally, the units may be in direct competition with other affordable units already in existence. Furthermore, public subsidy of housing (a likely requirement for any near term housing project, market rate or otherwise) may divert scarce resources from other priority interventions.

An exception to these tradeoffs may happen for potential residential areas close to downtown. These have been shown to have market strength due to proximity to existing strong neighborhoods (e.g. North Loop and East Hennepin areas), and may require little or no subsidy to result in successful near-term projects.

The case for economic development is somewhat different. The relatively high unemployment rates in nearby neighborhoods suggest a strong need for jobs, and these areas have been disproportionately impacted by the recent recession. Data suggest that there may be a mismatch between the typical worker in the existing industrial area and the residents of adjacent neighborhoods. While a significant percentage of the jobs are held by North and Northeast Minneapolis workers (at least 10%), it could be higher. This has been exacerbated by a continual decline in jobs in this area in recent years, as businesses downsize or move.

New economic development in this area, if jobs are taken by local residents, has the potential to benefit the area, especially if they are living wage jobs. Manufacturing and construction jobs are particularly valuable to the blue collar populations of this area, as they typically pay well and do not require advanced degrees. To this end, if and when businesses grow or expand, job linkage requirements and job training programs likely will be necessary to ensure that future job opportunities are made available to local residents.

When providing assistance to a business looking to locate and/or expand in the city, City staff will seek to support high job density uses – a general guideline is 1 job per 1,000 square feet of building, with a minimum 40% site coverage. Jobs paying a living wage are also preferred, though not always required. This tends to support light industrial and office uses as opposed to lower job density uses such as bulk materials and warehousing.

This plan's primary land use objectives can facilitate economic development goals through the creation of new urban riverfront parks and recreational facilities. Quality of life issues are playing an increasing role in attracting entrepreneurs and retaining skilled employees. The upper river area has the potential to be a vibrant urban area, immediately north of downtown, with a mix of new high value development.

IMPLEMENTATION MODEL

PUBLIC ROLE IN IMPLEMENTATION

Because of the market conditions of the area, it is unlikely that significant change will happen without public sector involvement and investment.

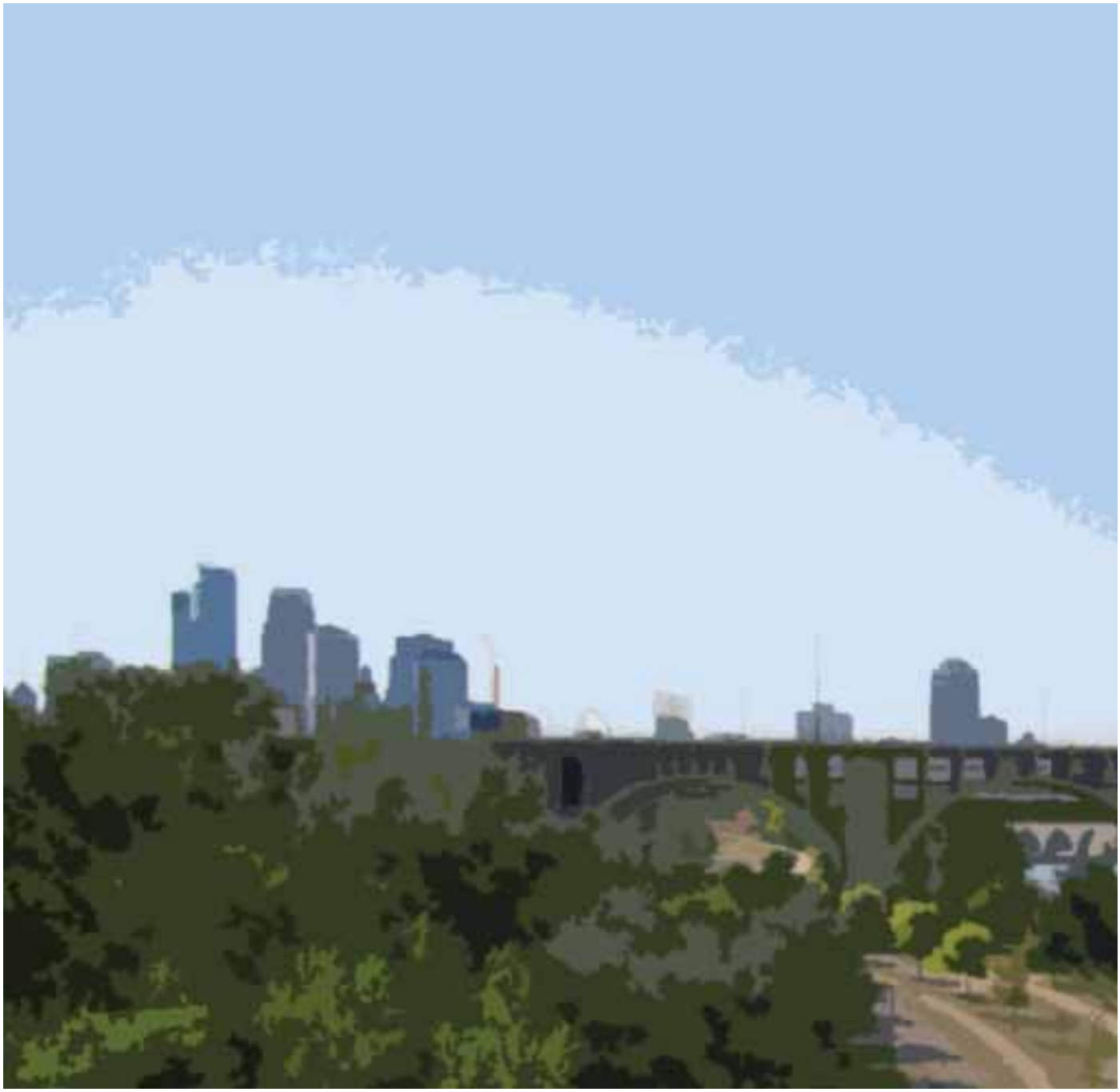
For transformative approaches – both for creating new parks and for new neighborhoods – land acquisition will be necessary. The Above the Falls plan assumed that eminent domain would be used, supported by the public purpose outlined in the plan, to acquire properties for these uses. However, changes in state law have greatly narrowed the potential uses of eminent domain, and it is a less viable and attractive tool than it used to be. Most transactions will need to rely on willing seller arrangements, which means that there will need to be a sustained effort over time to take advantage of opportunities as they emerge.

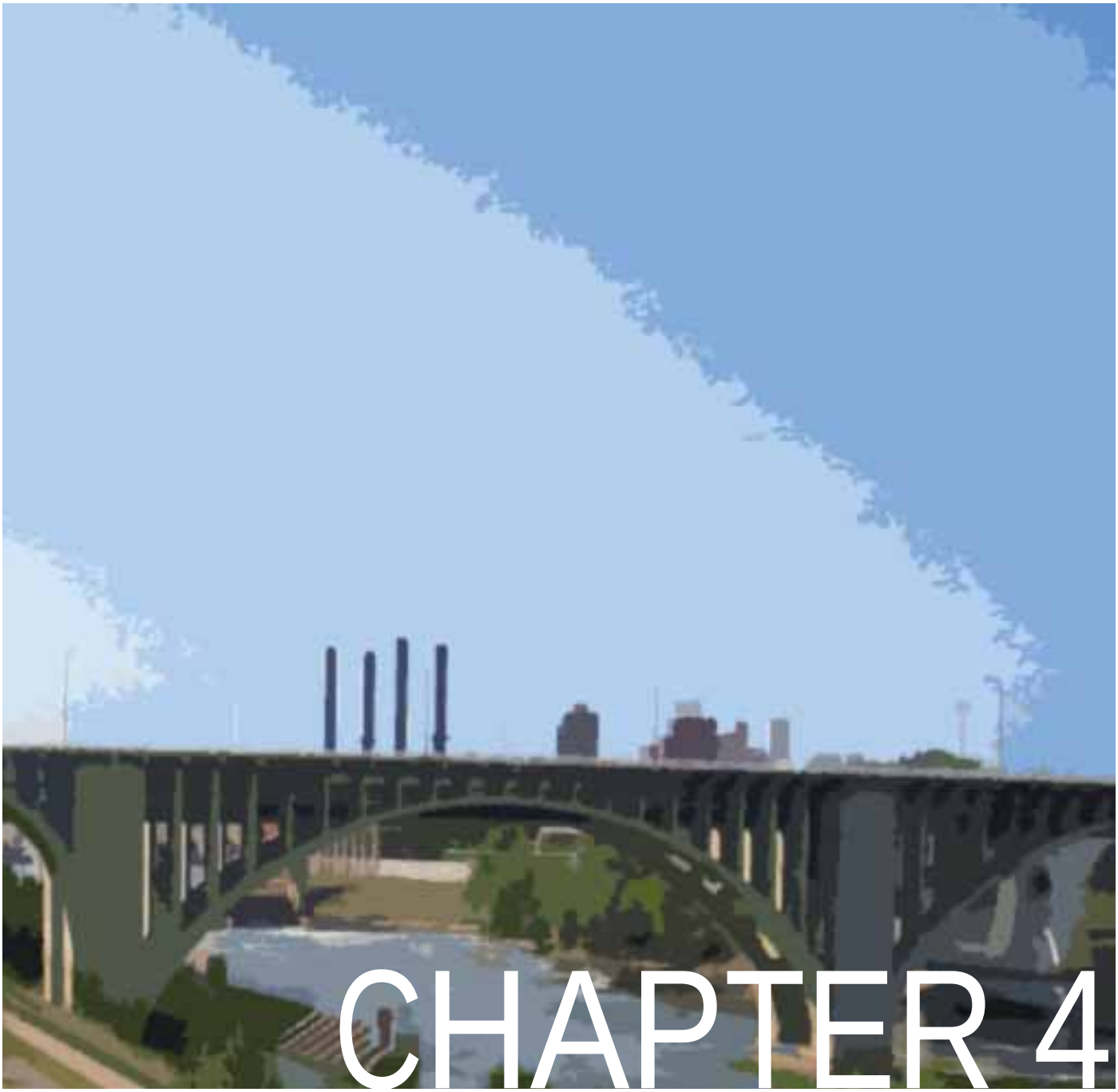
It is not necessarily required that the acquisition be handled through a public entity. While the MPRB is the logical body to acquire and own parkland, acquisition for development potentially could be handled through a private third party organization. That said, there are few if any tools or funding sources currently readily available for public acquisition and long term holding of land for redevelopment. Scenarios where incremental growth is possible and development opportunities are relatively short term would be more feasible.

Other possible public roles may include funding cleanup or other subsidy of new development through various tools. This is a more traditional way the City can be involved, as the Minneapolis Community Development Agency (MCDA) was previously.

Especially with a more ambitious transformation, a clear role for the public sector and other parties in implementation, and a commitment to implement, is needed is this plan is to move forward.

Additional clarification is needed around the timeframe for implementation, as large scale transformations require a long term horizon, but making progress requires short term action steps.





CHAPTER 4

Supporting Analysis

HEALTH IMPACT ANALYSIS

A Health Impact Assessment (HIA) is a tool that has been used on an international level for communities and decision makers to evaluate the potential health implications of a proposed project or policy before it is built, implemented or put into effect. An HIA encourages bringing together public input and data relevant to the project or policy in order to make recommendations about how to maximize potential positive health outcomes, while minimizing unintended negative consequences. This HIA investigated the potential health impacts that could result from key land use decision alternatives which are outlined in the ATF plan. The report is intended to prompt key decision makers to consider the potential health consequences on residents' health and wellbeing of implementing the ATF plan.

At the time the HIA began in January 2012, CPED and MPRB were engaged in updating the ATF plan to incorporate findings of the ATF-PRIS as well as elements of the visionary design proposed in RiverFirst. From the beginning, HIA efforts were aligned with the City and Park Board's plan revision process, including participation during public forums and during the public comment period.

The HIA project team consisted of City staff from CPED and the Minneapolis Health Department (two epidemiologists and two planners), a planner from MPRB, the executive director of Minneapolis Riverfront Partnership (MRP), an intern from the University of Minnesota, and subcommittee members of the Above the Falls Citizens Advisory Committee (AFCAC). The Health Department was the lead agency for implementing the HIA. Planners from CPED and MPRB provided advice, data, maps and plan details throughout the HIA process and led and assisted with community engagement efforts. The AFCAC subcommittee advised the HIA project team on community engagement strategies and health topics of major concern to residents. The subcommittee members actively participated in community engagement events and forums.

Having begun in January 2012, the HIA entered the plan revision process midstream. Timing for the HIA was optimal given the renewed focus on the ATF plan revision process and sufficient time for research into the potential health impacts before plan approval in the second quarter of 2013. The HIA afforded the opportunity to increase awareness of serious health conditions and disparities that could be mitigated or improved by the proposed changes and to research the health implications of proposed changes where the outcomes were unclear. The HIA provided a channel for residents from diverse perspectives to find common ground on the health issues that affect them most and that could provide impetus for accelerating plan implementation.

The main goals of the HIA were to:

1. Elevate health considerations during the ATF plan revision process;
2. Maximize potential health benefits and mitigate identified risks of proposed changes;
3. Receive input from diverse stakeholders including groups not reached previously; and
4. Serve as a catalyst for accelerated redevelopment efforts along the Upper Mississippi Riverfront in Minneapolis.

The HIA project team selected four, measurable land use decision alternatives to focus the scope of the HIA. They were:

1. To add 108 acres of parkland including building continuous trails along both the east and west sides of the Riverfront;
2. To extend existing Riverfront biking and walking trails by 4.2 miles.
3. To add over the long term 3,000 jobs; and
4. To add over the long term 1,000 new housing units, 1,000 units less than the original plan had estimated.

Findings of the HIA are based on a review of academic literature and previous HIA studies that link health outcomes to aspects of the built environment. Additionally findings were based on public health data about existing health conditions, a Community Input Survey and input from residents who attended HIA presentations and public forums. Since last June 2012, the HIA project team and partners have:

- Presented to 19 local committees, community groups and neighborhood organizations

- Conducted outreach at 15 community events, including four public forums to date: one in June 2012 (~70 attendees), one in October 2012 (~50 attendees), and two in November 2012 (~180 attendees). The two forums in November were held with Latino (Northeast) and Southeast Asian (North Side) community residents and additional, targeted cultural outreach activities are being planned or underway with youth and African American residents of these areas.
- Collected over 360 community-input online and paper surveys
- Received over 120 RIVER comment cards

HIA Summary of Findings

The HIA has found that the land use decision alternatives would have significant positive impacts on health. The following summarizes the HIA findings related to specific health-related concerns:

Obesity and Mental Health

Community Input Survey respondents and many participants in the community forums link the addition of new parkland to a positive impact on their health. Parks were among the most preferred changes to the Upper Mississippi Riverfront with over 50 percent of survey respondents saying that parks would improve their health. Jobs and housing were selected least among the potential changes that would positively affect their health.

Strong evidence about the connection between parkland, physical activity and mental health in the public health literature, a majority of survey respondents who rated the additional parkland as having more of a potential benefit to their health than new jobs and housing, a majority of survey respondents who report using the Riverfront for exercise and recreation, and evidence from the Minneapolis Parks Foundation Survey that parkland plays an important role in the emotional and psychological health of city residents all suggest a strong, positive impact of increased parkland on obesity and mental health.

Environmental Quality

Community Input Survey respondents and many participants in the community forums directly link the addition of new parkland with the removal of large sections of industrial land, even though that is not necessarily what the ATF plan is proposing. According to many residents these industries are a source of air, noise and water pollution, which negatively affects their health and they would like the industries to relocate. Air pollution, loud noises and traffic and car congestion, in that order, were selected as the main factors that negatively affect the health of both North and Northeast Minneapolis residents.

The scientific literature and the lack of consistent monitoring data provides weak evidence that the increase in parkland will greatly reduce air and noise pollution levels, especially given the density of vegetation necessary to create an effective barrier and the likelihood that the industries which are considered to be the sources for pollution are not likely to relocate. The scientific literature provides strong evidence of the potential for reduced River water pollution levels through the addition of continuous parkland along the Riverfront. Continuous parkland will provide a buffer between the heavy industries, paved areas, and the River.

Neighborhood Cohesion

The Riverfront is highly regarded by residents of North and Northeast Minneapolis as a destination for exercise and recreation, which increases the likelihood that the health of a wide diversity of residents from both communities will be improved by the addition of new Riverfront trails. Over 65 percent of respondents to the Minneapolis Parks Foundation Survey reported having used the trails and bikeways. Among all possible attractions that would draw residents to the Riverfront "nonstop trails along both sides of the Riverfront" was selected more often than any other possible attraction.

Crime and Safety

Factoring in low perceptions of walkability, relatively higher crime density along the main Riverway streets on the North Side, and heavy truck traffic, access to the Riverfront is likely to remain limited for biking and walking, particularly from the North Side. Driving will likely remain a primary mode of transportation for many residents to arrive at amenities along the Riverfront. Given the link between automobile-oriented communities and obesity, making the main connections to the Riverfront safer for walkers and bicyclists would maximize the potential for lowering obesity rates, particularly among youth, the elderly, people with disabilities, and other vulnerable populations who live in the surrounding neighborhoods.

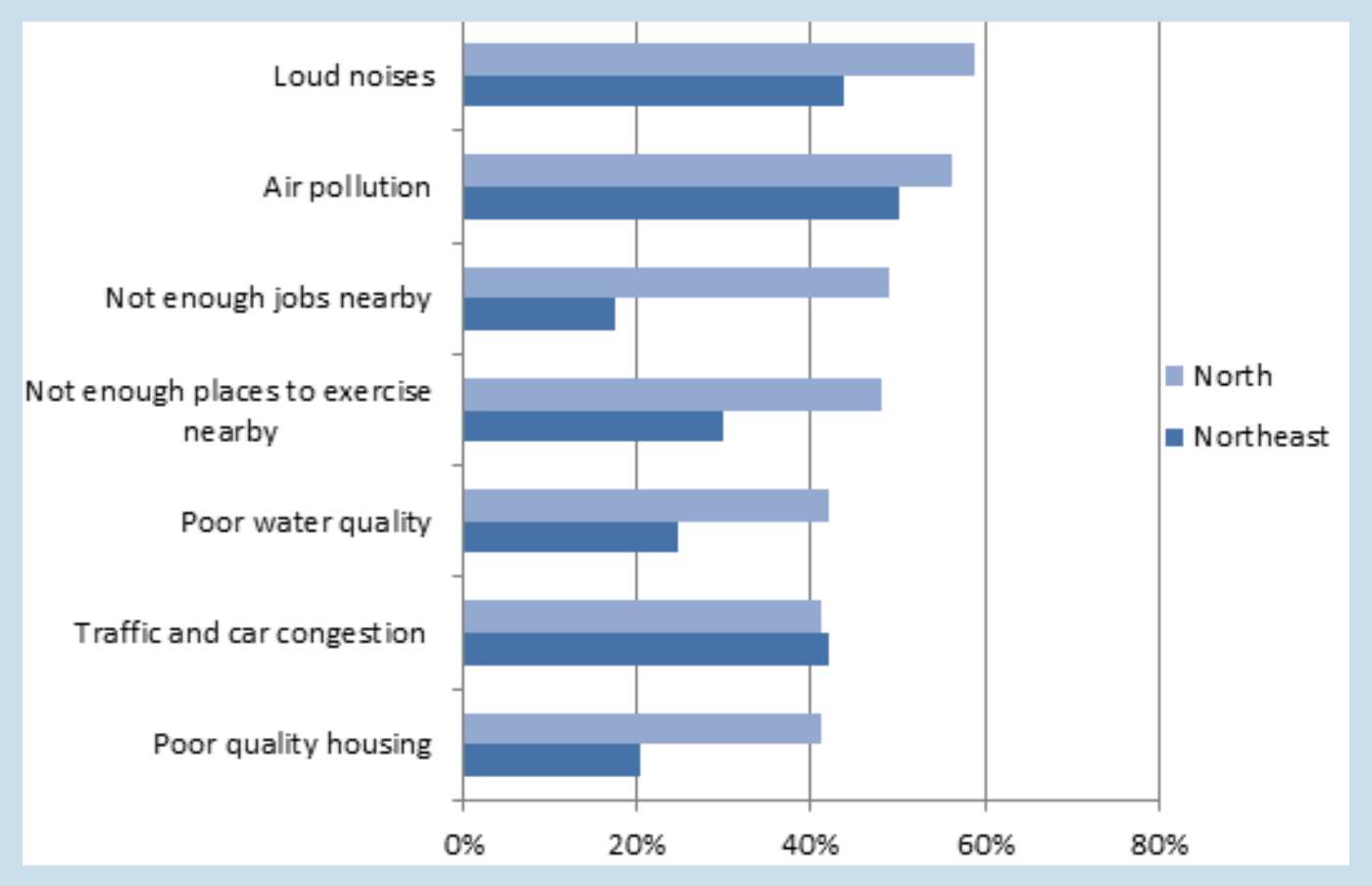


Table 4.1: Perceived Factors that affect health negatively

Employment

The link between improvements in public health and increases in income-generating land uses is very strong in the scientific literature. Residents of North and Northeast Minneapolis express skepticism that the proposed jobs would have a positive health impact on areas like North Minneapolis that experience the greatest health disparities. Whether the City can successfully attract 3000 new light industrial jobs to the ATF area and who would benefit is uncertain. Nonetheless, the revised ATF plan's focus on job-generating land use could have one of strongest impacts on public health, particularly premature mortality, mental health, and chronic disease reduction.

Housing

The overall impact of new housing on health will be minimal and possibly negative if affordable housing concentration increases. Affordable housing is unlikely to be a focus of the ATF plan, however, given an already high concentration of affordable housing and poverty in the area. A change that currently does not appear to be a focus of the ATF plan that could maximize a positive health impact especially along the Riverway streets, based on the scientific literature and the Community Input Survey results, is improvements in existing housing where housing is deteriorated as a means of creating a well-maintained neighborhood thereby promoting safety, sense of community and wellbeing.

Preliminary HIA recommendations based on analysis to date include:

- Work with existing businesses; they will likely continue to be located in the ATF area. Explore ways of effectively engaging businesses to assist in achieving the ATF plan objectives, for example by promoting environmentally safe or greener practices and increasing job density.
- Explore ways to promote local hiring practices among ATF area businesses in addition to training programs to support residents who will seek jobs in this area. Focus on opportunities for racial/ethnic minorities and immigrant populations.

- Effectively monitor air quality and noise levels of nearby industry and work with businesses to identify ways to reduce levels that can be detrimental to health.
- Focus on improvement of already existing residential areas and corridors that may have been hit hard by the recession and the housing and foreclosure crisis to help mitigate crime and safety concerns.
- Explore alternatives for youth, elderly, people with disabilities and other vulnerable populations to access the Riverfront such as planning for off-road trails to accommodate biking and walking traffic and public transit.

Final phases of data collection, community engagement and dissemination of findings of the HIA study will continue through April 2013. The final HIA report will be released in June 2013.

The HIA project is supported by a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, with funding from the Blue Cross and Blue Shield of Minnesota Foundation. The opinions expressed are those of the authors and do not necessarily reflect the views of the Health Impact Project, Robert Wood Johnson Foundation, The Pew Charitable Trusts, or the Blue Cross and Blue Shield of Minnesota Foundation.

For more detailed information on the Health Impact Analysis, see Appendix D.

MARKET ANALYSIS

There have been a number of shifts in the marketplace since the Above the Falls plan was originally adopted. Because the plan's land use vision depends on what types of development are considered feasible, it seemed advisable to revisit the market analysis and determine what had changed and the implications for development. The intent was to update analysis with a current view of market conditions for residential, office, and industrial development. While the plan does have a long term vision that is beyond the current market cycle, near term conditions are important for understanding what is feasible for the first phase of implementation.

Retail and service commercial uses were not analyzed separately. They were seen largely as an accessory type of use which follows other development types. The existing market in the area for stand-alone commercial uses is relatively weak, so it seems unlikely there would be significant new development of this type without other new development first. This does not reflect priority - it was repeatedly heard throughout the process that these uses are valued, and that more are needed along the riverfront. The plan supports these uses - it just reflects the market reality that they are unlikely to be successful unless other development happens here to strengthen the customer base, in the form of local residents and workers. See Chapter 5 for how this priority is represented in land use recommendations.

A consultant was hired to conduct a residential, office, and industrial market analysis. The results were based on review and analysis of data; interviews with developers, businesses, and other key stakeholders; and forecasted market trends for the region. All new development scenarios assume development of riverfront parks and trails, plus other infrastructure improvements. The market analysis also assumes that the market has normalized – that is, no longer in recession and with the foreclosure crisis over.

A summary of the market findings is included below. For more detailed information, see Appendix C.

RESIDENTIAL/MIXED USE

Overall, regional residential market trends are strong, especially for multi-family development. Significant new growth is forecasted in the coming years. At present, rental housing is stronger than ownership, though this can change over time.

When looking at what attracts new residential development, prime locations are important. Especially in urban areas, residents are looking for amenity-rich communities, with a number of destinations (shops, cafes, parks, etc.) within walking distance. As such, the most competitive locations are within or adjacent to existing strong neighborhoods, especially those near the urban core or other high amenity value. It is also worth noting that supporting these amenities requires a

Income Distribution	Above the Falls Study Area [a] Number	Above the Falls Study Area [a] Percent	Minneapolis Number	Minneapolis Percent
Less than $25,000	3,306	28.9%	41,271	25.1%
$25,000-$49,999	3,648	31.9%	46,331	28.2%
$50,000-$74,999	2,349	20.5%	30,779	18.7%
$75,000-$99,999	1,146	10.0%	18,143	11.0%
$100,000 and Above	994	8.7%	27,794	16.9%
Total	**11,443**	**100%**	**164,318**	**100%**

Income Distribution	7-County Metro Area [b] Number	7-County Metro Area [b] Percent	Minneapolis CBSA [c] Number	Minneapolis CBSA [c] Percent
Less than $25,000	156,844	12.4%	177,112	14.0%
$25,000-$49,999	245,075	19.4%	278,494	22.0%
$50,000-$74,999	228,543	18.1%	266,398	21.1%
$75,000-$99,999	174,505	13.8%	203,234	16.1%
$100,000 and Above	303,471	24.0%	339,841	26.9%
Total	**1,108,438**	**88%**	**1,265,079**	**100%**

Notes:

a. Above the Falls Study Area includes Census Tracts 102, 100400, 100900, 101600, 102300, 102900, 601, 100500, 1700, 2400,

b. 7-County Metro Area includes Anoka, Carver, Dakota, Hennnepin, Ramsey, Scott, and Washington Counties

c. Minneapolis-St. Paul-Bloomington CBSA includes the Minneapolis Urbanized Area plus Chisago, Isanti, Sherburne, and Wright Counties

Table 4.2: Local and Regional Demographic Trends

	2000	2010	2020	2030
Minneapolis				
Population	382,747	383,926	403,345	417,838
% change		0.3%	5.1%	3.6%
Households	162,352	163,593	172,402	179,412
% change		0.8%	5.4%	4.1%
7-County Metro Area				
Population	2,642,062	2,545,411	2,824,093	3,056,188
% change		-3.7%	10.9%	8.2%
Households	1,021,456	1,014,776	1,153,694	1,263,811
% change		-0.7%	13.7%	9.5%

Note:
Metropolitan Council population forecast was adjusted based on its difference with the 2010 Claritas estimate and the 2009 American Community Survey. Based on a percentage difference, population for the City of Minneapolis was discounted by 5% and the Minneapolis Urbanized Area was discounted 15%.

Source: Metropolitan Council, 2009, Claritas, 2010, American Community Survey, 2009, BAE 2010.

Table 4.3: Local and Regional Demographic Trends

critical mass of residential community – not isolated sites.

The relative competitiveness of the residential market in the study area varies greatly. The strongest neighborhoods – and hence sites for residential development – are those closest to Downtown. Generally, residential sites on the east side of the river are stronger than those on the west. The analysis suggested new residential development is supportable now as infill on the east bank of the river within existing residential neighborhoods.

Neighborhoods on the west side of the river, especially those near the center of the study area, tend be less strong and competitive for residential due to a number of factors. It is anticipated that even with parks development and other favorable improvements, it could be ten years or more before any significant market was available for a new residential community on the west bank.

Commercial uses could accompany residential development, especially in or near established mixed use areas. As with residential, the market for these on the west bank is much weaker and the time frame much longer for them to be established.

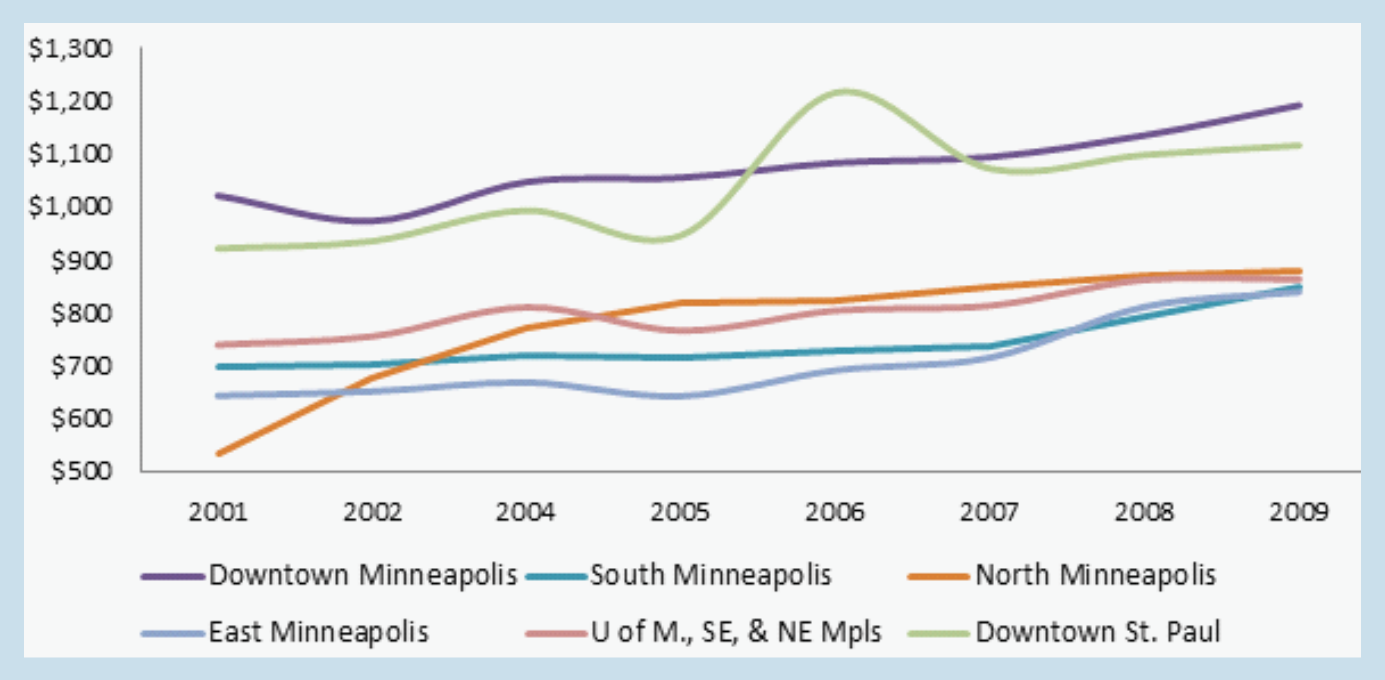


Table 4.4: Average Apartment Rents

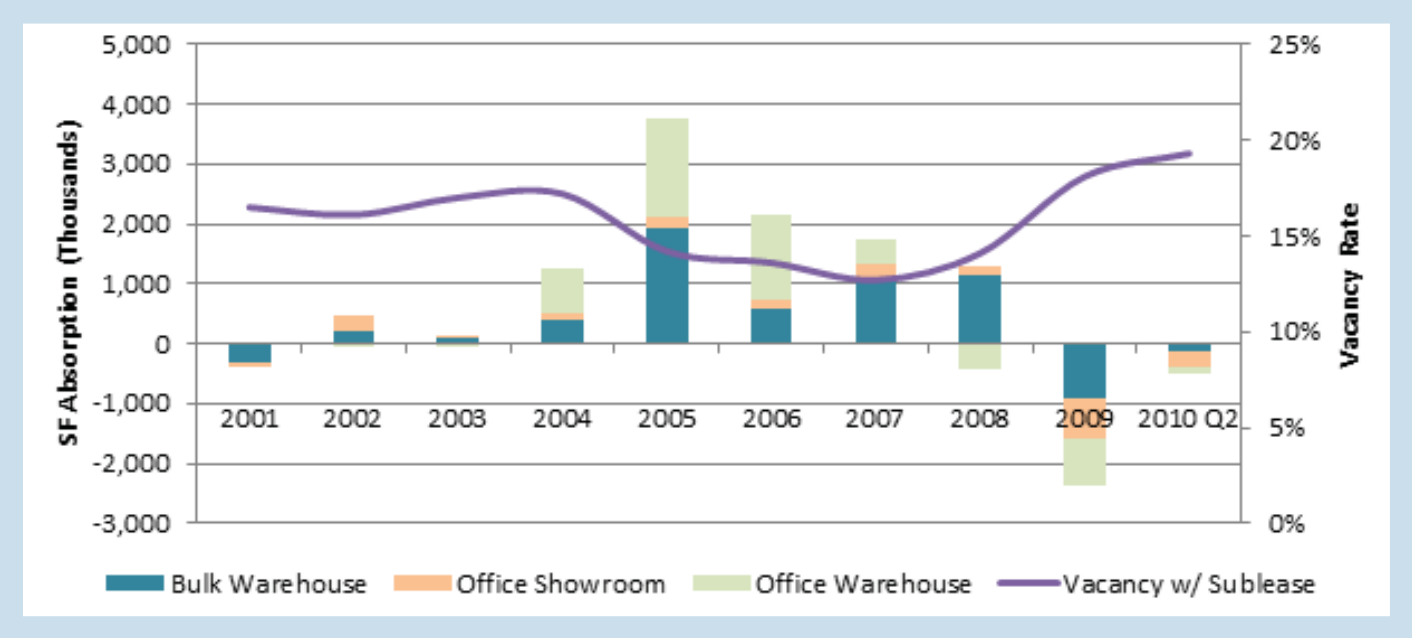


Table 4.5:Regional Office Absorption Rates

OFFICE/INDUSTRIAL

Compared to residential, the forecast for office and industrial growth is not as strong. Both are anticipated to grow regionally, but at slower rates than residential. Given past trends, professional and technical services, financial services, and management of companies are industry sectors where the City will likely be able to capture a larger share of the metro area's employment growth.

This is offset to a degree by the fact that the area is much more competitive in terms of being an attractive location for office/industrial. The main factors driving this are proximity to multi-modal transportation and freight options (especially Interstate 94), central location within the region, and proximity to employees, customers and suppliers. Another plus for

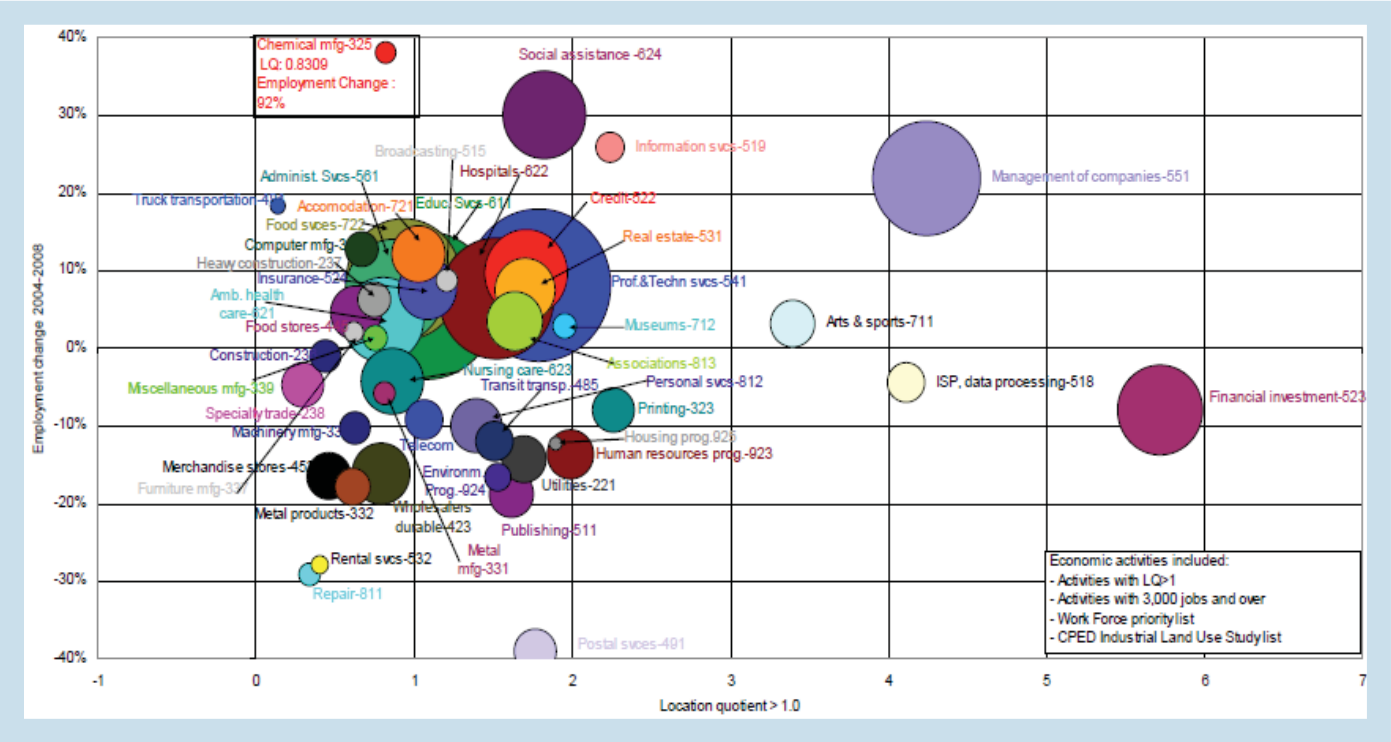


Table 4.6: Minneapolis: Employment size as a function of concentration and employment change, 2004-2008

some businesses is close proximity to Downtown, without Downtown-level costs for land, rent, and parking.

Both office and industrial markets are stratified, by type and cost of facility. This area fares particularly well on lower-cost options in older buildings – while they might not have all the features some businesses need (for instance, high ceiling heights) they can provide an option for those for whom affordability is a priority. These older buildings in particular may appeal to production, distribution, and repair industries, which provide support for urban center.

This area is not as competitive for new office buildings when competing with suburban locations – since the image and branding around those tends to drive those uses to certain areas. However, it might be competitive in some cases, especially if sizeable sites can be made available. It could also be very competitive with hybrid office-industrial models, which contain office space, distribution, and production facilities. This may be particularly attractive for owner-occupant businesses, who are less likely to be cost-sensitive when developing their own facility, and more likely to invest in the property with a higher finish.

IMPLICATIONS FOR DEVELOPMENT

The findings from the market study suggest a number of implications for development recommendations in the plan update:

- Residential infill is a feasible alternative for redevelopment in existing residential areas, with some being stronger than the others. However, at least in the short to mid-term, residential scenarios for the west bank may be less feasible than anticipated in original plan, and may require much greater subsidies. The most likely type will be multi-family development.
- This area will likely continue to be competitive for office/industrial development. The area may be able to attract higher value projects, especially owner occupant ones inclined to invest in a more attractive and valuable property for their own purposes.
- Land availability will be a factor for most new development. Many existing sites are small by current standards, and the area is largely built out already. Land assembly may be needed to get a critical mass for a new residential

community and/or a larger scale office/industrial use. However, within existing compatible areas, infill development will be possible without this.

- Market forecasting is by definition uncertain, and changing conditions may change outlook for growth. For instance, build-out of more attractive residential locations may in turn make this area more appealing. Therefore, periodic reevaluation of market trends would be advisable.

ECONOMIC AND FISCAL ANALYSIS

The market study provided an overview of what type of development could be attracted to the study area. The next round of analysis took a further look at development feasibility from both the private and public perspectives. Economic analysis was needed to determine the feasibility of development from perspective of private developers, and public subsidy (if any) needed to cover project funding gaps. Additionally, fiscal analysis was used to determine if project is worthwhile from perspective of the City, in terms of the amount invested versus return to City in the form of increased tax base and other revenues.

This analysis was based on general project typology using typical numbers and values. It was not meant to be specific to any particular development project. The analysis was done in two phases: a general one for the entire study area, and more focused one for specific development area (a stretch of existing industrial near the Upper Harbor Terminal) – to allow for more evaluation of details.

One caveat of the fiscal analysis is that it does not include non-City governmental units, including county, school district, and state. This was done to keep the scope of the analysis clear and manageable, as impacts on these other entities are varied and complex. It is likely the inclusion of these would tilt the analysis less in favor of residential, since it would in-

clude the costs of serving residential uses (e.g. social services and education) disproportionately. This is offset somewhat in the Twin Cities region, where the tax base sharing formula siphons off a portion of the tax base gain from office/industrial properties and redistributes it among member governments.

A summary of the results and conclusions are given below. The analysis also created a flexible economic and fiscal impact model that was used to test a range of scenarios, and could be used in the future to do follow-up analysis. For more information, see Appendix C.

RESIDENTIAL/MIXED USE

The analysis tested a couple types of residential development deemed to be the most likely to be considered for this area – multi-family rental apartments and owner-occupied condominiums. This analysis also assumed the need for a critical mass of residential to be a viable neighborhood – developers cannot successfully redevelop incrementally in industrial areas until there is control of a significant amount of land and/or close linkages to existing residential areas.

For the overall study area, residential analysis had mixed results. The economic and fiscal analysis both showed positive results for the condominiums, and negative results for the apartments. The difference reflected the much higher value per acre gained (to both the developer and the tax base) from condominiums. However, further analysis suggested this was not as clear as it seemed – the condominium market has declined so significantly since its peak (resulting in an unfilled inventory of units and large decline in values) that it is not expected to return in the near future – and when it does, it will locate in higher amenity areas.

Rental apartments may be able to cover costs at some point. However, for it to be attractive for market rate developers to construct new buildings, the area will need to be able to support significantly higher rents that current levels – except potentially in areas closest to Downtown where it may be possible to command higher rents. It may be 10 years or more before these are achievable in areas along the west bank. Subsidized affordable housing may be more possible, but it may not desirable to increase concentration of affordable housing in this area, which already has a lot of affordable housing. Additionally, it could be in direct competition with existing low cost housing in neighborhoods, which already have

significant vacancies.

The more focused analysis looked at the potential for residential development around the Upper Harbor Terminal area. It concluded that the most feasible approach was to start with residential development at the northern end of the study area near North Mississippi Regional Park, north of Dowling. While this area had significant land assembly issues, it had the advantage of being adjacent to a stronger neighborhood, commercial area, and transit routes. Starting farther south on the Upper Harbor Terminal site would not require the land assembly (reducing costs) but would be problematic in terms of market readiness and linkages to neighborhood areas.

OFFICE/INDUSTRIAL

The office/industrial analysis looked at low rise office buildings and office-industrial mix developments. As above, these were chosen based on the fact they were the most feasible development types for the area. Office/industrial uses typically have lower tax revenues per acre than residential; however, they also tend to use fewer public services than residential.

For the overall study area, both of these development types showed negative economic values – suggesting at least some subsidy would be needed for these projects to work from the perspective of a private developer. However, it is worth noting that the subsidy amount is less than half as much as that required by the rental apartments. Also, the office use has a positive fiscal impact, suggesting the investment may pay off.

The more targeted analysis suggests that the Upper Harbor Terminal would have positive impacts if developed with office/industrial uses, taking into account both costs and benefits. This could also be the case for selected infill of available sites in the remaining industrial area. However, the analysis would not justify the acquisition and relocation of ex-

isting businesses north of Dowling to be replaced with more job-generating uses – since the tax base differential would probably not be large enough to offset the significant costs.

Viable rents for new development are achievable in the near term with today's market conditions. Due to lack of preparation of sites there may still be some subsidy needed, but it is significantly less than for residential. Because of this, it is more possible to pursue this strategy incrementally than a residential one. However, the area still needs some public improvements if it is to be supportive of significant new investment.

