



Request for Qualifications

5/25/18

For an Economic Impact Analysis of the:

Fox River Corridor Master Plan Update

City of St. Charles, Illinois

I. Executive Summary

The City of St. Charles is seeking qualification proposals from consultants with experience in economic impact and cost-benefit analysis. The focus of this analysis is to evaluate specific proposed “attraction” improvements outlined in the Fox River Master Plan.

In 2015, the River Corridor Foundation, in partnership with the City of St. Charles and the St. Charles Park District, spearheaded an update to the Fox River Corridor Master Plan. This plan laid the conceptual framework for increased utilization of the Fox River through the creation of unique “attractions” projects.

The intent of this Request for Qualifications is to identify a consultant that is able to develop an economic impact and cost-benefit analysis to determine if these “attraction” projects will create a return on investment. Returns on investment will be based on an increase in interest in visitors/tourism, redevelopment of downtown properties, and increases in taxes generated to recover the potential estimated capital costs of these projects.

The City intends to solicit interest, select a consultant that best meets the qualifications of the request, and initiate a contract to provide these economic impact and cost-benefit services and prepare DRAFT preliminary findings. The City may further direct the consultant to finalize the report.

II. Background and Introduction

The City of St. Charles, IL, located in Kane and DuPage Counties, is 34 miles directly west of Chicago, with a population of approximately 33,000. The City’s historic downtown is located at its geographic center along the banks of the Fox River. Throughout the City’s history, the Fox River has played a critical role in the development of downtown St. Charles. Land use activities have varied over the years originally focusing on industrial uses that utilized the river to power factories. As time and preferences changed, there was an evolution in downtown St. Charles to commercial (retail and office), recreational, residential, entertainment, and hospitality uses. Most recently, the downtown is experiencing an increase in planned mixed-use redevelopment.

The City is seeing a renaissance in new development spearheaded by the First Street Redevelopment project along the western banks of the Fox River south of the Main Street (Rt. 64) bridge. This development project is a multi-phase, multiple building, public-private partnership creating new housing, retail, office, recreation amenities, and public parking facilities. This project is the culmination of approximately two decades of commitment from the City’s leaders.

There appears to be a desire to create new attractions focused in and along the Fox River. In 2015, the River Corridor Foundation, in partnership with the City of St. Charles and the St. Charles Park

District, spearheaded an update to the Fox River Corridor Master Plan. The updated plan highlights the potential for increased utilization of the Fox River by providing a strategic framework with the goal of creating unique features to increase interest from visitors (tourism) and developers to invest in redevelopment opportunities.

Given that some of the recommended improvements require a significant amount of capital investment, the City is seeking to review the qualifications of consultant companies that can create a methodology to analyze these projects. Specifically, the consultant will determine which projects will create an order of magnitude of new tourism and redevelopment interest in downtown St. Charles when compared to the cost of the potential improvement constructed.

III. Study Area Geographic Boundaries

The 2015 plan included recommendations for the entire length of the Fox River shoreline that is within the corporate limits of St. Charles. For the purposes of this study, the geographic boundary is limited to attractions/improvements within the following section of the Fox River and surrounding properties:

- UP Railroad trestle bridge –north border
- The Prairie Street Bridge – south border
- 3rd Avenue – eastern border
- 4th Street – western border
- See Exhibit I for a map illustrating the proposed geographic boundary

In addition to the recommendations of the 2015 plan update, there are certain City-owned and privately owned underutilized sites that have redevelopment potential and/or can be utilized to provide elements of the 2015 plan. These sites shall serve as the basis for redevelopment opportunities in this study. One site to highlight is the current location of the St. Charles Police Station. The City is in the process of constructing a new Police Station facility outside of downtown and it is anticipated that the existing site may become available for redevelopment. A map illustrating the location of these properties is attached as Exhibit II to this RFQ.

In order to assist with the preparation of the analysis, the City is flexible to furnish any available background information upon selection of a consultant.

IV. Scope of Study - Economic Impact Analysis

The selected consultant is expected to create and Economic Impact Analysis Report by examining the financial impacts of the physical improvements contained in the Fox River Corridor Master Plan 2015 update. Specifically, the selected consultant shall compose a final report that provides the following information:

- Base line determination of the potential for economic growth of the identified redevelopment opportunity sites in the defined geographic area, without the addition of any new features in or along the Fox River.
- An evaluation of the proposed “attraction” improvements identified in the 2015 plan within the defined geographic area. The scope of this study is limited to the following “attractions” and not all recommendations of the plan:
 - “Riverpark” Concept (Pages 28-32) – The “Riverpark” concept is located on the Fox River and immediately adjacent to the Fox River between the Main Street -Rt. 64 bridge (south) and the existing railroad trestle bridge (north). This concept includes the removal of the existing dam (north of the Rt. 64 Main Street bridge) and constructing a new adjustable height dam at/near the railroad trestle bridge. In place of the current water pool north of the existing dam, there will be a series of navigable rapids and an increase in shoreline property available to add new amenities such as bike/walking paths, pocket parks, signature pedestrian bridges, and a children’s play stream.
 - “Riverpark” Alternative– The consultant shall also include an analysis of adding attraction features utilizing the existing shoreline of the “Riverpark” area to account for a scenario in which the existing dam is not relocated. This may feature many of the same attractions such as new signature bridges, connecting pedestrian/bike paths, children’s play area, artwork, and incorporate public boat docks as recommend on page 41 to increase boat access to downtown in this location. This scenario does not include creating a series of navigable white water rapids.
 - River Walk and Connectivity (Pages 33-35 & 43) – There are currently a series of disjointed pedestrian/bike paths along the shores of the Fox River that are not connected throughout the defined geographic area. The plan identifies improvements to create more connectivity and increase the ability for visitors to walk and connect to different parts of downtown St. Charles.
 - “Bridgeview” (Page 37) – Create a signature observation platform on the railroad trestle bridge that overlooks downtown.
 - Recreational Assets (Pages 46-47) – The 2015 update identifies a number of potential recreational activities that can be developed at various locations within the geographic boundary. Specific recreational activities in the defined geographic area identified are:
 - Outdoor recreational activities (zip-line courses, climbing walls, kayaking launches, etc.)
 - Splash pads and destination playgrounds for children

- Providing fishing and nature observation locations
 - “Surf wave”
- Cultural Assets (Page 48) – Utilize spaces along the riverfront and in the Fox River to showcase artwork such as sculptures, historical markers, and art demonstrations incorporated into the Fox River.
- The consultant shall provide an evaluation of each identified “attraction” project stated above. This evaluation will examine the potential returns from each project and if the City will recover the estimated capital costs and/or create a return on investment. This return on investment shall be based on the project’s ability to stimulate additional interest in visitor attraction/tourism, redevelopment opportunities of the identified sites, new tax generation, or other benefits as determined by the consultant. The consultant shall also consider the costs of ongoing maintenance of the improvement after construction.
- Cost-benefit ranking based on which “attractions” will generate a positive value proposition when comparing the anticipated capital costs of the improvement to the increase in interest in visitors/tourism, redevelopment opportunities, and tax generation. (i.e. which proposed improvement will create the most interest in redevelopment and tourism for the lowest cost)

V. Tentative Schedule

<u>Action</u>	<u>Date</u>
Post RFQ	May 25, 2018
Recipient Responses Due	June 18, 2018 (4:30 PM Central Time)
Selection of Consultant/Contract Approval	July 16, 2018
DRAFT Preliminary Findings Completed	September 2018
<u>Optional Item:</u>	
Presentation to Council Committee	
<i>*The City reserves the right to request that the consultant prepare a final study document</i>	

VI. Submission Requirements

Three physical copies and an electronic copy of the response, to include the following information:

1. Description of the submitting company including:
 - Name, address, and contact information
 - Identification of the principals and staff who will be working on the proposed study
 - Information regarding previous similar project experience with specific examples
 - Description of how the company is qualified to fulfill the scope of services requested in this RFQ
 - References from municipalities where the consultant has completed a similar study
2. Detailed narrative description of the company's planned approach and methodology utilized to complete the identified deliverables. Specifically:
 - A description of how the firm intends to address the anticipated scope of services
 - Statement explaining the company's approach to economic impact analysis and cost-benefit analysis including methods, analytical techniques, or models, etc. that will be utilized
3. Project timeline and benchmarks for completing the study in the identified time allotted
4. Fees - estimated fee for the company to complete the study including:
 - Normal hourly rates for employees engaged in the study
 - List of reimbursable expenses
 - Other fees expected to be charged as part of the study

VII. Review of Responses

The following criteria will be used considered in reviewing responses:

- Approaches in methodology with respect to the anticipated scope of services that demonstrate maximum comprehension of and ability to provide such services
- Experience of the company and employees to be assigned to the project in general, and in particular, providing economic impact analysis reports to municipalities, economic development organizations, or other quasi -governmental or non-profit entities
- Demonstrated knowledge and experience with similar projects of economic impact analysis and cost-benefit services
- Innovative or outstanding work by the company that demonstrates the firm's unique qualifications to provide economic impact analysis services
- Selected company's ability and availability to complete the project in the requested timeframe
- Projected cost of services
- Quality of work product as demonstrated in submitted work samples

VIII. Additional Information

Contact Person:

Rita Tungare

Director of Community & Economic Development

City of St. Charles

2 E. Main Street

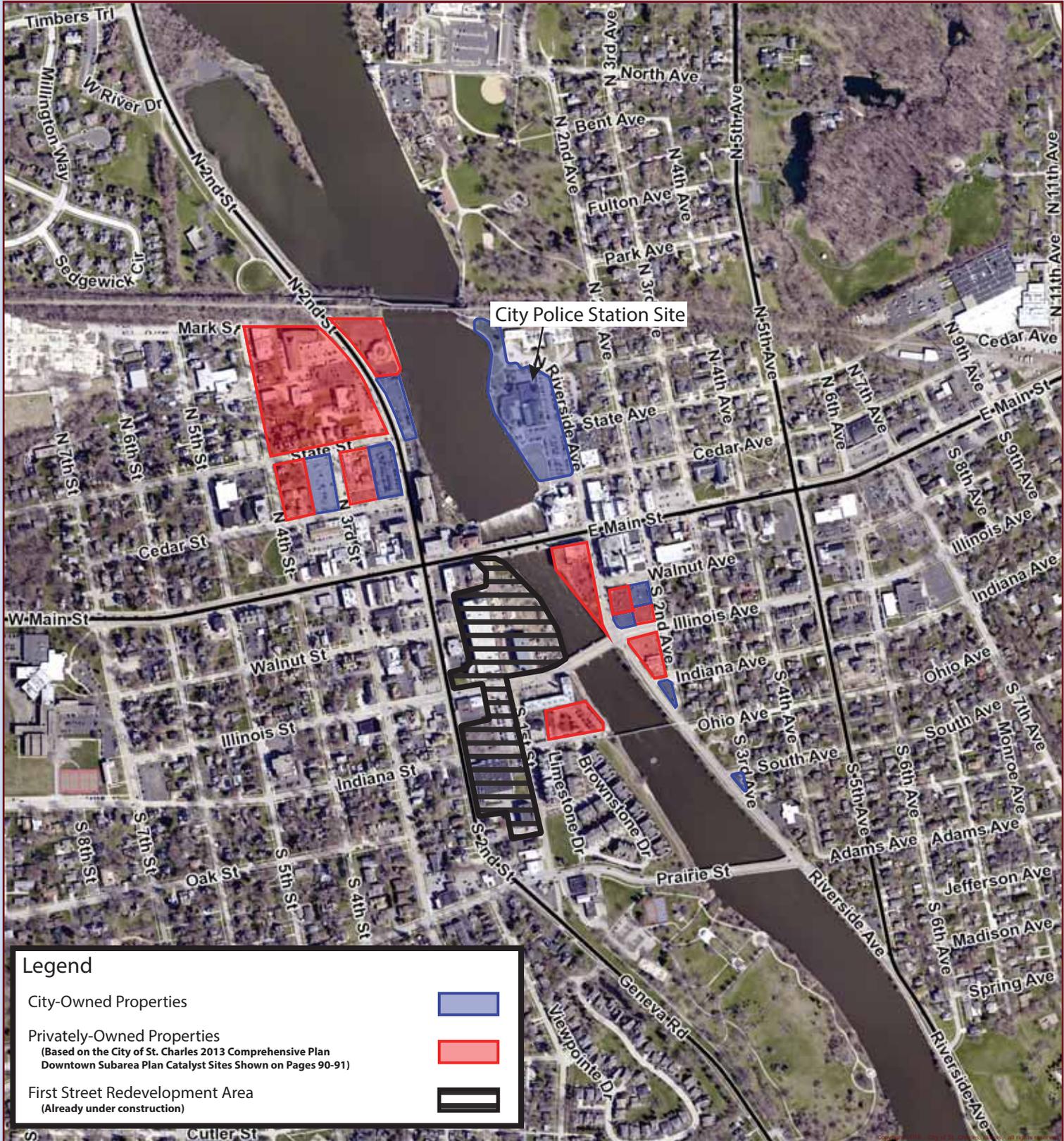
St. Charles, IL 60174

(630) 377-4443

rtungare@stcharlesil.gov

IX. Exhibits

- Exhibit I – Geographic Boundaries Map
- Exhibit II – Potential City-Owned and Privately-Owned redevelopment Properties Map
- Fox River Corridor Master Plan 2015 Update
- WBK Project Feasibility Study



Legend

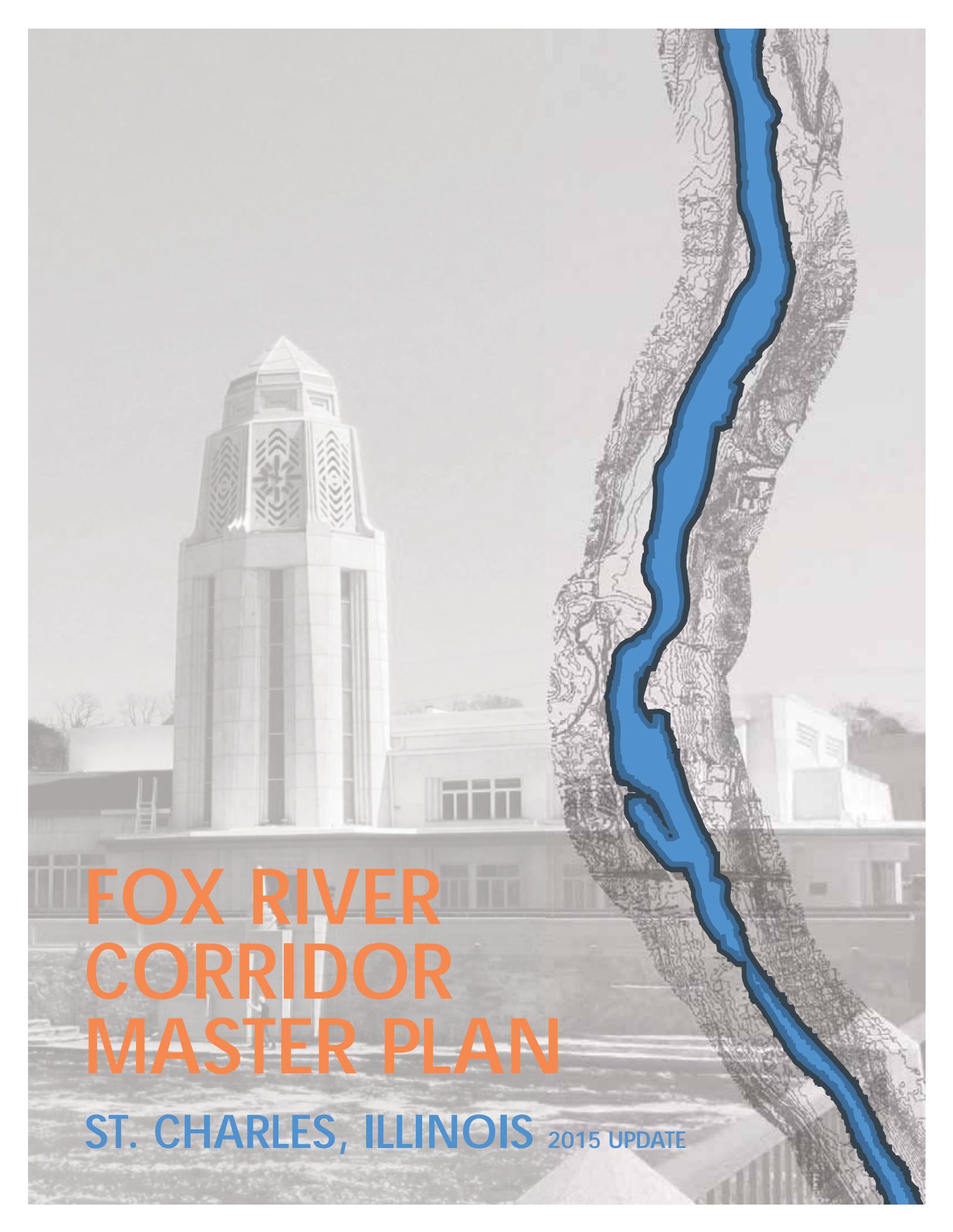
- City-Owned Properties
- Privately-Owned Properties
(Based on the City of St. Charles 2013 Comprehensive Plan
Downtown Subarea Plan Catalyst Sites Shown on Pages 90-91)
- First Street Redevelopment Area
(Already under construction)



Data Source:
City of St. Charles, Illinois
Kane County, Illinois
DuPage County, Illinois
Coordinate System: Illinois State Plane East
Projection: Transverse Mercator
North American Datum 1983
Printed on: April 30, 2018 04:09 PM



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FOX RIVER CORRIDOR MASTER PLAN

ST. CHARLES, ILLINOIS 2015 UPDATE

Acknowledgements

Sponsor Agencies

River Corridor Foundation of St. Charles

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Active River Task Force Members

John Rabchuk, Chairman
 Chris Adesso, Vice Chairman
 Holly Cabel
 John Wessel
 Bob Carne
 Monica Meyers
 Matt O'Rourke
 Rick Brems
 Jim Enck
 Tony Zehnder

Project Team

Hitchcock Design Group – Planning, Landscape Architecture
 Market & Feasibility Advisors – Market Economics
 Wills Burke Kelsey Associates – Civil/Water Resource Engineering
 S2O Design and Engineering – Active River Engineering

Support for this project has been provided by the Kane County Board, through its Office of Community Reinvestment, with funds from the Grand Victoria Riverboat Casino.



Market & Feasibility Advisors





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Executive Summary

Dear Community Leaders:

From the time that St. Charles was first settled, the Fox River has been one of its most important assets. Today, thanks to the vision of past leaders who recognized the importance of the river, St. Charles prospers and enjoys a sparkling regional reputation. The future of the Fox River and riverfront in St. Charles is extraordinary. Actively nurtured, the river corridor will feature a compelling package of natural and man-made assets that will define the community's environmental, cultural and economic prosperity for decades to come.

Building on a tradition of visionary planning, the 2002 River Corridor Master Plan illustrated the community's concept of a signature riverwalk along both sides of the river that would attract visitors, connect parks and neighborhoods to downtown, and stimulate downtown investment. The plan also recommended design guidelines and described an incremental implementation process. Spearheaded by the St. Charles River Corridor Foundation, the City of St. Charles and the St. Charles Park District have completed some key projects including the riverwalk between Prairie and Illinois Streets along the west bank of the river, named in honor of the late Bob Leonard, the 2002 Downtown St. Charles Partnership River Corridor Committee co-chairman. However, many of the master planned projects remain unrealized.

In 2015, led by the Active River Task Force of the River Corridor Foundation, the City of St. Charles, the St. Charles Park District and the Kane County Forest Preserve District sponsored this master plan update. Consistent with the 2002 master planning process, the consultant team analyzed the multitude of existing resources and intriguing market conditions, and gathered valuable input from residents and dozens of civic, jurisdictional, business and special interest organizations. In addition, the team gave extra attention to the multi-dimensional characteristics of the river. This 2015 update describes the Exceptional Opportunity, Active River Strategy and Incremental Implementation Process that will enable the community to realize its goal to **“create a lively riverfront environment that is the centerpiece of the community.”**

Exceptional Opportunity

Clearly, St. Charles is not the only town in the region with a downtown river. Every Fox River Valley town was settled along the river, and many other towns in the region have rivers flowing through their downtown. Some towns have begun to reverse decades of riverfront neglect caused by industrialization and cyclical flooding issues in order to leverage their riverfronts as recreational and cultural assets. Regionally, downtown Naperville has built its brand, in part, on the success of its riverwalk, and Chicago recently opened the first phase of its \$43 million Riverwalk. Nationally, countless communities have turned to their rivers to reinvigorate their downtowns. Four example communities are referenced in this plan. What, then, sets St. Charles apart from the crowd? As summarized in the Opportunity Analysis, the Fox River Corridor in St. Charles has an exceptional combination of desirable resources, attractive markets and market trends, and engaged stakeholders; all of which set the stage for success.

Almost four miles long, the St. Charles reach of the Fox River is uncommonly scenic, with much of the shoreline, particularly north and south of downtown, in public ownership and attractively improved for recreation. The impounded pool upstream of the dam is a beautiful and treasured asset for rowing and motorboat enthusiasts, and the Fox River Trail is an enormously successful regional bike trail that draws thousands to the vicinity. In addition to iconic commercial properties like the Baker Hotel, the 2013 Comprehensive Plan identified many properties, small and large, that could be redeveloped to take advantage of the river and riverfront improvements.

The local market is affluent and aging, with many more single adult and empty-nester households forecasted. Nationally and regionally those populations, along with the younger adults, are often seeking active urban and suburban lifestyles that support walking, cycling, canoeing, kayaking and rowing activities. St. Charles' domination of the local hotel market makes for an especially intriguing opportunity on the riverfront.

As can be expected, diverse Fox River Corridor stakeholders often have conflicting interests, but everyone seems to agree on the importance of the river and the need to manage it with great care. What, if anything, to do with the dam seems to be the topic that crystallizes the recreation vs. preservation, activation vs. restoration, and even old vs. new differences among those who love the river and their community. This debate is particularly important to the Fox River Study Group (FRSG), which includes representatives from state regulatory agencies, the City of St. Charles and other Fox River communities. The FRSG was formed to develop data-supported water quality recommendations for the Fox River, focusing primarily on discharge from sewage treatment plants, in lieu of an IEPA mandated phosphorous Total Maximum Daily Load requirement. The FRSG has studied the potential benefits of dam removal as one option to improve water quality of the Fox River. Dam removal proponents argue that the IDNR has indicated a willingness to contribute as much as \$2.5 million to remove the dam and that a complete removal of the dam will improve water quality and reduce the need for sewage treatment plant modifications. By comparison, dam retention advocates suggest that the current upstream pool is a priceless community asset and cannot be altered.