FEASIBLE SCENARIOS FOR TERMINAL AREA

The targeted analysis resulted in the development of several potentially feasible scenarios for the area north of Lowry on the west bank, around the Upper Harbor Terminal. The Upper Harbor Terminal, as a publicly owned site, provides a key catalyzing opportunity for redevelopment. The original ATF plan called this out as the area of greatest land use transformation, as opposed to a more incremental approach suggested elsewhere. The 2004 "Upper Harbor Terminal Redevelopment Study" refined this vision and tested a range of potential redevelopment scenarios for the Terminal. The scenarios considered by these plans were as follows, each including a significant parks component:

- A residential/mixed use only scenario should start at northernmost end of that area since it builds on stronger neighborhoods, commercial, and transit access. However, this would require significant land acquisition and long term holding, since the development starting point would likely be ten years or more in the future. At present, there are neither the resources nor the mechanism for the City to pursue this strategy. Build-out is estimated at 50+ years.
- An office/industrial scenario could start with Upper Harbor Terminal site as a first phase (not suitable for residential first phase due to its isolation, surrounded by industrial and rail). A future phase would be selective infill in remaining industrial areas, since it was not feasible to completely replace all industrial in those areas with full scale redevelopment. Though this would require some additional resources, it is largely achievable through existing programs and funding sources. Build-out is estimated as 10-20 years.
- A hybrid solution would pursue the first phase of office/industrial on the terminal site, while holding off on acting on the area north of Dowling (allowing it to remain as industrial in the interim). A trigger point in the future (a change in market conditions, availability of land or resources, etc.) could be used to determine when to begin acquisition in that area of land for a potential residential/mixed use scenario. This would pursue the most viable redevelopment in the near term, while keeping some flexibility for future action on a longer term vision. Build-out would vary, depending on timing of the trigger point.

The analysis included a cost-benefit calculation for each of these types, as well as some evaluation of the efficacy of value capture as a funding mechanism. All three were possibly viable, though the residential one would likely take significantly longer both to implement and to pay for itself, and would require additional tools and strategies for long term land holding.

IMPLICATIONS FOR DEVELOPMENT

Some of the main implications for development are listed below:

- Incremental, compatible redevelopment will likely be the best strategy for most of the study area, apart from the Upper Harbor Terminal area.
- Differing development scenarios can yield worthwhile results, but the implementation path for each varies greatly in terms of effort and timing.

Map 4.1
Above the Falls Upper Harbor Terminal Development Study Area

Legend

- Existing Parks
- Upper Harbor Terminal Site
- Railroad

Minneapolis
City of Lakes

N
W E
S

2/7/13 DRAFT

1,100 550 0 1,100 Feet

- Residential is possible for portions of the west bank, but requires long term commitment of effort and public funding, and expansion/modification of development tools beyond current capacities.
- Industrial/office on the west bank is likely more feasible within current structures, and can begin immediately.

Changing market conditions over the years will doubtless effect feasibility. It is recommended that the policy for this area be evaluated within ten years to determine if options and viability of alternatives has changed.

LAND USE AND AVAILABILITY ANALYSIS

One of the changes since the adoption of the original Above the Falls Plan was the subsequent adoption of the Industrial Land Use and Employment Policy Plan (ILUS-EPP) in 2006. That plan raised awareness of the shrinking supply of industrial land in the city and the need to protect a certain amount from other types of development, particularly residential.

The ILUS-EPP designated several industrial employment districts, including several in the Upper Riverfront area that precisely matched the boundaries of the industrial shown in the Above the Falls Plan. While these areas were protected from residential incursion, it was not anticipated that they could contain all the industrial land in the city. Indeed, recent analysis demonstrates that over half of all industrial uses and industrial zoning are located outside the designated industrial employment districts.

Further analysis of land availability was done through the 2010 Land Capacity Analysis, which looked at availability of land for redevelopment for various development types. To supplement this, staff also took a closer look at industrial properties classified as vacant, to determine if they were indeed available for development, or otherwise encumbered (e.g. for parking, loading, storage, or other uses).

LAND AVAILABILITY

These recent studies show a clear picture of the state of industrial land: the supply of industrial land is shrinking citywide. Moreover, much of the industrial land classified as vacant is either unbuildable or currently in use by another industry for auxiliary functions (parking, storage, etc.). The supply of ready-to-build sites for new office/industrial development is very small – most would necessitate another business leaving and vacating its property. This is a sign of the vitality of these areas, but it also signals a constraint when attempting to add jobs or tax base.

On the other hand, there is still a significant amount of land available for residential redevelopment, including in areas with more amenity value than the upper riverfront. This is true in part because it is easier to increase the density of residential development than industrial – residential development can be multi-story with structured parking, whereas a number of industrial uses function best with single story or low rise buildings with surface parking and loading, and sometimes outdoor storage.

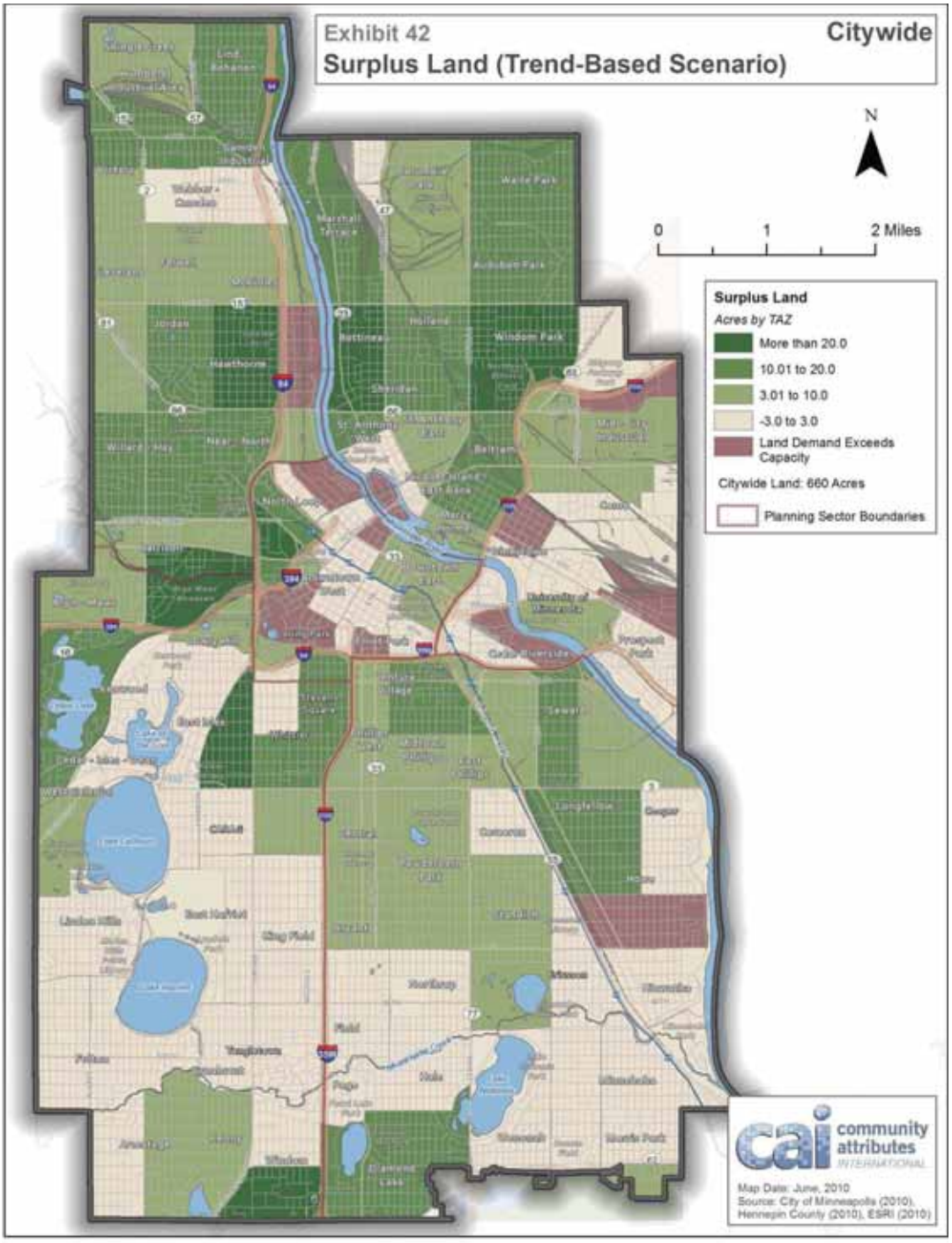
The Land Capacity Analysis study looked at surplus and shortage of land types by neighborhood, based on calculated demand for these land use types in these areas. In the neighborhoods in the upper riverfront area, there is currently a shortage of industrial land, and for the most part a surplus of residential land.

LOCATION FACTORS

The imbalance in demand for land in this area mentioned above reflects differentials in location factors influencing where various land use types locate.

For instance, office/industrial uses find this area attractive due to its excellent transportation access, centralized location, and proximity to Downtown. While these are advantages to residential as well, it lacks many of the amenities that make for an attractive residential community. While the park development may address some of this lack, more may be needed. The river is a great amenity, but not sufficient in itself to be the basis of a new neighborhood.

The heavy industrial uses in the study area are a special case of location factors. Many are very hard to relocate within the city, as there are virtually no available heavy industrial (I3) zoned areas in the city, and little policy support for creat-



Map 4.2: Surplus Land (Trend-Based Scenario)

CHAPTER 5

Land Use and Urban Design Plan

LAND USE PRINCIPLES

This plan updates the vision of the original Above the Falls Plan regarding land use along the upper riverfront. As part of this, it supports and affirms these principles and concepts:

- Compatible with and supportive of river, parks, and trails. For the Above the Falls area, the river is envisioned as a public amenity, lined by continuous public open space along both banks. This area is guided long term for park, with adequate depth to provide parkway connectivity, space for people to enjoy the riverfront, and habitat/water quality benefits.
- Supporting positive community and economic development. Redevelopment in this area will work to stabilize existing neighborhoods and act as a catalyst for new and revitalized residential and business development. Improved livability, enhanced amenities, increased property value, and expanded economic opportunity are desired results.
- Based on analysis of feasible scenarios. Since multiple options were possible for this study area, the plan pursued in depth analysis of development alternatives to determine the relative feasibility and benefits of different land use scenarios.
- Defined and supportable implementation path. For this vision to be a reality, the adopted future land use scenario must have a clear implementation plan. Without this, improvements in this area will be unlikely to move forward.
- Character, not just use. The character of development matters. This is especially true in the study area, where any development along the riverfront park should be guided to be compatible with the parkland and contributing positively to the public realm.

One specific element of land use here goes back to the central feature of the study area: the river. The relationship between the Mississippi River and Minneapolis goes back to the city's founding - its location is based on access to Saint Anthony Falls. The Mississippi was a true "working river," used to transport goods and to provide power to industries, many of which grew up along its banks. Though the industrial character of the central riverfront has largely transitioned to mixed use higher density development, the upper riverfront still maintains much of the original industrial heritage.

Of course, the city's relationship with the river is broader as well. This has been the primary source of water for the area, provided opportunities for recreational activities and fishing, and supported natural systems and habitats. The city also has a long tradition of preserving waterfront areas for public access and enjoyment.

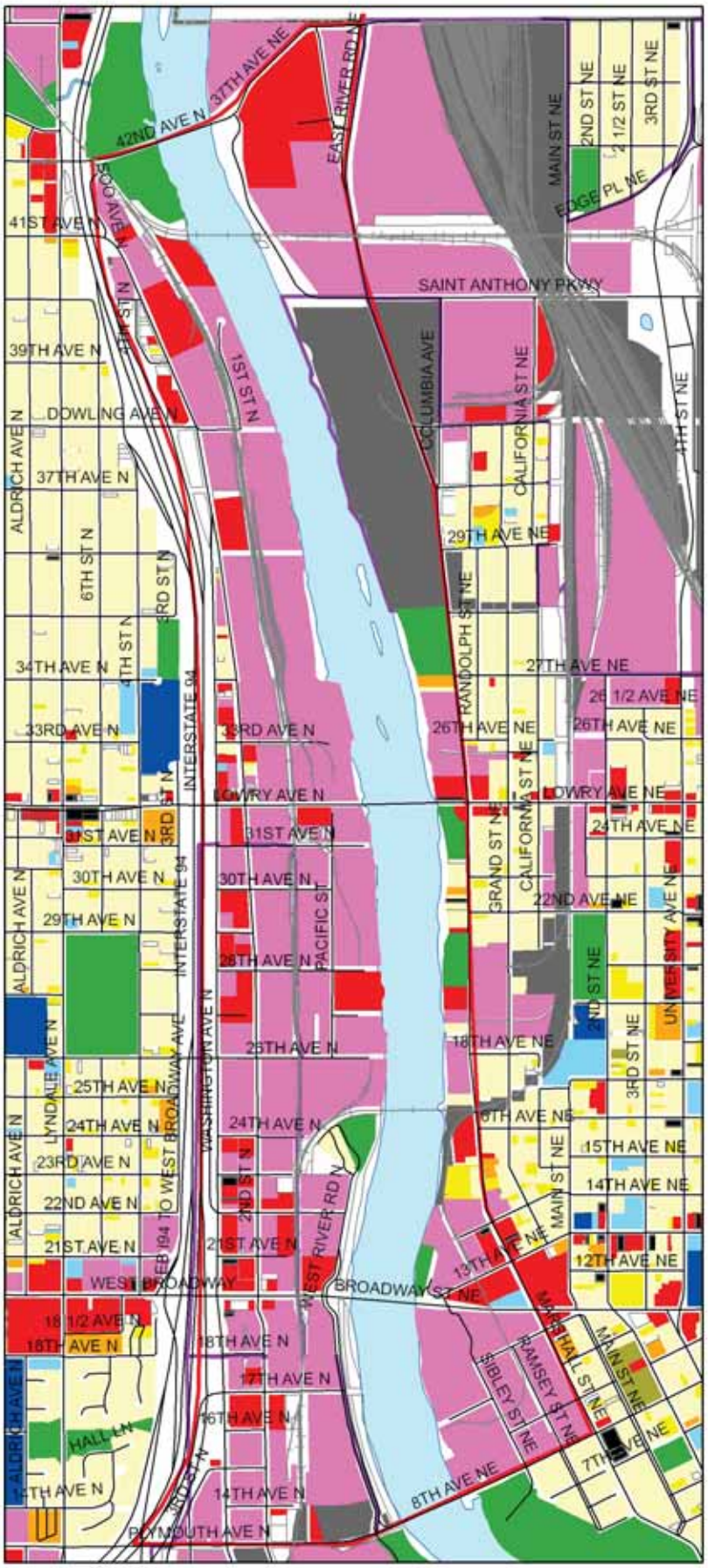
This also suggests that appropriate uses on the riverfront should include those with a special relationship to the river. This can include quite a range, from those that benefit from views (homes and restaurants), recreational access (for residents or workers), direct use of river (boating, marina, and other water uses), commercial traffic (barging operations), etc. Not all of these will be equally valued or appropriate, however, so decisions should include other factors to assess suitability.

Minneapolis' central riverfront provides a model for how these disparate strands can be recognized in a redevelopment scenario. Natural features are maintained as part of public open space. A lively mix of uses has been incorporated through redevelopment. And the area's industrial past is recognized in the character of the area (even as some of the uses have transitioned) and in interpretive elements provided. While the character of the upper riverfront is not an exact copy of the area to the south, it does hold similar promise for the ability to change and redevelop over time.

Public access to the riverfront for recreational use is a long-standing value for the city. The Above the Falls Plan focused much of its attention on realizing a continuous park and trail system, and determining how adjacent development could help support this vision. The MPRB's recent planning further refines that vision with specific recommendations for projects. The Regional Park master plan appended to this document includes further details regarding MPRB priorities.

An important thing to note is that access along the riverfront is not sufficient. There also need to be access points into the adjacent neighborhoods. This is especially critical on the west bank, where I-94 and large-scale industrial development separate neighborhoods from the riverfront.

Celebrating riverfront history and culture should be an important aspect of development along the river. It should be noted that this history should not just include post-settlement European heritage, but also reference the culture of the original native inhabitants of the area and their relationship to the river.



Map 5.1
Above the Falls Existing Land Use

Legend

Existing Land Use

- Low-Density Housing (up to 20 DU/acre)
- Medium-Density Housing (20-50 DU/acre)
- High-Density Housing (50-120 DU/acre)
- Very High-Density Housing (>120 DU/acre)
- Congregate Living
- Commercial
- Mixed Use
- Public/Institutional
- Cultural/Entertainment
- Transportation/Communication/Utilities
- Industrial
- Parks/Open Space
- Vacant
- Study Area
- Railroad
- Industrial District
- City Boundary
- Water

Minneapolis
City of Lakes

N
W E
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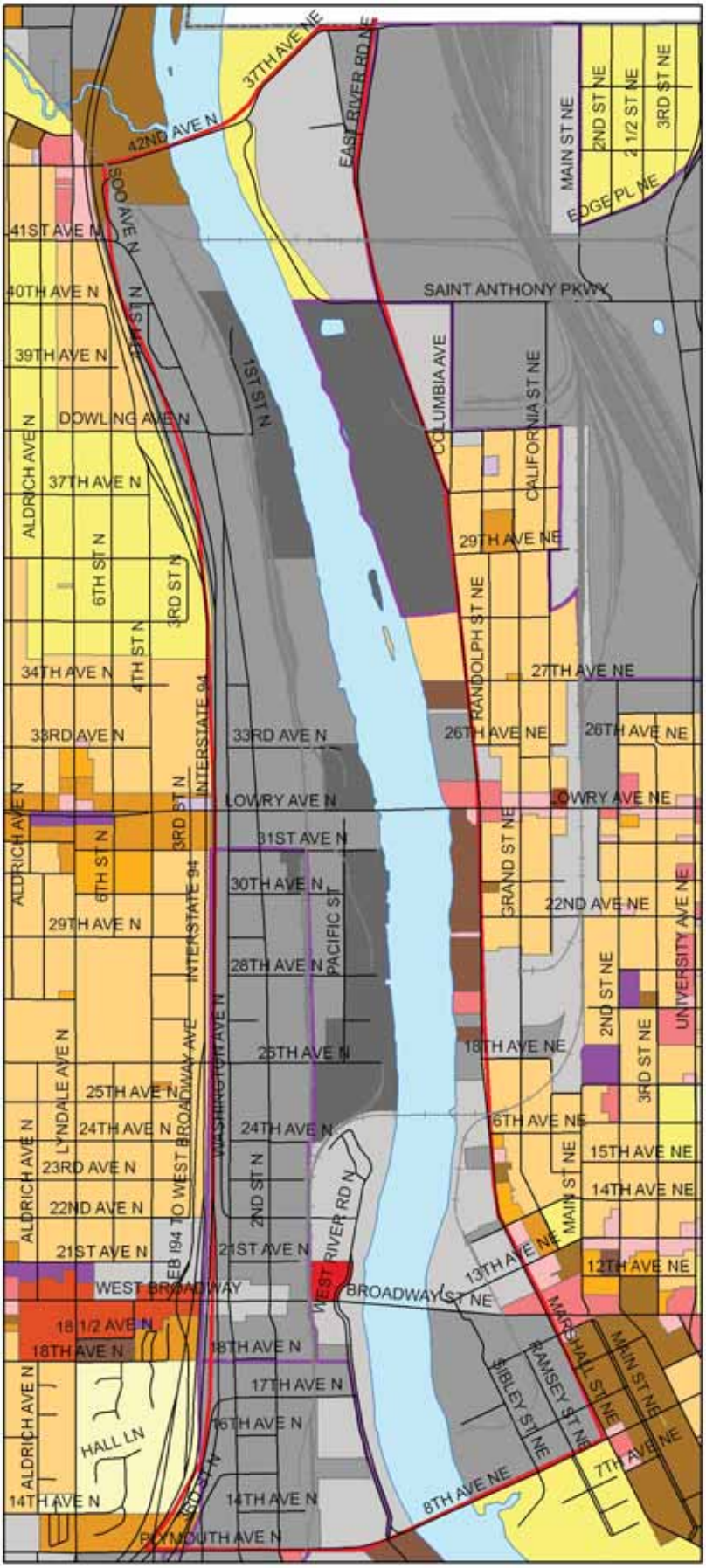
2/7/13 DRAFT

1,800 900 0 1,800 Feet

Map 5.1: Existing Land Use



Map 5.2
Above the Falls
Existing Zoning

Legend

Study Area	I2
B4-1	I3
B4-2	OR1
B4C-1	OR2
B4C-2	OR3
B4S-1	R1
B4S-2	R1A
C1	R2
C2	R2B
C3A	R3
C3S	R4
C4	R5
I1	R6

Minneapolis
City of Lakes

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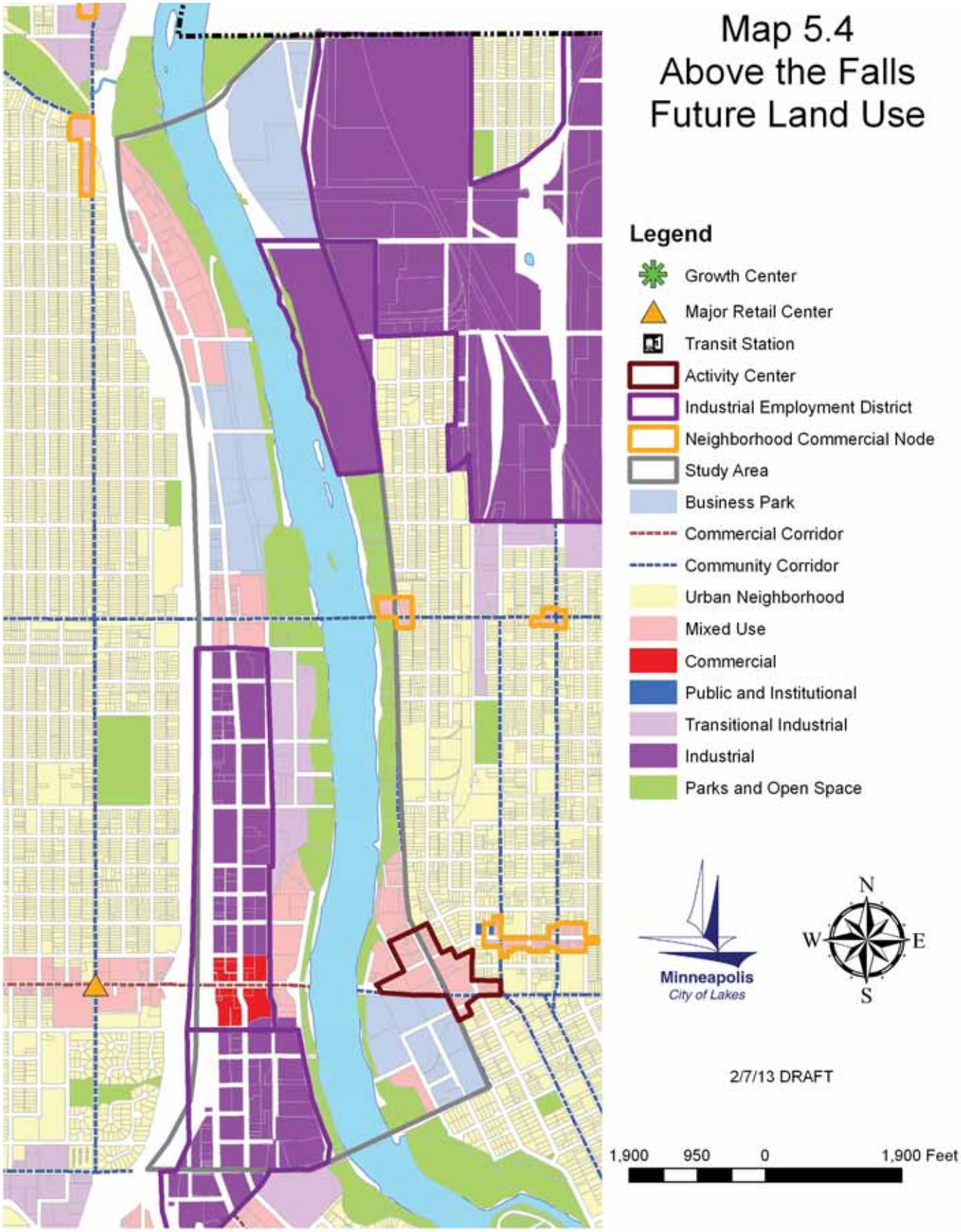
2/7/13 DRAFT

1,800 900 0 1,800 Feet

Map 5.2: Existing Zoning



Map 5.3: Future Land Use

FUTURE LAND USE

The Future Land Use Map (Map 5,4) provides guidance for the future land use for the study area. Below is a brief description of the categories used on the map and in the subsequent language of chapter. It should be noted that this includes areas outside of the study area. This is not to set new policy for those areas (the guidance depicted matches with adopted City policy in the comprehensive plan) but to provide context for the study area.

- Urban neighborhood - This is used for neighborhood areas outside the main study area. It is characterized by primarily residential use. However, it may include a limited mix of other uses (including commercial, institutional, industrial, and other) as long as they are compatible with the general character of the area. The other uses may be throughout the urban neighborhood area, but are more typically concentrated along main corridors.

- Mixed Use - This allows for mixed use development, including residential. Mixed use may include retails, office, residential,, or other compatible uses either within a building or district. Depending on context, light industrial may also be appropriate, if the type and design are compatible with other uses in the area.

- Commercial - These areas are guided for a broad range of commercial uses, in areas that are considered best suited for this sort of use.

- Transitional Industrial - These areas have flexibility built into their use type. They are typically areas with existing industrial uses which may remain for an uncertain time frame. It is expected that they will eventually transition to other uses compatible with the vision for the area. Since residential developers can typically pay more for land than can industrial developers, market forces will often result in higher valued properties becoming residential and mixed use in these transitional areas.

- Industrial - As opposed to transitional industrial areas, those guided for Industrial are expected to continue to industrial/office development. These are within established Industrial Employment Districts, described below.

- Parks - The existing and future riverfront park within the regional park boundary is guided for parkland. The category is an exception, in that it is applied to portions of parcels, where it anticipated that the entire parcel will not become a park. (All other land use categories are applied to full parcels. It also should be noted that this is not a separate zoning category, and therefore this split guidance does not require split zoning. The subdivision of the property between park and development site will happen at the time of land acquisition for park development. Since there may be a number of considerations in terms of where this boundary is set, it is expected that the final boundary may vary somewhat from what is shown on the map.

- Business Park - This is a new land use category. The intent is to support office/industrial development in a setting that is compatible with other uses. See the Zoning section below for further discussion.

In addition, there are some land use features from the Comprehensive Plan shown on the map. These are not changed from the existing Comprehensive Plan, but described here to provide additional context:

- Industrial Employment Districts (North Washington, Upper River, and Shoreham) - These are areas guided for job-generating uses, in particular office and industrial. The intent is to preserve them from encroachment by other non-compatible uses, particularly residential, which can often outbid industrial uses for land and shrink the space available citywide for job-generating uses.

- Neighborhood Commercial Node (Marshall and Lowry) - These areas are guided for medium to high density mixed use, particularly residential and neighborhood-serving commercial

- Commercial Corridor (West Broadway) - Major corridors guided for mixed use, residential, commercial, and light industrial development, as well as high densities. They are also major transit routes.

- Community Corridor (Broadway St NE, Marshall St, Lowry Ave, Plymouth Ave) - Minor corridors guided for similar uses to Commercial Corridors, but generally lower densities. They are frequently transit routes.

There are some additional land use features shown that are outside the study area. The Comprehensive Plan provides additional details on these.

DESIGN GUIDELINES

This section has design guidelines to illustrate the desired character of development within the Upper Riverfront area. Good design is needed to capitalize on the value of the riverfront, improve the overall public realm and environment, and create a livable and walkable community that encourages activity and investment.

The City's site plan review standards provide additional and more detailed guidance for site and development design.

GENERAL PRINCIPLES

Building Design and Character

- Support increased intensity and density of new development when paired with high quality and complementary design of buildings and sites.
- Any building on the riverfront should add to the positive activity of the public spaces around it, and complement riverfront parkland through development and site design.
- Primary building materials should be high quality, durable materials.
- Retain some views of the river for second tier development sites by thoughtful placement and design of riverfront buildings, utilizing tapered profiles as building height increases and avoiding overly wide or tall buildings that block much of the prime view and can create a wall that physically and psychologically cuts off the riverfront from surrounding neighborhoods.
- Buildings should be designed and programmed to engage public spaces. Encourage vitality and activity along the riverfront by orienting quasi-public spaces (restaurants and shops) and private open and communal spaces (decks, balconies, terraces, meeting rooms, etc.) toward the river, while also maintaining high quality design along public streets and pathways.
- Support the development of pedestrian friendly street frontages and windows that encourage natural surveillance and provide an inviting presence.
- Reflect the characteristic mixed use nature of development in this area with a complex and interesting combination of uses, while addressing potential conflicts and incompatibilities.
- Promote the concepts of universal design to develop an area that is accessible to people of all ages and abilities.
- Build on the history of the area to create authentic and unique locations, providing interpretive elements where needed. Consider preservation of historic resources, or mitigation where preservation is not feasible.

Site Design and Public Realm

- Avoid driveway access off of the parkway where possible; development access should be from non-parkway streets.
- On riverfront sites, locate parking and loading facilities to minimize their visibility from the river and other public spaces.
- Encourage the creation of pleasing portals to the river through the design of attractive, safe pedestrian and bicycle friendly public streets and private streetscapes "green corridors" that connect east and west to the river.
- Include appropriate streetscape features, including pedestrian scale lighting, ample sidewalks, landscaping, trees, and others.
- Incorporate sustainable stormwater management solutions (Best Management Practices, or BMPs) to minimize runoff and improve surface water quality, and to contribute to public realm and open space; create linkages and synergy between public and private open spaces.
- Add buffering between incompatible adjacent uses where they exist.
- Ensure there is adequate lighting throughout sites to promote a safe environment.
- Extend the benefit, character and function of public amenities (river, parks, the parkway, greenways and trails) into development sites through the extension of private open space, landscaping, and pedestrian circulation – "fingers of green."
- Consider incorporation of art into new development, especially art related to the unique neighborhood, historical and environmental context of the Upper Riverfront.
- Assure multiple access and interaction in many ways with the river - from fishing, dining or picnicking dockside, boarding boats, strolling, lounging, viewing or feeding ducks.
- Create multiple destinations along the river and utilize the continuous riverfront park space to connect the destinations.
- Achieve continuity, especially when it comes to the pedestrian experience.
- Encourage mixed uses and a 24/7 activity pattern where possible, to promote safety and security.

RESIDENTIAL/MIXED USE DEVELOPMENT

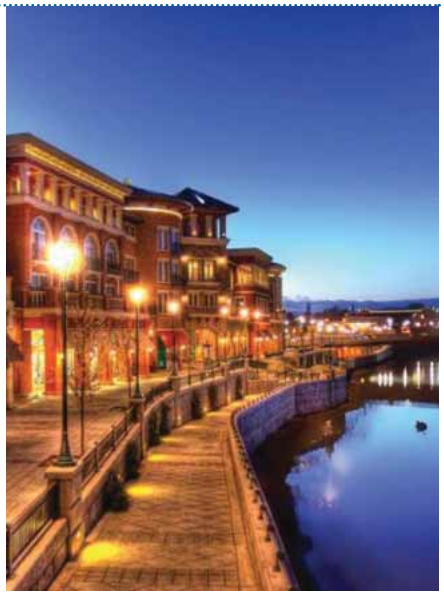
- Support the development of river-oriented commercial uses to provide attractive riverfront destinations and increase area vitality
- Encourage appropriate size and density of residential communities to create a critical mass for a sustainable and functional urban neighborhood.

OFFICE/INDUSTRIAL DEVELOPMENT

- Incorporate greening and landscaping to create attractive appearance

and provide buffering between adjacent uses and districts.

- Encourage retrofits to existing uses where possible to make sites, buildings, and operations more green and sustainable.
- Address the building's relationship to river and shoreland overlay to take advantage of this amenity.
- Support a 24 hour presence on the site to promote surveillance and general public safety throughout the day and night.
- Accommodate trucks, loading, and storage within sites in a way that minimizes the impacts on the public realm.
- Where land area permits, create well landscaped campuses, with private open space complementing adjacent parklands.
- Reduce dust, noise, vibration, air pollution, and other negative impacts on surrounding uses through improved design, site management, buffering and screening, and other strategies.

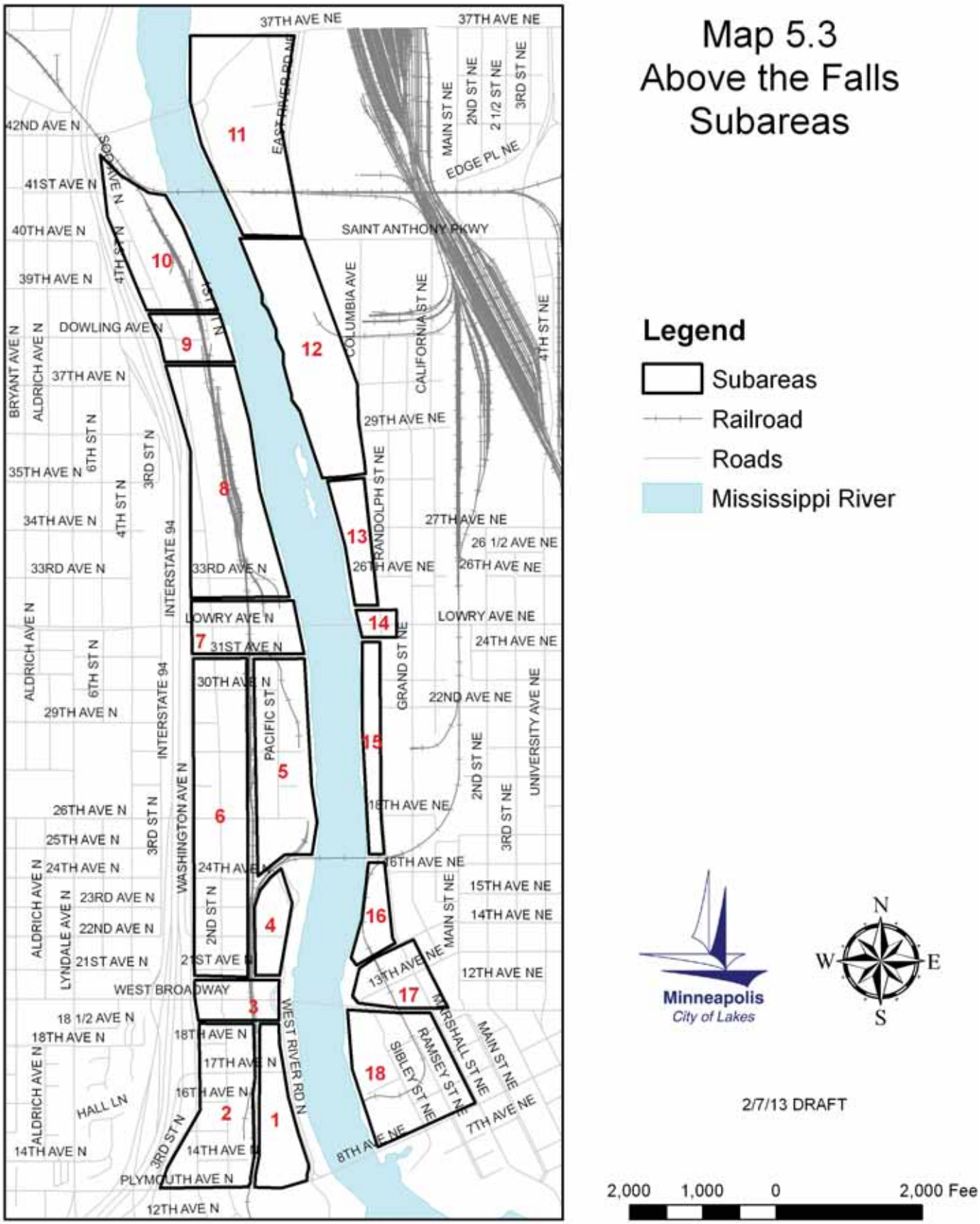


ZONING

- Zoning changes should be phased in over time, to reflect the opportunities and market support that emerges, while minimizing conflicts between uses and limiting the creation of extensive nonconformities.
- Consistent with city policy, split zoning should not be applied to parcels where a portion is guided for park, and the remainder for something else. The zoning change, if needed, should happen at the time the property is purchased and subdivided as part of the parkland development process.
- Develop new or modified zoning district for business parks, to focus on high value office and industrial development, while minimizing lower value uses. Industrial uses should focus on light industrial, including green industry, rather than heavy industrial. District should also include hospitality, retail, and other uses that complement riverfront parks and trails. While the zoning district would be primarily employment focused, it would be designed to be compatible with live-work uses and similar concepts for residential within an industrial setting, perhaps through the application of the Industrial Living Overlay District (ILOD).

RECOMMENDATIONS BY SUBAREA

For the purpose of conducting analysis and developing recommendations, the study area was divided into 18 subareas. These are similar to the subareas used in the original Above the Falls Plan. They are shown on Map 5.4 and discussed below. The numbering on the map corresponds with the numbering of each subarea in the text below. Map 5.3 shows the future land uses for the entire area. To the extent possible, boundaries between uses are made along parcel boundaries. However, as park acquisition by definition will in some areas likely split parcels, this is shown on the map where needed to show the intent.



Map 5.4: Plan Sub-Areas

NORTH WASHINGTON EMPLOYMENT DISTRICT (SUBAREA 1)

North Washington Employment District is an existing Industrial Employment District with park frontage along the riverfront. It is close to Downtown and the freeway. Recent redevelopment assistance from the City has resulted in a number of new industries in this area.

The analysis supports keeping this area with its original land use guidance, maintaining it as an Industrial Employment District. This includes a mix of office and industrial uses, with particular policy support for high intensity, job generating uses. Residential development should be discouraged in this area.

Due to proximity to the riverfront and the higher amenity associated with this location, it is anticipated that higher value, multi-story office development may be possible here.

Parks and trails in the area are already established, and so new acquisition or park development is not anticipated. Improved neighborhood connections along Plymouth Avenue are needed.

Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market.

NORTH WASHINGTON EMPLOYMENT DISTRICT (SUBAREA 2)

The North Washington Employment District is an existing Industrial Employment District with park frontage along the riverfront. It is close to Downtown and the freeway. Recent redevelopment assistance from the City has resulted in a number of new industries in this area.

The analysis supports keeping this area with its original land use guidance, maintaining it as an Industrial Employment District. This includes a mix of office and industrial uses, with particular policy support for high intensity, job generating uses. Residential development should be discouraged in this area.

The area has no existing or planned parks or trails. Improved neighborhood connections along Plymouth Avenue are needed.

Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market.

BROADWAY RIVERFRONT NODE (SUBAREA 3)

The subarea contains the gateway to West Broadway Avenue, one of the most prominent commercial corridors in North Minneapolis. It is also located close to Downtown, and has excellent freeway access due to close proximity to an interchange.

This area is guided for high density mixed use development, including commercial, industrial, and/or office. The area along the riverfront (east of the rail line) may be suitable for residential as well – the area west of this is not, because it is located within the adjacent Industrial Employment District. This could be a potential office headquarters location, or similar use. This affirms guidance from the recent West Broadway Alive plan, completed for the West Broadway Avenue corridor.

Parks and trails in the area are already established, and new acquisition or park development is not anticipated.

Connections across the County-owned Broadway Bridge are challenging for non-vehicular users. This plan identifies a need to explore with Hennepin County potential opportunities for new or enhanced connections and river crossings along Broadway. There could be a potential gateway feature marking entrance to North Minneapolis. Improved neighborhood connections are needed along West Broadway Avenue, including improved sidewalks and pedestrian amenities.

Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market.

NORTH OF BROADWAY RIVERFRONT DISTRICT (SUBAREA 4)

This subarea has a diverse mix of existing uses, ranging from residential to industrial. It is adjacent to heavy industry, and also to a riverfront park. Because of varying development patterns, there are some existing land use conflicts that need to be eliminated or mitigated.

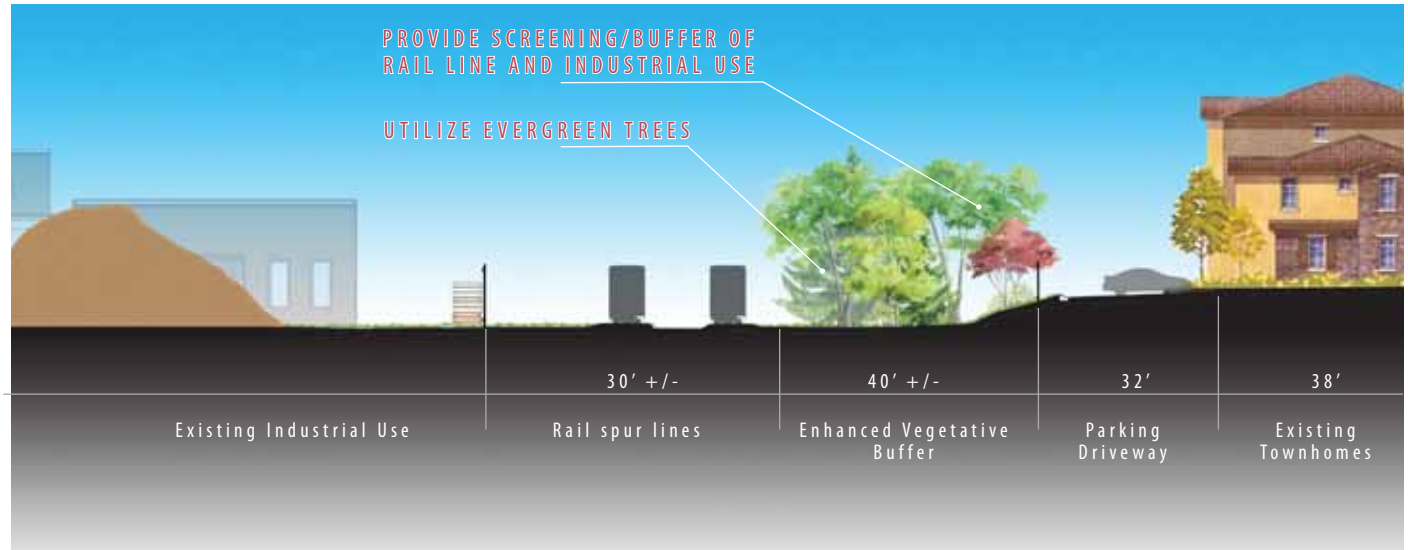
This area is guided for mixed use development, including potentially residential, commercial, office, and/or light industrial. It is also a possible location for office headquarters uses. Because of the diversity of uses in this area, the focus of guidance is less on the specific use and more on ensuring it is compatible with existing uses in the area, including providing adequate screening and buffering to mitigate any significant negative impacts.

Due to proximity to the riverfront and the higher amenity associated with this location, it is anticipated that higher value, multi-story development may be possible here.

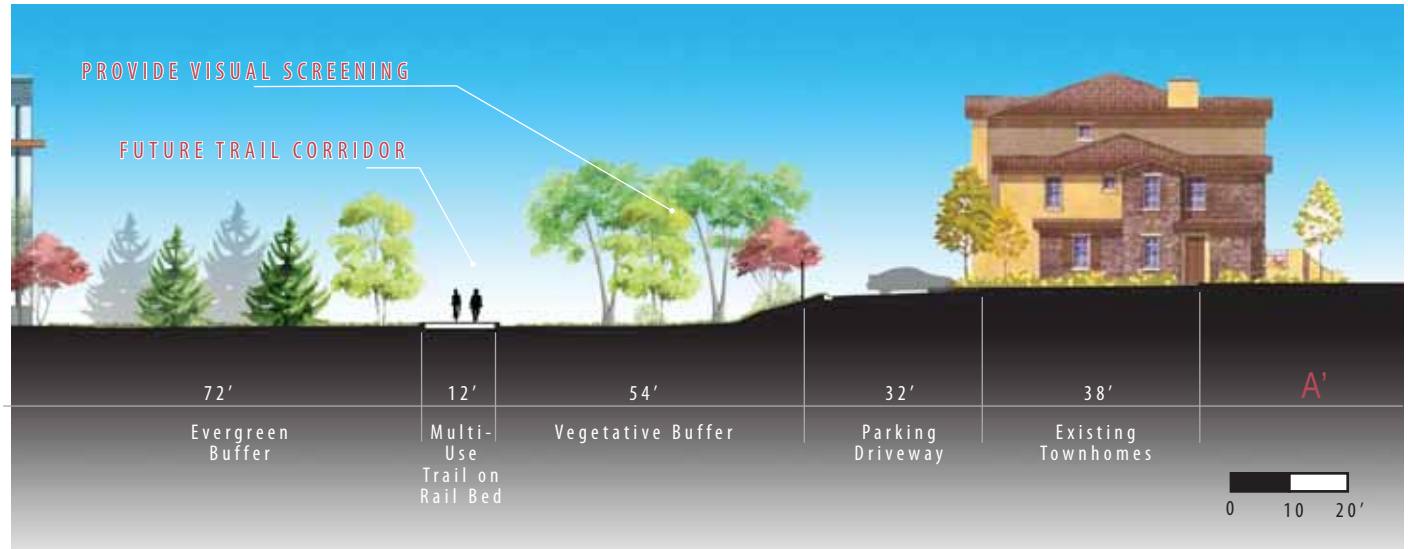
Parks and trails in the area are already established, although they terminate at the northern end of the study area. Northern expansion of parks, parkway and trails is part of the Regional Park plan.

Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market.

Section of Future Conditions (continues on opposite page)



Section of Improved Existing Conditions



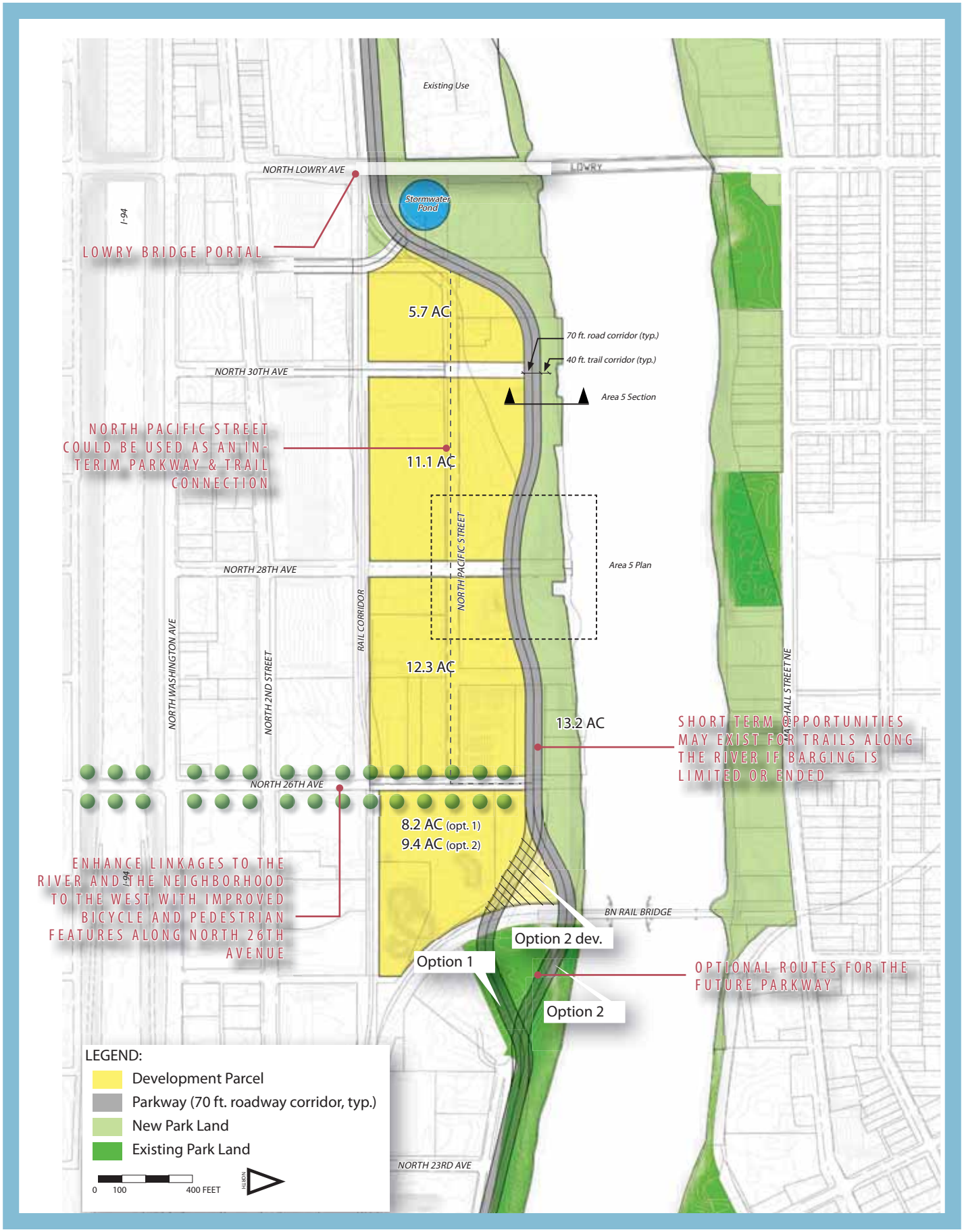
BROADWAY TO LOWRY RIVERFRONT DISTRICT (SUBAREA 5)

This subarea is occupied by hard-to-move heavy industry, including metal recycling, cement processing, gas utility, and waste transfer station uses. The uses are located on large, flat sites adjacent to industry and river. Two private barging terminals are located on the riverfront, largely precluding public use of much of the riverfront for other purposes at present.

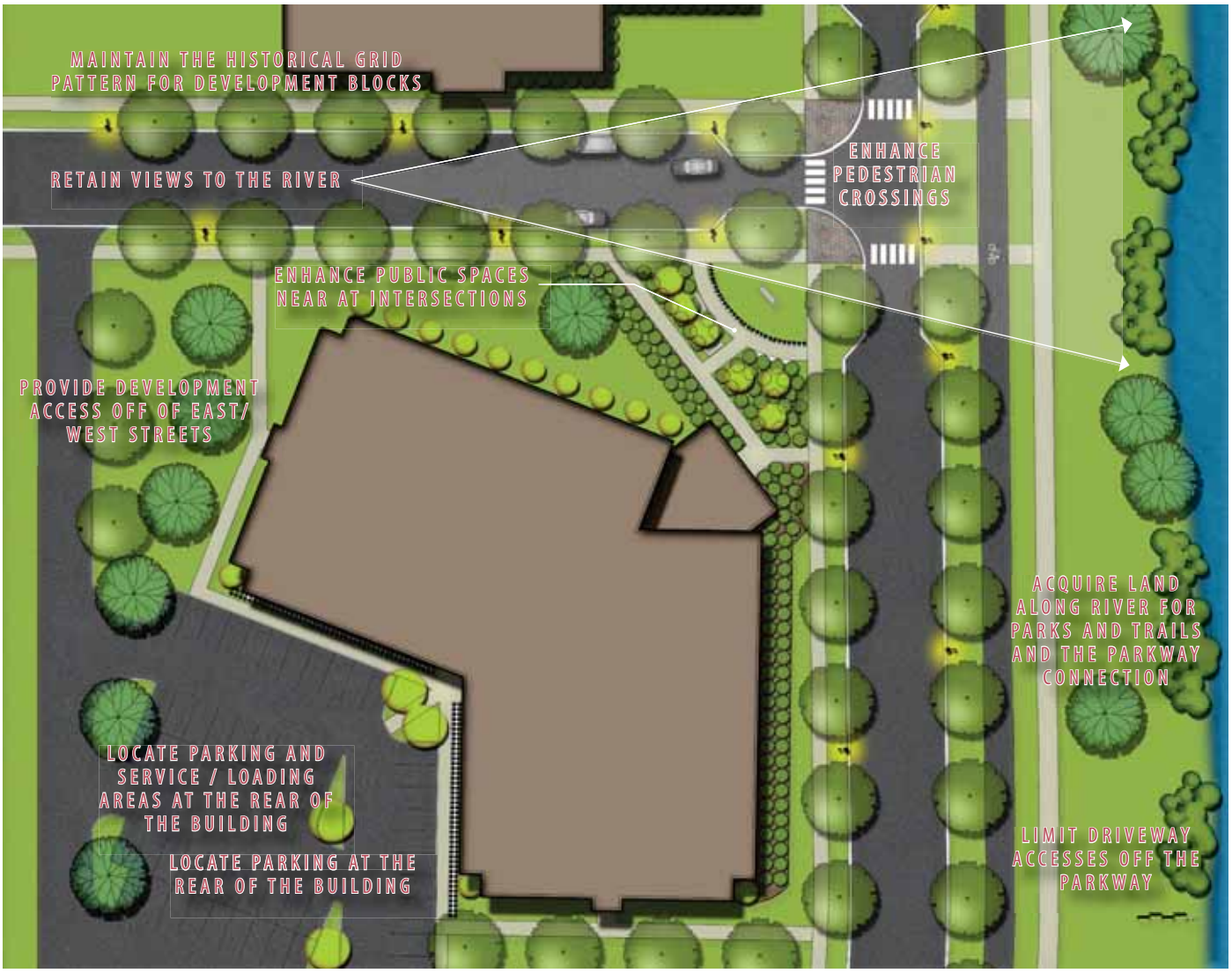
Because of the challenges associated with transitioning this subarea, there is a two phased vision for land use. In the short term, efforts can focus on mitigation of the impacts of the existing heavy industry mix, including greening of sites and operations, and screening from other uses. There may also be opportunities to acquire land or access along the riverfront for park and trail connections, particularly if barging is limited or ended. In the absence of such acquisition or access, MPRB and the City should explore opportunities to enhance North Pacific Street or other existing streets to serve as interim parkway and trail connections.

In the longer term, strategic acquisition of sites may allow for higher value infill office/industrial development combined with riverfront parks and trails. The time frame for this is not certain, since it will depend on the availability of sites. However, as the vision for office/industrial development is largely compatible with existing uses, this may be able to move forward incrementally, as opportunities present themselves.

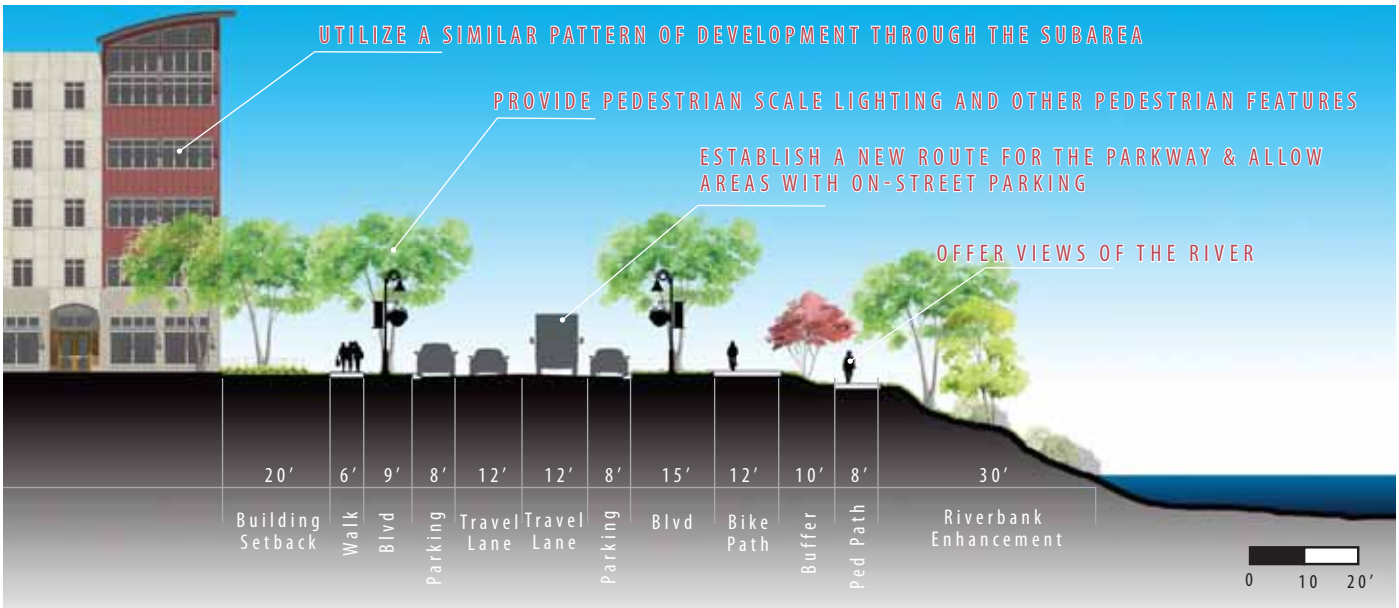
In the much longer term, there may be room for yet another transition, perhaps extending the mixed use development



Subarea 5: Redevelopment, Park and Parkway Concept



Area 5 Plan



Area 5 Section

up the riverfront. However, there will need to be an increase in the value and amenity of the area before this is possible. Additionally, it is anticipated that there will be a long term edge condition with industrial and rail uses on the western boundary of the subarea, which will need to be mitigated if there is a transformation of land use.

In the short term, there may be some opportunities to work around and through existing uses to create riverfront parkland and make trail connections, as well as linkages along 26th Avenue North to the neighborhood with enhanced pedestrian and bicycle features. Pacific Street may provide an interim route for the parkway.

In the long term, there may be wider acquisition of land for more extensive park and linkages to neighborhood. This may also result in a new route for the parkway, and a reconfiguration of parcels to allow for redevelopment of sites adjacent to the new parkland.

The implementation approach for the short term will focus on key opportunities to work with existing property owners to improve projects. Strategic acquisitions will likely be made via the MPRB as opportunities and resources allow. The details of implementation for the very long term vision are still to be determined.

Redevelopment in this area should respect the historic grid pattern with a similar rhythm or pattern of development throughout the district.

Once this area is redeveloped and a new parkway alignment is established, the former route of Pacific Street may be utilized as an internal site circulation corridor in the long-term redevelopment. Parking, service and loading should orient off of this corridor with buildings positioned toward the parkway and parking located toward the rail line.

Because of the transitional nature of this area, it is shown as Transitional Industrial on the future land use map. This category accommodates industrial uses, but allows transition to other uses to occur if there is an opportunity to do so that furthers the vision of riverfront development.

UPPER MISSISSIPPI EMPLOYMENT DISTRICT (SUBAREA 6)

The Upper Mississippi Employment District is an existing industrial employment district located along Interstate 94. There a range of values and intensities of the industries in this area.

The analysis supports keeping this area with its original guidance, maintaining it as an industrial employment district. This includes a mix of office and industrial uses, with particular policy support for high intensity, job generating uses. Residential development should be discouraged in this area.

The area has no existing or planned parks or trails, except for an improved neighborhood connection to the riverfront along 26th Avenue North.

Bike facilities should be developed along 2nd Street North, to provide north-south connectivity through the area.

Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market. Improvements to 26th Avenue North will likely be in partnership with the City and MPRB.

Retrofits to parking lots, service and loading areas should include improved screening and landscaping and consolidated access points. Stormwater retrofits could include tree trenches, rain gardens, and/or green roof technologies.

LOWRY AVENUE NORTH RIVERFRONT NODE (SUBAREA 7)

This is a small, currently industrial and commercial subarea, located at the western end of the new Lowry Avenue Bridge. The Lowry Avenue commercial corridor connects it to a range of commercial and residential development on both sides of the river. The route of the parkway under the new bridge has been somewhat predetermined by the spacing of openings under the bridge structure.

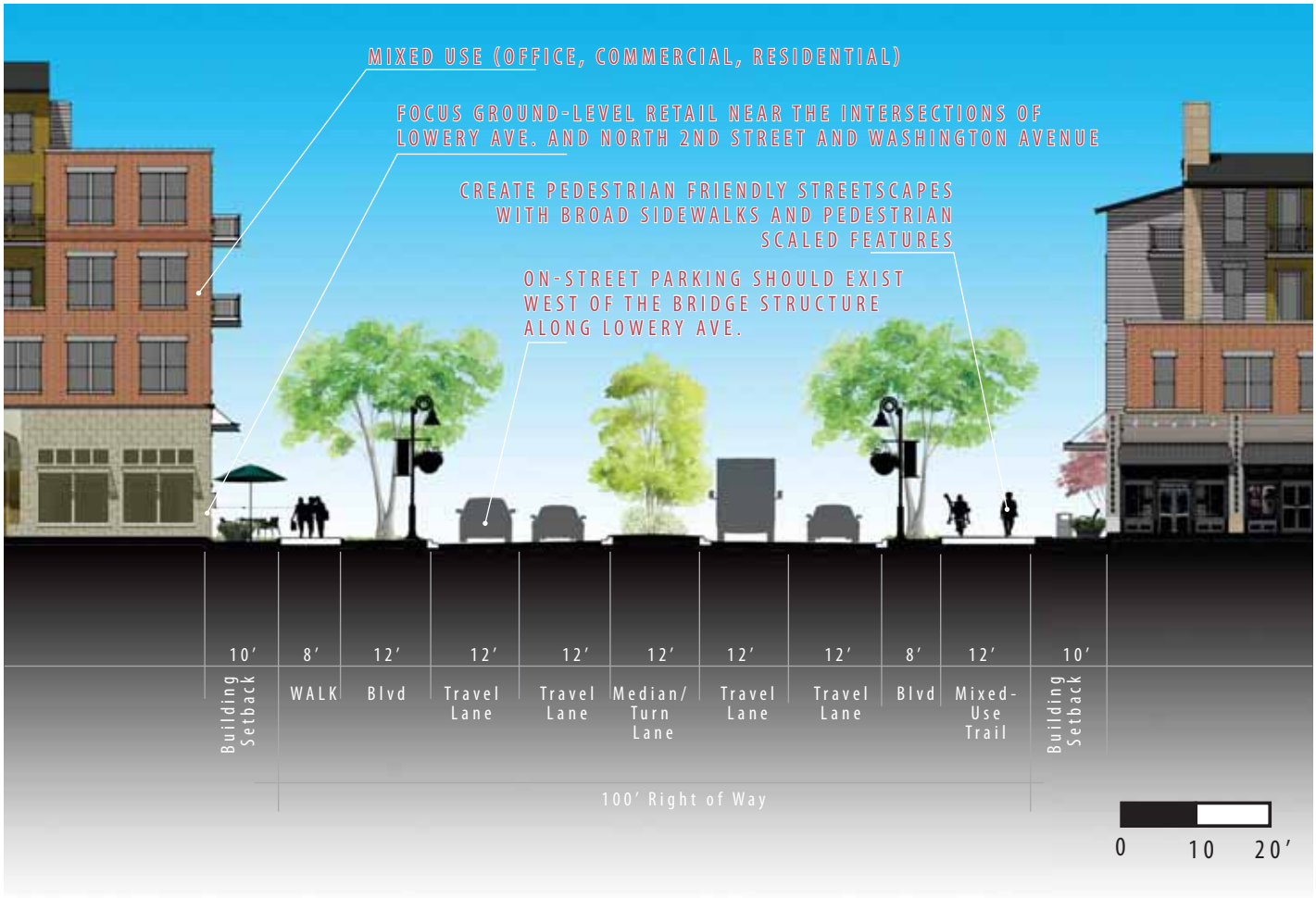
Because of this corridor connection and the gateway element of the signature bridge, this is a potential location for a mix of uses, including commercial, office, and light industrial uses. Residential may also be part of the mix, although that should be developed with close attention to compatibility with adjacent uses. An expanded retail presence is encouraged, when the market is able to support it. This development can build on proximity to the river in terms of the mix and orientation of uses – such as destination restaurants and shops that support riverfront vitality.

The curve of the planned parkway through the Lowry Avenue bridge portal, and the stormwater pond created for the Lowry Avenue Bridge create a connection between the riverfront and this area. Open space anchored by stormwater features can be a feature of this area.

The parkway route is largely determined, due to bridge design and roadway design standards. The horizontal curve and intersection spacing also dictate the road alignment options. Improved bicycle and pedestrian connections along Lowry Avenue North largely have been implemented – although some additional connectivity between the new bridge structure and the surface routes is still needed.

Implementation of the park and parkway vision will depend on strategic acquisition of land along the riverfront. Redevelopment will largely be incremental infill and rehabilitation of individual sites, driven primarily by the private market, although some business development resources may be appropriate for the development of a commercial corridor.

Development of this area should include creating a stronger pedestrian realm on Lowry Avenue, with enhanced pedestrian crossings at intersections and on-street parking for retail uses.


MIXED USE (OFFICE, COMMERCIAL, RESIDENTIAL)
FOCUS GROUND-LEVEL RETAIL NEAR THE INTERSECTIONS OF LOWERY AVE. AND NORTH 2ND STREET AND WASHINGTON AVENUE
CREATE PEDESTRIAN FRIENDLY STREETSCAPES WITH BROAD SIDEWALKS AND PEDESTRIAN SCALED FEATURES
ON-STREET PARKING SHOULD EXIST WEST OF THE BRIDGE STRUCTURE ALONG LOWERY AVE.
10′ Building Setback
8′ WALK
12′ Blvd
12′ Travel Lane
12′ Travel Lane
12′ Median/ Turn Lane
12′ Travel Lane
12′ Travel Lane
8′ Blvd
12′ Mixed-Use Trail
10′ Building Setback
100′ Right of Way
0 10 20′

UPPER HARBOR TERMINAL DISTRICT (SUBAREA 8)

This subarea includes the bulk of the riverfront Upper Harbor Terminal (UHT), an approximately 48 acre site owned by the City of Minneapolis. The terminal is slated to close in the near future and presents a rare development opportunity.

This site is separated from Interstate 94 and nearby neighborhoods by an area of privately owned primarily industrial development.

The land use guidance for this site focuses on high intensity, job generating uses, particularly office and light industrial. Because of the size of the site and the amenity value of the future park and parkway, this is a premium site. It is expected that the design and quality of this development will be fairly high.

A new or revised Business Park type zoning district for this area could accommodate uses such as office headquarters, research facilities, and green industry.

While the Upper Harbor Terminal site presents the largest development opportunity in this area, the privately owned land also provides additional opportunity for infill office and industrial development. While the terminal redevelopment will happen at the initiative of the City, the private sites will most likely move forward incrementally through the private market.

The small sites located between 2nd St N and Washington Ave N present somewhat of a challenge for redevelopment, as many are small, steeply sloped, and narrow. These may be suitable for small-scale office and light industrial uses. As there are already a number of residential uses within this section, it may also be appropriate for live-work type arrangements. Future reconfigurations of the street network and interstate access should consider ways to assemble these parcels in larger groupings, to allow for more options for redevelopment.

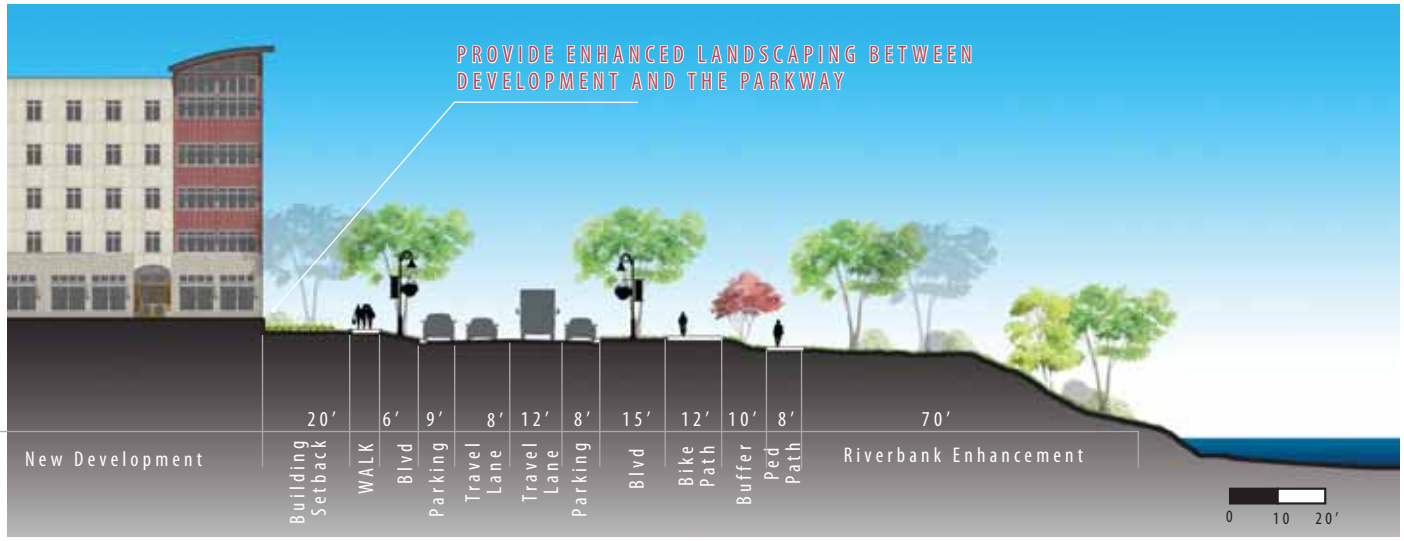
With the redevelopment of the Upper Harbor Terminal, a significant portion of the land will be allocated for a riverfront park and parkway. The development of these features and the overall site will be coordinated via a partnership between

Subarea 5: Redevelopment, Park and Parkway Concept

the City and MPRB.

While the UHT is likely to be an early implementation opportunity for this master plan, the likelihood and timeline for acquisition of surrounding parcels is uncertain. Therefore, attention must be given to the phasing of parks creation and private development, and should provide for improved public access that is safe and inviting. Existing rail crossings will be key access points: Dowling Avenue North and 33rd Avenue North. The existing street network surrounding the UHT currently is minimally improved. MPRB projects to develop new parks, parkway and trails with connections to existing streets should be considered in tandem with City/County reconstruction of the existing street network as needed. Refer to Appendix F for more information about parks development at UHT.

West River Parkway and associated trails are planned to pass through a portal of the Lowry Avenue Bridge. The parkway route is largely determined, due to the bridge design roadway design standards. Horizontal curve and intersection spacing also dictate the road alignment options. City improvements to bicycle and pedestrian connections along Lowry Avenue North largely have been implemented – although some additional connectivity between the new bridge structure and the surface routes is still needed. These can be completed as part of the eventual West River Parkway extension, or as interim improvements. MPRB will work to resolve conflicts between the future parkway alignment and the existing stormwater pond constructed by Hennepin County for the Lowry Avenue Bridge. Implementation of the park and parkway vision will depend on strategic acquisition of land along the riverfront. MPRB continues to seek property acquisition opportunities with willing sellers. Refer to Appendix F for more information.


PROVIDE ENHANCED LANDSCAPING BETWEEN DEVELOPMENT AND THE PARKWAY
New Development
20′
Building Setback
6′
WALK
9′
Blvd
Parking
8′
Travel Lane
12′
Travel Lane
8′
Parking
15′
Blvd
12′
Bike Path
10′
Buffer
8′
Ped Path
70′
Riverbank Enhancement
0
10
20′

DOWLING AVE N RIVERFRONT NODE (SUBAREA 9)

This is a small, currently industrial and commercial subarea, located at the Dowling Avenue North interchange with Interstate 94. This connects to Dowling Avenue North. It is also in proximity to the entrance to the Upper Harbor Terminal, and provides a linkage between that area and commercial businesses along Lyndale Avenue North, a community corridor and transit route.

Because of this corridor connection, this is a potential location for a mix of uses, including commercial, office, and light industrial uses. As the area north of here potentially redevelops (see Subarea 10), there's also the possibility of residential redevelopment at some point in the future.

An expanded retail presence is encouraged, when the market is able to support it. This development can build on proximity to the river and future parks in terms of the mix and orientation of uses – such as destination restaurants and shops that support riverfront vitality and parks uses.

The riverfront portion of this subarea is part of the Upper Harbor Terminal site. Because the distance between the rail lines and the river narrows toward this northern end, private redevelopment would be constrained. It is likely the full rail-to-river depth of the land in this northern area will eventually be parkland and parkway. Refer to the ATF Regional Park master plan for more information about parks development at UHT,

Neighborhood connections along Dowling Ave N, including improved bicycle and pedestrian amenities, are needed to create a linkage to future riverfront parks and the Dowling node.

Parking and loading for development parcels should be located against the rail line and buildings should be placed toward Dowling Avenue and the new parkway. Access to parcels from the parkway should be limited, unless no other viable alternatives exist.

NORTH OF DOWLING RIVERFRONT DISTRICT (SUBAREA 10)

The subarea north of Dowling is largely industrial, with a mix of some other uses. It is bordered on the north by North Mississippi Regional Park, as well as the route for the Grand Rounds across the Camden Bridge.

This proximity to a residential neighborhood suggests that there could be a transition at some point to a mix of uses including residential. However, the predominantly industrial nature of existing uses indicates that there will need to be a critical mass of land to allow for the development of a residential community, so it is not too isolated to be successful. Furthermore, market analysis suggests that a residential transition is unlikely to happen for at least 10-15 years, due to lack of market strength in the area.

In the short term, the area is likely to remain industrial. Mitigation of environmental and public realm impacts – including greening of sites and operations – can help develop compatibility with planned park development and eventual mix use expansion.

Longer term, guidance may shift to mixed use, including residential, commercial, and office. However, this transition will depend on a couple factors. First, there must be a land acquisition strategy that allows for a mechanism to buy and hold a critical mass of land. Second, there must be increased market strength in this area, so that new housing is not competing with efforts to strengthen nearby residential areas.

The portion of land between the rail lines and the riverfront in this area is fairly narrow, and will probably only accommodate park and parkway development, with little or no room for additional private development. This park feature will link to and build on the existing North Mississippi Regional Park and public water access point to the north. Strategic acquisitions by MPRB will further the development of the park, parkway and trails. To make the connection to the north, there may be some need to reconfigure road networks, which could potentially happen if there was extensive land acquisition. The existing, narrow railroad viaduct on Soo Avenue is a significant constraint on connections to the north from this area.

Retrofit elements such as screening, landscaping and enhanced lighting should be encouraged. As redevelopment does occur, it would be better to do it at the full block level, to allow for reconfiguration as needed.

Washington Avenue should be enhanced as a strong connection from the Dowling node to the Camden / Lyndale Avenue Node, potentially with a multi-modal street design.

Due to the transitional nature of this area, live/work development might be appropriate, as a hybrid between residential and industrial space. This will allow the conversion of older but still viable industrial buildings to remain by allowing live-work spaces, offices, galleries, limited retail, educational and some residential alongside light industrial uses.

NORTH OF XCEL RIVERSIDE DISTRICT (SUBAREA 11)

This subarea has relatively few existing uses. It includes a couple of office-light industrial campuses, set within a heavily landscaped area. Private land adjoins the riverfront park area, with the Grand Rounds following St. Anthony Parkway between the two. To the north is property owned by the City and used for public uses. To the south is Xcel Energy's Riverside Plant. This area provides an example of compatible business park development in the context of a green riverfront setting. It is guided to remain this in the future as well. There may be some potential infill development in the area, which should largely follow the existing character.

The parkway in this area is fully developed. It is notable that at this point on the east bank, the parkway runs parallel to Marshall Street NE, the parkway route further south.

Since the park and trail connections are already in place, improvements will largely consist of maintenance and enhancement of the existing system. An important element of this is the City's project to replace the Northtown Bridge over the rail yard to the east, along St. Anthony Parkway and part of the Grand Rounds.

New development in this area will primarily be incremental redevelopment and rehabilitation of individual sites, driven by the private market.

Development should respect the topography of the site and preserve the tree canopy within the natural draws leading toward the river. These could be developed as pedestrian connections to the parkway and river edge.

XCEL RIVERSIDE GENERATING STATION (SUBAREA 12)

The Xcel Energy Riverside Plant is the main feature of this area. This long-standing facility has recently been converted from coal to natural gas, improving area environmental quality and eliminating the need for on-site coal storage areas, which are now open space. It is anticipated that this facility will remain in place for the long term.

Xcel has created a buffer around its site through the acquisition of property, and maintains much of this as green space – including areas along Marshall Street NE to the east. Working in partnership with Xcel may allow for additional enhancements to these areas, including parkway features along Marshall.

As the reduction of coal storage has opened up land on the site, Xcel has implemented long-term phytoremediation of former coal-storage areas. Should Xcel decide to make land available for redevelopment, this plan guides for office/light industrial uses compatible with the business park character to the north – as well as to Xcel itself.

This plan does not show a trail along the riverfront between the Riverside plant and the river. Based on engagement with Xcel as part of the plan update process, it is clear that such a public trail would directly conflict with Xcel's operations and security needs, and therefore is impracticable. If and when Xcel indicates a desire to pursue a riverbank connection, it should be pursued by MPRB and other potential partners. Xcel has indicated a desire to partner with MPRB to develop trail and playing-field improvements on Xcel-owned property along the east side of Marshall Street NE, outside the proposed Regional Park boundary.

MARSHALL NORTH RIVERFRONT DISTRICT (SUBAREA 13)

Currently, this subarea has a mix of uses, including industrial, commercial, and residential. There are some intermittent existing park areas. The study area is only one parcel deep between Marshall Street NE and the riverfront in this subarea.

In the short term, this mix of uses is likely to continue. However, in the long term, as opportunities to acquire land emerge, this area is guided to eventually transfer into primarily park use.

The park area may contain uses that are accessory to the main park use, but it should be primarily park and uses related to the riverfront.

There is some support for infill housing and limited mixed use on the east side of Marshall, outside the study area, to increase housing options and build on the amenity created by the riverfront parks and trails. There will be linkages to the neighborhoods via 27th Avenue NE and Lowry Avenue NE.

The park will include a continuous trail connection, including linkages up to and over the Lowry Avenue Bridge. Marshall Street NE will also have bicycle and pedestrian facilities.

LOWRY AVENUE NE RIVERFRONT NODE (SUBAREA 14)

This subarea is a riverfront node, with existing commercial uses on three of the four corners. The fourth corner is part of an existing park and includes a large stormwater management feature. It sits at the base of the new Lowry Avenue Bridge, connecting to the Lowry Avenue NE corridor.

This area is guided for mixed use development, with commercial and residential uses. Uses that are compatible with the riverfront location are particularly encouraged.

The Lowry Avenue Bridge will have trail connections down to the adjacent parklands on both sides, and under the bridge along the bank. Within this subarea sits the headquarters of the Mississippi Watershed management Organization (MWMO), an important partner in the funding, construction and stewardship of riverbank restoration and stormwater-management facility projects. The MWMO has plans to develop public access to the riverbank, in addition to recently-completed site improvements. Currently, conversation is ongoing between Hennepin County, MPRB and MWMO to develop a pedestrian connection along the riverbank under the recently-completed Lowry Bridge.

Improved neighborhood pedestrian and bicycle connections along Lowry Avenue NE are encouraged.

The new Lowry Avenue Bridge is an iconic structure that brings interest to the upper riverfront. New development should take into account views of the bridge as an amenity, and not block access to them when possible.

MARSHALL SOUTH RIVERFRONT DISTRICT (SUBAREA 15)

Currently, this subarea has a mix of uses, including industrial, commercial, and residential. There are some intermittent existing park areas. The study area is only one parcel deep between Marshall Street NE and the riverfront in this area.

In the short term, this mix of uses is likely to continue. However, in the long term, as opportunities to acquire land emerge, this area is guided to eventually transfer into primarily park use. The plan's goal is to provide a continuous trail connection, including linkages up to and over the Lowry Avenue Bridge. Marshall Street NE will also have bicycle and pedestrian facilities. Where private ownership remains over the long term, easements or other provisions must be made for trail continuity. Partnership with Hennepin County and private property owners will be necessary if Marshall Street NE is to provide good public access to the river and among park lands.

The RiverFirst vision for park development in this area is to provide public access to the river while restoring riverbank conditions to provide true ecological function. The ATF Regional Park master plan provides more information.

The park area may contain uses that are accessory to the main park use, but it should be primarily park and uses related to the riverfront.

There is some support for infill housing and limited mixed use on the east side of Marshall, outside the study area, to increase housing options and build on the amenity created by the riverfront parks and trails. There will be linkages to the neighborhoods via 22nd Avenue NE and Lowry Avenue NE.

NORTH GRAIN BELT DISTRICT (SUBAREA 16)

This study area currently contains a mix of uses, including residential, commercial, and industrial, extending north from the Grain Belt activity center area. A rail spur runs through this area, but is in the process of being vacated since it is no longer being used by any of the adjacent property owners.

This area is guided for a mix of uses, including moderate to high density office, commercial, and residential uses. This is similar to the guidance for the adjacent Grain Belt Activity Center.

There is some support for infill housing and limited mixed use on the east side of Marshall, outside the study area, to increase housing options and build on the amenity created by the riverfront parks and trails.

The area vacated by the rail will allow for a riverfront park and trail connection as far north as the Burlington Northern rail bridge. The BNSF railroad bridge itself as well as the rail corridor north to the Shoreham Yards are identified as a key connections in the original ATF master plan, the City's Bicycle Master Plan and in RiverFirst. If the opportunity to vacate or share the rail bridge emerges, it will be an important bicycle and pedestrian linkage across the river. With such an opportunity, further trail development should be explored within the rail corridor (identified as the "Bottineau Trail" in the Bicycle Master Plan). Acquisition and rehabilitation of the bridge and, eventually, the rail corridor, will require extensive partnership among the City, MPRB and possibly Hennepin County.

GRAIN BELT DISTRICT (SUBAREA 17)

This subarea contains a mix of uses, including commercial, office, and residential. It corresponds with the location of the Grain Belt Activity Center designation, and contains the historic Grain Belt Brewery campus.

The guidance for the area includes a mix of moderate to high density office, commercial, and residential uses. An orientation to riverfront and hospitality uses are both encouraged.

The riverfront park for this area, the Sheridan Memorial Park, is already under development. Park development plans include a memorial plaza and trail connections north and south to other park areas, including under the Broadway Bridge and Plymouth Ave/8th Street NE Bridge. MPRB will work with Hennepin County and the City, respectively, to implement these connections. The RiverFirst vision includes improvements to non-vehicular river crossings on and along the Broadway Bridge, which if feasible will require extensive partnership with Hennepin County.

Reconstruction and connections among Water Street, 13th Avenue NE and 14th Avenue NE are planned with redevelopment of the remaining City-owned property on the west end of the Grain Belt complex. The concept for development of this site is still under consideration - it will likely be either residential or park use, or some combination. The City's Bicycle Master Plan also calls for 13th Avenue NE to be improved as a bike boulevard.

As with many of the city's Activity Centers, accommodating parking for the mix of uses in this area, particularly destination uses, can be a challenge. Parking issues should be addressed in a way that encourages shared solutions that minimize the footprint of parking on the area.

GRACO/SCHERER RIVERFRONT DISTRICT (SUBAREA 18)

This subarea contains office/light industrial uses, as well as the site of Scherer Park, a large planned riverfront park.

It is guided to be a business park area, with primarily office and light industrial uses with a focus on high quality, job intensive uses. Uses close to Scherer Park should be compatible with the riverfront park location, and may include a mix of commercial, retail, and other park-supportive uses.

There should be neighborhood connections along 8th Ave NE, including improved bicycle and pedestrian amenities.

New development will likely be driven by private investment, as well as MPRB development of the park and trail connections.

RECOMMENDATIONS

GENERAL DESIGN PRINCIPLES

Building Design and Character

1. Support increased intensity/density of new development when paired with high quality and complementary design of buildings and sites

2. Any building on the riverfront should add to the activity of the public spaces around it.

3. Building materials should be of high quality, durable materials.

4. Retain some views of the river for second tier development sites by thoughtful placement and design of riverfront buildings, utilizing tapered profiles as building height increases and avoiding overly wide or tall buildings that block much of the prime view and can create a wall that physically and psychologically cuts off the riverfront from surrounding neighborhoods.

5. Buildings should be designed and programmed to engage public spaces. Encourage vitality and activity along the riverfront by orienting quasi-public spaces (restaurants and shops) and private open and communal spaces (decks, balconies, terraces, meeting rooms, etc.) toward the river, while also maintaining high quality design along public streets and pathways.

6. Support the development of pedestrian friendly street frontages and windows that encourage natural surveillance and provide an inviting presence.

7. Reflect the characteristic mixed use nature of development in this area with a complex and interesting combination of uses, while addressing potential conflicts and incompatibilities.

8. Promote the concepts of universal design to develop an area that is accessible to people of all ages and abilities.

9. Build on the history of the area to create authentic and unique locations, providing interpretive elements where needed. Consider preservation of historic resources, or mitigation where preservation is not feasible.

Site Design and Public Realm

10. Avoid driveway access off of the parkway where possible; development access should be from non-parkway streets.

11. On riverfront sites, locate parking and loading facilities to minimize their visibility from the river and other public spaces.

12. Encourage the creation of pleasing portals to the river through the design of attractive, safe pedestrian and bicycle friendly public streets and private streetscapes "green corridors" that connect east and west to the river.

13. Include appropriate streetscape features, including pedestrian scale lighting, ample sidewalks, landscaping, trees, and others.

14. Incorporate sustainable stormwater solutions to minimize runoff and

improve surface water quality, and to contribute to public realm and open space; create linkages and synergy between public and private open spaces.

15. Add buffering between incompatible adjacent uses where they exist.

16. Ensure there is adequate lighting throughout sites to promote a safe environment.

17. Extend the benefit, character and function of public amenities (river, parks, the parkway, greenways and trails) into development sites through the extension of private open space, landscaping, and pedestrian circulation – "fingers of green."

18. Consider incorporation of art into new development, especially art related to the unique neighborhood, historical and environmental context of the Upper Riverfront.

19. Assure multiple access and interaction in many ways with the river - from fishing, dining or picnicking dockside, boarding boats, strolling, lounging, viewing or feeding ducks.

20. Create multiple destinations along the river and utilize the continuous riverfront park space to connect the destinations.

21. Achieve continuity, especially when it comes to the pedestrian experience.

22. Encourage mixed uses and a 24/7 activity pattern where possible, to promote safety and security.

RESIDENTIAL/MIXED USE DEVELOPMENT

1. Support the development of river-oriented commercial uses to provide attractive riverfront destinations and increase area vitality

2. Encourage appropriate size and density of residential communities to create a critical mass for a sustainable and functional urban neighborhood.

OFFICE/INDUSTRIAL DEVELOPMENT

1. Incorporate greening and landscaping to create attractive appearance and provide buffering between adjacent uses and districts.

2. Encourage retrofits to existing uses where possible to make sites, buildings, and operations more green and sustainable.

3. Address the building's relationship to the river and shoreland overlay to take advantage of this amenity.

4. Support a 24 hour presence on the site to promote surveillance and general public safety throughout the day and night.

5. Accommodate trucks, loading, and storage within sites in a way that minimizes the impacts on the public realm.

6. Where land area permits, create well landscaped campuses, with private open space complementing adjacent parklands.

7. Reduce dust, noise, vibration, air pollution, and other negative impacts on surrounding uses through improved design, site management, buffering and screening, and other strategies.

ZONING

1. Zoning changes should be phased in over time, to reflect the opportunities and market support that emerges, while minimizing conflicts between uses and limiting the creation of extensive nonconformities.

2. Develop new or modified zoning district for business parks, to focus on high value office and industrial development, while minimizing lower value uses. Industrial uses should focus on light industrial, including green industry, rather than heavy industrial. District should also include hospitality, retail, and other uses that complement riverfront parks and trails. While the zoning district would be primarily employment focused, it would be designed to be compatible with live-work uses and similar concepts for residential within an industrial setting, perhaps through the application of the Industrial Living Overlay District (ILOD).

NORTH WASHINGTON EMPLOYMENT DISTRICT (SUBAREA 1)

1. Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.

2. Discourage residential development in this area, and provide adequate buffers between this area and any adjacent residential.

3. Encourage the redevelopment and rehabilitation of sites in this area to ensure they are higher value with a greater job density.

NORTH WASHINGTON EMPLOYMENT DISTRICT (SUBAREA 2)

1. Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.

2. Discourage residential development in this area, and provide adequate buffers between this area and any adjacent residential.

3. Encourage the redevelopment and rehabilitation of sites in this area to ensure they are higher value with a greater job density.

BROADWAY RIVERFRONT NODE (SUBAREA 3)

1. Encourage development of this area with high density mixed use development, including commercial, light industrial, and/or office uses. Residential may be allowed along the riverfront.

2. Support the development of river-oriented commercial and retail uses, to build on the advantages of a riverfront location along a commercial corridor.

NORTH OF BROADWAY RIVERFRONT DISTRICT (SUBAREA 4)

1. Encourage development of this are with a compatible mix of uses, including potentially residential, commercial, office, and/or light industrial.

2. Focus on developing a compatible mix of uses to complement existing uses in the area.

3. Provide adequate buffering and screening between adjacent uses, especially those with possible land use conflicts.

BROADWAY TO LOWRY RIVERFRONT DISTRICT (SUBAREA 5)

1. In the near term, support mitigation of the impacts of the existing heavy industry mix, including greening of sites and operations, and screening from other uses.

2. In the longer term, when feasible, make strategic land acquisitions and investments to allow for higher value infill office/industrial development and riverfront park and parkway.

3. Redevelopment in this area should respect the historic grid pattern with a similar rhythm or pattern of development throughout the district.

4. Once this area is redeveloped and a new parkway alignment is established, the former route of Pacific Street may be utilized as an internal site circulation corridor in the long-term redevelopment. Parking, service and loading should orient off of this corridor with buildings positioned toward the parkway and parking located toward the rail line.

UPPER MISSISSIPPI EMPLOYMENT DISTRICT (SUBAREA 6)

1. Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.

2. Discourage residential development in this area.

3. Retrofits to parking lots, service and loading areas should include improved screening and landscaping and consolidated access points.