Given the abundant opportunities and daunting challenges, how can St. Charles best capitalize on its remarkable assets and attractive markets to distinguish itself in the Fox River Valley and achieve the community's heartfelt goal to be the centerpiece?

Active River Strategy

The City of St. Charles, the St. Charles Park District, the Kane County Forest Preserve District, business owners, property owners and all other partners who love this important river corridor need to embrace a long-term, multi-dimensional strategy to complete a package of seasonal and year-round river-centric attractions and complementary destinations; complete the river, riverwalk and trail connections; embellish the natural, cultural and recreational assets, refine and align brand communications; and act systematically and incrementally to gain and sustain momentum.

Each one of these five strategic dimensions supports and builds on existing assets, past achievements and important recommendations from the 2002 master plan. For instance, this 2015 Fox River Corridor Master Plan reinforces the need to complete a barrier-free, signature riverwalk and to improve and extend the Fox River and Great Western Trails. Both the riverwalk and trail improvements advance four strategic dimensions, simultaneously, as brand-defining magnet attractions, valuable connections and cultural/recreational assets.

Another brand-defining attraction, the spectacular multi-dimensional “River Park” featured in this 2015 update extends from Main Street to the railroad trestle along both sides of the river. River Park includes an expansive riverwalk, barrier-free trail extensions, a nature-based children’s play environment, naturalized shorelines, exciting pedestrian bridges, and a paddling course – all made possible by a major dam modification that is conceived to maintain the slow-moving, flat-water surface of the upstream impoundment that is ideal for rowing and power boating while creating a narrower, more natural, stepped river channel that allows wildlife passage and accommodates canoeists, kayakers and other river enthusiasts of all skill levels. In fact, River Park creates a connection between downtown and Pottawatomie Park and also creates an unmatched catalyst for the substantial redevelopment of relatively large tracts both east and west of the river.

Closely related ecological and infrastructure improvements at Boy Scout Island will improve water quality, wildlife habitat and boat launching while creating a distinctive water garden opportunity. Grade-separated and safer at-grade crossings will improve pedestrian and cyclist access to and along the riverfront, and dozens of smaller scale projects will embellish the natural, cultural and recreational features that will strengthen and define the St. Charles riverfront brand. In addition, all of the river and riverfront amenities will help attract much-needed smaller-scale residential, office and restaurant infill development. They will also promote private sector investment in seasonal recreation activities such as camping, cycling, boating, climbing and ropes courses.

This Active River Strategy will elevate St. Charles’ brand from good to great. When fully realized, the St. Charles river corridor will boast a package of extraordinary natural, cultural and recreational attractions, complimentary commercial and residential destinations, and vital connections that will appeal to an active and growing regional population. Other river towns may have some of these amenities, but St. Charles can have the most. Along the way, the river corridor partners – and the City of St. Charles, in particular, should craft a coordinated brand platform and communications around the river and the complete riverfront package.

The last dimension of the Active River Strategy, gaining and sustaining momentum, may be the most daunting. Like the 2002 plan, this update comes on the heels of a severe recession, and is compounded by unprecedented financial problems at the State of Illinois. Nonetheless, the long-term benefits are clear and compelling, the public is enthusiastic, and the process, when subdivided into small components, is manageable.

Incremental Implementation Process

Led by the City of St. Charles, the river corridor partners should all adopt this plan and commit to incremental implementation of the Active River Strategy by systematically executing a series of correlated policy, capital and operational improvements. The City and its river corridor partners should, initially, concentrate on key public policies that will set the stage for future work, vigorously promote the strategy to all stakeholders, and coordinate public and private sector capital improvements-in-progress to align with the updated master plan.

Policy Improvements

- Vigorously advocate the Active River Strategy with the FRSG to promote consideration of ecological, water quality and habitat improvements to supplement and offset conventional treatment plant improvements in their upcoming Fox River Improvement Plan that supports the “River Park” concept in this plan.
- Select river corridor improvements, including the Phase I study of the dam modification, for the 2016 and the 3 year Capital Improvement Plans (approx. \$4.1M).
- Seek funding through state and federal sources to complete the Phase I study of the dam modification. Confirm local match requirements.
- Assign someone to research grant funding and produce periodic memoranda to be shared and compared with other corridor partners. Identify the best opportunities and partnerships, and apply for/facilitate grant awards.
- Complete the Police Facility Study and determine the availability of this important site for redevelopment.

Capital Improvements

- Align the Piano Factory Bridge rehabilitation, temporary city hall/police station bulkhead wall rehabilitation, and Fox River Trail sign improvement projects-in-process with the Active River Strategy.
- Align the First Street redevelopment project-in-process with the Active River Strategy.
- Commence the Preliminary Design/Engineering study of the dam modification (approx. \$1M).
- Complete the Preliminary Design/Engineering of the Riverside Drive Riverwalk (approx. \$50K).
- Complete the Preliminary Design/Engineering of selected shoreline improvements and Leonard Memorial Walkway pedestrian amenities and enhancements (approx. \$25K).



Operational improvements

- Synchronize the 2016 City, Park District and County operational plans with other river corridor partners to prioritize the Active River Strategy.
- Continue to actively communicate and promote the Active River Strategy with all jurisdictional, organizational, commercial and residential stakeholders.

Timely community action is critical because the FRSG's Fox River Improvement Plan is due to be released at the end of 2015. Given the circumstances, if FRSG supports the Active River Strategy, then St. Charles is in a better position to obtain IDNR funding support for a dam modification.

Yes, this is an ambitious vision. However, since St. Charles was first settled, visionary leaders have understood that the Fox River has been, is, and will continue to be central to the success of the community. With the focused support of community members and their leaders, the Fox River corridor in St. Charles will be **"a lively riverfront environment that is the centerpiece of the community."**

Thank you for allowing us to participate in this exciting Active River Strategy.

Sincerely,

Hitchcock Design Group, in association with
Wills Burke Kelsey Associates, Ltd.
S2O Design and Engineering
Market and Feasibility Advisors



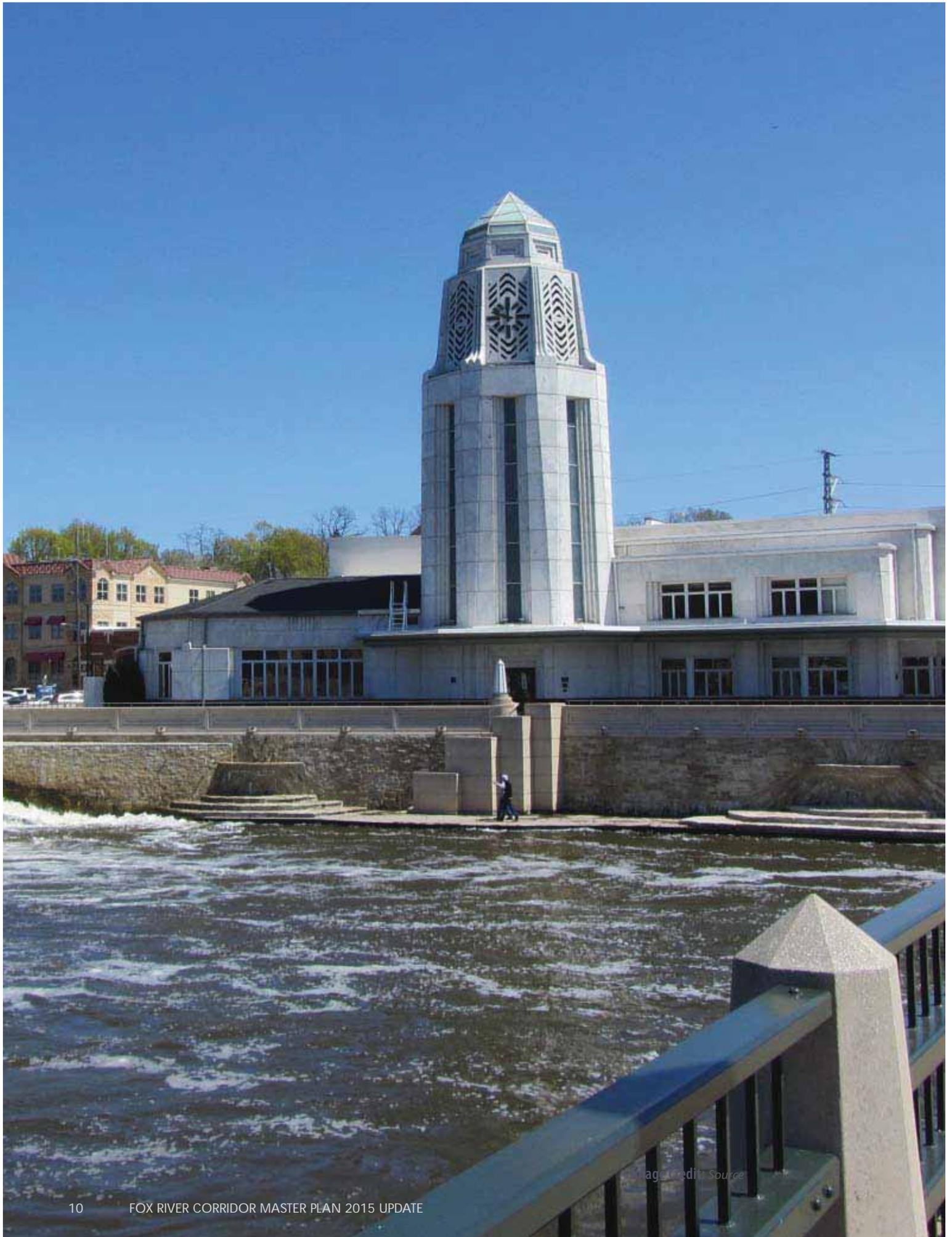


Image Credit: Source

Introduction

Purpose

The purpose of this plan is to update the 2002 River Corridor Master Plan with an increased focus on active river recreation, economic development opportunities and ecological improvement initiatives. The plan will provide policy and resource guidance to leaders over the next several years.

Study Area

The Study Area includes the extent of the Fox River within the City of St. Charles municipal boundaries from approximately Red Gate Road on the north to Division Street on the south, including the properties that border the river. Downtown St. Charles is located within the study area and is considered part of the River Corridor project area.

Process

In January of 2015 the Active River Task Force selected the Hitchcock Design Group (HDG) team to complete the master plan update. During the Opportunity Analysis the team examined the existing resources, local and regional marketplace, and stakeholder behaviors and interests. Next, the team explored alternative strategies and established a Preferred Strategy for an integrated, market-supported series of policy, operational, and capital improvements. This report summarizes the recommendations and concludes the Final Master Plan update..



Community Engagement

The team coordinated with the Active River Task Force throughout the duration of the study. The Active River Task Force consists of Park District, City, and Forest Preserve representatives, along with River Corridor Foundation members. The team also maintained a project website, conducted over 35 confidential stakeholder interviews, and facilitated a community workshop and a public open house. The team presented the preliminary recommendations to the River Corridor Foundation, and at a joint meeting of the Park District Board and the City Council during the Alternative Strategies phase. The Final Plan was presented to the Park District Board, City Council, Forest Preserve District Board and the River Corridor Foundation at the conclusion of the Final Master Plan.

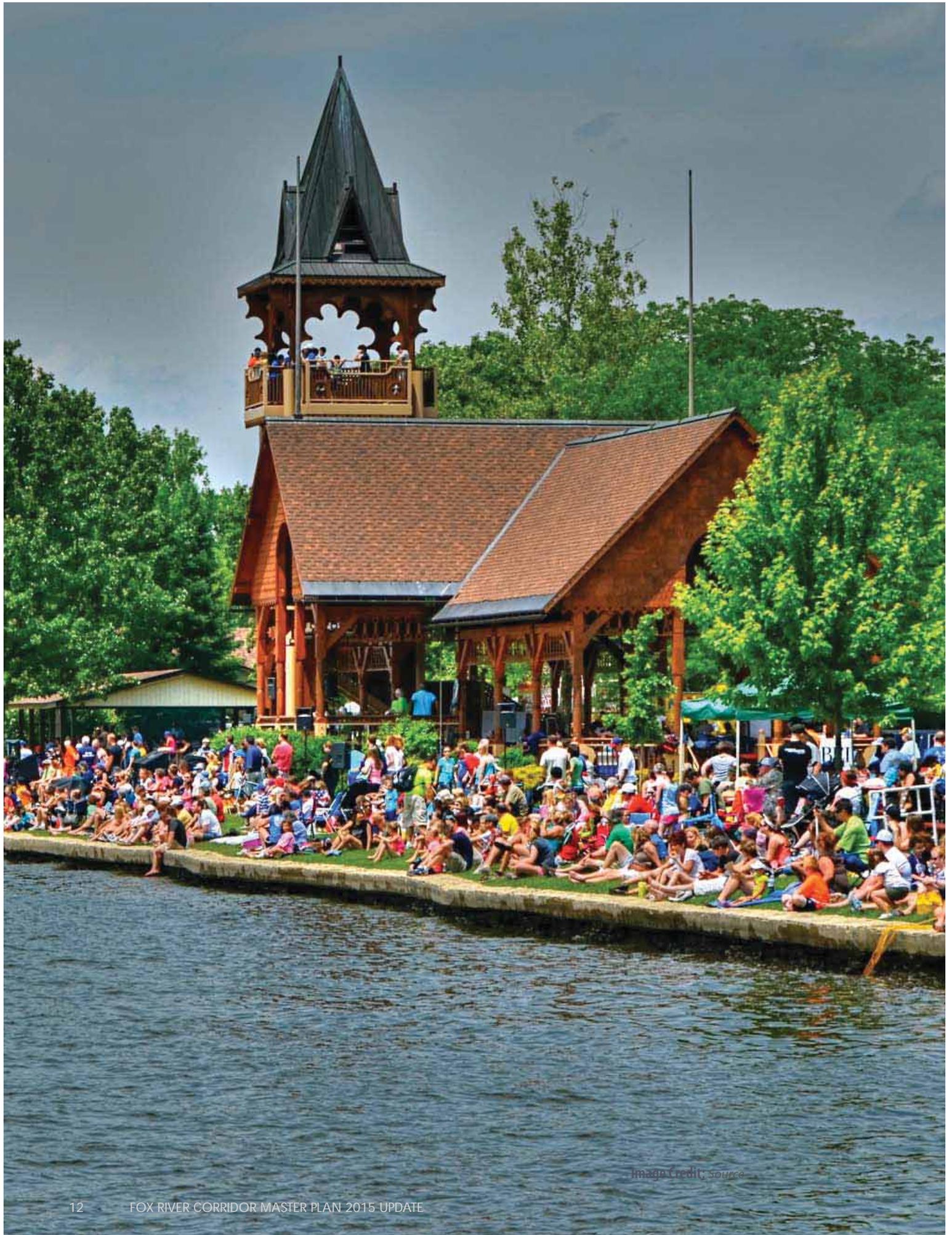


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Opportunity Analysis



Context

The City of St. Charles is located 35 miles west of downtown Chicago. Along with Geneva and Batavia to the south, the area is often referred to as the tri-cities and has a reputation as a great place to live, work and play, along with being a shopping, dining and recreational destination. The Fox River Valley on a regional scale is a unique natural, cultural and recreational resource within the Chicago region and beyond. The St. Charles section of the river is particularly scenic, offering many active and passive recreational alternatives. St. Charles has an opportunity to capitalize not only on its own unique attributes, but in coordination with other Fox Valley communities, the region on whole can leverage their resources to improve and prosper.

Resources

Natural Resources

The 3.8 mile section of the Fox River within St. Charles is especially scenic and offers a variety of recreational opportunities due to the 18 acre upstream pool created by the dam and the 7 miles of unobstructed river until the next dam north located in South Elgin. Due to its popularity, the balance of multiple uses within the river can be a challenge at times.

The floodplain and floodway extend beyond the banks of the river in some locations and can be a source of periodic flooding and inconvenience. This impacts potential development/redevelopment sites and will require further study and permitting as specific site improvements are considered.

There are a number of preserved natural areas along the river through St. Charles including Forest Preserve, Park District, and City owned properties. On the whole, environmental quality is considered to be improving in the area and continues to be the focus of many regulatory and special interest groups, along with the community in general.

Water quality is of particular concern within the Fox Valley region. The general perception is that water quality has improved over the past several years, but current high phosphorus levels lead to algal blooms and low dissolved oxygen levels. The Fox River Study Group (FRSG) was formed to study the river relative to wastewater treatment plant discharge and to establish regulations based on water sampling and models. Representatives from local communities, including the City of St. Charles, make up the FRSG and are developing recommendations to improve water quality. The resulting Fox River Implementation Plan (FRIP) will include guidelines to improve water quality in lieu of mandated discharge levels as determined by the IEPA.



Fox River communities

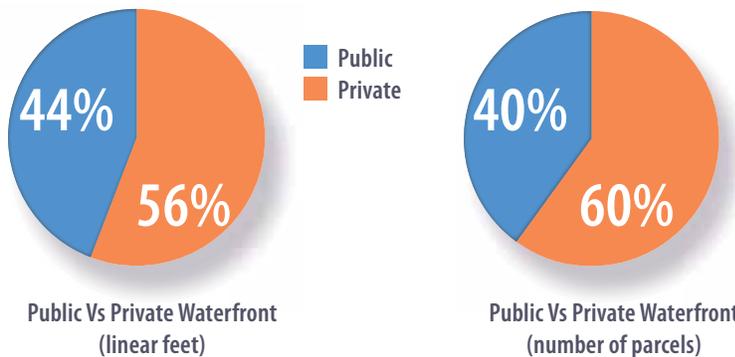
St. Charles Dam

The St. Charles Dam is a subject of considerable recent study and debate. The dam was originally constructed for a grist mill and served an important function for the community. The dam is owned by the Illinois Department of Natural Resources and currently is considered recreational in use, although for many, it serves a meaningful function in that it maintains the upstream pool, considered a priceless cultural and recreational asset for the community. To others the environmental benefits of complete dam removal including improved water quality, wildlife habitat, and safe passage offset the recreational and cultural benefits of maintaining the dam.

Any modification to the dam will be subject to regulatory permitting requirements involving considerable technical study of the hydraulics, water levels, sedimentation, flooding, and navigability of the river.

Property Ownership

One of the most significant challenges to accomplishing public improvements is property ownership and gaining access to the riverfront. Fortunately, 44 percent of the 3.8 miles of the Fox River within the City of St. Charles is publicly controlled. This provides opportunities for public access to the water, along with opportunities for public uses to be located directly on the river. However, 40 percent of the private property along the river is single family residential, leaving few opportunities for economic development. The downtown area is the exception where there are commercial opportunities along the riverfront.



Downtown St. Charles

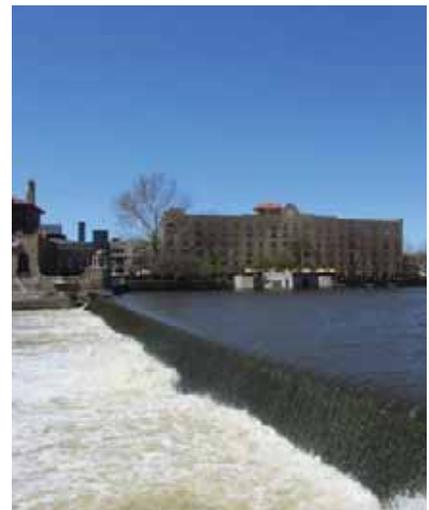
The City of St. Charles was founded along the banks of the Fox River and by the mid 1900's the community became known as a resort town, with tourism being a major component of the City's economy and identity. Today St. Charles is considered a desirable city in which to raise a family and is renowned for its high quality of life and natural beauty. Although growth has occurred both east and west of the downtown, the river has remained the center of the community and continues to influence its reputation as the Pride of the Fox.

Infrastructure and Utilities

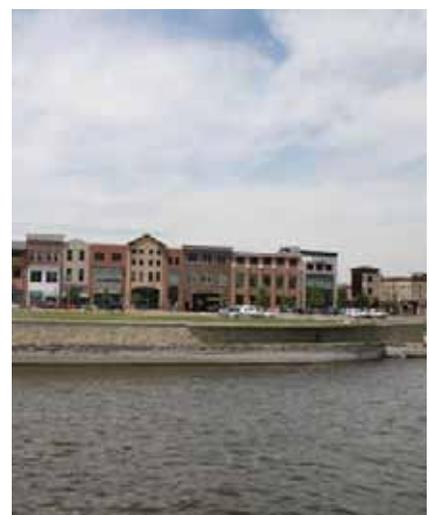
Public infrastructure and utilities are considered adequate within the corridor but any significant development would need to consider infrastructure and utility needs. There are utility crossings under the river that also need to be considered with any significant modification project.



Ferson Creek Fen



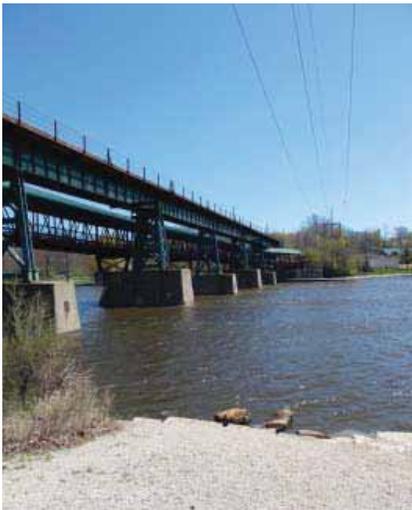
Dam on the Fox River in St Charles



First Street Redevelopment on the Fox River



Freedom Walk and Statue of Ekwabet



Union Pacific Railroad Bridge



Red Gate Rd Pedestrian/Bike Bridge

Access and mobility

St. Charles is accessible from major arterial roadways including Illinois Route 64 (Main Street) running east/west, Illinois Route 25 running north/south on the east side of the river, and Illinois Route 31 running north/south on the west side of the river. Kirk Road is the major north/south corridor on the east side of St. Charles and Randall Road is the major north/south corridor on the west side of St. Charles, both are Kane County highways.

St. Charles does not have direct access to interstate highways, but three interstates are located in close proximity; I-90 is located 9 miles to the north, I-88 7.5 miles to the south and I-355 11 miles to the east. St. Charles does not have commuter train access but the Geneva Metra station is located 1.5 miles to the south.

One of the corridor's most important assets is the regional trail system including the Fox River Trail (east and west sides of the river) and The Great Western Trail that heads west from downtown. These trail systems connect to an extensive regional trail system that extends throughout the Fox River valley and beyond. There are opportunities to improve the trail system by connecting gaps, especially through downtown along with adding clear signage, support facilities and amenities throughout.

Currently the St Charles dam prohibits water based users from passing through downtown. Dam modification would allow canoeists, kayakers, and other river users to travel the length of St Charles. Portage and safe passage routes would allow less experienced users to navigate the downtown, while improved docking facilities would allow water based visitors to more easily visit downtown.

Pedestrian and bicycle circulation is adequate but not especially noteworthy. The corridor would benefit from improved pedestrian crossings, traffic calming, and complete streets initiatives to improve the multi-modal experience within the corridor. Where possible, grade separated crossings either under or over roadways are preferred.