4. Stormwater retrofits are encouraged, including tree trenches, rain gardens, and/or green roof technologies.

LOWRY AVENUE N RIVERFRONT NODE (SUBAREA 7)

1. Support the redevelopment of this area with high density mixed use development, including commercial, light industrial, residential, and/or office uses.

2. Support the development of river-oriented commercial and retail uses, to build on the advantages of a riverfront location along a commercial corridor.

UPPER HARBOR TERMINAL DISTRICT (SUBAREA 8)

1. Support the redevelopment of the area as a business park, with a focus on high intensity, job generating uses, particularly office and light industrial.

2. Encourage the consolidation of small parcels west of the rail line to create larger, more developable sites.

DOWLING AVE N RIVERFRONT NODE (SUBAREA 9)

1. Support the redevelopment of the area with a mix of commercial, office, residential, and light industrial uses.
2. Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.
3. If residential uses are pursued in the area to the north, ensure adjacent uses are compatible.
4. Parking and loading for development parcels should be located against the rail line and buildings should be placed toward Dowling Avenue and the new parkway

NORTH OF DOWLING RIVERFRONT DISTRICT (SUBAREA 10)

1. In the near term, support mitigation of the impacts of the existing industry mix, including greening of sites and operations, and screening from other uses.
2. In the longer term, when feasible, consider making strategic land acquisitions and investments to allow for higher value mixed use development, including potentially new residential.
3. Provide buffers and transitions between uses where needed. Retrofit elements such as screening, landscaping and enhanced lighting should be encouraged.
4. Washington Avenue should be enhanced as a strong connection from the Dowling node to the Camden / Lyndale Avenue Node, potentially with a multi-modal street design.
5. Due to the transitional and multi-use nature of this area, consider live/work development as a potential development concept.
6. Improve the entrance to the riverfront park, including Upper Mississippi Regional Park, with a more visible, accessible, and inviting entrance.

NORTH OF XCEL RIVERFRONT DISTRICT (SUBAREA 11)

1. Support the development of the area as a business park, with a focus on high intensity, job generating uses, particularly office and light industrial.
2. Support the maintenance and development of landscaped private green space adjoining the riverfront park area, consistent with existing character.
3. Development should respect the topography of the site and preserve the tree canopy within the natural draws leading toward the river. These could be developed as pedestrian connections to the river edge.

XCEL RIVERSIDE PLANT (SUBAREA 12)

1. Maintain site as location for existing power plant.
2. If feasible, consider compatible infill development on adjacent sites.
3. Support the maintenance of green buffers around all sides of the site, and encourage the development of a riverfront easement to allow for the continuation of a riverfront trail.

MARSHALL NORTH RIVERFRONT DISTRICT (SUBAREA 13)

1. In the near term, allow a mix of uses compatible with adjacent park development and the riverfront location, making accommodations for riverfront trail connectivity and access.
2. In the longer term, make strategic land acquisitions and investments to create a continuous green riverfront, with limited park-compatible accessory uses that bring activity and interest to the riverfront.

3. Support the development of infill moderate density housing and limited mixed use on the east side of Marshall, to build upon the advantages of the riverfront park location.

LOWRY AVENUE NE RIVERFRONT NODE (SUBAREA 14)

1. Support the redevelopment of the area with a mix of commercial, office, and residential uses.
2. Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.

MARSHALL SOUTH RIVERFRONT DISTRICT (SUBAREA 15)

1. In the near term, allow a mix of uses compatible with adjacent park development and the riverfront location, making accommodations for riverfront trail connectivity and access.
2. In the longer term, make strategic land acquisitions and investments to create a continuous green riverfront, with limited park-compatible accessory uses that bring activity and interest to the riverfront.
3. Support the development of infill moderate density housing and limited mixed use on the east side of Marshall, to build upon the advantages of the riverfront park location.

NORTH GRAIN BELT DISTRICT (SUBAREA 16)

1. Support redevelopment with a mix of moderate to high density office, commercial, and residential uses.
2. Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.
3. Encourage creative industries and arts oriented uses, to support and strengthen the Northeast Arts District.

GRAIN BELT DISTRICT (SUBAREA 17)

1. Maintain as a designated activity center, with a focus on day to night activity, regional draw, and high density mixed use.
2. Support redevelopment with a mix of high density office, commercial, and residential uses.
3. Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.
4. Encourage creative industries and arts oriented uses, to support and strengthen the Northeast Arts District.
5. Support the development of shared parking solutions to manage parking needs within the activity center area.

GRACO/SCHERER RIVERFRONT DISTRICT (SUBAREA 18)

1. Maintain and redevelop as a business/office park development, with focus on high quality, job intensive office and light industrial uses.
2. Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.

CHAPTER 6

Parks and Trails

This chapter summarizes the Above the Falls Regional Park Master Plan. The full regional park plan can be found in Appendix F.

PLANNING FRAMEWORK

The purpose of the Above the Falls Regional Park Master Plan is to guide the park's development, preservation, management, and improvement. Above the Falls Regional Park is part of the Upper Mississippi riverfront generally located on both sides of the river between N. Plymouth Avenue/8th Street NE and the Camden Bridge (43rd Avenue N/37th Avenue NE). Above the Falls Regional Park stretches 2.75 miles between North Mississippi Regional Park and the Central Mississippi Riverfront Regional Park. Community leaders and residents have recognized the opportunity in this area to celebrate the Mississippi River, and seek through this Master Plan to enhance connections to one of the great rivers of the country. Continued acquisition and development of Above the Falls Regional Park will create a continuous regional park system along 2.8 miles of Minneapolis's Mississippi River frontage. Ultimately, the vision is to provide recreational opportunities within an ecologically-functioning framework. The combined Minneapolis and Saint Paul riverfront park system is one of the most significant linear riverfront parks in the nation.

This master plan provides guidance and direction on the acquisition, development, management, and operation of the Above the Falls Regional Park (ATF). Approximately 3.1 miles of the total linear riverfront along the Upper River is currently owned by public agencies, more than half of the total riverfront within the Regional Park. This plan shows how these parcels can eventually be linked to create a continuous park system that provides a new destination for park visitors, expands access to the river and enhances natural resource quality. Consistent with MN Statute 473.313 the Metropolitan Council requires a master plan to be developed and updated regularly for each regional park, park reserve, trail and special recreation feature. This Plan is written to fulfill the requirements of the Metropolitan Council for regional park master plans as outlined in the 2030 Regional Parks Policy Plan.

The planning timeframe for this Master Plan is through the year 2030, corresponding with Metropolitan Council's (Met Council) 2030 Regional Parks Policy Plan. To maintain accuracy and relevancy, the Above the Falls Regional Park Master Plan should be updated at least every 10 years. This Master Plan is consistent with the 2030 Regional Parks Policy Plan policies. Plan approval by the Metropolitan Council is necessary to be part of the Regional Parks and Open Space System. Required plan elements addressed in this Master Plan include:

- Boundaries and acquisition costs
- Plan for stewardship
- Demand forecast
- Development concept
- Conflicts
- Public services
- Operations
- Citizen participation
- Public awareness
- Accessibility
- Natural resources management

PARK DESCRIPTION AND BOUNDARY

The Mississippi River itself is the key feature of the Above the Falls Regional Park. The 226 acres of the park stretch along both banks of the river for 2.75 miles. As an urban infill park, the boundaries expand and contract based on property ownership, location of existing structures, and redevelopment opportunities. The park boundaries are intended to provide a continuous public park, adequate depth for continuous riverfront parkway connectivity on the west bank, space for people to enjoy the riverfront, significant park components/nodes and habitat/water quality benefits.

As with other Mississippi River regional parks in Minneapolis, Above the Falls Regional Park is comprised of distinct, named park components connected by linear park features and trails. These existing park components form the foundation of the Regional Park and will benefit from the implementation of the community's vision. Additional planned park components are described in Section V Development Plan.

WEST BANK

Orvin "Ole" Olson Park, 2325 West River Road

Olson Park is a 3.5 acre park located on West River Road, just north of N. 22nd Avenue. The park opened in 2006 and was developed as part of the first phase of the Above the Falls Master Plan. It features spectacular view of the river and the downtown skyline with walking and cycling paths.

Riverbank parkland along West River Road North, West bank between Plymouth Avenue North and 22nd Avenue North

This 12.4 acres of parkland does not have an official name within the MPRB system but is part of ATF Regional Park. Improvements completed between 2006 and 2008 include separated pedestrians paths and bicycle trails, which run continuously underneath the Plymouth and Broadway bridges. Additional paths allow users to experience the lower river terrace and river's edge. A boat ramp is used for emergency response, bridge maintenance and for the River Rats water-ski performers. In the summer, large crowds gather on the river bank to watch the River Rats perform. Restored riverbanks, native plantings and stormwater management improvement were funded in partnership with the MWMO. Views from this area include the former Scherer Bros. Lumber site now owned by MPRB and planned for park development.

EAST BANK

Sheridan Memorial Park, 1300 Water Street NE

The site of a foundry adjacent to the former Grain Belt Brewery, Sheridan Memorial Park is a 5.8 acre park which is still under development. The first lot for the park was acquired in 1986 with expansions occurring in 1995, 2007, and 2009. Existing improvements are limited to tree plantings and informal stone steps to the river's edge. A plan for the park was finished in 2007. Future park amenities include a memorial honoring all U.S. veterans, a peace garden, picnic area and river overlooks.

Gluek Park, 2000 Marshall Street NE

Encompassing 3.7 acres along the Mississippi River, Gluek Park is the site of the former Gluek Brewery and Mansion and was listed as a federal Superfund site due to soil contamination. In 2004 the soils were remediated, and in 2008 park improvements were constructed. The park features two river overlooks, a picnic shelter, pathways and gardens.

Edgewater Park, 2326 Marshall Street NE

Named for its location and being the site of the former Edgewater Inn, the 3.5 acre Edgewater Park was acquired in 1993, developed in 2006 and dedicated in 2007. The park is divided into two sections – the Prairie and the Metro with planting, layouts and signage evoking both themes. Walkways carve the park into three sections and mimic the alignment of the Mississippi and Minnesota Rivers. An overlook provides a wonderful vista of the Mississippi River and the recently-completed Lowry Avenue Bridge.

Marshall Terrace Park, 2740 Marshall Street NE

The 8.4 acre Marshall Terrace Park provides a number of recreational amenities for the surrounding neighborhood. The park includes fields for softball and baseball, a playground, basketball court and a wading pool. Two sets of wooden steps and overlooks lead to the water's edge, allowing the public to access the broad shoreline in this stretch of the river. However, the steps are not ADA-compliant; reconstruction of universally-accessible steps and ramps to the riverbank is a long-term goal for the park.

PARK VISION

Above the Falls Regional Park is envisioned ultimately as continuous public open space along both banks of the Mississippi River, offering recreational amenities within a framework of restored ecological function. The Regional Park is intended to provide public access to the Mississippi River; enhance the habitat, structure and function of the river and its environs; and connect to the Grand Rounds National Scenic Byway.

To achieve this, a number of actions will be needed, including the acquisition of additional park land; development of parks with new recreational and public-water access amenities; habitat and riverbank restoration; and construction of new parkways and trails.

PARK DEVELOPMENT CONCEPT

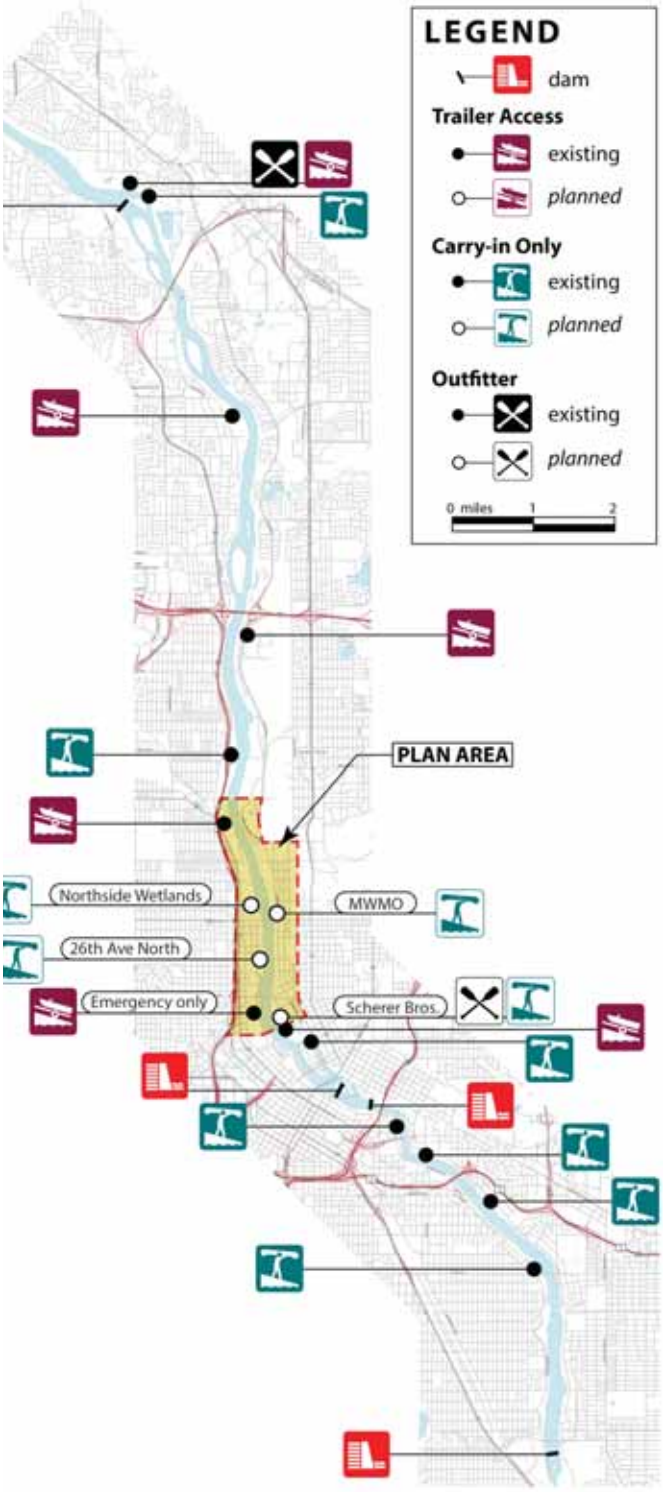
Recreation within Above the Falls Regional Park is primarily focused on water related activities, community gathering and use of multi-use trails by walkers, runners, bicyclists, and in-line skaters. Recreational development within Above the Falls is planned for both sides of the river. Map 6.1 shows the ATF Regional Park development concept. Map 6.3 shows this concept in the context of the greater ATF Master Plan vision, which includes some park-development goals external to the Regional Park as well as non-parks goals that nevertheless will contribute to the vitality of the Regional Park (see "Connected Actions" below).

Public water access points are planned on the west side of the river within the proposed Northside Wetlands Park and at 26th Avenue N. On the east shore, new public water access points are proposed to be added at existing and new Northeast Parks, and at the Scherer Brothers site. Currently all proposed water-access points within the Regional Park are for carry-in access only. One motorized access point exists in North Mississippi Regional Park, at 42nd Ave North/Soo Ave. Sufficient space for additional motorized access points has not yet been identified within the Regional Park. Public-water access points are shown in Map 6.2.

On the west bank, community gathering places are proposed for the Northside Wetlands Park, and at the east terminus of 26th Avenue North. An amphitheater is also proposed adjacent to the BNSF railroad bridge at West River Road North, a carry-over from the 2000 ATF plan. On the east shore, community gathering areas are available at existing parks, and these will be enhanced with better access to the river and overlooks at Northeast Parks, and at the Scherer Bros. site with its beach and carry-in boat launch.

Both the 2000 Above the Falls Master Plan and RiverFirst focus on expanding the system of looped multi-use trails that already exists in the regional parks to the south. At present, 2.1 miles of the total 6.3 miles of multi-use trails proposed currently exist. Additional trail development is needed on both sides of the river. These trails will connect to North Mississippi Regional Park, Victory Memorial Regional Trail, St. Anthony Regional Trail and the Anoka County Mississippi River Regional Trail on the north. On the south end of the park, the trails will connect to the Central Mississippi River Regional Park through Boom Island Park and along West River Road North. In addition to trails along the river, creating a loop involves ensuring river crossings at regular intervals. Trail connections across the river already exist at the Plymouth, Broadway, Lowry, and Camden bridges. The BNSF railroad bridge is proposed to be converted to a pedestrian/bicycle connector to add an additional crossing.

Map 6.1: Regional Park Boundary



Map 6.2: Public Water Access Points

PARK PROJECTS

The 2012 RiverFirst: A Park Design Proposal and Implementation Plan for the Minneapolis Upper Riverfront Plan not only offers a dynamic vision for a renewed Mississippi River corridor, it also outlines a 20 year implementation plan for reaching that vision. The implementation strategies are broken into three timeframes: 0 to 5 Years, 5 to 10 Years, and 10 to 20 Years. While this plan highlights the overall, long-term concept, the specific projects identified below focus on the priority park projects for implementation in the next 10 years. It is anticipated that the Above the Falls Regional Park Master Plan will need to be updated as projects are completed and more detailed plans for concepts are available.

Scherer Park

In 2010 the MPRB purchased the nearly 8 acre riverfront property formerly owned by Scherer Brother Lumber Company. The site is located on the east side of the river just north of 8th Avenue NE/Plymouth Avenue N. In 2011, demolition of the buildings and soil remediation was completed. Development plans for the site include the regional park on the western section along the river and some type of residential, commercial, or mixed-use development on the east.

Scherer Park is envisioned a signature year-round park within the Above the Falls Regional Park. The MPRB is currently exploring the restoration of Hall's Island and the creation of a river beach cove. This would enable the park to serve as an entry point into the river park system for river users, including kayakers. The park is also intended to include a trailhead facility for bicyclists, skiers, runners, and walkers.

Redevelopment of the site provides an opportunity for restoration of the riverbank, habitat development, and enhanced management of stormwater. RiverFirst identifies the opportunity for daylighting seasonal streams in the area. Development of this park will need to be sensitive as the floodplain extends significantly from the river in this area. The creation of a beach will allow flexibility in water levels.

Sheridan Memorial Park

Located on the former Grain Belt Brewery Campus, the 3.5 acre Sheridan Park is currently under development. The park is envisioned to include a playground for multiple ages and a Veteran's memorial. The East Bank Trail is already planned and funded to connect Sheridan Park to Scherer Park.

East Bank Trail

The East Bank Trail will connect Boom Island and Scherer Park with Sheridan Memorial Park. Eventually the trail will be extended to the BNSF rail bridge when land acquisition is complete. In 2012, $1 million in funding for design and construction was granted by the Transportation, Community, and System Preservation Program (TCSP) of the US Federal Highway Administration. This grant ends in 2015.

Upper Harbor Terminal

The redevelopment of the 48 acre, city-owned Upper Harbor Terminal (UHT) provides a significant opportunity for both the MPRB and the City of Minneapolis. UHT is currently expected to close in 2014. A significant amount of the UHT is planned to be allocated for a riverfront park and parkway, and other portions are envisioned for redevelopment. However, the exact division has not been determined.

The long-term vision involves the acquisition of adjacent parcels for park use so implementation needs to be carefully phased. The first step will likely involve the construction of a portion of West River Road North to provide river views and access. The existing rail crossings at Dowling Avenue N and 33rd Avenue N will be the key access points. Over the long-term, the southern half of UHT is planned to be the site of the Northside Wetlands Park as described in the following section. The northern portion of UHT is planned for intensive office and light industrial development. Design of these uses will need to be park supportive and of high quality to be reflective of its premium location and location adjacent to Above the Falls Regional Park.

Northside Wetlands Park

The development of the Northside Wetlands Park involves a transformation of the southern half of the Upper Harbor Terminal into a wetland complex with multiple habitat zones. The wetland is intended to serve as a public space amenity, storm water remediation feature, and habitat for local fauna. Once constructed, the park becomes a demonstration site for other nearby developments showing how stormwater management can be integrated on a site. The park is envisioned to include large gathering spaces and public water access points such as a kayak launch ramp. The park is also the proposed location of an amphitheater spaces for hosting events or serving as an outdoor classroom.

Northeast Riverfront Parks

There are three existing riverfront parks on the east bank that form a strong foundation for Above the Falls Regional Park. Over the long-term this plan envisions a continuous public park along the east bank. The MPRB will seek to acquire identified private in-holdings when available and, when not available for acquisition, secure easements to allow the expansion of park uses along the river, especially trails. Planned enhancements to riverfront parks include public water access points and park access improvements. Restoration of the riverbank and habitat is planned to include remediation of the existing stormwater outfalls.

In the short-term, the focus in the existing Northeast Riverfront Parks will be to maintain what exists and to improve river access. As properties are acquired, additional improvements will occur including restoration of riverbanks and ravines, access to the riverbank for pedestrians and carry-in boaters, stormwater management and overlooks -- all as envisioned in RiverFirst.

Trails and River Crossings

An important component of the recreation concept for Above the Falls is the development of multi-use trails. MPRB proposes 6.3 miles of trails within the park. Currently there are 2.1 miles of trails. On the west bank the existing trail is located along West River Road North from N. Plymouth Avenue to the BNSF railroad bridge. On the east bank, the existing trails are located within the existing Northeast Riverfront Parks and along St. Anthony Parkway.

The development of trails will correspond with the acquisition of property or easements and funding availability. This will result in short segments of trail construction and the use of wayfinding to direct users to alternative routes on local streets. On the west bank trail development will evolve primarily with the extension of the West River Road North. Additional collaboration with the City of Minneapolis and Hennepin County will be needed at the Lowry Avenue Bridge to determine how best to connect the park trails. In the short-term this will likely be via streets, however, over the long-term some type of vertical pedestrian/bicycle connection from the parkway directly to the bridge is desired.

As on the west bank, east bank trails will be developed in segments with interim routes on local streets. The East Bank Trail from Plymouth Avenue to Sheridan Memorial Park has been allocated $1 million in funding for design and construction. In addition, there are currently conversations between Hennepin County, the Mississippi Watershed Management Organization (MWMO), and the MPRB to develop a pedestrian connection along the riverbank and under the recently completed Lowry Bridge. Due to operations and security concerns, the trail will need to be routed on the eastern edge of the Xcel Riverside Plant.

River crossings are an important component of creating trail loops of various sizes in Above the Falls Regional Park. Currently, there are bicycle/pedestrian crossings at the Plymouth, Broadway, Lowry and Camden bridges. An additional bicycle/pedestrian crossing is planned as part of the repurposing of the BNSF railroad bridge. RiverFirst highlights the need for improving the river crossing experience for pedestrians and bicyclists. RiverFirst's vision is the addition of "knot bridges" at Plymouth, Broadway and Camden bridges that will be supported from the existing foundations of bridge structures but create a separate trail and enhanced experience. These knot bridges will be one of the possible long-term pedestrian and bicycle access solutions explored by the MPRB to enhancing trail user experiences crossing the river.

Map 6.3: Regional Park Development Plan

PARKWAY DEVELOPMENT AND PHASING STRATEGY

A key component of the Above the Falls Regional Park development is the proposed extension of West River Parkway, north from the current terminus of West River Road North to the Camden Bridge. A conceptual alignment is shown in this plan with sufficient space for the construction of multi-use trails and the restoration of the riverbank, as well as for the parkway itself. The MPRB will continue to explore alignment options as opportunities arise.

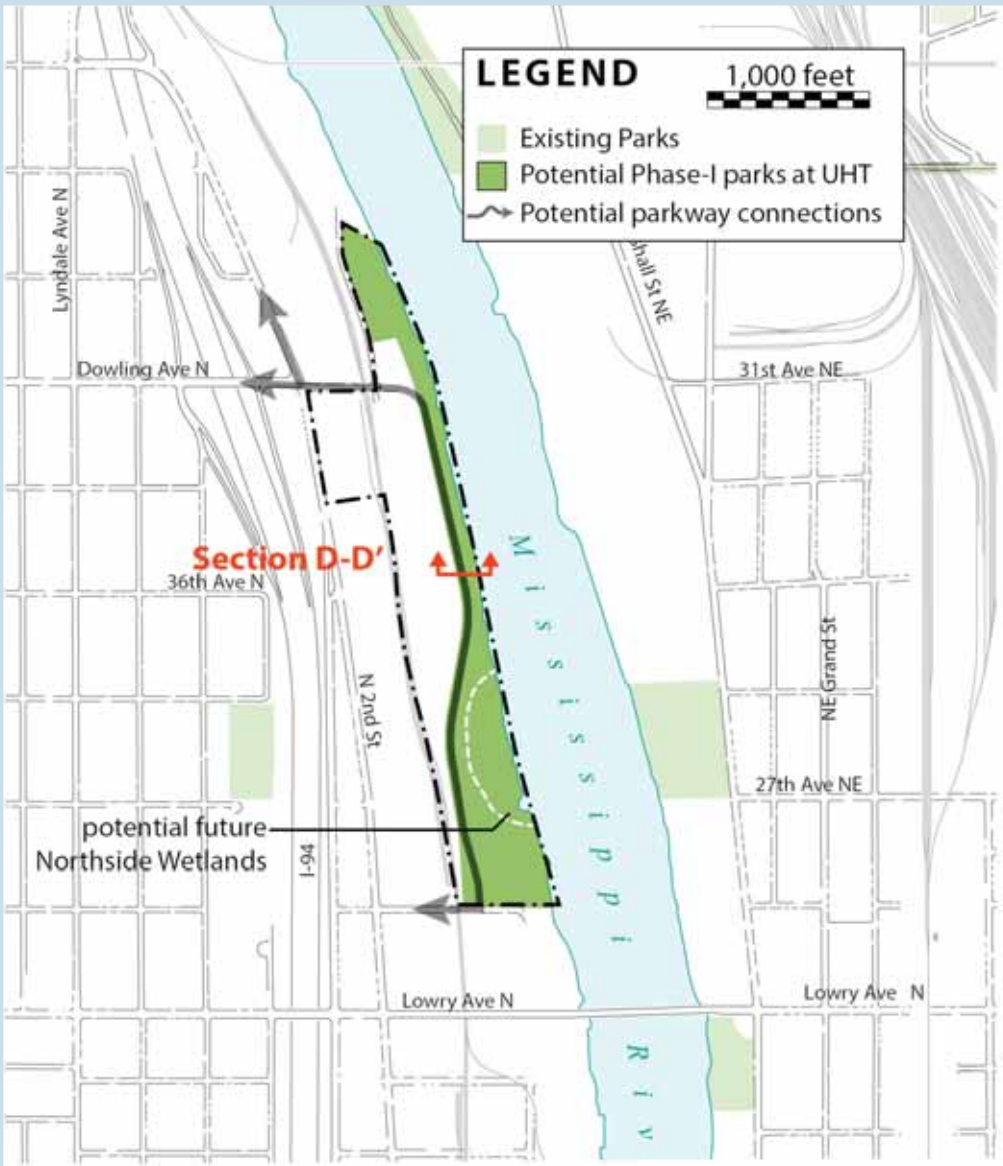
Unlike City streets, MPRB parkways do not exist within a designated right-of-way. Rather, parkways are located on MPRB-owned land as one of many integrated park improvements. They are considered to be a recreational amenity and park-framing device more than a transportation facility. While the new parkway could accommodate a mix of traffic, possibly including commercial traffic and trucks in some segments, efforts will be made to minimize negative impacts by reducing the frequency of access points, for example, and providing access for adjacent development from side streets and access drives rather than from the parkway itself. This will be determined by the Park Board in consultation with its partners at the City of Minneapolis and Hennepin County as redevelopment of the west bank occurs.

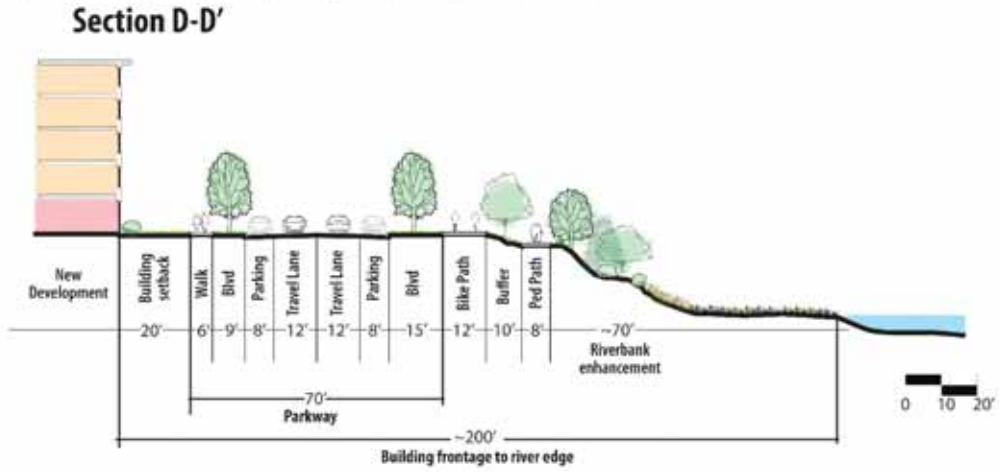
The proposed parkway extension will require significant land acquisition to be fully realized. Unlike the 2000 Above the Falls Master Plan, this plan locates the proposed West River Parkway directly adjacent to proposed riverbank parkland, separating the latter from future private development. This strategy offers much more flexibility over the long-term, allowing for phased, incremental park development independent from but parallel with private redevelopment phases. This strategy will allow the MPRB to develop parkland independently from partner agencies, if it so chooses. This, too, is a significant difference from the 2000 Above the Falls Plan, which envisioned wholesale land assembly and redevelopment.

Construction of the parkway proposed in this Regional Park plan likely will occur in phases timed with land availability and adjacent redevelopment projects. Until a fully-connected parkway is completed, it is likely that parkway users may be routed onto existing streets, such as 2nd Avenue N or Pacific Street, for interim periods. Because the City-owned Upper Harbor Terminal is a likely site for large, early-phase park development, potential parkway phasing at the UHT is diagrammed in Map 6.4.

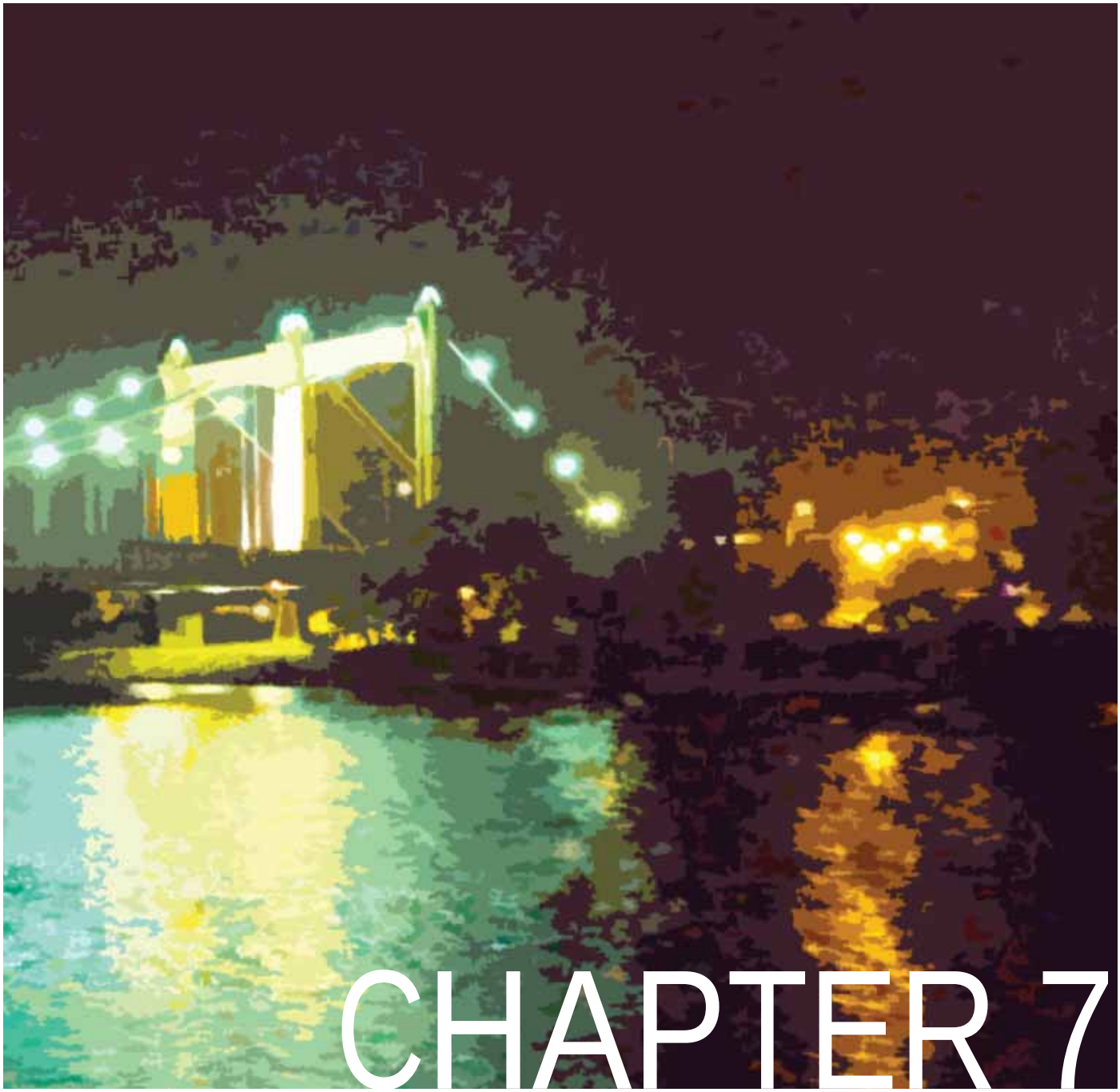
RECOMMENDATIONS

1. Create a continuous and integrated riverfront parks and open space system along the upper riverfront.
2. Construct recreational trails along both banks of the river.
3. Provide space in parks for riverbank, landscape, and habitat restoration.
4. Develop waterfront features in new parks, and nodes of interest at regular intervals along trails.
5. Preserve hospitality uses within parks corridor.
6. Pursue the transformation of the Upper Harbor Terminal in partnership with the City of Minneapolis.
7. Convert the BNSF Bridge to a pedestrian and bicycle facility linking both banks.
8. Continue ongoing acquisition of Regional Park land on both sides.





Map 6.4: Existing and Potential Park Phasing



CHAPTER 7

Environment and Infrastructure Plan

ENVIRONMENTAL RESTORATION

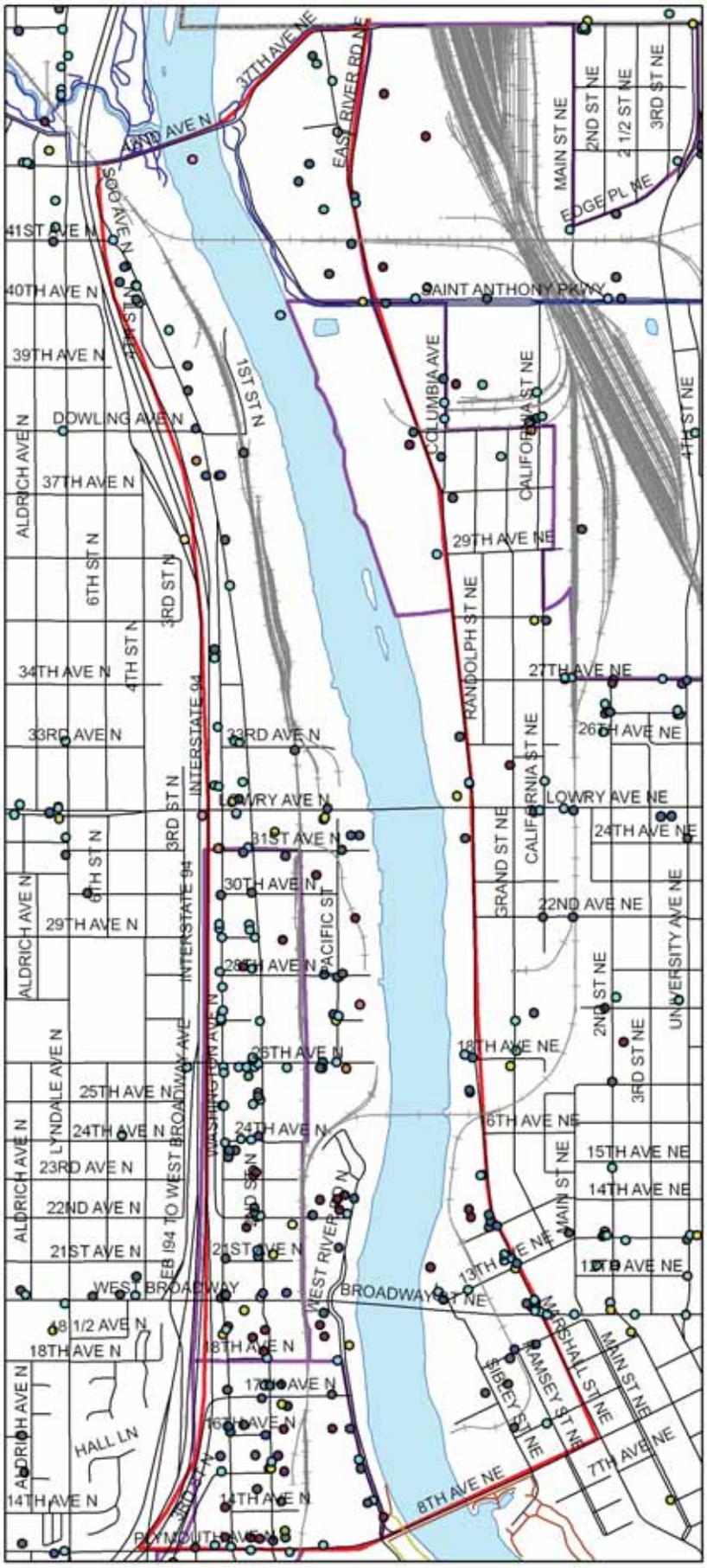
The environment along the upper riverfront has been damaged over time by a variety of contaminants, particularly those from industrial activity. The original plan envisioned the redevelopment of the riverfront as an opportunity to address this contamination through remediation, cleanup, and restoration of the natural habitat. This plan continues that focus via a range of efforts to restore the upper riverfront's terrestrial and aquatic ecosystems.

SOIL CONTAMINATION

Older urban industrial sites are likely to have a range of contaminants, as historically there were few enforced standards for how to handle the disposal of toxic substances. Additionally, unsafe fill was used in some sites, which may also pose geotechnical issues for new development. As a result, all redevelopment goes through a feasibility analysis to determine the amount of site cleanup required. Remediation that is carried out furthers the goal of restoring the environment along the upper riverfront. The Minnesota Pollution Control Agency (MPCA) has identified nearly 300 sites in the study area with some pollution-related issues. Map 7.1 shows the location of these sites. These include sites with active issues as well as those with past issues on record. They include, but are not limited to:

- CERCLIS (1 site): CERCLIS sites are places that are listed in the federal Comprehensive Environmental Response, Compensation and Liability Information System. This means that they are or were suspected of being contaminated.
- Hazardous Waste, Small to Minimal Quantity Generator (113 sites): A small to minimal quantity generator is a facility that generates less than 1,000 kilograms (2,200 pounds) of hazardous waste or 1 kilogram (2.2 pounds) of acutely hazardous waste per calendar month. Like large quantity generators, SQGs and VSQGs must have current hazardous waste licenses.
- Landfill, Open (3 sites): Open landfills are still accepting waste. This includes facilities that accept household garbage, industrial waste, and debris from construction or demolition.
- Leak Site (16 sites): Leak sites are locations where a release of petroleum products has occurred from a tank system. Leak sites can occur from above-ground or underground tank systems as well as from spills at tank facilities.
- Multi (105 sites): Multi sites are locations where there are multiple MPCA activities occurring. This could be a facility with a wastewater permit and an air quality permit, a cleanup site with multiple Superfund operating units, a site with a registered feedlot and a tank, etc.
- Unpermitted Dump Site (5 sites): Unpermitted dump sites are landfills that never held a valid permit from the MPCA. Generally, these dumps existed prior to the permitting program established with the creation of the MPCA in 1967.
- Voluntary Investigation and Cleanup (VIC) Site (37 sites): The Voluntary Investigation and Cleanup (VIC) Program is a non-petroleum brownfield program. VIC provides technical assistance to buyers, sellers, developers and/or local governments seeking to voluntarily investigate or clean up contaminated land.
- Soil contamination cleanup is likely to happen incrementally, as sites are redeveloped into new private development or parkland. Various sources of funding are available – at the local, state, and federal levels – to clean up contaminated soils. The number of sites involved in the Voluntary Investigation and Cleanup program through the MPCA also shows the possibility of cleanup of existing sites in partnership with the current owners.

Cleanup of contaminated soils is necessary to create a safe and healthy environment, as well as to reduce impacts on groundwater. Best practices in new development should effectively prohibit new soil contamination with all new developments in the area.



Map 7.1
Above the Falls
MPCA Sites

Legend

MPCA sites

- Air Permit
- CERCLIS Site
- Construction Stormwater Permit
- Hazardous Waste, Small to Minimal QG
- Industrial Stormwater Permit
- Landfill, Closed
- Landfill, Open
- Leak Site
- Multiple Activities
- State Assessment Site
- Unpermitted Dump Site
- Voluntary Investigation & Cleanup (VIC)
- Railroad
- Study Area
- Industrial District
- City Boundary
- Water

Minneapolis
City of Lakes

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RIVERBANK RESTORATION

The Mississippi River is a central part of both the natural and urban environments surrounding it and its existing riverbank conditions reflect this reality. Riverbanks in the study area vary greatly, from natural edges to rip rap to metal cladding. There will be opportunities to restore these riverbanks in a manner that regenerates the ecosystems of the river and the riparian areas as riverfront parks and other land adjacent to the river are redeveloped.

The preservation and/or restoration of a green edge serves multiple purposes, not in the least the role of a buffer for runoff that impacts water quality, and as a potential area for stormwater management. As such, existing and planned riverfront parks function not just as amenities and recreational spaces, but as "green infrastructure" serving public system needs. The river corridor is also part of a larger habitat and ecological system for plant and animal life. This includes its role as a major flyway for migratory birds. A continuous green connection along the riverfront is best for this function, preferably with natural areas and vegetation.

River floodplains are particularly vulnerable areas for maintaining environmental quality, especially in response to impacts of development. Currently there are only a few designated floodplains along this stretch of the Mississippi River. However, these areas were designated floodplains in 1961. Precipitation data that informed these designations is now being updated with additional data since 1961 to account for any long term changes that have occurred in the region's climate. Preliminary data from the National Oceanic and Atmospheric Administration (NOAA) suggests there may be additional areas where flooding could occur along the Upper Mississippi River. A more detailed analysis of potential flooding locations within the City of Minneapolis will need to be completed once the final NOAA findings are released. The Scherer Brothers site is known to contain one of the largest stretches of floodplain on the upper riverfront, its flood prone setting is being taken into account with the development of a riverfront park on this site.

With the potential for flooding along the river not only due to climate changes but also naturally occurring events such as extensive ice jams, it makes sense to plan for "soft edges" with development set back from the riverfront to allow for floodplain variability. The city's shoreland overlay district and critical area overlay place restrictions on how close development can be situated to the riverfront. Review and if needed modification of these ordinances along with thoughtfully designed redevelopment, parks and open space will go a long ways towards preventing future financial losses due to flooding along the river.

One approach to achieving the overall objective of restoring the riverbank is to introduce new plantings that will provide an integrated series of benefits, including: stabilizing the mechanics of slopes, reducing soil erosion, improving water quality, creating and connecting wildlife habitat, and enhancing riverbank aesthetics.

Soil bioengineering techniques provide a potential strategy for restoring vegetation on the banks of the upper riverfront. Soil bioengineering is a living technology consisting of plant structures that initially add stability to banks though live stem stakes, and over time, through root systems. The interwoven growth of plant stems and leaves creates a shoreland buffer that reduces runoff velocity, cleanses the water by collecting sediment, and offers surface erosion protection by holding soil in place. Use of native plant species for bioengineering will enhance biological diversity and complement the landscape restoration and wildlife habitat recommendations.

LANDSCAPE AND HABITAT RESTORATION

Improving the ecological function of the upper riverfront is a primary objective of this plan. In order to maximize the potential of the planned new open space amenities, the plan recommends an ecosystem approach that will recreate areas of native vegetation and provide habitat for a wide variety of wildlife. The ecology of the Mississippi River must be considered in the context of a much larger system, connected to the ecology of the region up and down the river corridor. It is also a place within an urban environment where restoration treatments will be set within the context of human activity and development.