The railroad bridge located just north of Main Street is owned by the Union Pacific (UP) railroad and is no longer in service. The Park District, City and Forest Preserve District have approached UP to discuss future control of the bridge and the associated right-of-way. Discussions about purchasing or gaining rights to use the structure for a regional trail connection have been favorable, although funding is not currently available.

Parking is important to any viable development, downtown or corridor. Parking in downtown St. Charles is considered adequate although surface parking lots take up valuable land within the project area, especially along the riverfront. Two parking structures in the downtown provide increased parking per square foot of area and additional parking decks would be a benefit as additional development and programmed uses are added. Shared public and private parking within off-street lots is another way to leverage the limited space available for parking.

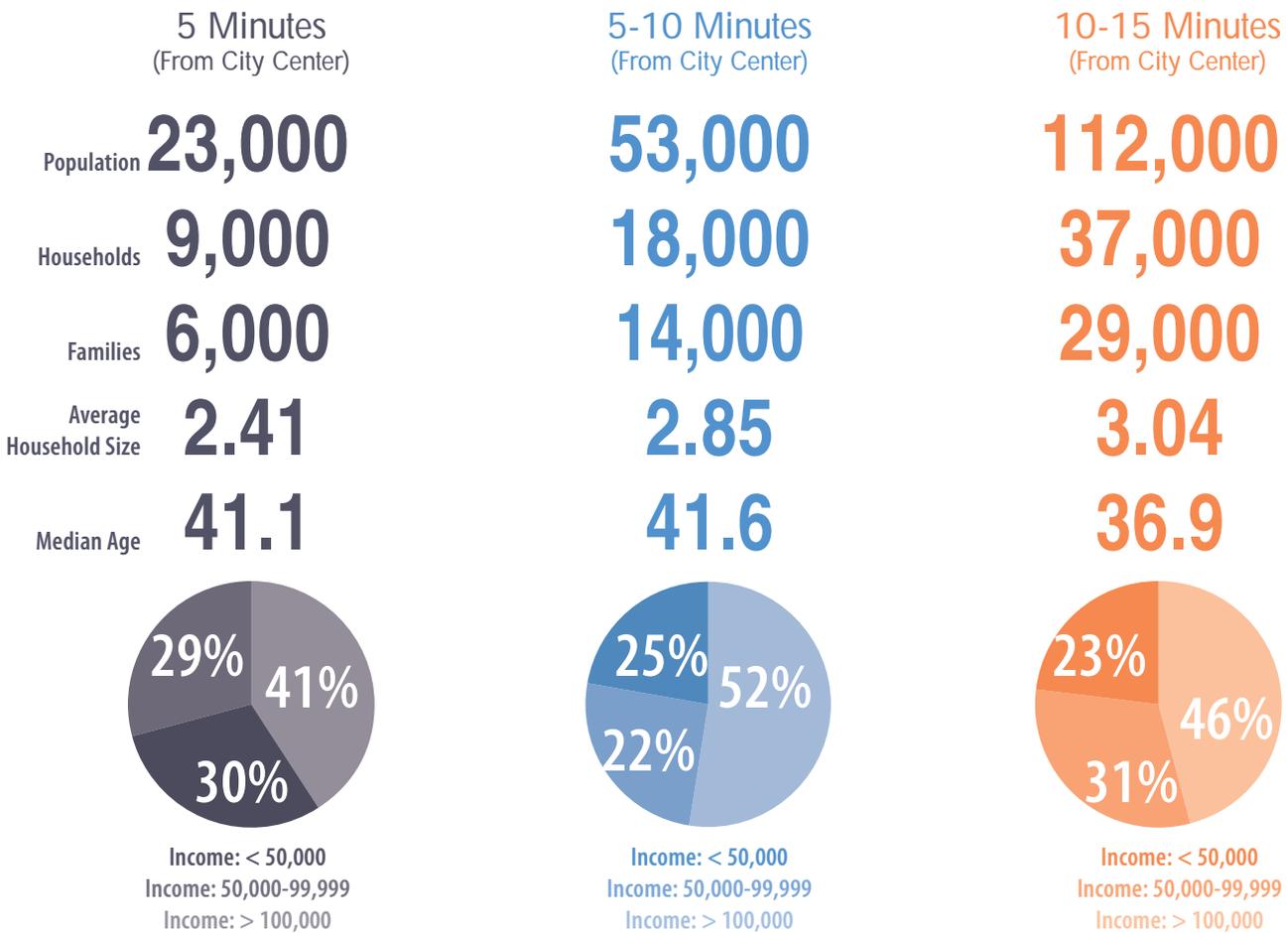
The City of St. Charles has gateway signage at the City limits along with wayfinding signs throughout the downtown. Other community groups and agencies have signage with various messages throughout the corridor. The community as a whole would benefit from a consistent image and messaging throughout the downtown and corridor.

Market Profile

Demographics

The City of St. Charles is known as a family oriented community and the majority of residential properties in town are single family homes. Similar to national trends, projections show that the population is aging and in the future many more households will consist of single adults, empty nesters and other non-traditional family types.

Within a 5 minute drive of downtown St. Charles there is a significant affluent population, many of which own their own home. Within a 5-10 minute drive time population and household size increase, while median age, income, and household size remain relatively consistent. Within a 10-15 minute drive from downtown the population increases substantially, while continuing to be affluent.



Visitors

The St. Charles area is a surprisingly successful visitor destination with more than 2,500 hotel rooms. Even if the less fully utilized Q Center and its 1,000 rooms are deducted, St Charles houses as many as 440,000 overnight guests a year assuming a 62% occupancy rate.

440,000
Yearly Overnight Visitors

Active Lifestyle

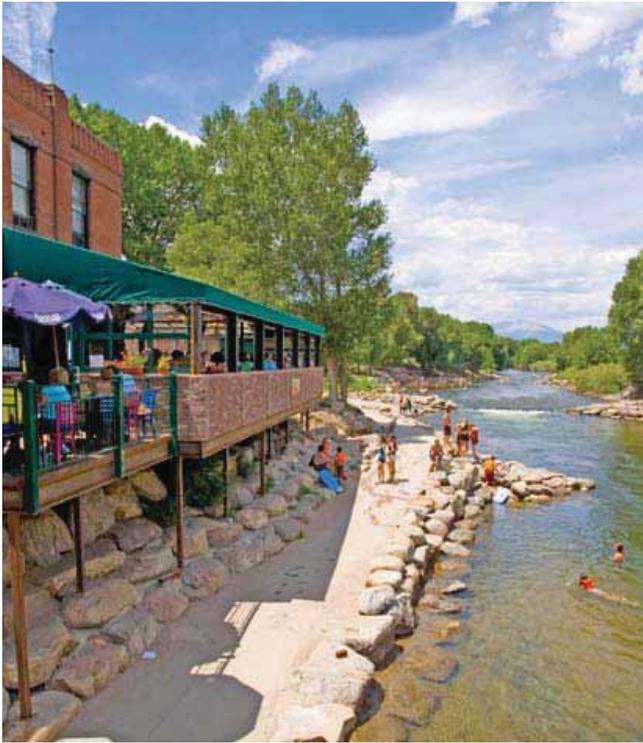
Recently there is a national resurgence in the popularity of walkable, urban areas offering an active lifestyle, not only in major urban areas, but also in suburban communities. People want to live in vibrant, active communities that are easy to get around with lots of things to do. St. Charles has a unique situation with a strong local identity, affluent population, abundant natural resources and amenities that is part of a major metropolitan area.

Nationally, the most popular activity is walking followed closely by jogging and biking. Swimming, fishing, and power boating are also very popular activities, although power boating is declining in popularity while kayaking, canoeing and rowing are increasing in popularity. These trends also appear to be true in St. Charles.

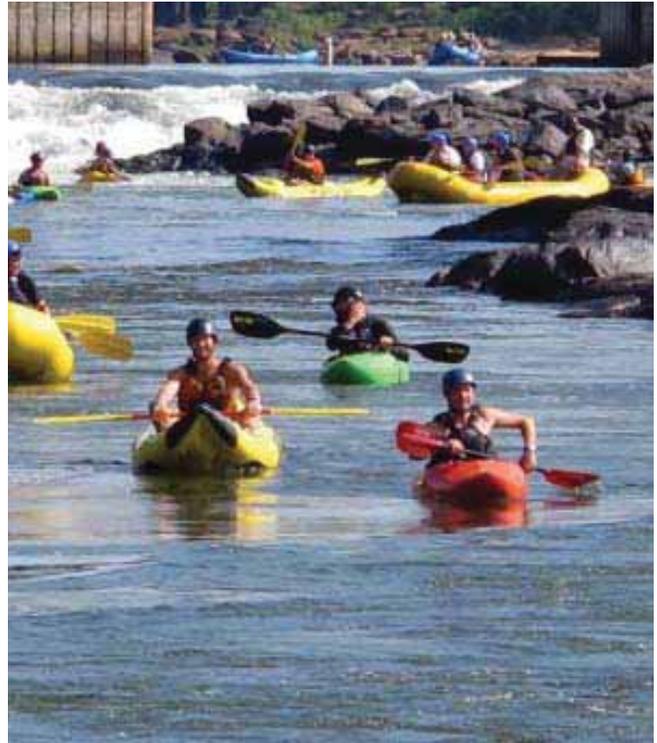
	Yearly Experiences (Locally)	Yearly Participants (Locally)	Popularity Trend (Nationally)
Swimming	753,000	23,000	
Exercise Walking	315,000	54,000	
Freshwater Fishing	235,000	17,000	
Exercise Running	136,000	23,000	
Bicycling	125,000	21,000	
Power Boating	124,000	9,000	
Kayaking	29,000	5,000	
Canoeing	20,000	5,000	
Water Skiing	15,000	2,500	

Conclusion

As St. Charles considers how to activate its riverfront it is apparent that there are great opportunities. Populations in affluent communities like St. Charles engage more often in athletic activities if the opportunity presents itself and is easily accessed. The river offers the ideal venue for activities including walking, bicycling, running and jogging all along the water's edge and kayaking, canoeing, fishing and potentially swimming in the water.



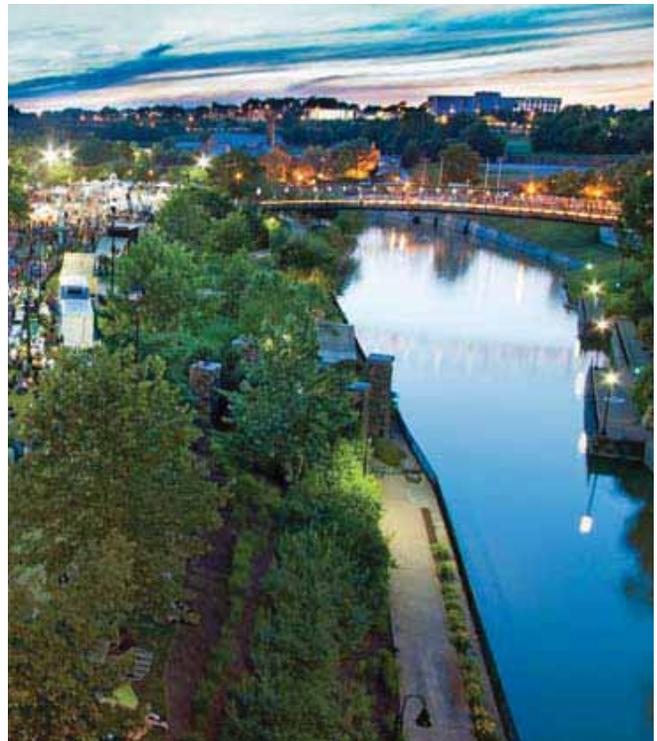
Salida, Colorado



Columbus, Georgia



Greenville, South Carolina



Richmond, Virginia

Comparable Communities

We profiled more than a dozen communities around the US that had successfully completed significant river enhancements, similar to those contemplated in St. Charles. Four were stronger examples than the others: Salida, Colorado; Columbus, Georgia; Greenville, South Carolina and Richmond, Virginia.