The area above St. Anthony Falls is a transition zone between the Northern Hardwood Forest and Tall Grass Prairie ecotypes. During the period following the end of the last Ice Age, the present structure of the upper riverfront, its course, topography, climate, and soil conditions, was set. Soil and geological surveys show that the upper river is composed of terraces, created as the river receded in width, and outwashes deposited as the river shifted course. In general, soil conditions are deep sand with a layer of organic material at the surface. Upland soils are porous, retaining little water near the surface, creating conditions conducive to sustaining an oak savanna ecotone. Fire played a role in creating oak savannas, because white and burr oak are able to withstand repeated burning, while other trees are consumed. Prairie species benefit from periodic fire, creating an open savanna with copses of oak surrounded by grasses and flowers. Wetter soil conditions at the river edge and in the floodplain allowed other species such as cottonwood and willow to survive fires, especially on the east bank, with the river acting as a fire break.

The development of new riverfront parks provides an opportunity to restore historic vegetation to the upper riverfront. Planting native species historically found on the upper river will also restore the regional flavor of the place, creating a pleasant aesthetic effect and educational opportunity for visitors. Wildlife will be attracted to the habitat, with plantings providing food and shelter.

In many respects the plan for parks is based on a concept of the riverfront as a linear greenway. Studies in landscape ecology show the benefits of connected vegetated corridors to the survival of plant and animal species, because corridors allow species to move and disperse throughout a landscape, increasing resistance to disturbance events. Corridors enhanced with native plantings can be of varying widths, and do not require unbroken continuity of continuity of vegetation to be effective. Within this greenway corridor, trail facilities should be complemented by a variety of restored landscapes for both aesthetic and ecological reasons.

The most important zone within the greenway corridor is the shoreland, where the river and land meet. Designed in concert with riverbank restoration, plantings in the shoreland area should be installed at a preferred minimum width of 50 feet from the top of the bank. Wider areas can be accommodated for aesthetic variety and increased habitat diversity. A minimum strip of 50 feet will provide water quality benefits, by slowing and filtering water during storms, and will also provide a suitable wildlife habitat corridor. The riverbank and floodplain should be planted with species that thrive in soils that are periodically wet.

Large areas designed with landscape-scale plantings provide an opportunity to recreate a semblance of the oak savanna that once dominated the banks of the Mississippi. White and burr oaks should be established in groups set within a short and tall grass prairie. These species will thrive in the sandy, dry soils and create an interesting landscape.

One additional benefit of landscape restoration along the upper river will be the ability of park users to experience the Mississippi River in a naturalized state. By interacting with naturalized shoreland, floodplain and riverbank, users can develop a real appreciation for the true extent of the Mississippi watershed and the river's impact on all of the living creatures that depend on it.

WATER QUALITY

It is known that daily activities on the land side of natural resources have a direct effect the quality and health our water resources. Thus, land use planning and future stormwater infrastructure change along the upper riverfront should acknowledge this direct relationship by evaluating changes in land use in concert with changes in the water resources.

The stretch of river running through the study area is part of a larger system. What happens in this area in terms of development has larger implications for the entire riverfront.

According to the MPCA, the stretch of the Mississippi River through the upper riverfront is currently listed as impaired with (1) fecal coliform and (2) polychlorinated biphenyls (PCBs) in fish tissue. Presence of fecal coliform is largely due to animal waste and septic systems, and may be associated with agricultural operations and rural development upstream, as well as other sources. This pollutant is found at high levels at various locations and water bodies statewide. PCBs are industrial chemicals that were discontinued in the late 1970's, but still exist in residual amounts in the environment. This pollutant is found at high levels in the Mississippi as far north as St Cloud. Together, these pollutants have implications for recreational use of the river and fish consumption.

At present, the MPCA is conducting a TMDL (total maximum daily load) project related to bacteria and total suspended solids for the stretch of the Mississippi River including the upper riverfront. Bacteria interventions may include compliance for failing septic systems, reduced runoff from feedlot/pasture areas, and overall better stormwater management (e.g. filtration and reducing sediment).

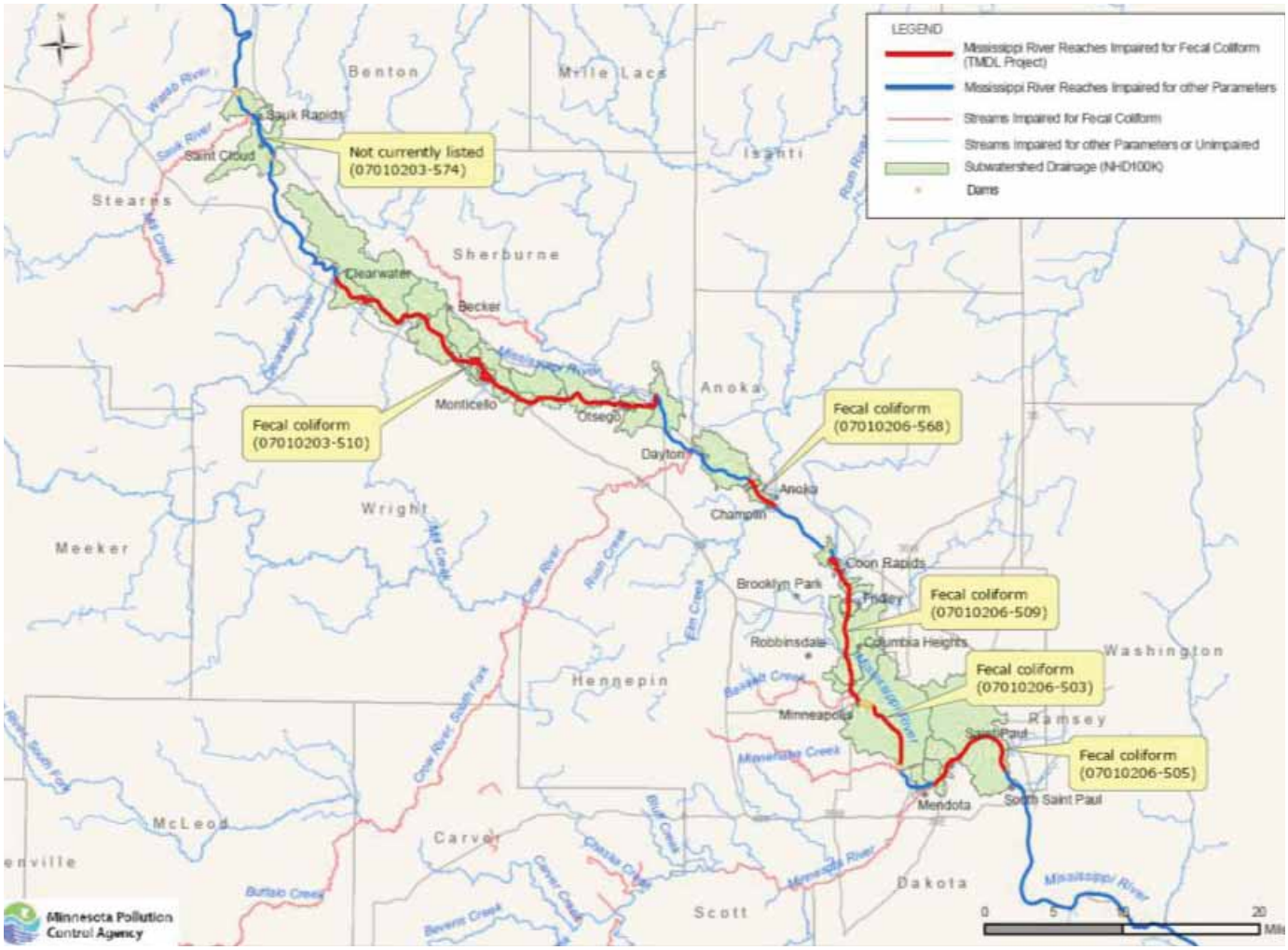
The preliminary draft TMDL for Total Suspended Solids (TSS) has proposed that the City of Minneapolis reduce its annual loading of TSS to the river by 25%. Soil bioengineering to restore riverbank erosion issues will help address this issues as well as the implementation of site and regional level stormwater treatment systems where ever feasible within the upper riverfront. The water quality issues immediately downstream from the upper riverfront are comparable, with similar impairments. The draft TMDL report and implementation plan are expected to be complete in 2013, though the final version may not be finished until 2014 or later. Monitoring of bacterial levels will continue over the long term.

In addition, many of the Twin Cities metropolitan area's waters are impaired with various pollutants. In Minneapolis, this includes the Chain of Lakes (with mercury, PFOS, and other contaminants), and Minnehaha Creek, Shingle Creek, and Bassett Creek (dissolved oxygen, chloride, and fecal coliform). This is typical of a heavily developed urban area, and requires a range of approaches to address. Some of these pollutants have been effectively mitigated using strategies including stormwater retention and treatment facilities, erosion control measures, improved street sweeping, education and awareness outreach, and other approaches.

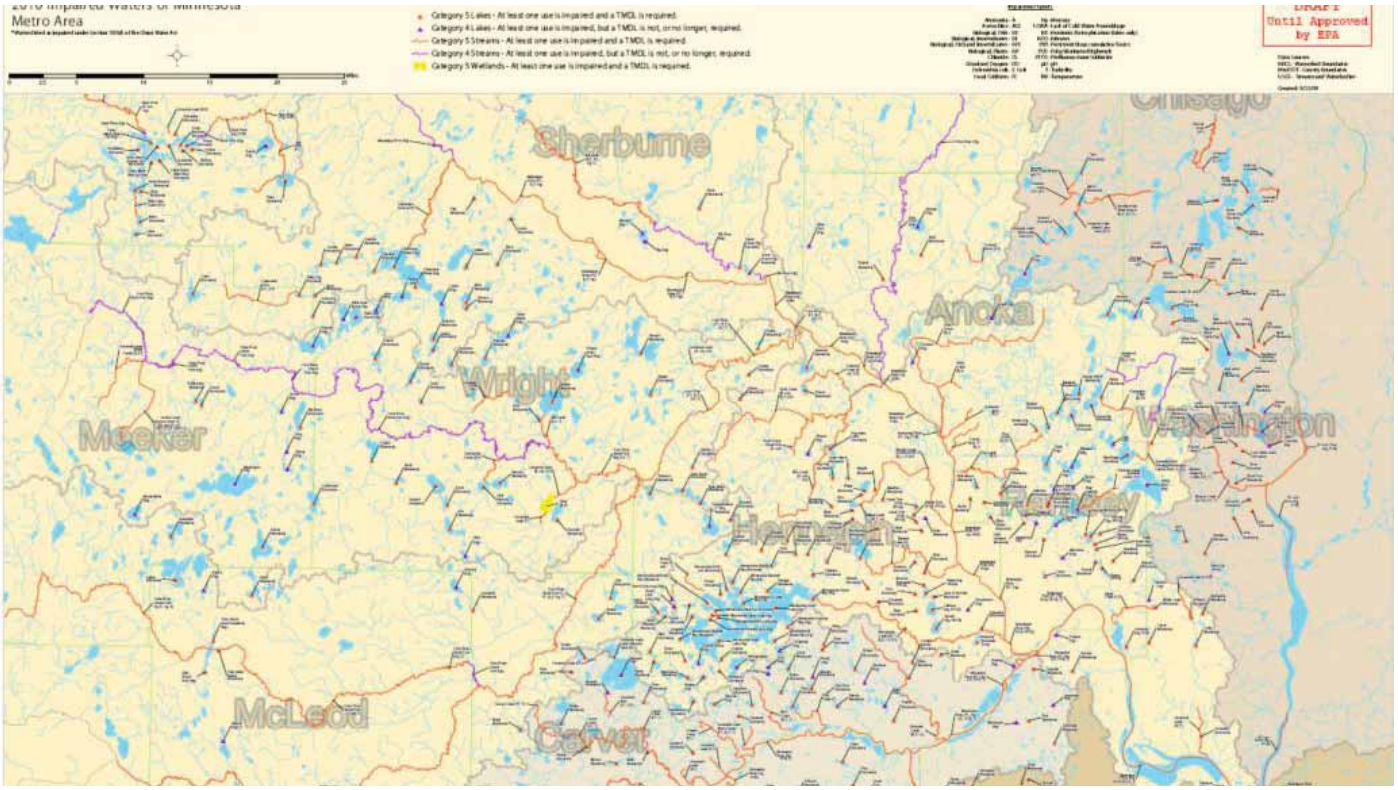
A number of questions have been raised regarding the negative impacts of existing uses on water quality, in particular older industrial properties that have not had to comply with more recent stormwater management and site design regulations – especially since many of these have a high percentage of impervious surface. While many older industrial sites do exist along the riverfront, at present the river is not listed as impaired for any current industrial pollutants.

Generally speaking, redevelopment to any use will improve water quality due to the site being brought into compliance with current regulations. Direct or "point" sources from industrial uses are already heavily regulated, so it is important to focus on controlling diffuse or "nonpoint" sources – i.e. what water sheet flows off the site's surface and enters the river during rain events, rather than what comes out of a stack or a pipe releasing water that has been used for an industrial process. This includes runoff from landscaped areas, which may contain high levels of animal waste, leaf debris, or chemical fertilizers.

An emerging threat to water quality is the heavy use of salt on roads, parking areas, sidewalks, and other paved areas during the winter. Best practices to minimize the use of salt are the primary ways to address this threat given chlorides easily pass through most filtering processes and infiltration transfers the problem to groundwater supplies. Shingle Creek, which feeds into the Above the Falls reach of the river, already has identified chloride impairment.



Map 7.2: Upper Mississippi River Bacteria TMDL, 2008



Map 7.3: Impaired Water Areas

STORMWATER

At this point in time, major sources of point source water pollution have been eliminated. Wastewater treatment is now carefully regulated, and wastewater and stormwater sources for the most part have been separated. To improve water quality, the focus must now be on non-point sources and improving the quality of stormwater that enters surface waters through the storm drain system.

Like the original Above the Falls Plan, this plan affirms the importance of addressing stormwater management with innovative and proactive strategies. The Mississippi River is lined with stormwater outfalls, carrying stormwater from a network of pipes throughout the city to deposit it directly in the river. There is currently inadequate management and filtering of stormwater on lands within the study area. New development – both private and public – provides an opportunity to bring sites into compliance with current standards regarding stormwater management.

However, unlike the original plan, this one does not recommend detailed strategies regarding stormwater management for specific locations. While the original plan assumed the ability to build a very large scale regional treatment system (based on large-scale land acquisition), the current, more incremental approach to implementation will make this a less likely option. However, this does not imply that there are not opportunities for shared and stacked functions that make the best use of available space to accommodate sustainable, attractive, and functional stormwater management systems. Instead, below is a list of principles to guide in the development of stormwater management infrastructure:

- Whenever possible bring sites along the upper riverfront into compliance with Minneapolis' stormwater ordinances and the Mississippi Watershed Management Organization's (MWMO) stormwater standards.
- Continue to pursue a range of stormwater best management practices in new development and parks to meet high standards for stormwater capture, retention, and treatment.
- Explore ways to attractively incorporate stormwater features into the public realm, through the use of green infrastructure such as: ponds, rain gardens, vegetated swales, water features, green roofs and other strategies.
- Support the retrofitting of existing sites with stormwater best management practices and the reduction of impervious surface cover along the upper riverfront.
- Consider partnerships and coordination between private development, parks and the MWMO to maximize the efficiency of stormwater systems, monitor changes in the ecosystem, explore shared solutions, and increase the greening of the public realm.

- Coordinate the provision of stormwater management strategies and open space, to provide public realm connectivity and preserve scenic views.
- A number of possible best management practices may be applicable in this area. The technologies available continue to evolve and change. A recent, highly effective advancement in BMP design is adding iron enhancement to filtration areas, to remove dissolved phosphorus. Below are identified some potential strategies that are currently available and may be a good fit in parts of the upper riverfront:

ABOVE-GROUND BMPS

In addition to providing a functional purpose, many of these BMPs can be attractive additions to open space and the public realm. When used on private property development near the riverfront, they can help provide a physical and visual connection to the river.

- **Stormwater basin**. For larger or shared sites, a stormwater basin may be an appropriate choice. There are several types. A constructed retention basin with a permanent pool of water is a wet stormwater pond. Runoff is captured and treated in the pond through gravitational settling and biological uptake until it is displaced by runoff from the next storm. A dry detention pond is a basin with outlets designed to temporarily detain stormwater and allow sediment particles and associated pollutants to settle out. Water is gradually released into the storm drain system and the basin remains empty between runoff events. An infiltration basin is a shallow and dry depression designed to capture and temporarily store stormwater runoff. Runoff is routed through storm drain systems, channels, swales and other stormwater systems to a basin consisting of conditioned soil and sometimes mulch and plants that promote infiltration and plant up-take of water. During a large rain event, bypass or emergency spillways deal with excess water and prevent flooding. A constructed wetland is a basin with a permanent pool of water that creates growing conditions suitable for water-tolerant plants. Runoff is slowly released into streams, natural wetlands, and other receiving waters.
- **Vegetated swale.** A swale is a shallow drainage conveyance trench or shoulder with a gentle slope designed to slow the speed of, transport and treat runoff. A swale looks similar to a ditch, but is slightly wider and may use berms and/or check dams to promote settling and infiltration. Swales are commonly used as a substitute to, or enhancement of, a curb and gutter system.
- **Rain garden.** A rain garden is a shallow depression that captures stormwater runoff from roofs, driveways, streets and parking lots, allowing it to infiltrate into the soil. These gardens typically utilize a modified soil mixture to ensure that the gardens soak up the water within a two-day period. Many are designed to have an overflow out-

let during heavy rainfall events. Rain gardens can be planted with shrubs, perennials or native wildflowers and grasses to increase infiltration and attract a variety of birds and butterflies.

- **Porous pavement.** A hard but permeable surface that allows water to infiltrate across the entire area is known as porous pavement. The pavement is made without fine sand or small aggregate to create void spaces that allow rain and snow melt to pass through to a bed of open-graded aggregate beneath the pervious pavement. Stormwater is then collected and stored in these voids until it infiltrates into the underlying soils. Permeable paving should not be used in areas with the potential for high volume/high speed traffic, because its load-bearing capacity is less than conventional pavement. In addition, areas with high pollutant loads or debris can cause porous pavement to clog and reduce its efficiency.

- **Infiltration or flow-through planter.** A container with an open bottom placed above or below ground and filled with gravel, soil, and vegetation is known as an infiltration planter. Stormwater is temporarily stored in the planter and then slowly filters down into soils underneath. A similar container with a closed but impervious bottom and sides is known as a flow-through planter. Water that is not absorbed by the soil or plants flows through and is collected in a perforated pipe at the bottom of the planter and routed to a drain system or network of planters.

- **Impervious surface reduction.** Reducing total impervious cover on a site can reduce stormwater runoff. Approaches include reducing paved parking and loading areas, narrowing streets and driveways, and similar strategies.

UNDERGROUND BMPS

Underground BMPs provide options where there is not enough surface area on a site to manage stormwater. This can be a good option where urban densities are fairly high, and activity and walkability take priority over open space.

- **Infiltration trench or French drain**. An infiltration trench is a shallow trench filled with stone, sand or rock to create a reservoir for runoff until it infiltrates into the soil or is released slowly into a storm drain system, usually over a period of several days. Some contain a perforated pipe at the bottom to collect stormwater and direct it to a conveyance system. Underground infiltration trenches are ideal for areas with limited space as they can be more vertical than horizontal. Trenches can be exposed or covered with stone, sand, grass, small plants or shrubs to better incorporate into the urban landscape.

- **Sand filters.** Sand filters usually consist of two-chambers: a sedimentation chamber and a filtration chamber filled with sand or another filtering media. As stormwater flows into the first chamber, large particles settle out, then finer particles and other pollutants are removed as stormwater flows through filtering media. The filtered water is then discharged through an underdrain system to either the storm drain system or destination point. Sand filters

are preferred over infiltration practices when contamination of groundwater is a concern, where soils cannot treat the water or water tables are high.

- **Downstream filtration device.** Downstream filtration devices are placed at the entry point to a storm drain system to filter water and remove sediment, debris and pollution. These devices are reserved for dense development areas and act as pre-treatment for other treatment practices where space is limited.

- **Underground storage.** A number of underground stormwater storage techniques are available, and are often viable alternatives particularly in dense urban areas with limited room for surface stormwater management. On-site underground storage can be used at many scales. Some have a low profile that makes storage suitable for areas with high water tables and for use under parking lots, roadways and paved areas. Units can also be linked together to increase capacity. Large, underground retention systems designed to remove large particulates, debris, oil and grease from runoff are known as oil and grit separators. Drywell is a process where stormwater runoff is funneled into an underground rock-filled trench, temporarily detained and infiltrated back into the surrounding soils. Located underground, a pervious pipe system allows infiltration of water through perforated pipe walls. A cistern is an exposed or buried tank with a secure cover and discharge pump that captures and stores roof runoff for reuse on-site. Retention is conducted by using on-site pipes or chambers that capture and store runoff underground. Stored water is slowly released directly into an outlet pipe at rates designed to reduce peak flows.

- **Green roof.** A green roof uses living plant material as part of the roofing system. The plants, roots, and soils filter, detain and absorb rainwater so the water that does leave the roof is slowed, cleansed and cooled. Some systems then capture resulting stormwater and direct it to a storage tank or municipal system.

BMPS NEAR THE RIVERBANK

Some BMPs are uniquely suitable for locations along the riverfront. They are identified below.

- **Native landscaping.** Native plants and trees are defined as species growing in a particular area at the time of European settlement that are adapted to local weather, water and soil conditions. They tend to require less maintenance, less fertilizer, and are more resistant to drought, local pests and diseases than non-native landscape such as turf grass. These deep-rooted grasses and flow-

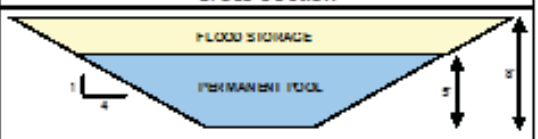
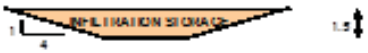
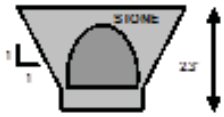
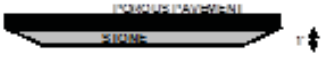
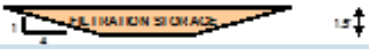
BMP	Design Parameters	Cross Section
Storm Water Treatment Pond	- Permanent Storage = 4:1 side slopes, 5' deep - Flood Storage = 4:1 side slopes, 3' above NWL	
Infiltration Basin / Rain Garden	- Infiltration Storage = 4:1 side slopes, 1.5' deep - Infiltration rate = 1 in/hr	
Underground Infiltration System	- arch model product - 6" stone base and cover, 40% voids in stone, - 1:1 side slopes - Infiltration rate = 1 in/hr - Analysis done in P8	
Porous Pavement	- Infiltration Storage = 1:1 side slopes, 1' deep stone with 40% voids - Infiltration Rate = 1 in/hr	
Sand Filtration	(70 - 85% TSS removal)	

Illustration from Mississippi Watershed Management Organization's "Water Quality Standards Analysis"

ers break up compact soil, allowing for more stormwater infiltration. The plants themselves intercept and hold rainwater and decrease water flow with stalks, stems, branches and foliage.

- **Vegetated filter strip.** A vegetated area along a body of water designed to treat runoff as overland sheet flow. It may be designed in any natural vegetated form, from a grassy meadow to a small forest, but is designed to filter and slow stormwater from impervious surfaces before reaching waterway systems or sensitive environmental areas. Deliberate vegetated filter strips differ from natural buffers in that they are designed specifically for pollution removal by slowing runoff and allowing particulates to settle.

- **Reforestation:** Trees, much more than smaller plants, slow down, capture and hold rainfall in the canopy's leaves and branches. Rainfall that is not intercepted may be taken up by the tree's extensive root system, which holds soil in place. The canopy also shades impervious surfaces. Generally, large trees with large leaf area are the most efficient rainfall inceptors. Deciduous trees are not effective during winter months, but evergreen trees will capture precipitation all year-round.

- **Shoreline stabilization**. Traditionally, shoreline erosion problems have been solved using human-made materials on the shoreline, but there are a variety of more natural techniques as will. Native vegetation with extensive root systems will bond the soil in the banks. The above-ground portion of the plants dissipates the energy of erosive waves, creating quiet water areas along the bank that allow sediment to accumulate rather than erode. Shoreline vegetation plantings provide additional habitat for fish and wildlife.

- **Daylighting streams.** Daylighting is the process of bringing a buried stream above ground, removing artificial culverts, pipes or drainage systems and exposing all, or a portion of it to sunlight, air and soils. Some projects recreate wetlands or ponds. If some outfalls along the river bank were to receive this treatment, it could be challeng-

ing to deal with the magnitude of water and pollutants conveyed by large pipes. Measures would need to be taken to divert the flows from large storm events, and to pretreat for pollutant loads, so that daylighting BMPs would not be overwhelmed and destroyed..

ASIAN CARP

The spread of the invasive Asian carp along the nation's waterways has been an increasing threat to the Mississippi River, including the stretch through the Above the Falls study area. The science and policy on this topic are still evolving, and the recommended responses to the threat are still under development.

As this is a much larger issue than the extent of this plan, it will not attempt to be a full policy response to this topic. However, there are some implications worth noting for the future of the area:

- The full or partial closure of lock and dam systems downstream from the study area has been suggested as a potential barrier to the upstream spread of Asian carp. If this closure is permanent, or semi-permanent, it will make full use of barging and other through traffic from the Upper Riverfront impossible. As the plan recommends a transition away from uses dependent on barging, this could be compatible with that approach.
- The lock and dam closure would also limit the ability of recreational use of the river via boating. However, it may still be possible for small craft to complete a portage around the lock and dam, or simply use the upper pool.
- If the use of the lock and dam is discontinued, dredging of the upper riverfront would likely be as well. This would likely limit boats to small craft, such as canoes and kayaks. It would also free up the space used for dredge spoils for other riverfront use.
- The closure would also result in economic impacts to some businesses and supply chains relying on barging. This is discussed in the section below.

TRANSPORTATION NETWORKS

BARGE TRANSPORT

Barge transport is useful for low value, high volume bulk commodities, where speed of delivery is not important. It can also move fragile commodities safer than freight rail because the travel is smoother, resulting in less "spoilage" in shipments. A "Jumbo Barge" is the current standard barge size. It is 35' wide by almost 200' long. Barge transport is a competitor to rail transport for bulk materials where origins and destinations have sufficient correspondence to the alignment of river systems. Private businesses will make freight transport decisions based on economics, time frame and reliability.

CURRENT BARGING ACTIVITY

There are currently three barging terminals in operation on the City's upper riverfront.

1. Northern Metal Recycling, 2800 Pacific Street. At the location of the former American Iron recycling business, Northern Metal Recycling utilizes its terminal for export of recycled metals.

ANNUAL MINNESOTA PORT TONNAGE						
Port	*2010*	*2009*	*2008*	*2007*	*2006*	*2005*
Minneapolis	663,935	545,840	781,155	795,372	1,069,238	1,024,877
St. Paul		5,071,864	3,469,383	5,126,732	5,511,445	5,462,801
Savage		2,777,677	1,705,650	3,201,406	3,214,351	3,018,613
Red Wing		735,417	631,870	851,692	920,610	787,883
Winona		1,672,630	1,573,239	2,099,746	2,204,375	2,008,029
Total		10,803,428	8,160,297	12,074,948	12,920,019	12,302,203

Source: Minnesota's River Terminals, MnDOT 2009, with 2010 data from Army Corps

2. Aggregate Industries, Pacific Street and 26th Avenue. At the location of the former JL Shiely business, the Aggregate Industries facility is primarily utilized for the receipt of sand and gravel for utilization in the construction industry. The cost effectiveness of this business is presumably related to the proximity of Gray Cloud Island, where the materials are mined. Gray Cloud Island is just south of St Paul, a mile downriver from where Interstate 494 crosses the Mississippi River. Based on a reported conversation with MNDOT staff, there may be an estimated 10 to 15 years remaining in the supply of aggregate at Gray Cloud Island.

3. The Upper Harbor Terminal, owned by the City of Minneapolis and operated by River Services. The current City contract with River Services runs through 2014. A variety of commodities are received at the UHT. Almost all materials are received rather than shipped at the terminal. River Services reportedly stopped loading barges out of Minneapolis around five years ago in order to reduce costs. The terminal is served by a Canadian Pacific spur rail line that is also used by Twin City & Western Railroad (TC&W). However, most of the commodities that arrive by barge at the UHT are shipped out on trucks. In 2009, 91% (by tonnage) of all commodities shipped out of the UHT went via trucks with only 5% using the rail spur.

Barge transport to the upper riverfront is limited by the size of the lock and dam system. The three locks between Minneapolis and St Paul can accommodate only two-barge assemblages. This is in contrast to all of the other locks on the Mississippi River, which can accommodate assemblages of 9 barges at one time. Over the past five years, the amount of commodities passed through the Upper Locks at St Anthony Falls has declined by 47% based on overall tonnage. This compares to a 12% overall reduction for the entire Mississippi River Port System, which includes 5 ports: Winona, Red Wing, Savage, St Paul, and Minneapolis. In 2010, a total of 663,935 tons of commodities were shipped through the Upper Locks at St Anthony Falls. Questions remain whether the drop in barging traffic is due to a lack of competitiveness of this location as a shipping option, and its uncertain future, or whether better market positioning, and site improvements might serve to increase volumes. Both may be true.

THE MISSISSIPPI RIVER SYSTEM

The river navigational system serving Minnesota is maintained by the U.S. Army Corps of Engineers. The Corps dredges the navigation channels and operates the 29 locks on the Upper Mississippi River. The locks serve both the commercial operators and recreational boaters. The commercial barge operators on the river pay for half of the cost of major Federal lock construction with a fuel user tax which is now 20 cents per gallon.

The annual cost to the Corps of operating and maintaining the three locks and dams between Minneapolis and St Paul averages $3.72 million. This includes the maintenance of the navigation channel for the same reach of the river.

The Corps and other state and federal authorities have recently raised the alert about the potential for the upward spread of Asian carp, a large invasive species that has the potential to severely damage northern Minnesota's recreational fishing industry. Permanently closing the Minneapolis lock and dam system may become necessary to keep it from spreading further. While the fish are large enough to jump over many barriers, they would not be able to clear the St Anthony Falls if the lock was closed. The urgency of this discussion has increased recently by DNA testing of nearby waters which shows the presence of Asian carp.

ECONOMIC VALUE OF BARGING

Barge transport has value for the businesses that utilize it. For the upper riverfront, these were quantified in a 2004 MNDOT study entitled "Modal Shifts from the Mississippi River & Duluth/Superior to Land Transportation." This study estimated the value of barging services to the Minneapolis upper riverfront by evaluating the cost of unloading barges in St Paul instead of Minneapolis, and trucking the material from St Paul to its various destinations. This provides a starting point for understanding the economic importance of barging services to Minneapolis terminals (once scaled to current shipping volumes and adjusted for inflation). The actual impact on businesses will be lower than this estimate by some amount, because businesses could respond to discontinuance of barging services to Minneapolis in a variety of ways—of

which offloading barge shipments in St Paul is just one possibility.

The elements addressed in this plan included the costs (both public and private) of the modal shift in transportation modes and adjustments to business operations based on the change in transportation options. It found that the costs could be significant, in terms of increased cost of business operations, costs associated with roadway maintenance, and additional highway congestion from trucks.

In 2012, an additional study was commissioned by the Metropolitan Council, entitled "Assessment of Economic Impact of Potentially Discontinuing the Operation of the Upper St. Anthony Falls Lock." This economic analysis was an assessment of the regional economic effects of potentially closing the Upper Lock at St. Anthony Falls, which is considered an option to halt the upriver movement of Asian carp, a harmful invasive species. Closure of the lock would curtail barge traffic to the Upper Riverfront in Minneapolis. The study analyzes the changes in the transportation system and elements of the supply chain, identifies anticipated business adaptations to these changes, and describes the effect of these changes on:

- The state economy, including average annual output, wage income, jobs and value-added
- The sectors and businesses that use the commodities shipped through the locks
- The businesses that use the locks and their employees
- Recreational users, organizations and businesses

The report also addressed redevelopment potential of the Upper Riverfront if heavy industry is relocated. It did not address the economic impact of further carp migration into Minnesota rivers and lakes. It also did not address the offsetting positive value of redevelopment from closure and conversion of barging sites, in particular the Upper Harbor Terminal.

The discontinued use of the lock would require changes in the distribution network of these businesses and industries:

- Shifting commodity movement from barge to truck
- Creating additional transportation and material handling costs for these businesses/industries
- Stimulating new capital investment to adapt to these changes
- Increasing truck traffic and related societal impacts
- Creating changes in employment.

The impact of the closure of the Upper St. Anthony Lock would be:

- The permanent loss of 72 jobs in the Minnesota economy (direct employment loss)
- A net permanent loss of an additional 12 jobs as the impact of the initial job cuts and reduced business spending ripples through the economy (indirect and induced change).
- An increase of 21,316 truck trips, concentrated during the work week, primarily in the 8.5 month period typically associated with barge shipment.

Potentially discontinuing operation of the Upper St. Anthony Falls locks would create a shift in transportation from barge to truck expected to cost Minnesota's economy $21.5 million over the 2012-2040 timeframe. Importantly, the impact could be greater than described above because of problems that specific businesses may experience with their supply chain and localized traffic problems.

While the report notes that the total impacts here are not great in terms of the size of the overall state economy, it does point to the fact that localized impacts may be significant. As a result, mitigation of these impacts may be advisable if the plan to close the lock and dam proceeds. Specific areas called out for additional investigation included traffic and safety impacts of the increased truck volumes, and a closer look at supply chain issues, especially regarding specific industries.

UPPER HARBOR TERMINAL

Material	Tons In Barge	Truck	Tons Out Truck	Rail	Barge
Aggregate	10,517.36	0.00	13,302.64	0.00	0.00
Coal	88,016.50	0.00	105,118.40	0.00	0.00
Wood Chips	0.00	0.00	533.12	0.00	0.00
Dredge Sand	0.00	0.00	22,843.20	0.00	0.00
DAP	17,000.74	0.00	16,270.78	499.80	0.00
Granite Block	0.00	574.85	574.85	0.00	0.00
MAP	1,467.89	0.00	1,454.17	0.00	0.00
Pig Iron	7,665.85	0.00	13,996.16	0.00	0.00
Pig Iron Nodules	0.00	0.00	469.44	0.00	0.00
Potash	2,967.13	0.00	2,957.32	0.00	0.00
Prilled Urea	9,267.59	0.00	0.00	9,267.59	0.00
Twine	3,340.00	4,335.45	7,675.45	0.00	0.00
Sand	0.00	0.00	914.43	0.00	0.00
Scrap Materials	0.00	0.00	0.00	0.00	7,613.90
Urea	12,233.04	0.00	15,157.64	2,139.36	0.00
Total	152,476.09	4,910.30	201,267.60	11,906.75	7,613.90
Total Tons In	**157,386.39**				
Total Tons Out	**220,788.25**				
Total Tons	**378,174.64**				

Many varying claims have been made regarding the value and potential of the Upper Harbor Terminal. The 48 acres of City owned land include almost a mile of Mississippi River frontage. The Terminal currently employs around 15 individuals, and it provides access to barging services for 15 to 20 companies. It provides an important function to the businesses it serves, and is modestly profitable. It is, however, far from what was originally intended in terms of volume of business and revenue. This is partly related to its structural disadvantage in comparison with all other barging terminals on the Mississippi River—that is, the size constraints of the locks between St Paul and Minneapolis—which suggests that it will never be as large and profitable as downstream terminals. On the other hand, given the rising cost of petroleum and the low environmental impact of barge transport in general, there may be an overall increase in Mississippi River barge transport in the future. And this may increase the demand for UHT services as it would other terminals.

There are few if any business relationships between the Upper Harbor Terminal and nearby industrial businesses. This is because, aside from the two heavy industrial facilities that have their own private barging terminals, the small to medium sized industrial facilities on the upper riverfront would seldom need bulk commodities on the scale that justifies transport by barge. Closer ties between upper riverfront businesses and the UHT are unlikely to be built through industrial redevelopment (to the extent that it is pursued on the upper riverfront), because City industrial policy favors job-intensive production facilities over land-intensive users or distributors of bulk materials. These observations cast doubt on recent suggestions that the Terminal could serve as an economic engine to foster growth in an adjacent job-intensive industrial district.

This research supports the conclusion of the Above the Falls plan that the UHT facility can be closed at some point to pursue a higher value future that makes better use of the City's riverfront. This proposed course of action was accepted by the Metropolitan Council and MNDOT after City Council adoption of the plan. According to MNDOT staff, this was based on a subsequent analysis that concluded that closure of the UHT would have "no significant impact" on highway congestion. And barge terminals in St Paul are considered to have ample capacity to receive the shipments that currently go to Minneapolis.

Although City policy calls for the eventual closure of the Upper Harbor Terminal, there is reason to proceed cautiously.

The property is extensive, and if it were not in active use it would need to be maintained by the City of Minneapolis. Securing the site in the first year of closure would cost an estimated $365,000, and the ongoing annual holding costs are estimated to be $75,000 per year.

The current lease of the site by River Services, by contrast, generates revenues to the City of Minneapolis, and absolves the City of all maintenance responsibilities and expenditures. This suggests that closure of the terminal should be timed to coincide with redevelopment of the site—and that there is a public interest in the viability of barging services in the interim.

FREIGHT RAIL TRANSPORT

The two highest freight rail users in the area are Burlington Northern Santa Fe (BNSF) and Canadian Pacific (CP). The BNSF mainline runs north-south along the east side of the study area. It runs freight trains, as well as Amtrak, and Northstar passenger service, resulting in 40 to 60 trains per day. Shoreham Yard serves as a major BN rail yard. The CP mainline runs east-west across the northern end of the study area, crossing the Mississippi River just south of the Camden Bridge, and is one of the busiest rail lines in the state.

Both railroad companies have spur lines that serve the upper riverfront. The CP spur extends along the west side of the river from the CP rail bridge to the Star Tribune printing facility. The CP spur is also used by the Twin City & Western Railroad (TC&W), a Class III private railroad. The BNSF spur extends along the east side of the river, crossing at a rail bridge a couple of blocks north of West Broadway. This convergence of rail facilities offers upper river businesses multiple options for rail freight transport.

Based on this study's business survey and additional investigation, few industrial businesses on the east side of the Upper Riverfront use freight rail. West side usage is also very light.

Decisions with respect to mode of transportation are individually made by the businesses based on cost. The multiple rail lines in the upper riverfront area provide a competitive advantage for area businesses. A business may play off rail companies and other modes of transportation to compete for pricing even if they are located on one company's track. For example, a business could contract with CP or Minnesota Commercial on BNSF tracks. A rail option can also be used to bargain for lower trucking prices.

Rail traffic is growing regionally and nationally, 2009 was the highest volume year ever. During the last gas price spike small shipping companies went out of business, consolidated, or moved to rail. Congestion in the metropolitan area further advantages rail transport. In some cases because of this congestion, goods will be trucked away from the Cities, loaded to freight rail, and shipped to the Cities by rail.

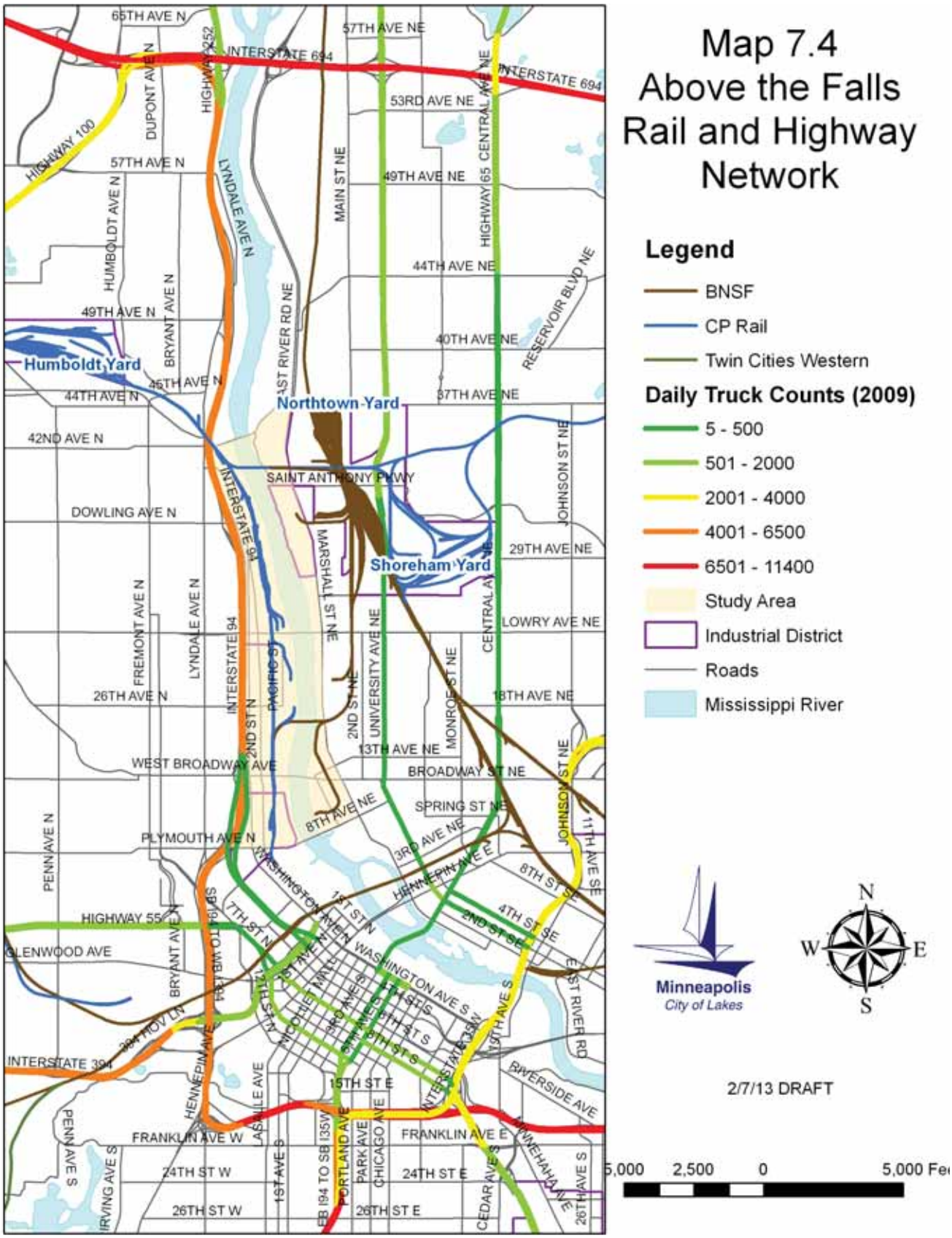
While current volumes are relatively low in the upper riverfront, rail has significant potential for future growth that is already being realized. While not suitable for all goods, it may increasingly be an attractive option as gas prices rise. Since these lines are actively used, it is anticipated that they will remain in place for the foreseeable future.

The spur lines in the upper riverfront carry low volumes, but are nonetheless an asset to area businesses. They are, however, less critical for performance of the overall network. The rail network should be robust. Changes that decrease mainline connectivity and redundancy should be approached with caution. While maintaining the option of rail can be a selling point for various industrial sites, they should be managed in a way to otherwise be compatible with existing and planned future growth and redevelopment.

It is also noted that due to the vacation of rail lines in various parts of the city – combined with recent growth in rail traffic – there are capacity concerns, including a possible bottleneck downtown, especially with Northstar and other planned commuter rail operations that may run on the same tracks.

HIGHWAY AND TRUCK NETWORK

Truck traffic in the Above the Falls area is connected to the regional transportation network via Interstate I-94 with local access at West Broadway, Dowling Avenue, and 49th Avenue N. The route from I-94 to Shoreham Yards (via Dowling Ave-2nd St. N-Lowry Ave.-University Ave-23rd Ave. NE-30th Ave. NE) is designated as part of the National Highway System as an Intermodal Connector.