Salida, Colorado

A kayaking course has been implemented in the river, as well as a waterplay area similar to the one envisioned for St. Charles. As a result the community has seen an increase in visitation from other parts of Colorado and adjacent redevelopment has turned the river into a community asset.

Columbus, Georgia

Columbus, and its neighboring city Phenix City, Alabama benefitted from the removal of dams on the Chattahoochee River, the addition of a new bridge and improvements to an existing bridge. The river itself has been changed into a recreational environment with rafting, kayaking, canoeing, obstacle courses and waterplay in the river, and new paths for trail sports on the banks.

Greenville, South Carolina

Unlike Columbus, Greenville took out a vehicular bridge and replaced it with a signature pedestrian bridge over natural water falls in the downtown. The city also significantly improved all of the river frontage, saving some historic structures. On the south bank significant new urban development followed, including a new hotel and new commercial and residential development.

Richmond, Virginia

The James River in Richmond already had rapids that attracted kayakers, although the river was badly polluted and lined with industry. As that situation was reversed, the water quality improved as the industry moved away. Subsequently, there has been a considerable amount of development along the river banks and the river itself has been claimed by the local populace for constant use and a series of successful festivals each summer.

* Refer to Appendix for more information, including images and statistics, on these comparable communities.

Stakeholder Interests

The team, along with the Active River Task Force, gathered, evaluated and summarized input from a variety of stakeholders to help formulate strategies for the river corridor improvements.

Although stakeholders agree on many important factors, there are also competing interests for the use of the river and the riverfront properties. Preservationists would like to see riverfront properties remain natural and promote ecological restoration, while others support active recreation and riverfront development. Power boaters are sometimes in conflict with rowers, canoers and fishermen. Water quality proponents are in favor of complete dam removal while paddling enthusiasts support dam modification. The challenge is to balance these competing interests throughout the river corridor.

Downtown St. Charles and the riverfront have traditionally been the center of the community, but resources are now divided between the downtown and riverfront, the east gateway along Kirk Road, and the West gateway along Randall Road. Each area plays an important role in the community but also compete for limited resources.

The consensus is that the river is the most important community asset and should remain a priority for years to come.

There is also a disparity among stakeholders regarding the future of St. Charles and the role the river plays within it. Should St. Charles continue to improve and enhance the river corridor mainly for the benefit of the existing residents and community members, or should St. Charles implement changes to support economic development and an active, more urban lifestyle, that could be attractive to visitors and a younger population?

Regardless of the varied stakeholder interests, the consensus is that the river is the most important community asset and should remain a priority for years to come.

COMPETING INTERESTS?



Goal, Objectives and Standards

The analysis of the Resources, Market and Stakeholder interests concludes with a clearly stated Goal, supporting Objectives, and improvement Standards. The Goal is the long-term desired result for the river corridor, the Objectives are the specific items necessary to achieve the goal, and the Standards are the qualitative criteria to be considered for all proposed improvements.

The Goal, Objectives and Standards form the basis of the Strategy and will be the benchmark for which all improvement recommendations will be judged against.

Goal

“Create a lively riverfront environment that is the centerpiece of the community”

Objectives

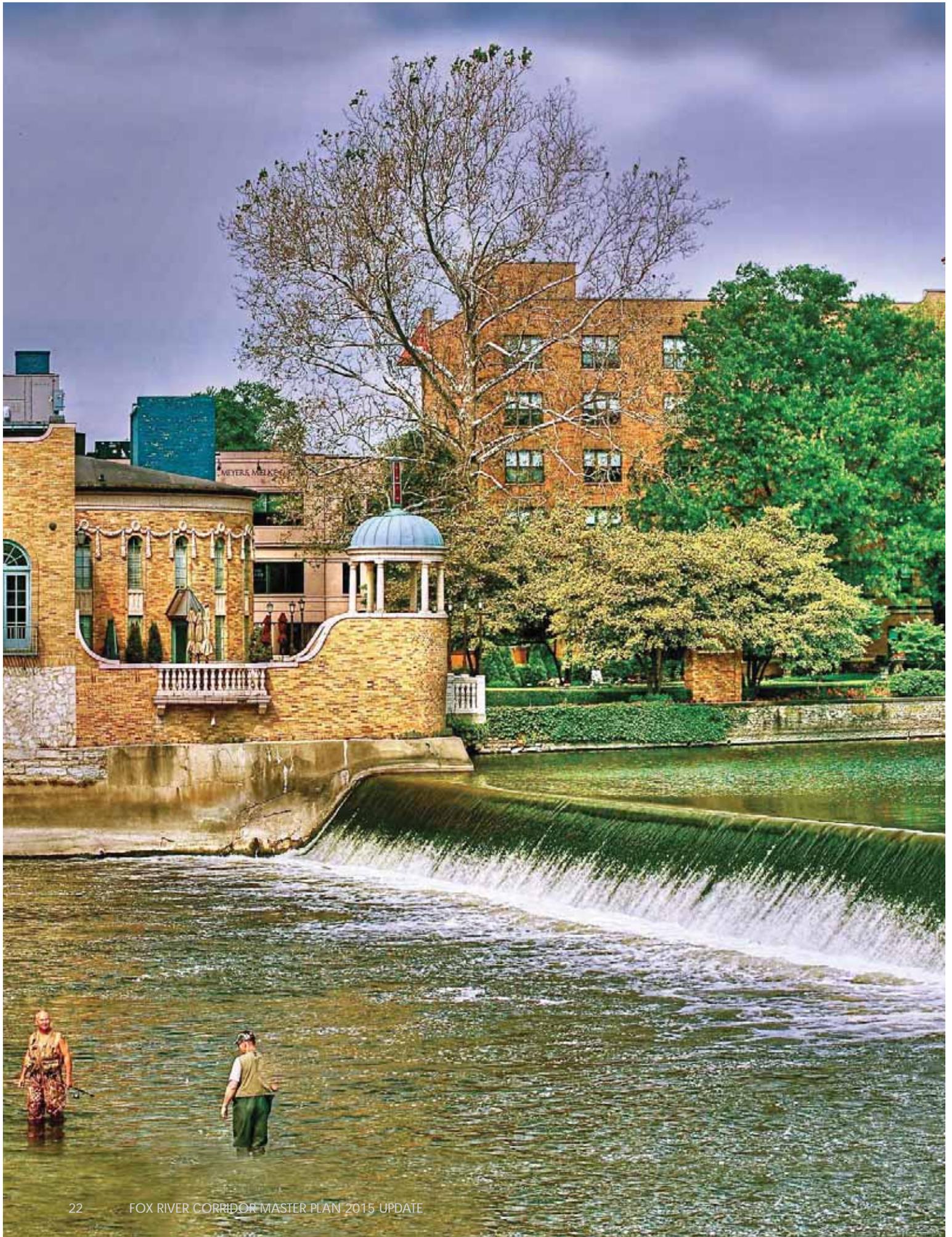
By 2025...

- **Brand:** St. Charles will be widely recognized for its exceptional river and riverfront as part of a regional Fox River experience
- **Economy and Land Use:** The marketplace will support a package of distinctive, public and private river corridor attractions and complimentary live/work/play/shop/dine/destinations
- **Mobility:** People will easily access and circulate along the river and between riverfront destinations using a variety of mobility options
- **Recreation:** The marketplace will support a variety of distinctive recreation attractions and complementary activities
- **Culture and Education:** People will enjoy the river corridor’s abundant natural and cultural assets, and learn about the community’s rich river-related heritage
- **Environment:** Water quality, wildlife passage and native habitat will be enhanced as the river flows through town

Standards

- **Sustainable:** Consider the environmental, economic and cultural longevity of improvements
- **Multi-dimensional:** Improvements will be flexible with high return on investment
- **Healthy:** Provide an active, comfortable, clean and safe environment
- **Attractive:** Improvements will be engaging, stimulating and clean
- **Distinctive:** Differentiate the area from nearby towns
- **Respectful:** Respect for resources and stakeholders
- **Barrier-free:** Areas will be accessible by all





Strategy

In order to achieve the goal to **create a lively riverfront environment that is the centerpiece of the community**, and to meet the stated objectives and standards, the St. Charles River Corridor Strategy is to:

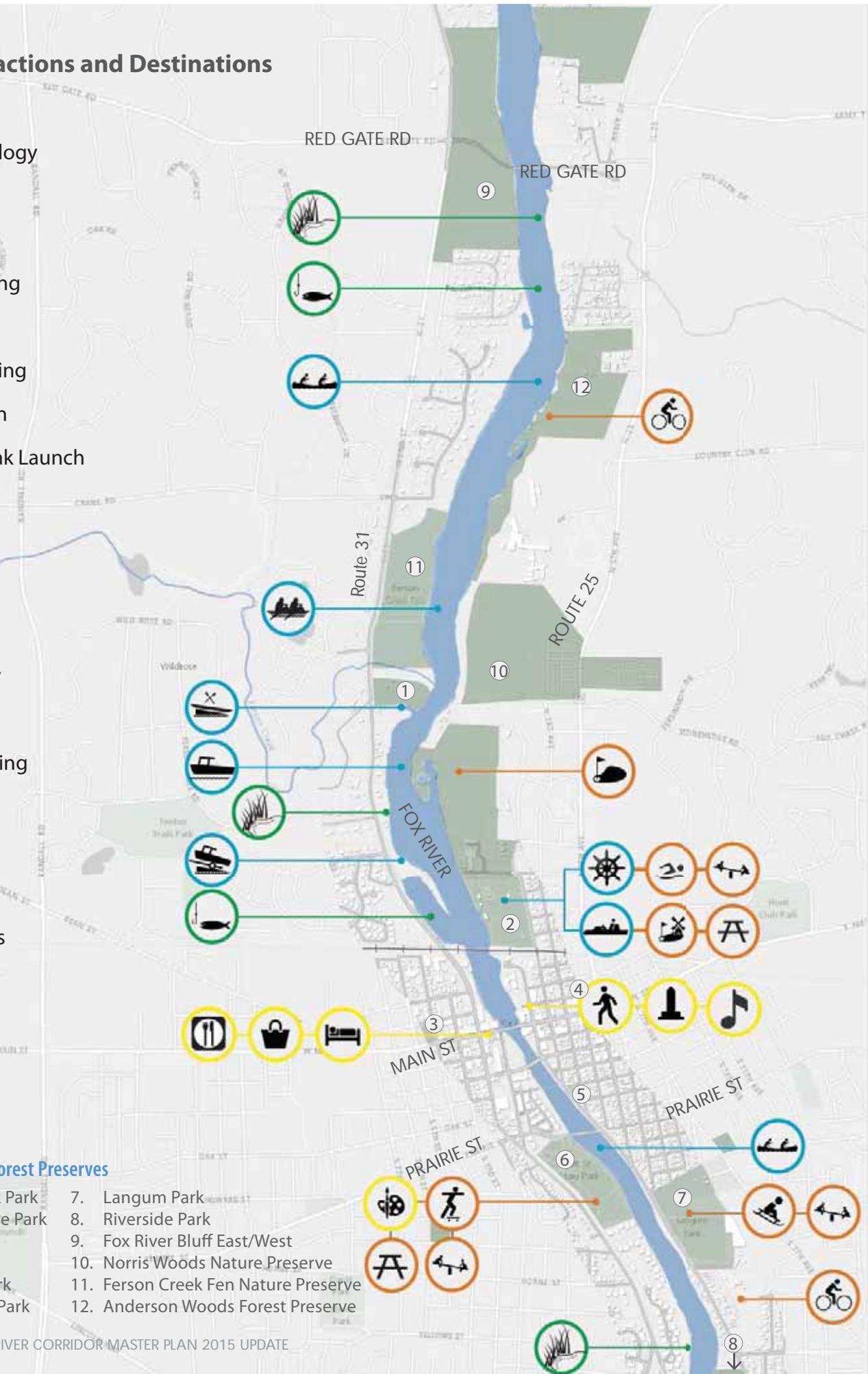
- Complete a package of seasonal and year round river-centric **attractions** and complementary **destinations**
- Complete the river, riverwalk and trail **connections**
- Embellish **natural, recreational , and cultural assets**
- Refine and align **brand** communications
- Act systematically and incrementally to gain and sustain **momentum**

Existing Attractions and Destinations

-  Fishing
-  Nature, ecology
-  Rowing
-  Canoeing
-  Pedal boating
-  River boat
-  Power Boating
-  Boat Launch
-  Canoe/Kayak Launch
-  Bicycling
-  Mini Golf
-  Golf
-  Swimming
-  Park Facility
-  Playground
-  Skateboarding
-  Sledding
-  Walking
-  Music
-  Monuments
-  Dining
-  Hotel
-  Shopping
-  Art

Existing Parks and Forest Preserves

- | | |
|----------------------|--------------------------------------|
| 1. Ferson Creek Park | 7. Langum Park |
| 2. Pottawatomie Park | 8. Riverside Park |
| 3. Lincoln Park | 9. Fox River Bluff East/West |
| 4. Baker Park | 10. Norris Woods Nature Preserve |
| 5. Hazeltine Park | 11. Ferson Creek Fen Nature Preserve |
| 6. Mt. St. Mary Park | 12. Anderson Woods Forest Preserve |



Existing Attractions and Destinations

It is important to point out that there are many existing attractions and destinations located throughout the St. Charles section of the Fox River corridor that already support the overall strategy. Many of these will continue to function as they currently exist for the foreseeable future, while others will be modified or improved to advance the proposed strategy.



Boating on the Fox River



Rowing on the Fox River



Bob Leonard Memorial Walkway



Potowatomie Park



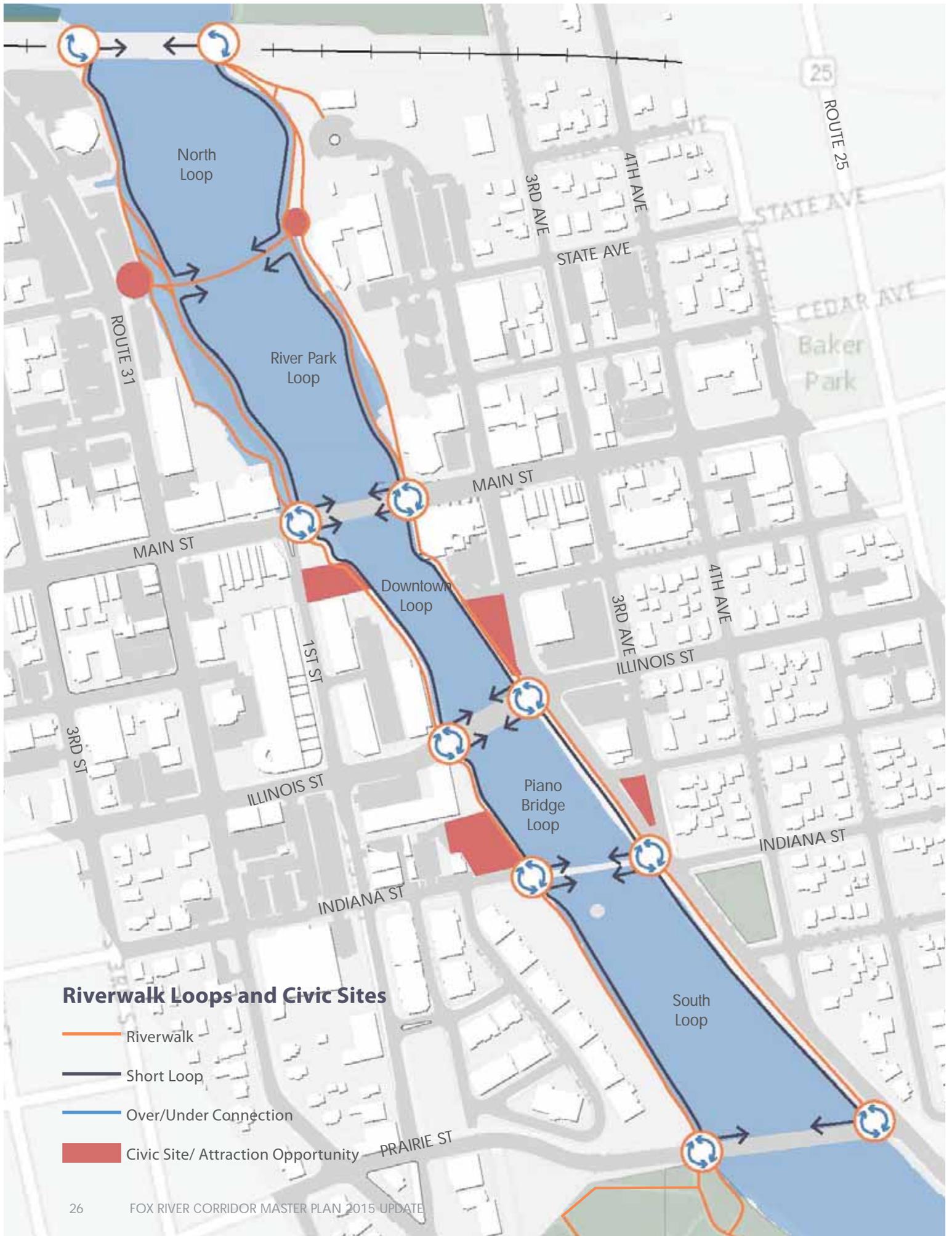
St Charles Riverfest Dragon Boat Race



St Charles Riverboat



Mt St Mary Park



Riverwalk Loops and Civic Sites

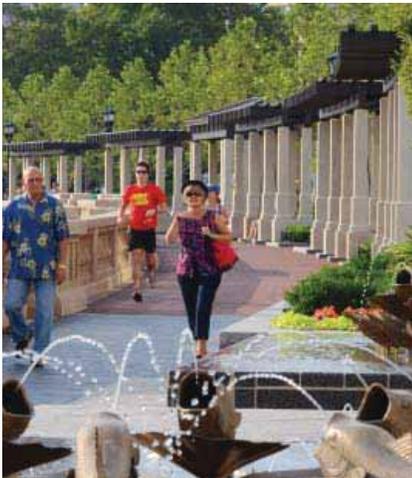
- Riverwalk
- Short Loop
- Over/Under Connection
- Civic Site/ Attraction Opportunity

Attractions

Attractions are significant components that draw interest, provide entertainment and contribute to the overall liveliness and viability of the place. The outlined Attractions are the best opportunities to achieve the Goal, Objectives and Standards based on the results of the Opportunity Analysis.

Support existing attractions, and:

- Create "River Park"; Whitewater, Paddling course, Destination water-based play, Riverwalk, Signature bridge
- Extend, complete the Riverwalk
- Extend the Regional Trails
- Create "Bridgeview" observation platform



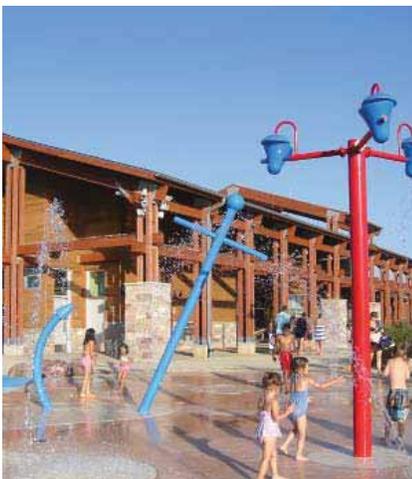
Continuous Riverwalk



Regional Trail Connections



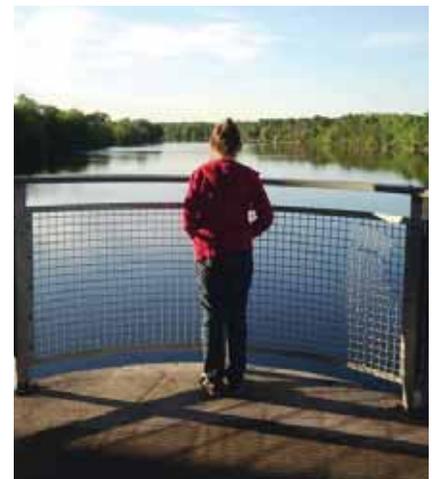
Whitewater Course



Destination Water -based Play



Signature Pedestrian Bridge



"Bridgeview" Overlook



POTTAWATOMIE
PARK

ROUTE 31

Maintain
Impoundment Pool

“Bridgeview” Observation
Area

Childrens Stream and Play
Area

Riverwalk

N RIVERSIDE AVE

STATE ST

Pedestrian Bridge and
Plazas

Dam Modification

MAIN ST

“River Park”

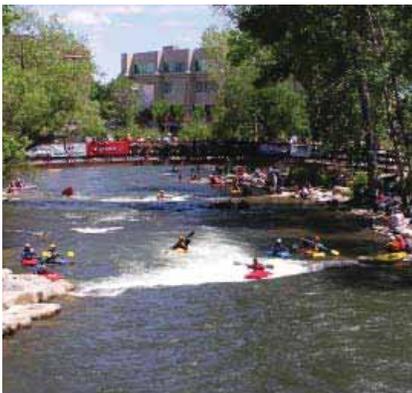
“Riverpark”



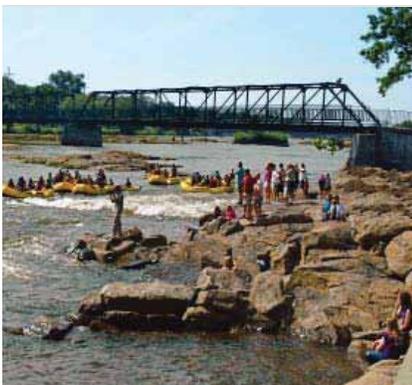
Childrens Stream and Play Area



Signature Pedestrian Bridge



Dam Modification



Riverwalk Observation Area

Momentum is growing to take action on the dam. Complete dam removal could improve water quality and wildlife passage, although it would result in reduction of the upstream impoundment pool, which is an undesirable result for the community. Modification of the dam is an alternative that would result in preservation of the impoundment pool while providing an opportunity to create a paddling course, a children’s exploration stream, and reclaimed land for construction of a continuous riverwalk. Add in a signature pedestrian bridge along with spectator observation areas and this area can become an incredibly unique “Riverpark” unlike anything else in the Fox Valley region.