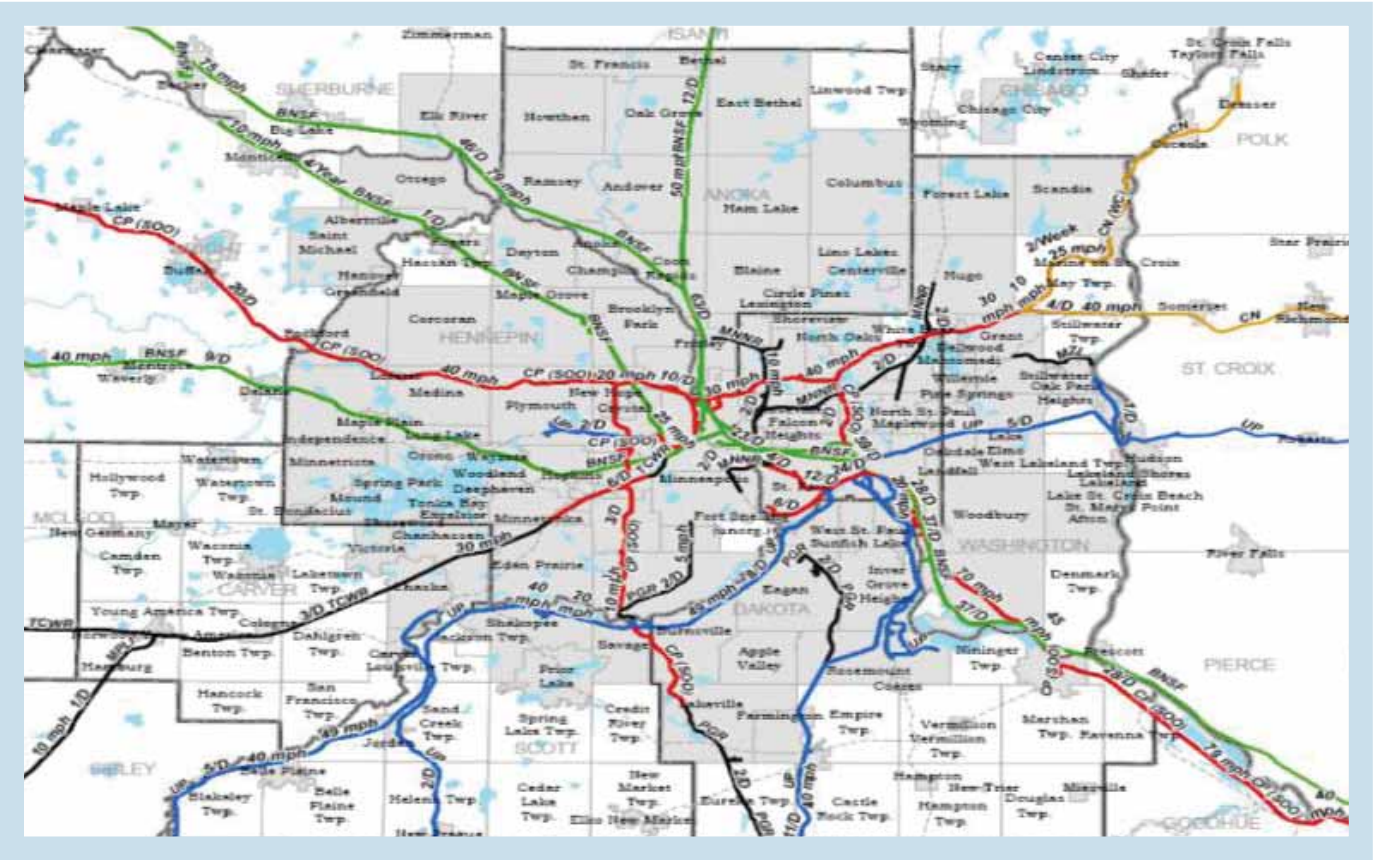

Map 7.4
Above the Falls
Rail and Highway
Network
Legend
BNSF
CP Rail
Twin Cities Western
Daily Truck Counts (2009)
5 - 500
501 - 2000
2001 - 4000
4001 - 6500
6501 - 11400
Study Area
Industrial District
Roads
Mississippi River
Minneapolis
City of Lakes
N
W
E
S
2/7/13 DRAFT
5,000
2,500
0
5,000 Fe
Humboldt Yard
Northtown Yard
Shoreham Yard
INTERSTATE 694
INTERSTATE 94
INTERSTATE 35W
INTERSTATE 394
HIGHWAY 100
HIGHWAY 252
HIGHWAY 65
HIGHWAY 55
65TH AVE N
57TH AVE N
49TH AVE N
46TH AVE N
44TH AVE N
42ND AVE N
DOWLING AVE N
26TH AVE N
WEST BROADWAY AVE
PLYMOUTH AVE N
GLENWOOD AVE
FRANKLIN AVE W
FRANKLIN AVE E
24TH ST W
26TH ST W
24TH ST E
26TH ST E
15TH ST E
57TH AVE NE
53RD AVE NE
49TH AVE NE
44TH AVE NE
40TH AVE NE
37TH AVE NE
29TH AVE NE
LOWRY AVE NE
18TH AVE NE
13TH AVE NE
BROADWAY ST NE
SPRING ST NE
8TH AVE NE
3RD AVE NE
SAINT ANTHONY PKWY
HENNEPIN AVE E
WASHINGTON AVE S
RIVERSIDE AVE
DUPONT AVE N
HUMBOLDT AVE N
BRYANT AVE N
LYNDALE AVE N
FREMONT AVE N
PENN AVE N
PENN AVE S
IRVING AVE S
HENNEPIN AVE
LASALLE AVE
1ST AVE S
PORTLAND AVE
PARK AVE
CHICAGO AVE
CEDAR AVE S
MINNEHAHA AVE
26TH AVE S
EAST RIVER RD
MAIN ST NE
MARSHALL ST NE
UNIVERSITY AVE NE
MONROE ST NE
CENTRAL AVE NE
JOHNSON ST NE
11TH AVE SE
8TH ST SE
4TH ST SE
2ND ST SE
RESERVOIR BLVD NE
EAST RIVER RD
2ND ST N
PACIFIC ST
7TH ST N
12TH ST N
15TH ST N
19TH AVE S
EB I94 TO SB I35W
WB I94 TO SB I35W
394 HOV LN

The local street network also includes truck routes on Washington Avenue, 2nd Street N, Broadway Avenue, Lowry Avenue and Marshall Street NE.

The major north-south truck routes are I-94 on the west bank and University Avenue on the east bank. Interstate 94 is one of the highest freight routes in general in the region, though volumes are higher north of I-694 than south of it. Over the past ten years, the truck traffic volumes on I-94 have increased, especially near the northern end of the study area. It is possible there is a link between the decline in UHT usage and increased truck traffic, though many other factors are likely at work as well.

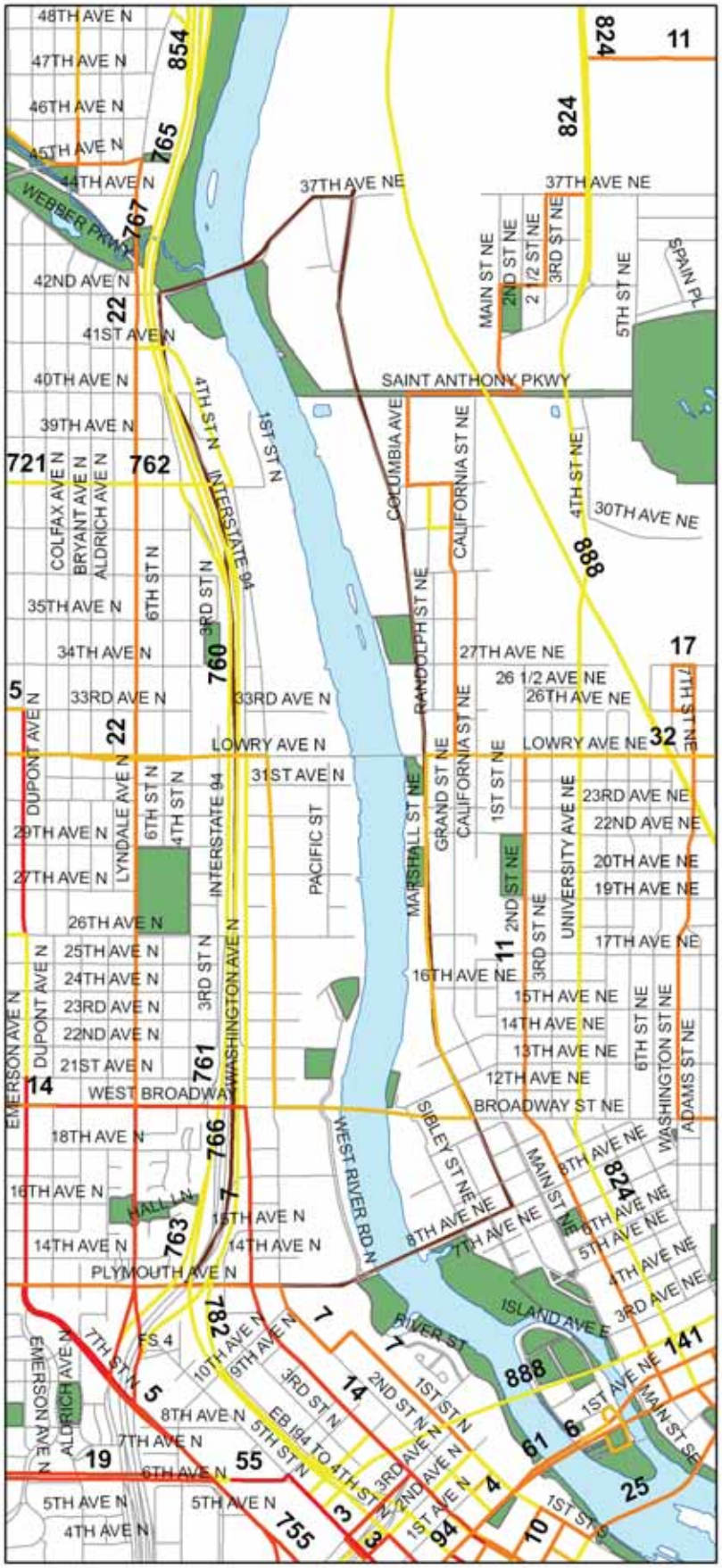
On the other hand, there has been a substantial decline in truck traffic on University Avenue, from volumes that were fairly low to begin with. Given that the road runs through residential and commercial areas, this is not necessarily a problem. It is unclear why this change has happened, though it may be due to redevelopment and change on the east bank.

At present, there generally is adequate capacity for trucks throughout the highway system, though overall system congestion may pose the challenges as it does to other vehicle traffic. Concerns have been raised regarding the volumes and safety of intersections along Marshall Street and Lowry Avenue NE. These are County routes and therefore improvements



Map 7.5: Regional Rail Network Map

DAILY TRUCK TRAFFIC COUNTS ON AREA FREIGHT ROUTES 1998-2009				
Route Name	*Location*	*1998*	*2009*	*Δ 1998 - 2009*
I-94	N OF 49th AV N IN MPLS	4,550	5,400	19%
I-94	N OF DOWLING AV N IN MPLS	4,800	5,300	10%
I-94	S OF LOWRY AV	4,900	5,500	12%
I-94	N OF PLYMOUTH AV BRIDGE IN MPLS	4,800	4,800	0%
University Ave	S OF 37th AV NE	660	530	-20%
University Ave	N OF LOWRY AV NE	660	485	-27%
University Ave	N OF E BROADWAY ST	560	455	-19%



Map 7.6
Above the Falls Transit Network

Legend

Bus Route Segments

Weekday Trips

- Less than 10
- 11 - 25
- 26 - 50
- 51 - 100
- More than 100
- Other roads
- Study Area
- Water
- Parks

Minneapolis
City of Lakes

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2/7/13 DRAFT

2,500 1,250 0 2,500 Feet

Map 7.7: Transit Map

are likely to happen through them.

There are County plans for improvements to Lowry (already implemented on the west bank) that show a much wider cross section, necessitating the removal of commercial and residential buildings along the street. At present, the City does not support this measure, and has advocated for an amendment to County plans to focus just on key intersection improvements. At present, the project has no timeline or budget.

There are also tentative plans for making Marshall Street more like a parkway while still accommodating trucks. This is supported by previous planning documents including the original Above the Falls plan and the City's Bicycle Master Plan. As with Lowry, this project had no identified timeline or budget.

Regardless, this plan acknowledges that truck traffic will need to be accommodated in the long term on local streets and parkways; the design of these facilities will need to allow for adequate turning radii while still promoting bicycle and pedestrian safety and friendliness.

TRANSIT

TRANSIT NETWORK

Existing bus service for the area is fairly limited; frequent routes are located farther into neighborhoods on both sides of the river, but the study area service is not always frequent or convenient. Service that is more frequent tends to service east-west trips, while north-south transit movement through the area is nearly non-existent. In contrast to express bus routes that run on I-35W in south Minneapolis, express bus routes in the study area that use I-94 do not currently stop at any strategic locations. That being said, it is acknowledged that there are a limited number of possible transit trip generators that exist in the study area. Residential development is infrequent and dispersed, while job centers are atypical of those best served by transit service. The study area is directly served by the following bus routes:

Route 32 – an east/west local route connecting inner ring suburbs to the west of Minneapolis with North Minneapolis and the Rosedale commercial area to the east, primarily along Lowry Avenue.

Route 14 – a north/south local route with termini in Robbinsdale and Richfield that traverses Downtown Minneapolis.

Route 11, while not in the study area, is a local route that serves areas just to the east of Marshall Avenue, connecting nearby Columbia Heights, Downtown Minneapolis, and South Minneapolis.

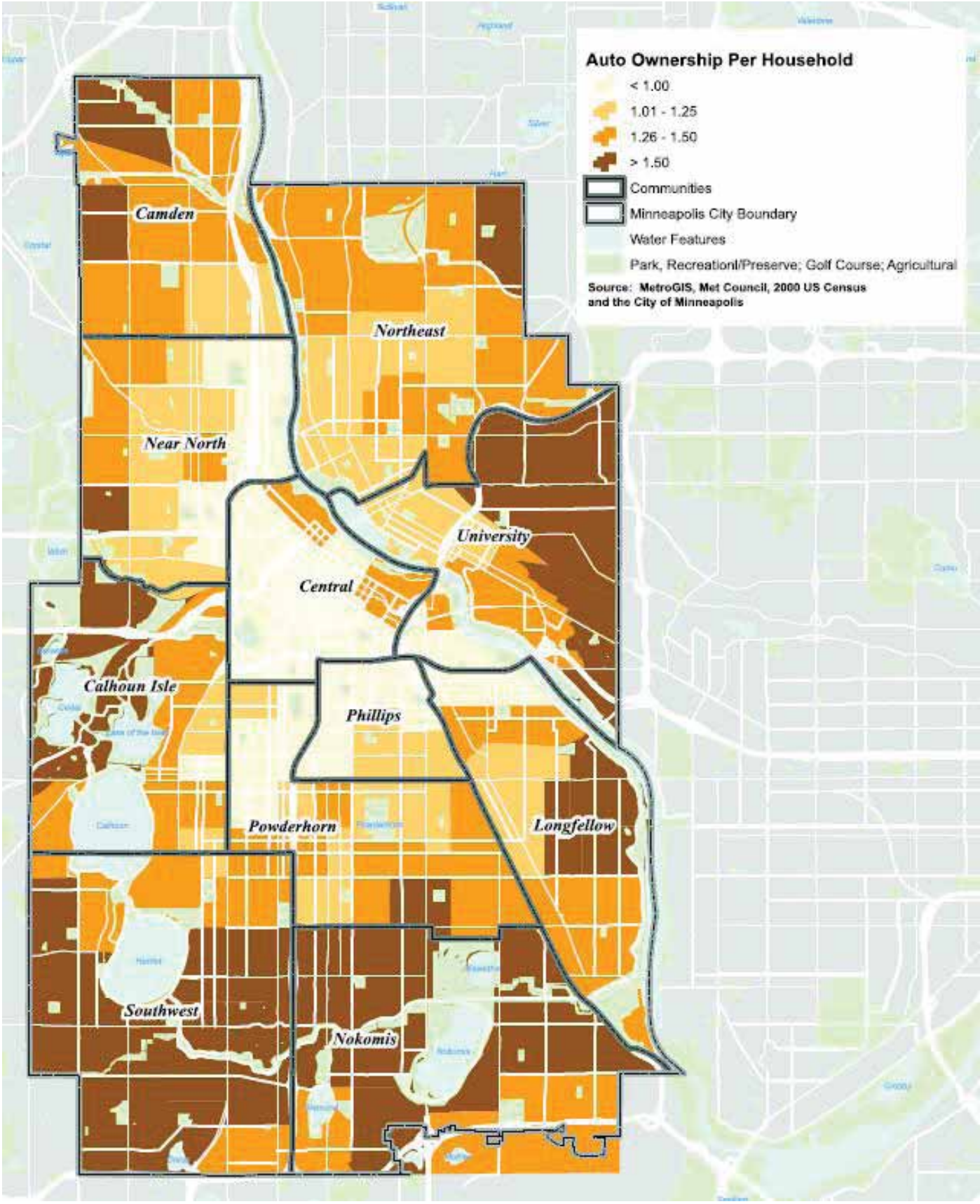
No express bus routes directly serve this part of Minneapolis.

This presents somewhat of a chicken and egg situation between transit service and future development. Improved transit service on a wide scale is unlikely to occur without increased residential and/or job density, but attracting this increase in density may be challenging without the improved transit service. If anticipated economic development is intended to serve as an employment connection for residents of north Minneapolis, improvements to the transit service will be important. Examples exist from other communities across the country where transit service was subsidized to support the early stages of a development area; however, this approach is not common in the Twin Cities for a variety of reasons – chief among them the funding strategies involved in providing such a service.

Another limitation is the lack of high frequency transit options running east-west across the study area. Not only does this limit access between North and Northeast, but it limits access from adjacent neighborhoods to the riverfront.

STREETCAR

The southern end of the study area contains a portion of the long-term streetcar network. A route including a combination of Washington Avenue North and West Broadway Avenue is identified for further study in the Minneapolis Streetcar



Map 7.7: Auto Ownership

Courtesy of ACCESS Minneapolis

Feasibility Study. Just east of the study area, Central Avenue NE was also identified in the report as a possible streetcar route. The Central Avenue alignment is currently undergoing an Alternatives Analysis aimed at determining the best transit mode for the corridor, with an expected local decision sometime in 2013. As discussed elsewhere in this report, lack of a direct transit connection to the upper riverfront area and in particular on the west side of the river, is a hindrance to further development. However, the building blocks are in place for improvements to the transit network. At this time, funding is not in place to continue study of the Washington Avenue and West Broadway streetcar alignment.

ARTERIAL BRT STUDY

In 2011 Metro Transit completed a study of transit routes in the Twin Cities that could benefit from enhanced bus rapid transit service. The study identified 11 routes that already experience high ridership, but have an anticipated need for long term investment and improvement. Consistent with the findings of the Minneapolis Streetcar Feasibility Study, the Arterial Transitway Corridors Study identified Washington Avenue North and West Broadway Avenue as a corridor of need, as well as the Central Avenue NE route.

ACCESS MINNEAPOLIS

The study area has some of the lowest auto ownership rates in the City. The portions of the Near North community that front the Mississippi River in particular have very low ownership rates. While this part of the study area has a general lack of transit service, it is noted that aside from a few pockets of residential the areas east of I-94 are not densely populated. This reality further underscores the need to invest in a transportation system that serves a diversity of modes.

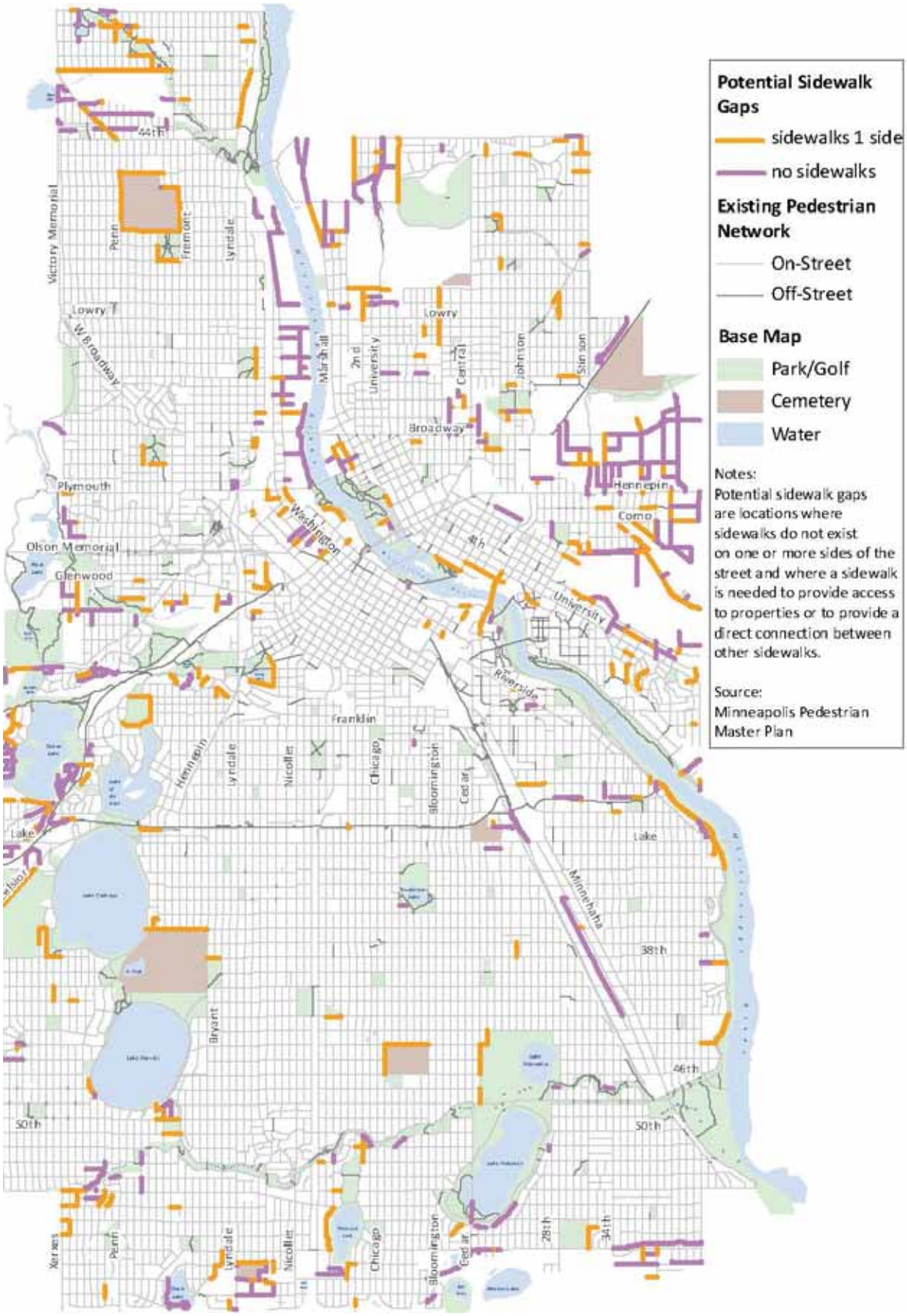
In recent years, two supporting documents to ACCESS Minneapolis were adopted by the Minneapolis City Council. The Pedestrian and Bicycle Master Plans identify needs and priorities for increasing the ability of Minneapolis citizens to travel through the city through improvements to infrastructure, policy, and programming. Of particular importance to this plan are the network gaps identified in both documents. Typical of industrial districts in the City, the Pedestrian Master Plan identifies a high number of sidewalk gaps within the study area. Regardless of primary street use it is a goal of the Pedestrian Master Plan and this document to provide for pedestrian movement on all public streets. Similarly the Bicycle Master Plan identifies priorities for infrastructure investment throughout the city. Proposed routes for bicycle facilities are largely congruent with the Riverway Street network, discussed later in this chapter.

ROADS AND BRIDGES

GRAND ROUNDS

Since its inception in the 1880s the Minneapolis Park Board has had a long record of success in developing parks, parkways, and trails, including the total system of integrated parkways known as the Grand Rounds. The system links a series of greenway amenities surrounding the City's water bodies, including the Chain of Lakes, Minnehaha Creek, and East and West River Parkway. Park planners have long recognized the natural affinity and interest people have in water features. Given the steep topography of the Lower Gorge, the East and West River Parkways along the Mississippi could be developed early in the City's history without vying with competing land uses. The Central Riverfront, however, was the industrial heart of the Minneapolis for a hundred years; yet, when milling declined and ended at the falls, most of the riverbank became vacant and available. In 1989 the Park Board and other agencies celebrated the extension of West River Parkway through the historic milling district, past the Hennepin Avenue Bridge, to Plymouth Ave. This plan now addresses some of the final links in the Grand Rounds system: an extension of park amenities north along the Mississippi River.

In addition to parks and recreational trails, the Minneapolis park system continues to develop parkways for passenger vehicles. Original parkways were first constructed as carriageways for horse-drawn vehicles, with the resulting streets setting a clear boundary between public and private space. Park Board standards call for narrow drive lanes, restricted connections to local streets and arterial thoroughfares, and no commercial truck traffic. However, the design of West River Parkway should reflect the industrial nature of the adjacent land uses. Truck traffic will likely need to be allowed and accommodated on this future roadway. Furthermore, connections to local streets are an important implementation



Map 7.8: Sidewalk Gaps

step in better connecting neighborhoods of North Minneapolis to the River. A key objective for the Upper River plan is to extend West River Parkway up the west bank to connect with Webber Parkway and North Mississippi Regional Park, and connect to the east bank via the Camden Bridge to St. Anthony Parkway.

On the east bank, Marshall Street is the logical boundary for new riverfront parks, and as such, there is a desire to convert Marshall into a parkway. As part of a complete Riverway Street system, improvements to streets leading to the riverfront will encourage local identification with the river and extend the benefits of new park amenities back into adjacent neighborhoods. Regional access routes for vehicles can be provided on thoroughfares with river bridges. Previous plans have called for improved local access streets, referred to as "greenway windows" or "gateway streets," that would include new landscaping and infrastructure that facilitates pedestrian and bicycle movement to the river.

RIVERWAY STREET SYSTEM

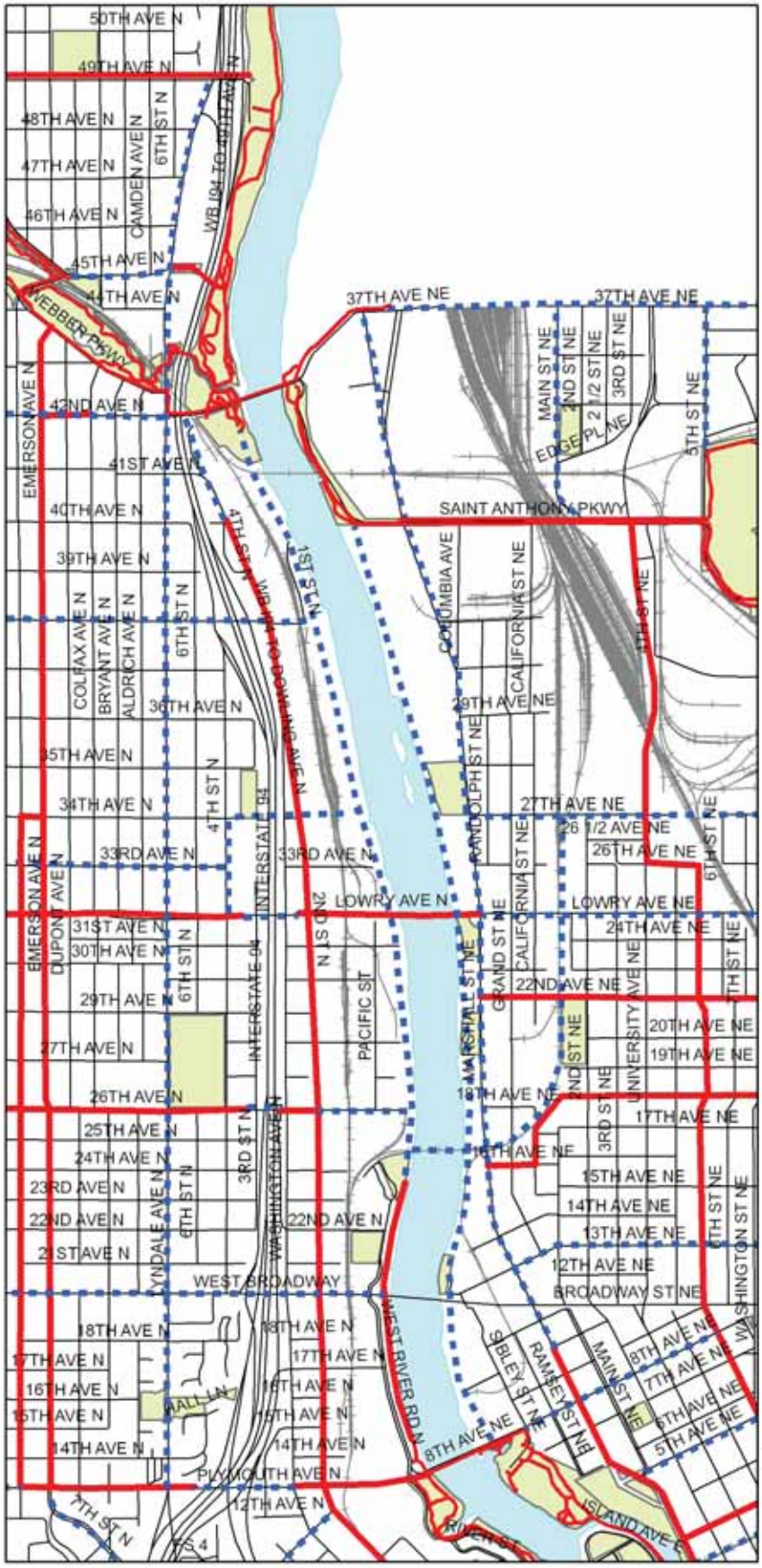
The plan envisions a system of "Riverway Streets," with enhanced streetscapes and signage that will lead residents and visitors to riverfront parks. This concept is also referred to a Greenway Streets and Green Corridors in the RiverFirst plan. This system includes major thoroughfares with river crossing bridges, as well as local streets that provide the most direct routes across north and northeast Minneapolis. Regional routes on high traffic thoroughfares should have enhancements that are oriented to vehicular way-finding, while local routes should have improved facilities for pedestrians and bicyclists. Employing a common palette of streetscape elements will identify the streets leading to and parallel with the river as a unified system; especially important is the installation of signage specifically designed to direct people to upper riverfront parks.

The intent is to create a system of connectors to the riverfront that is safe, attractive, and accessible to all. A number of these streets are also Commercial and Community Corridors, which means that they are guided through broader city policy for new growth, density, and development of residential, commercial , and mixed use development. Additionally, many of these are also transit corridors, supporting development and accessibility.

Riverway Street elements may include:

- Directional signs to upper river parks
- Decorative pedestrian-level lighting
- Bicycle infrastructure
- Enhanced boulevard plantings
- Additional street tree plantings

The Riverway Street typology is based on cross-sections found in the Street and Sidewalk Design Guidelines, developed as part of the ACCESS Minneapolis Ten Year Transportation Plan. In this document, cross-sections are identified for roadways based on right of way width, street purpose, and priorities for pedestrian and bicycle improvements. It is recommended in this plan that space and safety for pedestrians and cyclists be enhanced on identified Riverway Streets ahead of the need for automobile throughput. That being said, each project should be analyzed on a case by case basis taking into consideration such elements as connecting parks and residents, the freeway system, current and future development, and freight circulation patterns.



Map 7.9
Above the Falls Bicycle Facilities

Legend

- Existing or Funded
- Planned
- Roads
- Parks
- Railroad
- Mississippi River

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City of Lakes

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2,300 1,150 0 2,300 Feet

The best opportunity for implementing these improvements is when facilities come up for complete reconstruction. However, as Riverway Streets receive maintenance through for instance a mill and overlay, lane reconfiguration should be considered to bring roadways closer to conformance with the goals of this plan. Connections outlined in both the original Above the Falls plan and the Bicycle Master Plan that should be prioritized for transition toward a Riverway Street typology include:

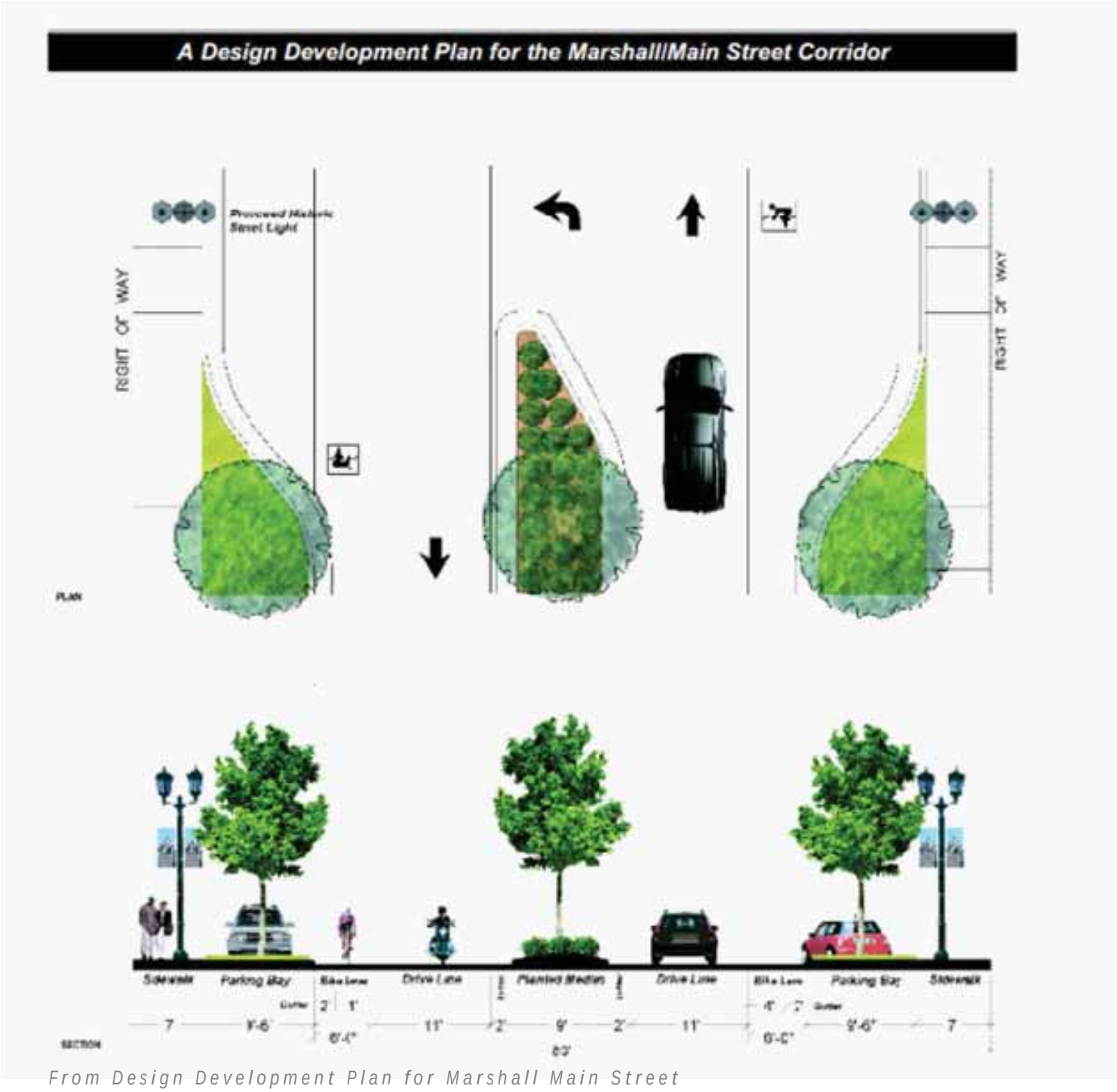
On the West Bank:

- Humboldt Greenway
- Webber Parkway
- 42nd Avenue North
- Dowling Avenue North
- 35th/36th Avenue North
- 33rd/34th Avenue North
- Lowry Avenue North
- 29th Avenue North
- 26th Avenue North
- West Broadway Avenue
- Plymouth Avenue North

On the East Bank:

- St. Anthony Parkway
- 27th Avenue Northeast
- Lowry Avenue Northeast
- 22nd Avenue Northeast
- 18th Avenue Northeast
- 14th Avenue Northeast
- 13th Avenue Northeast
- 8th Avenue Northeast

While not currently in the bicycle master plan, one additional connection was brought up during the public involvement process: a connection from 16th Avenue North to the riverfront. This would allow for access in an underserved area between the busy corridors of Broadway and Plymouth. The development in the area was developed to accommodate such a connection when it was possible to do so. This should be considered in future studies of and improvements to the area.



From Design Development Plan for Marshall Main Street

PARKWAYS AND TRAILS

This plan recommends the extension of West River Parkway 2 miles and the redesign of Marshall St NE as a landscaped boulevard. Continuous parks along both banks will be accessed by over 6 miles of new bike lanes and recreational trails. West River Parkway will connect to Webber Parkway on the west bank and the entrance to North Mississippi Regional Park. On the east bank, the new Marshall Boulevard will connect Boom Island and the central riverfront to St. Anthony Parkway and riverfront parks in Anoka County.

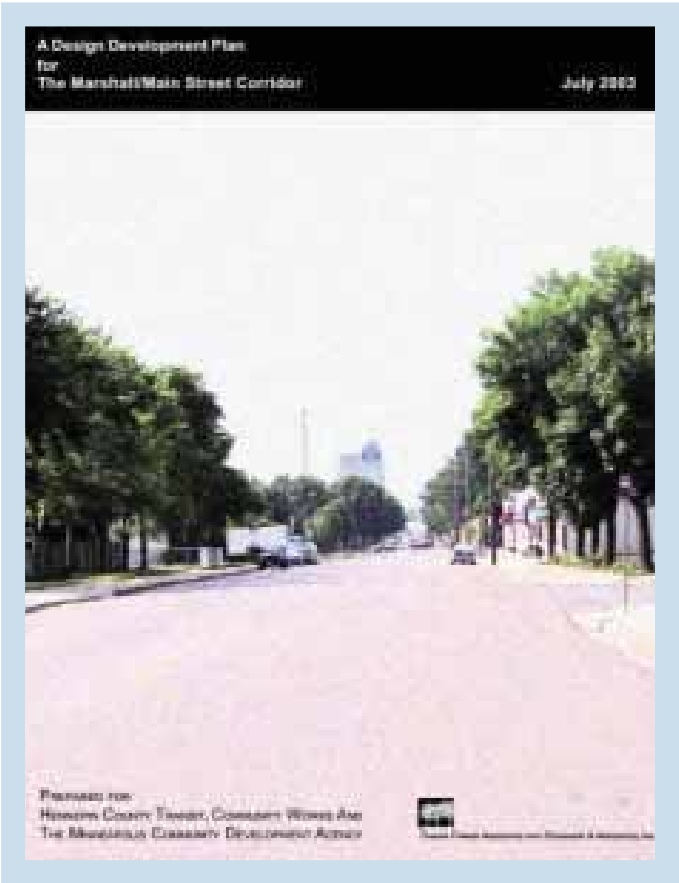
A preferred typical parkway cross section for the new west bank portion of the parkway is provided below. This is based on the model of parkways located around lakes and along the river in other parts of Minneapolis.

Where possible, the trail system should be located close to the riverfront, to provide public visual access to the river. However, due to variations in topography, and the need to make connections around existing uses, the trail's route may vary. Where there is space, pedestrian and bicycle traffic should be separated, for safety reasons.

The route of the Mississippi River Trail, a continuous 3,000 mile route along the entire Mississippi River, passes through the study area. The route is the state's first designated state bikeway. On the east bank, the route follows Marshall St NE. On the west bank, it goes along 2nd St N, 22nd Ave N, and the existing trail between 22nd Ave N and 8th Ave N along West River Road. As the parkway and trails are developed, they will be incorporated into this great national-scale amenity.

WEST RIVER PARKWAY

The extension of West River Parkway northwards past the existing terminus south of the Burlington Northern rail bridge will require extensive land acquisition and redevelopment to be fully realized. Below is a description of the approach for the various segments:



- **Between 26th Avenue N and Lowry Avenue N**, the route can potentially follow an interim alignment of Pacific Street, with connections on either end. There may also be an interim riverfront pedestrian and bicycle connection along the riverfront, as shown in the RiverFirst vision. Creating a more final alignment, however, would require discontinuing barging operations, purchasing and replatting lots, and relocating transportation access. While this is an important connection, it is likely to be a long term plan. The land uses along the 26th to Lowry section are guided to remain industrial. However, they may well transition to lighter, cleaner, and higher value industries at the time the area is redeveloped.
- **Between Lowry Avenue N and Dowling Avenue N,** the route will pass through the redeveloped Upper Harbor Terminal site. As the current owners, the City will work with the MPRB to identify the final alignment that creates space for parks and trails, as well as development. The northern and southern ends of the alignment will be determined by how the alignment can fit beneath Lowry Avenue N and connect on the northern end to the Grand Rounds
- **North of Dowling Avenue N**, the route remains somewhat undecided. The need to connect to the Camden Bridge Grand Rounds route presents some challenges, and may require site acquisition and re-

configuration of right-of-way. This again will likely be a long term project, with an interim route along 2nd Street North until then.

The new parkway connection will likely accommodate a mix of traffic, including trucks, though effort should be made to provide access for adjacent development's parking and loading off of side streets and access drives rather than the parkway itself. The frontage along the parkway should be mainly landscaping and pedestrian space. Wherever possible, curb cuts off the parkway itself should be minimized or eliminated.

Before complete reconstruction can take place and while land acquisition is ongoing, interim improvements and a short-term route on the existing street network should be pursued. Both 2nd Street North and Pacific Street North could play an interim role in the routing of West River Parkway.

26TH AVENUE CONNECTION

The future route of the parkway intersects with 26th Avenue N, a local Riverway Street offering the only existing bridge over the interstate between Lowry and Broadway. This connection provides an important link for North Minneapolis residents to the Mississippi River, and is the focus of a RiverFirst priority project. At present, an enhanced bicycle facility is being developed, consistent with the City's Bicycle Master Plan. Additional enhancements can provide improved streetscape and other amenities.

While the extension of the parkway north of this point along the river is likely a long term project (see above), there may be the possibility of at least making a link southward to the existing termination point of West River Road, linking 26th Ave N southwards to the Central Riverfront parkway and trails.

MARSHALL STREET NE

Paralleling the river from Grain Belt to the Xcel Riverside Plant, Marshall Street NE serves a variety of purposes in the local and regional community. It is a thoroughfare connecting downtown and northeast Minneapolis to Anoka County; a residential street and a place of business; a commercial truck route; a park border; and commuter bicycle facility. Marshall is also currently designated as the Mississippi River Trail route through the study area.

In 2003, Hennepin County completed *A Design Development Plan for the Marshall/Main Street Corridor*. This plan was designed to provide additional guidance as to how to implement the vision for Marshall St NE as described in the original Above the Falls Plan. One of the chief recommendations was to convert the street from four to three lanes (two lanes with an intermittent center turn lane), which calmed traffic while maintain sufficient vehicle capacity. This conversion was completed, and is the current configuration. This is a change from the original Above the Falls Plan, which assumed four lanes would remain. Off-peak parking in the outer lanes was converted to separate parking lanes.

The Marshall/Main plan recognized that it may not be possible to fully accommodate both on-street parking and bicycle lanes on the new cross section without widening the right of way, particularly along the narrower portion of the street north of 14th Avenue NE. It recommended incremental property acquisition along that segment to allow for the establishment of on-street parking bays, which would in turn allow space for bicycle lanes and greening of the corridor. It was indicated that no existing source of funding was readily available for these acquisitions, so they would depend on identifying a new source. Until then, there would be a tradeoff between how these various elements were incorporated in the corridor.

This right-of-way limitation still exists, and the acquisition plan remains a long term and unfunded goal. Additionally, there has been subsequent discussion regarding the findings of the County study, and some difference of opinion as to how different modes can be accommodated on Marshall, including variations in lane widths. As a result, this plan will not attempt to finalize a new cross section for Marshall, but rather describe the elements that need to be taken into account as opportunities emerge. The Marshall St NE corridor should accommodate:

- Parallel off-street trail (multi-use or separate facilities for pedestrians and bicycles)
- On-street accommodation of bicycle traffic, preferably dedicated lanes
- Enhanced green boulevards on both sides of the street

- Adequate accommodation of traffic, while maintaining a safe pedestrian environment and crossings
- Using the park space on the river side of the road to accommodate off-street trails

It is possible the trail connecting parks along the east bank may be designed to be configured around existing and future uses. Ideally, there will eventually be paths both along the riverfront and near Marshall St NE. In the short term, it may be more feasible to implement the trail connection along the road first. However, if there are opportunities to establish public ownership and/or easements along the riverfront, they should be pursued. While connectivity along the riverfront may remain a long term goal, it likely will be achieved using at least some incremental acquisitions such as these.

To accomplish these goals an increase in right of way width may ultimately be necessary, while interim improvements through lane restriping could serve as a positive interim improvement. Ultimately, the new Marshall is as narrow as possible to avoid significant encroachment into the riverfront parks, while still providing necessary bicycle lanes and a planting strip to buffer housing on the east side. Parking bays may be provided along portions of the street for use by park visitors and area businesses, while allowing the green of the park to reach out to the street with trees and other plantings.

There may be some flexibility in how bicycle facilities are accommodated along Marshall. While on-street access should be a priority, it may be more feasible to construct an adjacent off-road multi-use trail on the river side (west) of the road, through existing and future parkland. While the plan does envision a riverfront trail through the planned parkland, interim conditions and access realities may mean an off-road route along Marshall provides access sooner and more completely than the eventual riverfront route. Additionally, it may be a more feasible condition when working with existing property owners.

For more information on the interaction between Marshall and proposed park development, see Chapter 5.

BRIDGES

Bridges crossing the river are important connections in the system. The recently constructed Lowry Avenue bridge has significant bicycle and pedestrian facilities, and the Camden Bridge's facilities have recently been refreshed. The Plymouth Avenue and West Broadway Avenue bridges could benefit from more pedestrian and bicycle friendly retrofits. One important note regarding the bridges is that there should be accommodation of adequate multi-use trails under them, to provide connectivity along the riverfront. Additionally, there should be connections down from the bridge itself to the adjacent parkland and trails as they are developed on both banks.

Railroad bridges also factor into this area. The Burlington Northern rail bridge, which currently contains a lightly used rail spur, may be converted at some point to add to this system. There may also be a potential to accommodate a facility attached to the CP Rail bridge farther north – which is a main line and will remain actively used – but that may be a longer term project.

STREET NETWORK RECONFIGURATION

While the street network on the east bank is largely an extension of the existing grid (with a notable exception around the rail yards), the west bank system is more broken up. In particular, limited crossings over Interstate 94 and the parallel railroad tracks constrict both motorized and non-motorized traffic.

The Riverway Streets concept provides a network for connectivity east-west between the neighborhoods and the river. In addition to these streets, it worth maintaining grid connections on the streets between the interstate and river, even if they do not cross over the interstate into adjacent neighborhoods. Connectivity within this area helps to establish pedestrian accessibility, and reduces the potential for large buildings and blocks that limit access to the river.

North-south, the west bank has other challenges. Washington Ave N and 2nd Street N converge in the northern half of the study area, creating a number of small, substandard parcels that are unlikely to develop with high value uses. Additionally, interstate access is limited – Dowling Avenue N is one of only two interchanges (Broadway being the other), and it does not even connect over the river to Northeast Minneapolis. Lowry Avenue, a national highway, truck route, and connector across the entire width of the city, has no interstate access.

It is possible to envision some long term scenario where interstate access is reconsidered and Washington and 2nd are reconfigured to better serve the area and to present more developable parcels. Extensive additional study would be needed to determine the specifics of any such change. At this point, this plan just identifies it as a potential future opportunity.

RECOMMENDATIONS

TRANSPORTATION

1. Pursue the closure of the Upper Harbor Terminal, and provide assistance to mitigate the economic and traffic impacts of this closure, while preparing the site for redevelopment.
2. Encourage the development of good quality, high-frequency, mass transit options within the study area and in adjacent neighborhoods, including improved east-west connections between neighborhoods and the river.
3. Continue to maintain existing freight infrastructure, including truck and rail, with a focus on meeting the needs of area businesses and minimizing impacts on residential areas.
4. Establish a Riverway Street system, with common streetscape elements and enhanced bicycle and pedestrian facilities, to provide access to the riverfront from adjacent neighborhoods.
5. Develop a consistent system of wayfinding and signage to direct people to riverfront parks and trails as they are developed.
6. Ensure consistent river access with public right-of-way developed on the regular street grid wherever possible.
7. Support strategies to enhance the attractiveness and safety of the Riverway Street system, including pedestrian scale lighting, traffic calming, and enhanced streetscaping, and improved public safety presence along the corridors.
8. Develop an interim parkway route along the west bank, following existing streets such as Pacific Street N and 2nd Street N, to provide system connectivity in the near term.
9. As opportunities present themselves, acquire land for and develop the final parkway route along the west bank, from its current terminus northward to North Mississippi Regional Park.

10. When feasible, convert the BN Bridge to a pedestrian and bicycle facility linking both banks.

11. Reconstruct Marshall Street as an accessible boulevard, with enhanced landscaping, bicycle lanes and/or off-road multi-use trails, and other amenities.

12. Support the development of riverfront trails, with interior connections made where necessary to provide system connectivity.

13. Incorporate amenities along trail routes to serve bicyclists and pedestrians, including but not limited to air pumps, water fountains, Nice Ride stations, restrooms, rest stops, scenic overlooks, bicycle parking, and wayfinding.

14. Explore options to rationalize the street network and interstate access on the west bank, potentially combining Washington Avenue N and 2nd Avenue N alignments and/or reconfiguring interstate access to improve overall traffic flow and increase redevelopment potential of nearby sites.

15. Pursue the development of the Water Street connection, to serve Sheridan Park and the riverfront Grain Belt development site.

16. Reconstruct Technology Drive and other industrial streets as needed to provide access to important office and industrial development sites.

17. When feasible, pursue burying power lines and other above-ground utilities underground, preferably in public right-of-way.

18. Pursue shared and district parking strategies to address parking demand in busy areas, including areas with dense development and/or destination uses.

ENVIRONMENTAL RESTORATION

1. Continue to monitor known sites of soil and groundwater contamination.

2. Support the investigation and cleanup of contaminated sites, particularly with site redevelopment or conversion to parkland.

3. Utilize best practices, such as soil bioengineering, to stabilize and revegetate banks and slopes along the upper riverfront.

4. Create a vegetated shoreland buffer and wildlife habitat through landscape restoration techniques in new parks along the upper riverfront.

5. Bring neighborhood residents to the river by taking opportunities to connect the upper riverfront's wildlife habitat corridor to perpendicular or adjacent open spaces and greenway corridors.

6. Support the development of river edges that can accommodate changes in water levels, including flooding.

WATER QUALITY AND STORMWATER

1. Whenever possible bring sites along the upper riverfront into compliance with Minneapolis stormwater ordinances and the Mississippi Watershed Management Organization's (MWMO) stormwater standards.

2. Continue to pursue a range of stormwater best management practices in new development and parks to meet high standards for stormwater retention and treatment.

3. Explore ways to attractively incorporate stormwater features into the public realm, through the use of green infrastructure such as: ponds, rain gardens, vegetated swales, water features, green roofs and other strategies.

4. Support the retrofitting of existing sites with stormwater best management practices and the reduction of impervious surface cover along the upper riverfront.

5. Consider partnerships and coordination between private development, parks and the MWMO to maximize the efficiency of stormwater systems, monitor changes in the ecosystem, explore shared solutions, and increase the greening of the public realm.

6. Coordinate the provision of stormwater management and open space to provide public realm connectivity and preserve scenic views.

CHAPTER 8

Community and Economic Development Plan

PRINCIPLES AND GOALS

Community and economic development are both important aspects of the vision for the upper riverfront. There are several main components of this vision, including:

- Improving community livability and strength. Many surrounding communities have numerous challenges, and are disproportionately impacted by negative economic trends, crime, and other social factors. A high quality riverfront amenity, along with new compatible development has the opportunity to strengthen the community fabric, and make this area more vibrant and attractive.
- Addressing equity concerns. The populations in the adjacent neighborhoods also tend to be lower income and more diverse than many other areas of the city. At the same time they lack park and trail amenities enjoyed by other neighborhoods. This disparity needs to be addressed, especially in light of other related disparities, including economic and health factors.
- Advancing economic opportunity. Although there are some employment options in the area, they could be more numerous and higher quality. Additionally, many of the existing jobs are held by those not living in the area. New jobs for residents could help address large existing employment disparities.
- Building on existing programs and projects. Because of the numerous challenges facing nearby neighborhoods, there are already a variety of efforts and interventions underway. Leveraging existing efforts and assets to improve the community will continue to be a priority.

Approaches for addressing these concerns are discussed below.

COMMUNITY DEVELOPMENT AND HOUSING

RESIDENTIAL NEIGHBORHOOD IMPLICATIONS

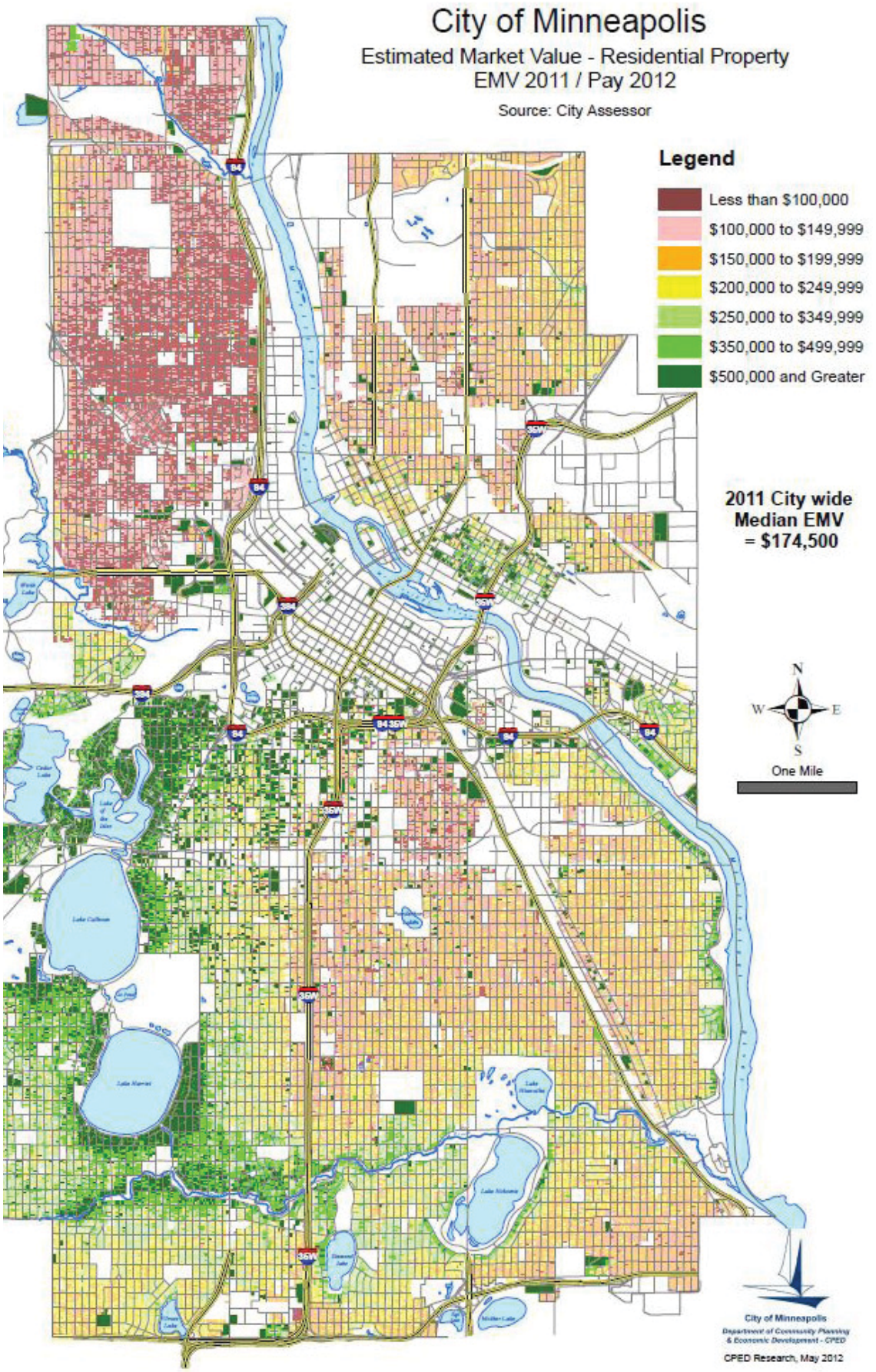
There are several potential impacts to residential areas nearby based on the development of new housing and mixed use areas along and near the upper riverfront.

One primary opportunity is the possibility of expanding housing choices. The current housing stock nearby is mostly low to moderate value. New higher end "move up" housing options with riverfront amenities could diversify the mix.

However, lower income or affordable development might compete more directly with existing housing stock, which has a high vacancy rate. This could potentially have a negative effect. However, a mix of affordable housing might still be a consideration, due to concerns about equity and access.

Another possible positive impact is that new residential development could help support new commercial development. Current residential development does not have the critical mass or buying power to support significant new businesses in some areas. However, it may require a significant amount of new residential development to really make a difference.

New development could also trigger impacts on schools, social services, and other public services, depending on the number and type of new residents. These could be positive or negative, depending on the scenario – positive in that they might help build support and tax base for underutilized assets, negative in that they may incur additional costs to some of these systems.



Map 8.1: Estimated Value of Residential Property

IMPACTS ON PROPERTY VALUES

Research suggests there may be some positive impacts on nearby property values from new development. However, this is likely to be slight and very localized (within 1 block or less of the new development). New higher value residential has the possibility of lifting nearby values. Lower value residential might actually have the opposite effect, as it may be competition and dilute the supply.

Parks have a more demonstrable impact on property values, though it still remains localized. Job generating uses tend to be neutral with regards to impacts on adjacent property values.

Generally speaking, residential development frequently pays more property taxes per acre than industrial or office development. However, this is frequently outweighed by the fact that residential development typically consumes more governmental services per unit than do industrial and office developments.

There is also the general assertion that residential development benefits more directly from riverfront park access, in terms of the recreational and amenity value. This is difficult to quantify, since many of the benefits gained are intangible. The research done for this plan update showed that a variety of uses may benefit directly from access to parks. Residential uses near water in the city appear to have a higher premium on value over nearby residential, as compared to non-residential use.

IMPACTS ON PUBLIC SAFETY

Planning theory and practice suggests that one of the values of well-designed urban residential development is that it provides more "eyes on the street" and therefore much more natural surveillance of a residential area than an employment use would. Conversely, industrial areas tend to have lower number of people in general, and thus less opportunity for crimes against people; statistics show that the industrial areas are some of the lower crime areas on the west side of the river.

Surveillance and monitoring on behalf of public safety should be a consideration with any development scenario, including ways to develop a 24-hour presence – both through design and actual presence of people.

It is worth noting that the current level of reported crimes along the riverfront is quite low, in large part due to the lower number of people and the lack of access to the riverfront that characterizes the area. The addition of public amenities in some way may increase the opportunity for crimes. This should be carefully taken into account in the design of new development and parks.

SUPPORTING RESIDENTIAL DEVELOPMENT

There are various efforts underway now that provide some benefit for residential development in the general area, though most are focused away from the upper riverfront into the more heavily residential adjacent areas.

Affordable housing programs are among the most prominent, with the most funding options. The City's housing policy does not support concentrating new affordable housing in areas with high poverty rates. As of this plan's writing, the main portion of the study area impacted by this restriction is the Hawthorne neighborhood on the west bank. Investment in new affordable housing may be supportable in other portions of the study area.

Affordable housing funding also supports the maintenance and stabilization of existing affordable housing units. Since there is little housing currently within the study area, this mainly impacts adjacent neighborhoods where there is existing affordable housing.

There are a number of resources available for affordable housing, from local, state, and national levels. There are far fewer resources available to subsidize market rate housing. Because of this, affordable housing may be a more natural "pioneer" development in areas without a strong market for new housing. This would be a departure from previous planning efforts that assumed new development would be primarily high end luxury units, but may be a way to make change happen if opportunities become available but market forces are still lagging.

One challenge for new housing is that transit service in this area is fairly weak. Particularly for affordable units (both in terms of competitiveness for funding and utility to residents), good transit service is frequently seen as a requirement. This will need to be addressed as plans for development proceed.

Additionally, as strengthening existing residential communities in adjacent neighborhoods remains a high priority, it may be counterproductive to filter away resources for new residential development near the riverfront. Therefore, if new residential development is to occur, it is important that additional resources be identified.

EMPLOYMENT GROWTH AND LINKAGES

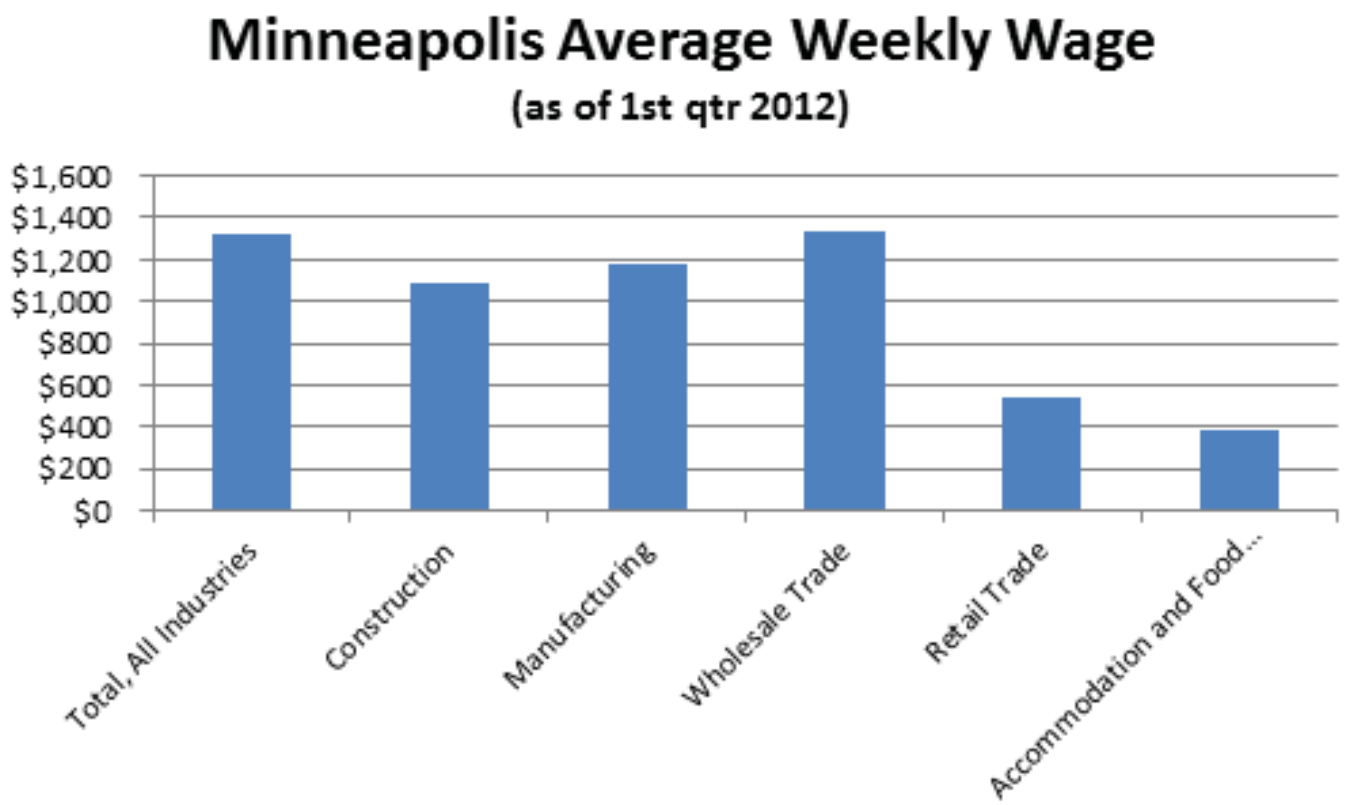
ECONOMIC DEVELOPMENT APPROACH

This area has traditionally been a source of employment, especially for blue collar workers in manufacturing, construction, and other similar fields. These types of jobs typically pay good wages and offer opportunities for people with limited higher education – a good match for nearby working class neighborhoods, and an important reason for the prosperity and upward mobility of past waves of residents there.

The area is also configured in a way that is advantageous to industry. Interstate 94 provides both an important freight and commuter connection for businesses, and a buffer between industrial areas and the adjacent residential neighborhoods. Rail and barge provide other freight options. The central location of the study area is convenient for businesses needing connections to all parts of the region. And the close proximity to Downtown provides access to Downtown customers and suppliers without the higher rents. The resulting industrial district is fairly strong, diversified, and active.

The focus of the economic development efforts for this area is building on these strengths and assets to further improve the economic health of the area, and to create good office and light industrial jobs. The value of these jobs is seen in a comparison of wage levels by industry in the city in the table below – compared to other traditionally blue collar service occupations, jobs found in industrial districts pay substantially better on average.

In addition to jobs, strengthening office/industrial development benefits the city in other ways. Increasing the non-residential tax base decreases the property tax burden on residential areas, which have bourne an increasing share of the tax in recent years. Industrial and office uses also use less government services than residential on average. And from a system perspective, jobs in the region's core area help support as strong and extensive transit network, which is built largely around commuting patterns.



At present, the majority of the jobs in the area are held by people who do not live in the city. While this is not unusual in today's world – where a dispersed workforce is the norm – it does not have to be taken as unchangeable. Job growth has potential to benefit surrounding residents, especially lower income populations with higher than average unemployment rates and limited education. Furthermore, proximity to transit makes it more possible that these residents can get to jobs, since transportation to suburban job centers is often a barrier.

The area also has some retail and commercial that serves the area. While there is no major commercial district within the area, businesses such as Psycho Suzi's and Broadway Pizza serve as destinations that attract people to the area and the riverfront. Additional retail and service growth will be encouraged, but the current market condition suggests that it will likely follow other development rather than be the lead.

JOB RETENTION AND EXPANSION

Part of the updated direction for economic development in this area is a refocusing of the relationship with existing businesses. Since large scale buyout of existing uses is not feasible or necessarily desirable, the new focus will be on working cooperatively with existing businesses to make improvements to their property. This may include greening of sites or operations, or other improvements to the building. The purpose is to improve the business' appearance and compatibility with other uses, as well as improvements to the environment and general sustainability. Support for this is important for overall plan goals, as lack of attention to and support for existing uses can result in disinvestment and decline.

Since the area is attractive for employment uses and the industrial area is already vital and active, development efforts can encourage additional high value, job intensive uses. This may be through supporting the growth and expansion of existing businesses, or attracting new ones to the area.

Because of value of land, supporting low intensity uses that take up a lot of space and employ very few workers is not desirable. Some heavy industry with these characteristics may be present, but is not the model for future development. Due to the constrained availability of land in this area, uses that maximize productive space and jobs per acre are highly

preferred.

Some degree of public funds is likely to be involved in a major new job generating project in this area. And with public assistance to businesses, there is an opportunity to encourage the businesses to offer living wage jobs to their employees, providing economic stability. Additionally, there is an opportunity to encourage them to continue to expand their hiring to meet agreed-upon targets.

EMPLOYMENT LINKAGES

Jobs definitely are needed in the study area. While the unemployment numbers citywide range from five to eight percent, recent data suggests that the unemployment rate in some neighborhoods near the study area may be 20 percent or more. The effective impact may be even greater, as these areas also have significantly lower than average workforce participation. This reflects in part the large racial and ethnic employment disparities present in the city, and contributes to a host of other challenges facing the area.

However, due to challenges assimilating some unemployed and underemployed residents into the workforce, it is not automatic that new jobs will be readily available to them. These include lack of access to job posting information, limited transportation options, and lack of workforce readiness. Furthermore, some jobs may need customized skills that require specific training for prospective employees.

Job training and job linkage programs will be needed to help with the transition. These may be encouraged or even required when working with employers, to ensure the benefits of employment are available to local workers. The City currently works with a range of nonprofit partners and educational institutions to provide these services. The training may

need to accommodate not just job-specific skills, but also general soft skills training for workforce preparation.

If there is a commitment to growing employment in this study area, there likewise should be a commitment to local employment, if possible. This does not only benefit the employed person in terms of increased income, but also decreases the need for public assistance and increases the ability for the person to support other local businesses through spending.

RECOMMENDATIONS

HOUSING

1. Support the development of a range of housing options in and adjacent to the study area, for a variety of income levels, ages, and household types.
2. Assist in strengthening existing neighborhoods in and adjacent to the study area through strategies to invest in improvements to the housing stock and compatible infill development.
3. Continue to support the development and maintenance of affordable housing in and adjacent to the study area, while not unnecessarily increasing the concentration of low income communities.
4. When feasible, consider the development of additional new housing within designated areas in the study area.
5. When possible, avoid placing housing in areas where there are direct land use conflicts with adjacent uses that cannot be successfully mitigated through adequate buffering and screening.
6. If a new housing area is established, ensure there is a critical mass of land available to allow for the development of a neighborhood context with a range of amenities and a walkable format.
7. Support the development of housing close to areas with good transit access when possible.
8. Periodically reevaluate the market to adjust strategy to changing conditions and opportunities.

COMMUNITY DEVELOPMENT

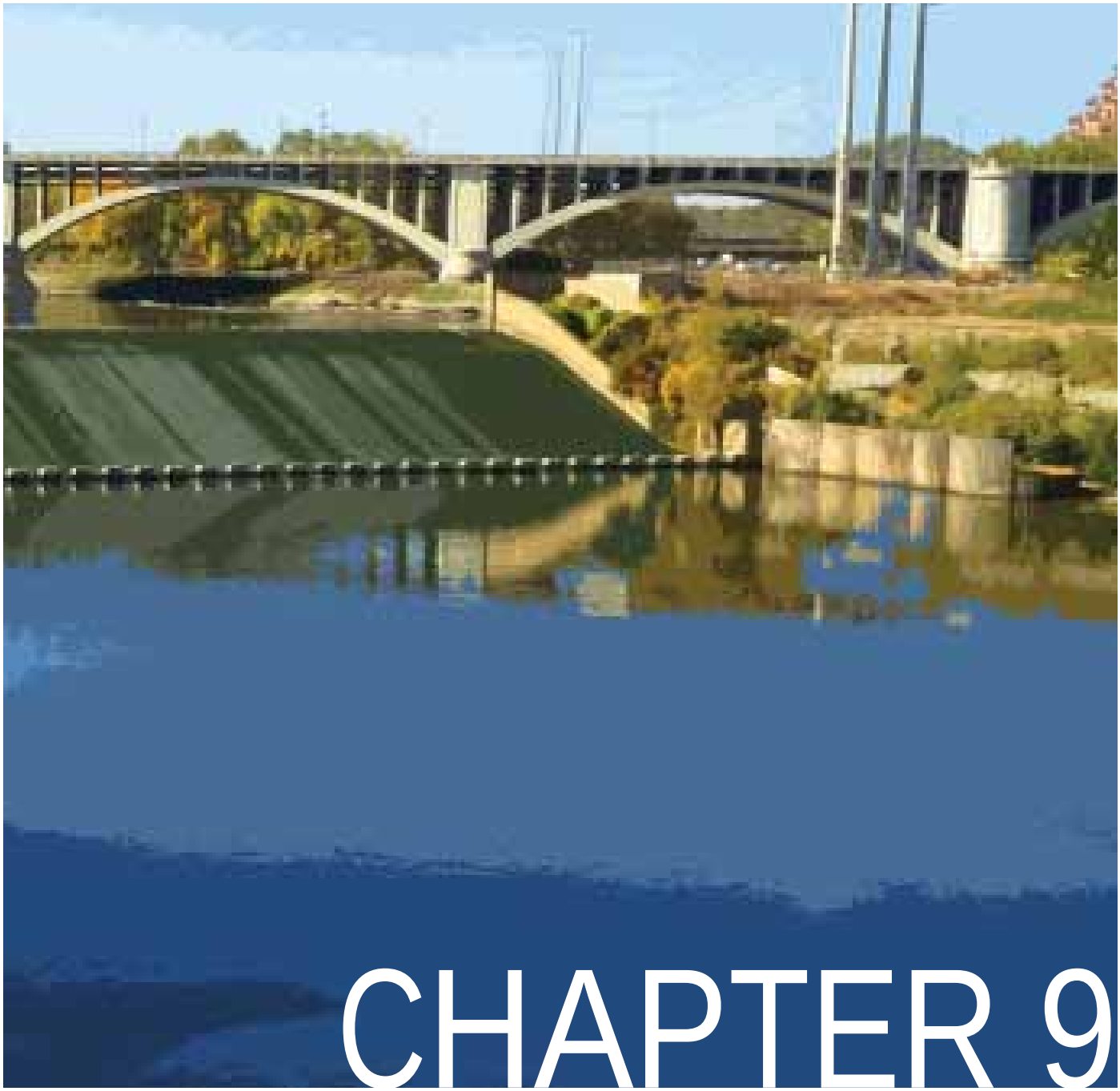
1. Support the development and maintenance of public facilities that provide needed services and amenities to area neighborhoods, including parks, community centers, libraries, schools, and other elements.
2. Encourage the development of retail and service options within mixed use communities, to serve local residents, increase jobs and tax base, and provide an added attraction to the riverfront park areas.
3. Strengthen the public safety presence in the community, to increase the perception and reality of public safety

and to empower residents to feel safe in the area, including traveling to and within planned riverfront parks.

4. Provide options for local youth and young adults to engage in safe and productive activities, including after school programs and recreational activities.
5. Connect residents to riverfront parks through a range of activities and options.
6. Encourage active stewardship of the public realm by businesses, property owners, and other interested groups, to maintain the attractiveness and livability of the area.

ECONOMIC DEVELOPMENT

1. Continue to promote the area as a good place to do business, with centralized access to customers and suppliers, and selectively recruit high quality new businesses that are a good match for the area.
2. Support the creation and retention of jobs in the area, including those available to people with a wide range of skills and training.
3. Where possible, encourage employers to pay a living wage for their jobs.
4. Strongly encourage existing, expanding, and new businesses to proactively hire residents from nearby neighborhoods, especially in the case where there is public subsidy involved.
5. Assist in providing training for potential workers as needed to prepare them for employment at area employers, with a particular focus on residents of nearby neighborhoods.
6. Make necessary investments in public infrastructure and amenities, including parks, to set the stage for private investment and build confidence in the area.
7. Selectively use public resources to support high quality new and expanding job generating development, and hold recipients accountable for reaching their goals.
8. Periodically reevaluate the market to adjust strategy to changing conditions and opportunities.
9. Support the definition and development of green industry, with reference to site design, product, production methods, and other elements that impact the environment.



CHAPTER 9

Implementation Plan

BENEFITS OF IMPLEMENTATION

The upper riverfront area contains a mix of existing assets and unrealized potential. A thoughtful, coordinated approach to implementation can yield great benefit both to the immediate area and the city as a whole. A brief list of attainable results demonstrates what is possible in this area:

- 98.6 acres of new parks and open space (not including 27 acres added since 2000)
- 3.4 miles of restored riverbank (in addition to 1.1 miles of existing)
- 2.0 miles of new parkway or boulevard (in addition to 0.5 miles existing)
- 3.9 miles of bicycle and pedestrian trails (in addition to 1.5 miles existing)
- A wide variety of new riverfront destinations
- Over 1,000 housing units in new riverfront neighborhoods
- Over 3,000 net additional jobs

Furthermore, the plan:

- Proposes that the highest and best use of the Upper River area has yet to be developed
- Recognizes the future economic development value of riverfront amenities
- Helps to stabilize communities in North and Northeast Minneapolis
- Works towards meeting Metropolitan Council goals for growth within established urban areas

There is much to be gained, but implementation will require sustained, coordinated work. This chapter outlines how to make progress towards this vision, and the partners, tools, strategies, and projects that are needed to move this from vision to reality.

PROGRESS SINCE ORIGINAL PLAN

This plan builds upon some significant past successes. The original Above the Falls Plan outlined a number of priorities that have since been completed, including most of the Phase I priorities:

- Upper River Development Corporation – The Minneapolis Riverfront Partnership has been formed; while it has not taken on the full charge of the original plan to date, it is generally tasked with plan implementation.
- Grain Belt redevelopment – This is mostly completed; the last building in the complex (the Office Building) is current under contract with a private developer for renovation and reuse; the area north of Grain Belt has been partially redeveloped with new multifamily housing; the adjacent riverfront park is currently under development.
- Trails north from Plymouth Ave along both banks to BN Bridge – This has been completed on the west bank and is underway on the east bank; Plymouth Ave also has bicycle/pedestrian upgrades in process.
- West River Road North extension to 26th Ave N – additional design and detail has been developed for this connection; a portion of the project is under development and in the City's Capital Improvement Plan.
- While not called out as a specific priority in the previous plan, the significant new investment in the North Washington Jobs Park has reflected the plan's general recommendation in favor of higher job intensity in industrial development. Projects such as Standard Heating and Coloplast are examples of this new investment.

Additionally, some progress has been made a few future phase projects, based on some opportunities that have emerged. These include:

- Gluek Park expansion to BN Bridge (Phase II) – the Park Board has acquired some property in this area to eventually develop as parkland.
- Marshall Street NE redesign (Phase II) – some additional planning work has been done by the County to explore options for this road; in the short term the road is receiving a mill and overlay, which will include the addition of bike lanes on at least a portion of the alignment.
- Lowry Bridge and Plaza (Phase III) – the Lowry Bridge is currently undergoing replacement with a new signature facility.
- Scherer Site (Phase III) – the Park Board has acquired this site and begun plans for redevelopment as a park with compatible adjacent development.

While it is important to celebrate successes, it is also important to recognize what has not yet been achieved, and why this is the case. This information helps to inform how this new plan should move forward:

The biggest difference is the approach to public sector land acquisition for redevelopment, a necessary precondition for large scale change. The original plan envisioned the City (and/or a third party entity) taking the lead in large scale acquisition of private property, with the intent of reselling for private redevelopment. This has not occurred for several reasons:

- State law now strictly limits the ability of the government to condemn land for anything but public purpose. While it is still possible (within bounds) to exercise eminent domain for public use, acquiring for private redevelopment is no longer an option in most cases. This means the current strategy will need to rely on willing seller transactions, and thus will be dependent on preparing for opportunities as they arise rather than a more proactive role.
- Current resources for acquisition are not suited for long term land assembly and holding. Public funding sources for land acquisition are increasingly tied towards short term redevelopment. Large scale acquisition, such as what would be needed for a new residential community, would necessarily require new or modified tools to allow the ability to buy and hold land for some time prior to development.
- Nonconforming uses have additional rights. One method of removing unwanted uses is to make them nonconforming under existing policy and regulatory guidance, and then wait for them to become inactive and lose these rights – or to choose to sell and move elsewhere. However, the rights of nonconforming uses have become significantly stronger since the original plan passed. At present, such uses can remain in perpetuity, including rights to rebuild if a structure is damaged. Combined with lack of eminent domain, this makes it very challenging to remove unwanted uses that do not freely choose to leave.
- Resources are limited in general, and there are other priorities. Particularly with regards to residential and mixed use, the recent focus for development funds has been on transit oriented development – using resources to leverage the huge public sector investments in fixed route transit service. While the upper riverfront has many areas, it is not (nor will be in any near future) transit oriented. There is a very good case to be made for investing in this area, but it must be made within the context of other demands on resources.

NEW IMPLEMENTATION STRUCTURE

Because of the new policy and resource environment, the implementation approach for this plan must necessarily change to reflect a feasible path to progress. The original plan relied on geographic phasing, moving up the riverfront in large blocks, reflecting areas of concentrated public investment. As stated above, it relied heavily on the ability of the public sector to acquire and redevelop sites.

The new plan will have a different focus, much more based on taking advantages of opportunities as they emerge. Additionally, it will acknowledge that there are some compelling vision elements of the original plan that do not currently have a path to implementation, but might in the future. While it is not the intent to be limited by short term conditions, it is also important that the plan is realistic and actionable.

This approach is reflected in a new two tiered approach to implementation, reflecting the need to balance vision and feasibility. The implementation strategy for this plan is divided into two main categories: the Priority Plan and the Vision Plan.

The Priority Plan represents a series of achievable goals for redevelopment and parks along the upper riverfront. It has identifiable resources, tools, and implementing agencies. While the components of the Priority Plan may still take a substantial amount of time to complete, implementation can begin in the very near term. By definition, many of the recommendations here represent incremental changes to the existing conditions rather than sweeping transformations. The Priority Plan also contains ongoing activities that do not have a defined starting or ending point, but are nonetheless very important to implementation. Recommendations in this section have details regarding responsible implementing agencies and expected time frame. Some cost information is available, but it was decided to limit the level of effort and detail invested in this exercise at this stage, as these numbers are often very uncertain and rapidly become out of date.

The Vision Plan represents a more ambitious image of change for the upper riverfront. The larger scale concepts here require resources, tools, and conditions that are not currently available and may require significant effort to obtain. It is not the intent of the plan to be limited just by current conditions, but rather to be realistic about what it will take to move towards a transformational vision. The recommendations in this section do not have a defined time frame. While it is assumed they may be long term, unexpected opportunities that occur may change these time horizons. Instead, this section focuses on outlining the major issues that must be addressed for the various elements to move forward.

It is anticipated that there will be a need to periodically revisit the plan for this area, to reassess what has changed and if a revised approach is needed. The many factors at work here make this an area in transition, and implementation largely dependent on existing conditions and resources. It is suggested that the plan should be revisited at least once every 10 years at minimum, to ensure the framework is still robust and relevant to the vision for the upper riverfront.

PRIORITY PLAN

This plan update puts forth a Priority Plan for near-term implementation. These are projects that should move forward in the short term, although their completion schedule may vary based on the identification of resources and opportunities. It is anticipated progress can be made on these priorities within the next five years. In continuity with the original plan, these carry forward previously identified priorities with some modifications based on new information and analysis.

- **Park and Trail Priorities** – These were developed as the priority projects through the River First visioning process. The Park Board will be the lead implementer, though other organizations will work in close partnership.
    - *Riverfront Trail System – The RiverFirst trail system—a combination of pedestrian and bicycle trails along the river's banks and "Knot Bridges" attached to existing bridges—will complete critical connections in the Grand Rounds system, and better connect North Minneapolis to Northeast Minneapolis for pedestrians and cyclists. The trails will be completed in phases, moving up both banks from the Central Riverfront, and creating a series of loops across bridges to provide connectivity.*
    - *Habitat Restoration and Water Quality – A series of improvements to the environment along the riverfront will create riparian habitat for endangered species and migratory birds by providing nesting and staging areas for endangered aquatic and land animals and plants while also cleaning water. Strategies may include shoreland restoration, landscaping and tree planting, stormwater features, and floating islands.*

- *Farview Park Connections - This major new park extension crosses Interstate 94 and reconnects the high point of the city and communities in North Minneapolis with the Mississippi River. The proposal could result in the greening and enhancement of 26th Avenue N and 28th Avenue N, as well as a riverfront park destination and connection to riverfront trails.*
- *Scherer Park District - With the restoration of Hall's Island and the creation of a river beach cove, Scherer Park will serve as a recreational entry point to the Mississippi trail and park system for kayaks, bikes, skiers, runners and walkers. It will be the center of a riverfront destination flanked by Boom Island and Sheridan Park and surrounded by a vibrant mix of development that will energize the riverfront. This will include an extension of the riverfront trail up to the BNSF bridge.*
- *Northside Riverfront Park – Envisioned on a portion of the Upper Harbor Terminal site is a riverfront park and parkway, alongside complementary new development. Among other features, the park could include a wetlands area, which could provide for stormwater management and flood protection, as well as providing habitat and recreational space.*

- **Development Priorities** – These priorities have been identified through this planning process for development in the upper riverfront area. The City of Minneapolis will be the lead implementer, again working in partnership with others as needed.
  - *Upper Harbor Terminal redevelopment – The existing Upper Harbor Terminal is planned to be closed by 2014. Tenant leases on the site will be ended, and the site will be prepared for infill office-light industrial development. A riverfront park, trail, and parkway will be included on the site and developed in coordination with MPRB.*
  - *Grain Belt area development – Redevelopment of the Grain Belt campus is already well underway. Only a few sites remain undeveloped. The City will continue to promote appropriate infill development, considering historic and neighborhood context. The construction of Water Street should be pursued to open up access to a waterfront site and the Sheridan riverfront park currently under development.*
  - *Zoning and regulatory guidance – Rezoning is an important part of the implementation of this plan. The framework for rezoning will be the Priority Plan, focusing on achievable outcomes. As such, the rezoning study will not seek to rezone large amounts of industrial area to residential or commercial zoning (see Vision Plan section for more details). However, it will create a new Business Park zoning district that focuses on high value job generating uses that both maximize the value of the riverfront location as well as provide a compatible potential neighbor to mixed use development.*

- **Other Priorities** – These are other projects for improving the physical and organizational framework that supports the priorities listed above.
  - *Organizational and resource development, including policy direction for a development corporation – As discussed later in this chapter, a third party development corporation could be a tool in a proactive*

Grain Belt area development

approach to redevelopment along the riverfront. An assessment will need to be made to determine if this approach is supported, or if the focus will be on strengthening internal capacity within the City to take on this role, as was done with the former Minneapolis Community Development Agency.

- *26th Avenue North connection – Plans are underway for a trail connection along 26th Avenue North, in coordination with the MPRB's Farview Park connection project. This is an important link from North Minneapolis to the riverfront, and specifically to the West River Road connection to Downtown.*
- *Marshall Street NE bicycle/pedestrian facilities – The current mill and overlay of Marshall Street NE is providing an opportunity to reconfigure lanes and accommodate some bicycle access. Conversations should continue around this alignment, and possibilities of increasing these facilities, while accommodating other traffic and some on-street parking. Possible trail connections through the adjacent planned riverfront park should be taken into consideration as well in the options.*
- *BN rail bridge vacation/redevelopment – While there is no immediate progress on transferring the Burlington Northern rail bridge from use as a rail spur to a new bicycle/pedestrian bridge, this remains a priority and will stay on the list of projects, should an opportunity to pursue this present itself.*

ONGOING ACTIVITIES

These priorities will be implemented on an ongoing basis, and may well already be underway.

- **Park and Trail Projects**
  - *Strategic acquisitions – The MPRB will continue to pursue strategic acquisitions of land along the riverfront in order to expand the system of riverfront parks and trails. To the extent possible, this will be done through a series of willing seller arrangements. Portions of these sites acquired that are outside the regional park boundary may be sold or leased for private redevelopment. When there is some lapse in time between acquisition and the ability to redevelop the site as park, some interim use may be in place.*
  - *Maintenance and development of existing facilities – MPRB will also continue to maintain and make improvements to existing parklands and trails in the study area.*
- **Development Projects**
  - *Support for high quality compatible infill development – For many parts of the study area, redevelopment will likely happen on a site-by-site basis. In this case, the City will support compatible infill development, consistent with adopted policy and regulatory guidance. For job generating uses, there will be a focus on job training and linkage to promote the hiring of local residents.*
  - *Implementation of design guidance for new development – As outlined in the chapter on land use and urban design, there are a number of design guidelines to be applied to new development occurring within the study area. The intent is to maximize the advantages of the location, both in the context of riverfront orientation and traditional urban design.*

In addition to the priorities described above, there a number of other implementation steps. They are listed below, along with lead implementing agencies and an estimated timeframe for the start of implementation of each. The tables list implementing agencies and timeframes for implementation, based on the following categories:

- Ongoing – These recommendations will be implemented on an ongoing basis, largely through regular planning and regulatory processes.
- Short Term – It is expected that these can begin to be implemented within the next five years, though full implementation may take longer. Exact timing will depend on opportunities that arise, for instance new proposed development projects or availability of funding sources.
- Medium Term – It is expected that these can begin to be implemented within the next ten years, though full implementation may take longer. Exact timing will depend on opportunities that arise, for instance new proposed development projects or availability of funding sources.
- Long Term – It is expected that these projects will take more than ten years to be implemented. In most cases, this is due to complicated or expensive logistics associated with implementation. However, if opportunities to pursue these arise sooner, this does not preclude supporting them within a shorter time horizon. A number of these reflect Vision Plan priorities, as discussed below.

LAND USE AND URBAN DESIGN

IMPLEMENTATION STEPS	LEAD IMPLEMENTING AGENCIES	TIMELINE/ STATUS
General Design Principles		
Building Design and Character		
Support increased intensity/density of new development when paired with high quality and complementary design of buildings and sites	CPED	Ongoing
Any building on the riverfront should add to the positive activity of the public spaces around it, and complement riverfront parkland through development and site design.	CPED	Ongoing
Primary building materials should be high quality, durable materials.	CPED	Ongoing
Retain some views of the river for second tier development sites by thoughtful placement and design of riverfront buildings, utilizing tapered profiles as building height increases and avoiding overly wide or tall buildings that block much of the prime view and can create a wall that physically and psychologically cuts off the riverfront from surrounding neighborhoods.	CPED	Ongoing
Buildings should be designed and programmed to engage public spaces. Encourage vitality and activity along the riverfront by orienting quasi-public spaces (restaurants and shops) and private open and communal spaces (decks, balconies, terraces, meeting rooms, etc.) toward the river, while also maintaining high quality design along public streets and pathways.	CPED	Ongoing
Support the development of pedestrian friendly street frontages and windows that encourage natural surveillance and provide an inviting presence.	CPED	Ongoing
Reflect the characteristic mixed use nature of development in this area with a complex and interesting combination of uses, while addressing potential conflicts and incompatibilities.	CPED	Ongoing
Promote the concepts of universal design to develop an area that is accessible to people of all ages and abilities.	CPED	Ongoing
Build on the history of the area to create authentic and unique locations, providing interpretive elements where needed. Consider preservation of historic resources, or mitigation where preservation is not feasible.	CPED	Ongoing
Site Design and Public Realm		
Avoid driveway access off of the parkway where possible; development access should be from non-parkway streets.	CPED	Ongoing
On riverfront sites, locate parking and loading facilities to minimize their visibility from the river and other public spaces.	CPED	Ongoing
Encourage the creation of pleasing portals to the river through the design of attractive, safe pedestrian and bicycle friendly public streets and private streetscapes "green corridors" that connect east and west to the river.	CPED	Ongoing
Include appropriate streetscape features, including pedestrian scale lighting, ample sidewalks, landscaping, trees, and others.	CPED	Ongoing

Incorporate sustainable stormwater solutions to minimize runoff and improve surface water quality, and to contribute to public realm and open space; create linkages and synergy between public and private open spaces.	CPED	Ongoing
Add buffering between incompatible adjacent uses where they exist.	CPED	Ongoing
Ensure there is adequate lighting throughout sites to promote a safe environment.	CPED	Ongoing
Extend the benefit, character and function of public amenities (river, parks, the parkway, greenways and trails) into development sites through the extension of private open space, landscaping, and pedestrian circulation – "fingers of green."	CPED	Ongoing
Consider incorporation of art into new development, especially art related to the unique neighborhood, historical and environmental context of the Upper Riverfront.	CPED	Ongoing
Assure multiple access and interaction in many ways with the river - from fishing, dining or picnicking dockside, boarding boats, strolling, lounging, viewing or feeding ducks.	CPED	Ongoing
Create multiple destinations along the river and utilize the continuous riverfront park space to connect the destinations.	CPED	Ongoing
Achieve continuity, especially when it comes to the pedestrian experience.	CPED	Ongoing
Encourage mixed uses and a 24/7 activity pattern where possible, to promote safety and security.	CPED	Ongoing
Residential/Mixed Use Development Design Principles		
Support the development of river-oriented commercial uses to provide attractive riverfront destinations and increase area vitality	CPED	Ongoing
Encourage appropriate size and density of residential communities to create a critical mass for a sustainable and functional urban neighborhood.	CPED	Ongoing
Office/Industrial Development Design Principles		
Incorporate greening and landscaping to create attractive appearance and provide buffering between adjacent uses and districts.	CPED	Ongoing
Encourage retrofits to existing uses where possible to make sites, buildings, and operations more green and sustainable.	CPED	Ongoing
Address the building's relationship to river and shoreland overlay to take advantage of this amenity.	CPED	Ongoing
Support a 24 hour presence on the site to promote surveillance and general public safety throughout the day and night.	CPED	Ongoing
Accommodate trucks, loading, and storage within sites in a way that minimizes the impacts on the public realm.	CPED	Ongoing
Where land area permits, create well landscaped campuses, with private open space complementing adjacent parklands.	CPED	Ongoing
Reduce dust, noise, vibration, air pollution, and other negative impacts on surrounding uses through improved design, site management, buffering and screening, and other strategies.	CPED	Ongoing
Zoning		
Zoning changes should be phased in over time, to reflect the opportunities and market support that emerges, while minimizing conflicts between uses and limiting the creation of extensive nonconformities.	CPED	Ongoing

Consistent with city policy, split zoning should not be applied to parcels where a portion is guided for park, and the remainder for something else. The zoning change, if needed, should happen at the time the property is purchased and subdivided as part of the parkland development process.	CPED	Ongoing
Develop new or modified zoning district for business parks, to focus on high value office and industrial development, while minimizing lower value uses. Industrial uses should focus on light industrial, including green industry, rather than heavy industrial. District should also include hospitality, retail, and other uses that complement riverfront parks and trails. While the zoning district would be primarily employment focused, it would be designed to be compatible with live-work uses and similar concepts for residential within an industrial setting, perhaps through the application of the Industrial Living Overlay District (ILOD).	CPED	Short Term
North Washington Employment District (Subarea 1)		
Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.	CPED	Short Term
Discourage residential development in this area, and provide adequate buffers between this area and any adjacent residential.	CPED	Short Term
Encourage the redevelopment and rehabilitation of sites in this area to ensure they are higher value with a greater job density.	CPED	Short Term
North Washington Employment District (Subarea 2)		
Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.	CPED	Short Term
Discourage residential development in this area, and provide adequate buffers between this area and any adjacent residential.	CPED	Short Term
Encourage the redevelopment and rehabilitation of sites in this area to ensure they are higher value with a greater job density.	CPED	Short Term
Broadway Riverfront Node (Subarea 3)		
Encourage development of this area with high density mixed use development, including commercial, light industrial, and/or office uses. Residential may be allowed along the riverfront.	CPED	Medium Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of a riverfront location along a commercial corridor.	CPED	Medium Term
North of Broadway Riverfront District (Subarea 4)		
Encourage development of this are with a compatible mix of uses, including potentially residential, commercial, office, and/or light industrial.	CPED	Short Term
Focus on developing a compatible mix of uses to complement existing uses in the area.	CPED	Short Term
Provide adequate buffering and screening between adjacent uses, especially those with possible land use conflicts.	CPED	Short Term
Broadway to Lowry Riverfront District (Subarea 5)		
In the near term, support mitigation of the impacts of the existing heavy industry mix, including greening of sites and operations, and screening from other uses.	CPED	Short Term

In the longer term, when feasible, make strategic land acquisitions and investments to allow for higher value infill office/industrial development and riverfront park and parkway.	CPED, MPRB	Long Term
Redevelopment in this area should respect the historic grid pattern with a similar rhythm or pattern of development throughout the district.	CPED	Long Term
Once this area is redeveloped and a new parkway alignment is established, the former route of Pacific Street may be utilized as an internal site circulation corridor in the long-term redevelopment. Parking, service and loading should orient off of this corridor with buildings positioned toward the parkway and parking located toward the rail line.	CPED	Long Term
Upper Mississippi Employment District (Subarea 6)		
Maintain this area as industrial employment district, with a focus on high intensity, job generating uses, particularly office and industrial.	CPED	Short Term
Discourage residential development in this area.	CPED	Short Term
Retrofits to parking lots, service and loading areas could include improved screening and landscaping and consolidated access points.	CPED	Short Term
Stormwater retrofits should be encouraged, including potentially tree trenches, rain gardens, and/or green roof technologies.	CPED	Short Term
Lowry Avenue N Riverfront Node (Subarea 7)		
Support the redevelopment of this area with high density mixed use development, including commercial, light industrial, residential, and/or office uses.	CPED	Medium Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of a riverfront location along a commercial corridor.	CPED	Medium Term
Upper Harbor Terminal District (Subarea 8)		
Support the redevelopment of the area as a business park, with a focus on high intensity, job generating uses, particularly office and light industrial.	CPED	Short Term
Encourage the consolidation of small parcels west of the rail line to create larger, more developable sites.	CPED	Long Term
Dowling Ave N Riverfront Node (Subarea 9)		
Support the redevelopment of the area with a mix of commercial, office, residential, and light industrial uses.	CPED	Medium Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.	CPED	Medium Term
If residential pursued in the area to the north, ensure adjacent uses are compatible.	CPED	Long Term
Parking and loading for development parcels should be located against the rail line and buildings should be placed toward Dowling Avenue and the new parkway	CPED	Medium Term
North of Dowling Riverfront District (Subarea 10)		
In the near term, support mitigation of the impacts of the existing industry mix, including greening of sites and operations, and screening from other uses.	CPED	Short Term

In the longer term, when feasible, consider making strategic land acquisitions and investments to allow for higher value mixed use development, including potentially new residential.	CPED, MPRB	Long Term
Provide buffers and transitions between uses where needed. Retrofit elements such as screening, landscaping and enhanced lighting should be encouraged.	CPED	Long Term
Washington Avenue should be enhanced as a strong connection from the Dowling node to the Camden / Lyndale Avenue Node, potentially with a multi-modal street design.	CPED	Long Term
Due to the transitional and multi-use nature of this area, consider live/work development as a potential development concept.	CPED	Long Term
Improve the entrance to the riverfront park, including Upper Mississippi Regional Park, with a more visible, accessible, and inviting entrance.	CPED	Long Term
North of Xcel Riverfront District (Subarea 11)		
Support the development of the area as a business park, with a focus on high intensity, job generating uses, particularly office and light industrial.	CPED	Short Term
Support the maintenance and development of landscaped private green space adjoining the riverfront park area, consistent with existing character.	CPED	Short Term
Development should respect the topography of the site and preserve the tree canopy within the natural draws leading toward the river. These could be developed as pedestrian connections to the river edge.	CPED	Short Term
Xcel Riverfront Plant (Subarea 12)		
Maintain site as location for existing power plant.	CPED	Short Term
If feasible, consider compatible infill development on adjacent sites.	CPED	Long Term
Support the maintenance of green buffer around all sides of the site, and encourage the development of a riverfront easement to allow for the continuation of a riverfront trail.	CPED	Short Term
Marshall North Riverfront District (Subarea 13)		
In the near term, allow a mix of uses compatible with adjacent park development and the riverfront location, making accommodations for riverfront trail connectivity and access.	CPED	Short Term
In the longer term, make strategic land acquisitions and investments to create a continuous green riverfront, with limited park-compatible accessory uses that bring activity and interest to the riverfront.	MPRB	Long Term
Support the development of infill moderate density housing and limited mixed use on east side of Marshall, to build upon the advantages of the riverfront park location.	CPED	Short Term
Lowry Avenue NE Riverfront Node (Subarea 14)		
Support the redevelopment of the area with a mix of commercial, office, and residential uses.	CPED	Medium Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.	CPED	Medium Term

Marshall South Riverfront District (Subarea 15)		
In the near term, allow a mix of uses compatible with adjacent park development and the riverfront location, making accommodations for riverfront trail connectivity and access.	CPED	Short Term
In the longer term, make strategic land acquisitions and investments to create a continuous green riverfront, with limited park-compatible accessory uses that bring activity and interest to the riverfront.	MPRB	Long Term
Support the development of infill moderate density housing and limited mixed use on east side of Marshall, to build upon the advantages of the riverfront park location.	CPED	Short Term
North Grain Belt District (Subarea 16)		
Support redevelopment with a mix of moderate to high density office, commercial, and residential uses.	CPED	Short Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.	CPED	Medium Term
Encourage creative industries and arts oriented uses, to support and strengthen the Northeast Arts District.	CPED	Short Term
Grain Belt District (Subarea 17)		
Maintain as a designated activity center, with a focus on day to night activity, regional draw, and high density mixed use.	CPED	Short Term
Support redevelopment with a mix of high density office, commercial, and residential uses.	CPED	Short Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.	CPED	Medium Term
Encourage creative industries and arts oriented uses, to support and strengthen the Northeast Arts District.	CPED	Short Term
Support the development of shared parking solutions to manage parking needs within the activity center area.	CPED	Medium Term
Graco/Scherer Riverfront District (Subarea 18)		
Maintain and redevelop as a business/office park development, with focus on high quality, job intensive office and light industrial uses.	CPED	Short Term
Support the development of river-oriented commercial and retail uses, to build on the advantages of the riverfront location.	CPED	Medium Term

PARKS AND TRAILS

IMPLEMENTATION STEPS	LEAD IMPLEMENTING AGENCIES	TIMELINE/ STATUS
Create a continuous and integrated riverfront parks and open space system along the upper riverfront.	MPRB	Ongoing
Construct recreational trails along both banks of the river.	MPRB	Ongoing
Provide space in parks for riverbank, landscape, and habitat restoration.	MPRB	Ongoing
Develop waterfront features in new parks, and nodes of interest at regular intervals along trails.	MPRB	Ongoing
Preserve hospitality uses within parks corridor.	MPRB, CPED	Ongoing
Pursue the transformation of the Upper Harbor Terminal in partnership with the City of Minneapolis	MPRB, CPED	Short Term
Convert the BNSF Bridge to a pedestrian and bicycle facility linking both banks.	MPRB	Medium Term
Continue ongoing acquisition of Regional Park land on both sides of the river.	MPRB	Ongoing

ENVIRONMENT AND INFRASTRUCTURE

IMPLEMENTATION STEPS	LEAD IMPLEMENTING AGENCIES	TIMELINE/ STATUS
Transportation		
Pursue the closure of the upper harbor terminal, and provide assistance with mitigating the economic and traffic impacts of this closure, while preparing the site for redevelopment.	CPED, Public Works	Short Term
Encourage the development of good quality mass transit options within the study area and in adjacent neighborhoods, including improved east-west connections between neighborhoods and the river.	Metro Transit	Medium Term
Continue to maintain existing freight infrastructure, including truck and rail, with a focus on meeting the needs of area businesses and minimizing impacts on residential areas.	Public Works, Hennepin County, MnDOT	Medium Term
Establish a Riverway Street system, with common streetscape elements and enhanced bicycle and pedestrian facilities, to provide access to the riverfront from adjacent neighborhoods.	Public Works	Medium Term
Develop a consistent system of wayfinding and signage to direct people to riverfront parks and trails as they are developed.	MPRB, Public Works	Long Term
Ensure consistent river access with public right-of-way developed on the regular street grid wherever possible.	Public Works	Long Term
Support strategies to enhance the attractiveness and safety of the Riverway Street system, including pedestrian scale lighting, traffic calming, and enhanced streetscaping, and improved public safety presence along the corridors.	Public Works, Hennepin County	Medium Term
Develop an interim parkway route along the west bank, following existing streets such as Pacific Street N and 2nd Street N, to provide system connectivity in the near term.	MPRB, Public Works	Medium Term
As opportunities present themselves, acquire land for and develop the final parkway route along the west bank, from its current terminus northward to North Mississippi Regional Park.	MPRB, Public Works	Long Term
When feasible, convert the BN Bridge to a pedestrian and bicycle facility linking both banks.	MPRB, Public Works	Long Term
Reconstruct Marshall Street as an accessible boulevard, with enhanced landscaping, bicycle lanes and/or off-road multi-use trails, and other amenities.	Hennepin County, MPRB	Long Term
Support the development of riverfront trails, with interior connections made where necessary to provide system connectivity.	MPRB	Long Term
Incorporate amenities along trail routes to serve bicyclists and pedestrians, including but not limited to air pumps, water fountains, Nice Ride stations, restrooms, rest stops, scenic overlooks, bicycle parking, and wayfinding.	MPRB, Public Works	Long Term
Explore options to rationalize the street network and interstate access on the west bank, potentially combining Washington Avenue N and 2nd Avenue N alignments and/or reconfiguring interstate access to improve overall traffic flow and increase redevelopment potential of nearby sites.	Public Works, MnDOT, Hennepin County	Long Term

Pursue the development of the Water Street connection, to serve Sheridan Park and the riverfront Grain Belt development site.	CPED, MPRB, Public Works	Long Term
Reconstruct Technology Drive and other industrial streets as needed to provide access to important office and industrial development sites.	Public Works	Medium Term
When feasible, pursue burying power lines and other above-ground utilities underground, preferably in public right-of-way.	Xcel Energy, Public Works	Long Term
Pursue shared and district parking strategies to address parking demand in busy areas, including areas with dense development and/or destination uses.	CPED, Public Works	Medium Term
Environmental Restoration		
Continue to monitor known sites of soil and groundwater contamination.	MPCA	Short Term
Support the investigation and cleanup of contaminated sites, particularly with site redevelopment or conversion to parkland.	CPED, MPCA, Hennepin County	Medium Term
Utilize best practices, such as soil bioengineering, to stabilize and revegetate banks and slopes along the upper riverfront.	MPRB	Medium Term
Create a vegetated shoreland buffer and wildlife habitat through landscape restoration techniques in new parks along the upper riverfront.	MPRB	Medium Term
Bring neighborhood residents to the river by taking opportunities to connect the upper riverfront's wildlife habitat corridor to perpendicular or adjacent open spaces and greenway corridors.	CPED, MPRB	Medium Term
Support the development of river edges that can accommodate changes in water levels, including flooding.	MPRB	Long Term
Water Quality and Stormwater		
Whenever possible bring sites along the upper riverfront into compliance with Minneapolis stormwater ordinances and the Mississippi Watershed Management Organization's (MWMO) stormwater standards.	Public Works, MPRB, MWMO	Medium Term
Continue to pursue a range of stormwater best management practices in new development and parks to meet high standards for stormwater retention and treatment.	Public Works, MPRB, MWMO	Medium Term
Explore ways to attractively incorporate stormwater features into the public realm, through the use of green infrastructure such as: ponds, rain gardens, vegetated swales, water features, green roofs and other strategies.	Public Works, MPRB, MWMO	Medium Term
Support the retrofitting of existing sites with stormwater best management practices and the reduction of impervious surface cover along the upper riverfront.	Public Works, MPRB, MWMO	Medium Term
Consider partnerships and coordination between private development, parks and the MWMO to maximize the efficiency of stormwater systems, monitor changes in the ecosystem, explore shared solutions, and increase the greening of the public realm.	Public Works, MPRB, MWMO	Medium Term
Coordinate the provision of stormwater management and open space to provide public realm connectivity and preserve scenic views.	Public Works, MPRB, MWMO	Medium Term

COMMUNITY AND ECONOMIC DEVELOPMENT

IMPLEMENTATION STEPS	LEAD IMPLEMENTING AGENCIES	TIMELINE/ STATUS
Housing		
Support the development of a range of housing options in and adjacent to the study area, for a variety of income levels, ages, and household types.	CPED	Long Term
Assist in strengthening existing neighborhoods in and adjacent to the study area through strategies to invest in improvements to the housing stock and compatible infill development.	CPED	Short Term
Continue to support the development and maintenance of affordable housing in and adjacent to the study area, while not unnecessarily increasing the concentration of low income communities.	CPED	Short Term
When feasible, consider the development of additional new housing within designated areas within the study area.	CPED	Long Term
When possible, avoid placing housing in areas where there are direct land use conflicts with adjacent uses that cannot be successfully mitigated through adequate buffering and screening.	CPED	Short Term
If a new housing area is established, ensure there is a critical mass of land available to allow for the development of a neighborhood context with a range of amenities and a walkable format.	CPED	Long Term
Support the development of housing close to areas with good transit access when possible.	CPED	Short Term
Periodically reevaluate the market to adjust strategy to changing conditions and opportunities.	CPED	Long Term
Community Development		
Support the development and maintenance of public facilities that provide needed services and amenities to area neighborhoods, including parks, community centers, libraries, schools, and other elements.	CPED, Hennepin County, MPS	Long Term
Encourage the development of retail and service options within mixed use communities, to serve local residents, increase jobs and tax base, and provide an added attraction to the riverfront park areas.	CPED	Medium Term
Strengthen the public safety presence in the community, to increase the perception and reality of public safety and to empower residents to feel safe in the area, including traveling to and within planned riverfront parks.	Public Safety	Medium Term
Provide options for local youth and young adults to engage in safe and productive activities, including after school programs and recreational activities.	MPS, MPRB	Medium Term
Connect residents to riverfront parks through a range of activities and options.	MPRB	Medium Term
Encourage active stewardship of the public realm by businesses, property owners, and other interested groups, to maintain the attractiveness and livability of the area.	CPED	Medium Term

Economic Development		
Continue to promote the area as a good place to do business, with centralized access to customers and suppliers, and selectively recruit high quality new businesses that are a good match for the area.	CPED	Short Term
Support the creation and retention of jobs in the area, including those available to people with a wide range of skills and training.	CPED	Medium Term
Where possible, encourage employers to pay a living wage for their jobs.	CPED	Short Term
Strongly encourage existing, expanding, and new businesses to proactively hire residents from nearby neighborhoods, especially in the case where there is public subsidy involved.	CPED	Short Term
Assist in providing training for potential workers as needed to prepare them for employment at area employers, with a particular focus on residents of nearby neighborhoods.	CPED	Short Term
Make necessary investments in public infrastructure and amenities, including parks, to set the stage for private investment and build confidence in the area.	MPRB, Public Works, Hennepin County	Medium Term
Selectively use public resources to support high quality new and expanding job generating development, and hold recipients accountable for reaching their goals.	CPED	Medium Term
Periodically reevaluate the market to adjust strategy to changing conditions and opportunities.	CPED	Long Term
Support the definition and development of green industry, with reference to site design, product, production methods, and other elements that impact the environment.	CPED	Long Term

VISION PLAN

The Vision Plan differs from the Priority Plan in that the horizon for implementation is uncertain. The order and timeline is flexible, as these will proceed largely based on when opportunities emerge and resources are made available. For some, there may need to be a shift in the market before it is feasible for development to proceed

- **Park and Trail Projects**
  - *Farview Park Extension – The earlier phase of this project included greenway improvements along 26th Avenue North and 28th Avenue North. This phase takes that a step farther, creating a land bridge over Interstate 94 and converting land on the riverfront to a destination park site. This project involves a significant amount of funding and logistics regarding the land bridge, as well as land acquisition and potentially business relocation along the riverfront.*
  - *Northeast Riverfront Park – Portions of the riverfront park on the east bank are already in place. This phase presumes acquisition of the remaining sites west of Marshall Street NE between Lowry Avenue NE and Broadway Street NE. The project involves the development of this into a large riverfront park, including possibly some riverfront destination businesses within the context of the park.*
- **Development Projects**
  - *Acquisition and redevelopment north of Dowling Avenue North – The proposed transformational vision of the area north of Dowling envisions the area moving from a predominantly industrial to a mixed use scenario including residential. The proximity to neighborhoods, commercial areas, transit, and the existing North Mississippi Regional Park, provides assets to build this vision upon.*
  - *West central riverfront redevelopment –The vision in the original Above the Falls Plan saw the west central riverfront between 26th Avenue North and Lowry Avenue North transitioning to a mixed use district as well. Likewise, changing this area will require patient assembly and a significant amount of resources. This is further compounded by the fact that the heavy industrial uses in this area are very challenging to relocate, as there are extremely few suitable sites that would meet both City policy and business criteria.*

As is clear from the descriptions above, organizational and resource questions are key in these discussions. There are a number of feasibility issues related to making progress on these vision projects, which may delay the start of this portion of plan implementation:

- **Resources and tools for acquisition and assembly of a critical mass of land.** To provide neighborhood context and provide investor confidence, this must precede redevelopment of the new mixed use area north of Dowling. At present, large scale buying and holding of sites such as this is not a viable approach through existing resources and programs. This will require the identification and acquisition of significant new resources, and the potential modification of programs to allow for holding the property for a longer period of time. A land bank tool may be appropriate, if sufficient funds could be made available for this type of acquisition. The holding component is less of a factor for parks than for development, but may still be an issue if plans cannot progress for park development until a certain amount of land is acquired.

- **Availability of land for purchase.** Since condemnation is a much more restrictive option in the past, the mass purchase of land is not an option. Instead, acquisition will depend on a series of willing seller agreements over time. This introduces a significant element of uncertainty as to when properties will become available, and if that will line up with resource availability. The potential for interim use – i.e. land being leased out for an interim period while property is being acquired – may help with this process. However, that likely only will be an option for uses that are either in the process of ceasing operations or are functioning on a very interim/short-term basis.

- **Market readiness for residential.** As shown in the market study work, portions of the study area – particularly on the west bank – are not ready for new market rate residential development. The rents that development is able to attract in that area are too low to support new construction, and it is anticipated that the area will not be able to support it for at least ten years. This is not based on the status quo, either – it assumes the market is stabilized, and there are continued investments in the riverfront parks, trails and public infrastructure. Other areas, particularly on the east bank and closer to Downtown generally, are much more likely to proceed sooner and with less need of assistance. At present, it is probably better to focus on market stabilization and public investment on the west bank, and work towards a future plan for mixed use development.

- **Market readiness for commercial.** At present, the market for retail and services – particularly on the west bank – is fairly weak. This reflects the current conditions and buying power of the area. It also makes it unlikely that major new commercial development will be the leading focus in this area. (There may be some incremental development, but probably not a significant retail district.) Again, the focus will need to be on strengthening other aspects of the market, including existing residential and office/industrial uses, to set the stage for this new development.

Because of the major uncertainties around the timing and feasibility of these aspects, this plan recommends focusing implementation efforts on the nearer term and more certain Priority Plan recommendations. These will help to strengthen the market and create successes that build support for more ambitious proposals. The plan for this area will need to be revised periodically, at least every ten years, to ensure that the approach is updated to reflect changing conditions. In the future, new opportunities and options may arise that are not currently known.

Full scale rezoning of all the vision areas to mixed use zoning away from industrial should also wait on a future phase, to be determined. Due to the weakness of the market for residential and commercial development on the west bank, rezoning is unlikely to trigger new development. Instead, it will likely result in the proliferation of nonconforming uses, and a tendency towards stagnation, disinvestment, and blight. This will not further the goals of the area, and may worsen the problems that already exist. The zoning for this area will need to be revisited periodically with subsequent plan updates.

ORGANIZATIONAL FRAMEWORK

The upper riverfront is by definition a multi-jurisdictional area – with many groups and organizations having a role in the area's development, health, and function. Likewise, implementation of a plan for this area will require multi-jurisdictional cooperation and coordination. This section lays out the main players and their roles.

The Minneapolis Park and Recreation Board (MPRB) is the lead agency for the development of parks, parkways, and trails along the upper riverfront. The MPRB will be primarily responsible for land acquisition, funding, development, and ongoing maintenance and programming of these facilities. Other key partners in these areas include the Metropolitan Council's regional parks division, the National Park Service, and various groups concerned with environmental preservation and cleanup.

The City of Minneapolis is the lead agency for guiding private land use and development, and funding and maintenance of non-park related infrastructure. The City will play a primary role in both guiding and assisting with development, including helping direct resources as needed. It will also take a lead role where there is City-owned land for redevelopment, such as the upper harbor terminal. Hennepin County and MnDOT also play important roles regarding infrastructure that is county or state owned.

While these two organizations are lead implementers, there are many others that have important roles to play. Below is a table that outlines the main responsibilities of these various agencies in the upper riverfront area.

AGENCY	
Governmental	
Minneapolis Park and Recreation Board	• Parkland acquisition and development • Development of trail/parkway system • Ongoing maintenance and programming of park, parkway, and trail system
City of Minneapolis – CPED	• Land use and zoning planning, policy and regulation • Development review of proposed projects • Redevelopment assistance for selected projects
City of Minneapolis – Public Works	• Development of funding priorities for transportation and other infrastructure improvements • Maintenance of and improvements to streets, sidewalks, bike lanes, and other elements in right-of-way • Regulation of access to right-of-way, including parking and curb cuts
Hennepin County – Transportation	• Maintenance of and improvements to county-owned streets and bridges
Hennepin County – Community Works	• Redevelopment assistance for selected projects
Metropolitan Council	• Comprehensive plan review and approval, including regional parks plan • Designation of and funding for regional parks and trails • Redevelopment assistance for selected projects

Mississippi Watershed Management Organization	• Monitoring and assessing water quality • Education and outreach on water quality issues • Funding for acquisition and improvements to enhance water quality
State of Minnesota – Legislature	• Funding for special projects (e.g. legacy grant, bonding, high priority projects, etc.) • Authorization for organizational structure
State of Minnesota – DNR	• Potential funding for water access points, trails, etc. • Oversight and management of state's natural resources • Permitting for docks, modifications to riverway, etc.
State of Minnesota – DEED	• Redevelopment assistance for selected job-generating projects
State of Minnesota - MNDOT	• Maintenance of and improvements to state highways and interstates • Oversight on truck route, freight rail, and barging networks/activities • Project permitting where applicable • Mississippi River Trail designation
United States – HUD	• Redevelopment assistance for selected housing projects
United States – Army Corps of Engineers	• Project permitting for modifications to navigation channel, shoreline, etc. • Regulation and maintenance of navigable waterways • Staffing and maintaining lock and dam • Channel dredging for navigation purposes
United States – National Park Service	• Oversight and management of Mississippi River National and Recreational Area • Project review and comment where applicable • Education and outreach activities

Non-governmental	
Above the Falls Citizen Advisory Committee	• Advocacy and outreach on behalf of interests of community stakeholders, esp. around plan implementation • Review of and comment on development proposals in the study area
Minneapolis Riverfront Partnership	• See discussion below
Minneapolis Parks Foundation	• Support and funding for park and trail projects
Friends of the Mississippi	• Advocacy and outreach on behalf of protecting and restoring river and watershed areas
Neighborhood Organizations	• Representation of neighborhood's interests on various topics • Review and comment on projects proposed in neighborhoods
RiverFirst Initiative	• Advocacy, communications and fundraising for park and trail development along the Minneapolis riverfront
Mississippi River Parkway Commission, Great River Road - National Scenic Byway	• Protection, enhancement, and promotion of a national scenic byway along the Mississippi River

THIRD PARTY DEVELOPMENT ORGANIZATION

Additionally, the original Above the Falls plan called for the creation of a third party agency to implement the plan. This was based on case study research that showed that transformational riverfront plans in peer cities were successful when there was an independent entity to assemble resources, maintain momentum over time, and make projects happen.

This was affirmed by the various participating local agencies at the time, which saw the scope and timeline of the plan exceeding the capacity of any existing partner. It was further affirmed through a series of task force meetings in 2005-2007, which further identified the need and specifics of this new entity. The result of the task force meetings was a new riverfront organizational model, with the scope for a new organization being defined with a very wide ranging scope, including coordination/administration, development assistance, marketing/promotion/communications, and planning/design/construction.

While all of these tasks are important and valid, it has become clear that this is probably too much for a new organization to undertake all at once, and that it represents a range of expertise and focus that implies significant staff and organizational capacity. Indeed, the report suggested need for staff capacity including executive director/leadership , fundraising/development/advocacy, design center oversight, communications, ombudsman (to work with developers and businesses that may be affected), community engagement, legal counsel, and administrative support.

Subsequent to the release of this report, the Minneapolis Riverfront Corporation (now Minneapolis Riverfront Partnership) was formed. While there have been some successes, this agency has been challenged by the implications of its wide-ranging charge, especially as a start-up.

To better prepare this entity (or another third party entity) to be successful in implementation, this plan proposes a two-tiered organizational development strategy, mirroring the overall plan's approach.

The Priority Plan strategy for this organization will focus on key gaps in organizational coverage, with a more limited mission and scope. It is the intent not to be comprehensive in addressing all concerns, but to address the most critical elements. As such, it relies on partnering organizations (listed above) to cover other tasks. The Priority Plan tasks include:

- **Convening and Coordinating Partners.** Convene the various organizations with interest and work along the riverfront to coordinate work plans, share ideas, address complex projects and problems, and track progress. Identify opportunities to work together, including new opportunities that emerge which can benefit the area. The role of the entity is to support the adopted vision for the riverfront, but not necessarily to take strong advocacy positions, which may be better be handled by individual partners.

- **Identifying and Assembling Resources.** One of the key tasks in the original plan was the ability to assemble funding for large projects, including land acquisition. This could be from any number of sources (including those listed below in the Resources section), including everything from the federal government to private foundations. In some cases, it may be identifying funding sources that are available for partner agencies to apply for, including grants and loans. It may also help make the case for legislative or regulatory changes that facilitate better or expanded tools for the area, though not likely in the form of direct advocacy.

- **Finding and Facilitating Development Opportunities**. The success of the Priority Plan is largely dependent on the ability to identify and take advantage of opportunities as they emerge. This entity can help make this happen through ongoing and sustained outreach to existing and potential development partners. This includes conversations with existing and potential residents, property owners, businesses, investors, developers, funders, and others with an interest in the area. This role will require ongoing coordination with other partners, including the City and MPRB, to ensure it is in synch with other implementation efforts.

The Vision Plan strategy for this organization represents a future phase of the organization, with expanded staff and resources. This phase will be necessary to make major changes in the Vision Plan happen. As with the Vision Plan in general, it is uncertain when (or even if) all elements will be realized.

- **Land Acquisition and Redevelopment.** For the vision of transformational development to happen, it is necessary that there be an entity with the ability to buy and hold land over time, and to facilitate its redevelopment. While this is similar to existing land bank concepts, it would need to be more focused and differently structured than existing ones. The ability to do this would likely depend on changes to existing resources and tools to allow for longer term horizons on redevelopment of sites. This role may even involve becoming a property manager, leasing and maintaining interim uses on site prior to redevelopment. It also could involve administering gap financing or other direct assistance to developers.

- **Design Review and Guidance.** At present, design review is largely a City function, and will likely remain so. Community level review is handled through neighborhood organizations and the Above the Falls Citizen Advisory Committee. However, if this entity reached a certain level of capacity and sophistication, it may be able to more proactively be involved in riverfront-specific development review – as is done through the current St. Paul Riverfront Corporation's design center. This in turn could help inform future revisions and updates to the plan.

- **Direct Advocacy and Priority Setting**. Again, advocacy and priority setting are both now done by individual organizations. However, as this entity develops capacity and expertise, it may be in the position to set priorities and advocate for specific actions and changes to promote development on the upper riverfront. This would likely flow from experience in other areas, rather than being a stand-alone function.

As of the time of this writing, it is unclear if this third party entity will be an evolution of the existing Minneapolis Riverfront Partnership or a new organizational structure – or if for the time being it will make sense to keep these functions in house, managed by City and MPRB staff and leadership. Regardless, it is safe to say that a third party entity has the potential to be a significant catalyzing force in the redevelopment of the upper riverfront – particularly if it focuses on developing core competencies that complement and expand upon existing organizations and initiatives.

STRATEGIES AND TOOLS

IMPLEMENTATION PRINCIPLES

In addition to identifying specific recommendations and the agencies that will implement them, it is important to identify the primary tools and strategies that will be used to create change in the upper riverfront. While this is not an exhaustive list, it is meant to capture the main ideas and the general approach being adopted.

This approach is based on a series of implementation principles:

- Build on existing assets and competitive advantages of the area, including riverfront amenity, central location, convenient transportation options, and diversity of uses
- Assemble property primarily through willing seller transactions, with very limited use of eminent domain for land acquisition
- Prioritize land acquisition for and development of riverfront parks and trails along both banks, to establish connections, create amenity value, and set the stage for new development
- Connect the area through a series of riverfront trail loops along and across the river
- Utilize publicly owned lands as a catalyst for high quality redevelopment
- Work with existing property owners to encourage site improvements that create a higher value, greener, and more sustainable riverfront area
- Identify and promote opportunities for high quality infill that capitalizes on the riverfront location, and provide assistance for any incompatible uses needing to relocate
- When possible, strategically acquire sites for redevelopment in key areas along the riverfront
- Connect local streets to the riverfront through a series of bicycle, pedestrian, and streetscape improvements

These principles should be utilized with the goal of creating complete park and redevelopment projects that can be celebrated. Initial success will build support for additional implementation.

LAND USE CONTROLS

The City of Minneapolis, through its comprehensive plan and zoning ordinance, has the power to set regulations for acceptable uses in the upper riverfront, in order to promote the general welfare and seek an orderly evolution of the city. Consistency between adopted land use policy and zoning is required by law. As a result, the adoption of this plan will be followed by a rezoning study to ensure zoning is consistent with the adopted policy.

The current base zoning of the study area is largely consistent with existing uses. Since the area is primarily industrial, this means industrial zoning ranging from I1 Light Industrial to I3 Heavy Industrial. Other areas include a mix of zoning particularly along the east bank of the river.

The original Above the Falls Plan called for widespread rezoning, downzoning a significant amount of area to high density residential, creating new zoning districts for parks, as well as a "specially planned district" zone.

This plan represents a change in direction on rezoning, for several reasons. One is a state law change in nonconforming rights on existing properties that makes it significantly harder to remove an existing nonconforming use. Another is further analysis into the proposed zones – a park zone on a non-park property is likely to be considered a taking, and the specially planned district zone is counter towards the existing zoning code's recently revised approach to planned unit development. Finally, the shift to a more incremental implementation approach outlined in this chapter significantly increases the risk that premature rezoning of an area may actually slow the pace of redevelopment – as existing uses are discouraged from investing in their properties and blight and deterioration accelerate.

Additionally, there has been some rethinking of industrial zoning in the city. The primary focus of industrial zoning to date has been protection of other uses from industrial impacts – particularly residential. However, the focus on mixed use redevelopment and the creation of cleaner more attractive light industrial uses has blurred the line between the two – most notably with the formation of the Industrial Living Overlay District. Furthermore, when planning for high amenity areas such as the riverfront, the miscellaneous uses included in industrial zoning districts does not necessarily translate into appropriate uses in these valuable locations.

As a result, there has increasingly been a desire to create a new job-oriented "business park" district which focuses on office and clean light industrial uses, while screening out lower end, lower value uses typically found in industrial districts (such as bulk storage, auto service, and other such uses). This would both capitalize on the value of the riverfront location as well as providing a more compatible neighbor for nearby residential and mixed use.

With this in mind, the plan proposes a more limited scope for the subsequent rezoning study:

- For areas identified as "business park" on the future land use map, investigate the creation of a new business park zoning district or altering controls in existing industrial districts, which focus development on high value job-generating redevelopment. These areas may also be identified as priorities for public assistance to new development.
- For areas identified as "industrial" on the future land use map, maintain existing zoning but consider downzoning to lighter industrial in areas immediately conflicting with existing or potential mixed use or residential areas.
- For areas identified as "park," allow existing zoning to remain, but consider downzoning when land transitions to park use.
- For areas identified as "mixed use," allow existing zoning to remain in the interim, but permit rezoning to residential or mixed use development once conditions for the Vision Plan are met (see Vision Plan section)

Due to the uncertainty around the implementation of the Vision Plan, the rezoning of large areas to residential-mixed use development is likely to be at some as of yet undefined point in the future. Future plan updates should periodically reexamine this question and reevaluate the desirability and timing of this transformation.

PUBLIC ACQUISITION AND DEVELOPMENT COORDINATION

Implementation of this plan will require significant public acquisition of land. This is envisioned to be largely through willing seller transactions, and will take place over a period of time. As such, the implementation is likely to be opportunistic and incremental, especially at first.

There are several key aspects to this approach. One is the availability of resources to take advantage of opportunities as they emerge. At present, the Legacy Amendment has created a funding stream for the MPRB, which when combined with other resources creates the ability to acquire lands for parks. This plan would strongly support continuation of this and other sources. Availability of land for private development – at least in this area –is not as readily identified at present, but may emerge over time.

Another aspect is ongoing communication with existing and potential property owners, residents, businesses, developers and other entities. This can help identify those interested in selling, relocation, developing new projects, and other key transactions that can help move plans forward. While some of these changes will remain purely private and not subject to intervention, ongoing communication and outreach can help create a more proactive approach to identifying these opportunities than would happen otherwise.

As noted above, an independent development entity can potentially do a lot to further this particular strategy. Efforts will need to be scalable, starting with ongoing outreach, building the case for resources, etc.

Another advantage of a non-public development organization is that land can potentially be assembled and redeveloped privately, without an ownership role from the public sector. As one of the goals of riverfront redevelopment is to build investor confidence and promote private investment, scenarios where the public sector does not need to participate directly should be encouraged – assuming the results are generally consistent with adopted policies and guidelines for the area.

ENVIRONMENTAL COALITION BUILDING

There are many non-governmental organizations, including environmental groups and private foundations that have a keen interest in improving the environment of the Mississippi River, at the national, metropolitan, and local scales. These organizations are a valuable resource for information and advocating for the river. Any and all interested groups and individuals who support the concepts outlined in the Master Plan should be actively engaged in a broad coalition for progressive implementation.

In addition to the many private groups and local public agencies working to improve the Mississippi, the state and federal governments also have ongoing planning requirements and programs. The State of Minnesota has designated the Mississippi River a "critical area," and requires municipalities to create plans for improving the riverbank environment. At the federal level the National Park Service manages the Mississippi National River and Recreation Area (MNRRA), a unique unit of the National Parks system working with municipalities to establish continuous parks and river access along the Mississippi in the Twin Cities metropolitan area.

In general, this plan will realize the Critical Area and MNRRA goals with a continuous riverfront trail system connecting to other trails north and south, a greenway buffer along the riverbank, and new land uses replacing open storage of bulk materials with attractive and high value new development.

Variances to the standards set in the City's Shoreland Ordinance regarding the height of structures and setbacks may be necessary along the Mississippi Promenade to create the type of lively urban riverfront district that the Plan envisions; however, such action should only be taken in the context of specific development proposals, and in coordination with public agencies that oversee Critical Area and MNRAA compliance.

RESOURCES

In order to implement the Upper River Master Plan, funds should be sought at all levels of government, as well as grants from private foundations. One of the benefits of a visionary plan is that interest and excitement can be generated outside of the City of Minneapolis. At the metropolitan level, funds should be sought on the grounds of expanding a highly popular regional park system and strengthening the core with new development. At the state level, the plan contains many fundable elements relating to infrastructure and environmental resource protection. The plan is also consistent with federal programs for inner city revitalization and transportation efficiency.

Potential sources of funds include, but are not limited to, the following:

- **City of Minneapolis and Hennepin County**
  - *Tax increment financing*
  - *Tax abatement*
  - *General obligation bonds*
  - *Minneapolis capital improvement program*
  - *Housing revenue bonds*
  - *Hennepin Community Works projects*
  - *County transportation capital improvement programs*
  - *Proceeds from land sales*
  - *Direct assistance to businesses*

- **Watershed**
  - *Mississippi Watershed funds*
- **Metropolitan Council**
  - *Metropolitan Parks and Open Space Commission*
  - *Livable Communities Program grants*
- **State of Minnesota**
  - *Projects earmarked in biennial Bonding Bill*
  - *Legislative-Citizen Commission on Minnesota Resources (LCCMR) grants*
  - *State transportation capital improvement programs*
  - *Great River Road Program grants*
  - *Hazardous waste remediation grants*
  - *Department of Employment and Economic Development grants*
  - *Department of Natural Resources – Metro Greenways, Metro Wildlife Corridors Partnership*
  - *Department of Transportation – Municipal State Aid (MSA)*
  - *Minnesota Pollution Control Agency – Clean Water Partnership*
- **Federal**
  - *Department of Transportation, MAP-21 funding programs*
  - *Department of Housing and Urban Development, programs and special grants*
  - *National Park Service, Mississippi National River and Recreation Area grants*
  - *Army Corps of Engineers – Environmental Management Program grants*
  - *Land and Water Conservation Fund*
  - *Empowerment Zone grants*
  - *Private Sources*
  - *Foundation grants*
  - *Donations for specific projects*
  - *Special services district*
  - *Special assessments*
  - *Park dedication*

Additional tools and resources may need to be developed. For instance, modifications to tax increment financing (TIF) that allow funds to be pooled over a larger area, or used to fund improvements over a longer period of time.

As stated above, one underlying goal of this process is to build private sector confidence in this area, and thereby to encourage private investment in its development and improvement. While the facts remain that significant public and philanthropic subsidy will likely be needed to set the stage for private sector investment, the goal of strengthening the private market should not be lost.

One key observation is that in many ways, the private market is already working in this area. It may not be producing the highest and best use that takes advantage of the unique assets of this location, but it does have a viable purpose and some demonstrated value. The approach of this plan should be to carefully weigh the tradeoffs associated with land use transition, to ensure we build on existing strengths to the extent possible, rather than attempting to undo everything that has gone before and start from scratch. In that way not only will we find a more feasible path to success, but we will be good stewards of limited public resources dedicated to positive change in the community.

APPROVAL PROCESS

Once public review is complete and comments and edits have been incorporated appropriately, the plan will go through a multi-stage approval process.

After a 45-day comment period, the City Planning Commission will review the plan and recommend it for approval to the City Council. The Planning Commission meeting will be a public hearing, with the opportunity for the public to comment on the plan. The plan will then proceed to the City Council's Zoning and Planning Committee, and then on to the full City Council for approval.

The Minneapolis Park and Recreation Board will act on the front end of the public comment period to approve the plan. It will take subsequent action upon the completion of the comment period with a final approval.

Both City and Park Board approvals will be contingent on final approval by the Metropolitan Council. The regional park plan component will proceed first, since it involves the direct modification of the Metropolitan Council's own regional parks plan. Once that is approved, the full plan update will move forward for Metropolitan Council approval. This will involve an update to the City's comprehensive plan, which also includes the Park Board's comprehensive plan.

If the Metropolitan Council review results in modifications to the Above the Falls Plan, it will need to return to the City Council and/or Park Board for a final approval. Otherwise, plan adoption will be final.

Implementation is already ongoing and will continue after plan adoption. A rezoning study will be an important action step on the City's side. The recommendations listed in this implementation chapter can be used to track progress over time.