Recommendations

- Modify the dam to create a series of drops and rapids that will be attractive to whitewater kayaking enthusiasts
- Create a safe passage for experienced canoeists and convenient portage locations for novices
- Maintain the upstream impoundment pool water level to accommodate existing water based activities
- Create a children’s splash depth play stream and water based play environment
- Complete a continuous riverwalk with spectator observation areas
- Complete a signature bridge connecting State Street to the east side of the river

Maintain Impoundment Pool

A drop structure located at the railroad bridge pier foundations will maintain the water elevation of the upstream impoundment pool and provide downstream safe passage for non-motorized boats. Provide transient boat tie-up access north of the railroad bridge along the Pottawatomie Park shoreline for power boater access to downtown.

Children’s Stream and Play Area

Develop a low-flow side channel as a children’s play stream, with a nature/water based destination play area along the shoreline. Multiple locations will act as viewing areas for river based activities.

Pedestrian Bridge and Plazas

Provide a signature pedestrian bridge for east/west access and river activity viewing. Civic plazas located at each end of the pedestrian bridge will include cultural and pedestrian amenities.

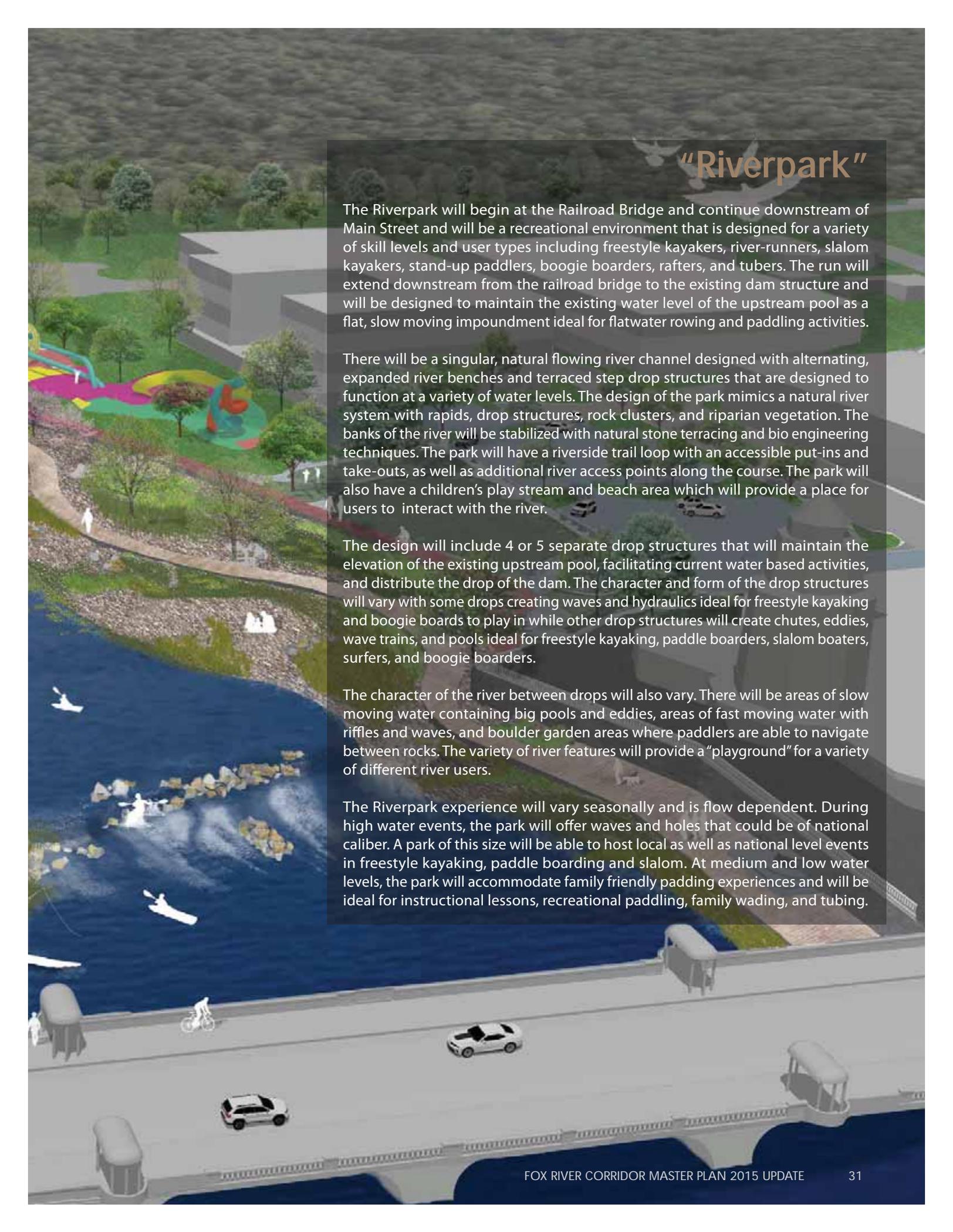
Dam Modification

Remove the dam and provide multiple terraced drop structures to create a single flowing river channel. Develop various levels of experiences that will be attractive to users of all skill levels. Provide a safe passage route and easy to access put-in and take-out points.

Riverwalk and Observation Areas

Continuous riverfront access is possible on reclaimed shoreline areas. Maintain the Freedom Trail access throughout the Riverpark and north to Pottawatomie Park. Provide overlook and observation areas at various locations throughout the Riverpark.



An aerial rendering of the Riverpark project. The image shows a river flowing through a park area. The river has several drop structures, creating waves and eddies. There are colorful paths (pink, yellow, green) along the riverbank. A trail loop is visible, and there are people walking and cycling. A bridge with cars and a bus is in the foreground. The background shows a forested area.

“Riverpark”

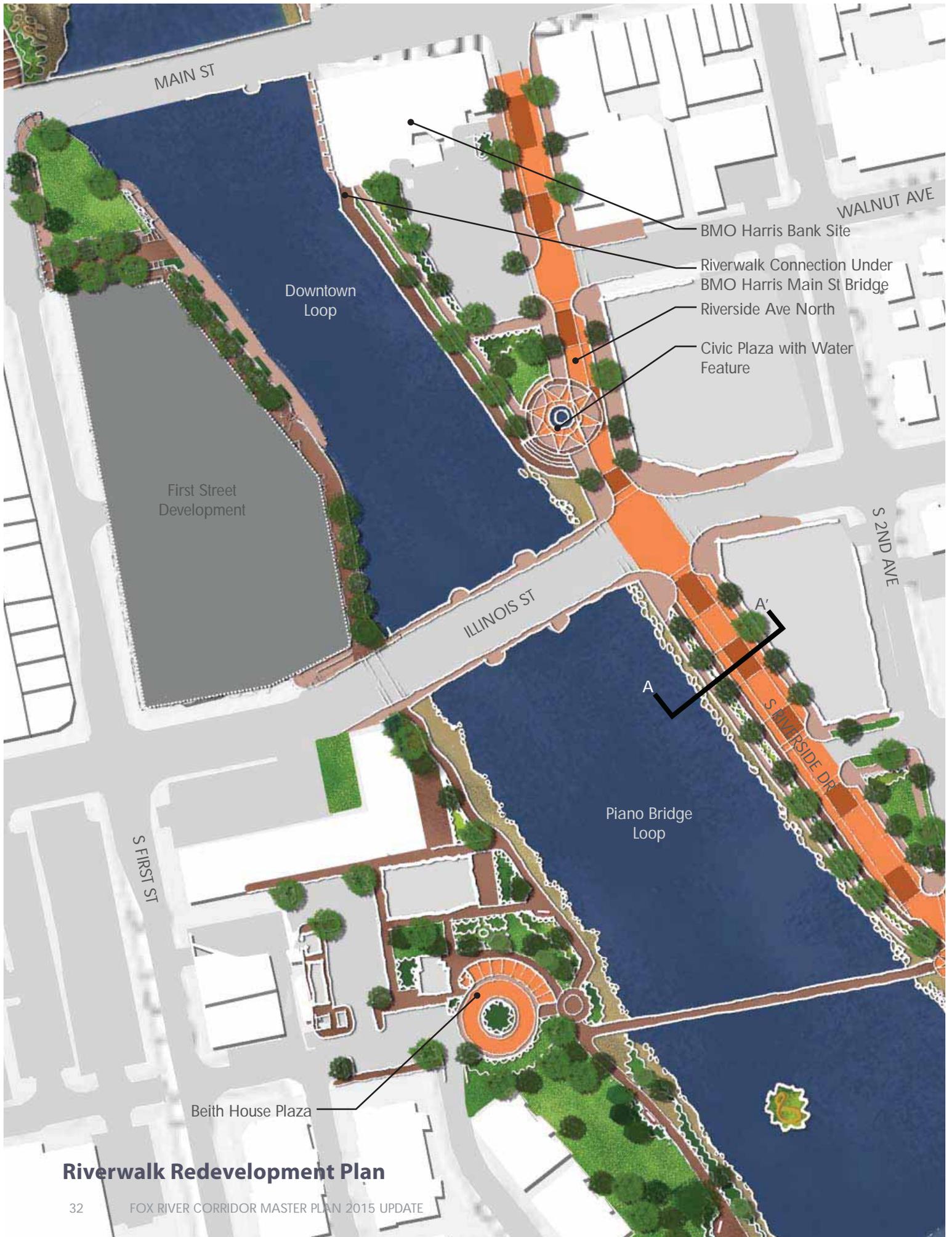
The Riverpark will begin at the Railroad Bridge and continue downstream of Main Street and will be a recreational environment that is designed for a variety of skill levels and user types including freestyle kayakers, river-runners, slalom kayakers, stand-up paddlers, boogie boarders, rafters, and tubers. The run will extend downstream from the railroad bridge to the existing dam structure and will be designed to maintain the existing water level of the upstream pool as a flat, slow moving impoundment ideal for flatwater rowing and paddling activities.

There will be a singular, natural flowing river channel designed with alternating, expanded river benches and terraced step drop structures that are designed to function at a variety of water levels. The design of the park mimics a natural river system with rapids, drop structures, rock clusters, and riparian vegetation. The banks of the river will be stabilized with natural stone terracing and bio engineering techniques. The park will have a riverside trail loop with an accessible put-ins and take-outs, as well as additional river access points along the course. The park will also have a children’s play stream and beach area which will provide a place for users to interact with the river.

The design will include 4 or 5 separate drop structures that will maintain the elevation of the existing upstream pool, facilitating current water based activities, and distribute the drop of the dam. The character and form of the drop structures will vary with some drops creating waves and hydraulics ideal for freestyle kayaking and boogie boards to play in while other drop structures will create chutes, eddies, wave trains, and pools ideal for freestyle kayaking, paddle boarders, slalom boaters, surfers, and boogie boarders.

The character of the river between drops will also vary. There will be areas of slow moving water containing big pools and eddies, areas of fast moving water with riffles and waves, and boulder garden areas where paddlers are able to navigate between rocks. The variety of river features will provide a “playground” for a variety of different river users.

The Riverpark experience will vary seasonally and is flow dependent. During high water events, the park will offer waves and holes that could be of national caliber. A park of this size will be able to host local as well as national level events in freestyle kayaking, paddle boarding and slalom. At medium and low water levels, the park will accommodate family friendly paddling experiences and will be ideal for instructional lessons, recreational paddling, family wading, and tubing.



MAIN ST

WALNUT AVE

Downtown Loop

BMO Harris Bank Site

Riverwalk Connection Under BMO Harris Main St Bridge

Riverside Ave North

Civic Plaza with Water Feature

First Street Development

ILLINOIS ST

S 2ND AVE

A

A'

S RIVERSIDE DR

Piano Bridge Loop

S FIRST ST

Beith House Plaza

Riverwalk Redevelopment Plan

Riverwalk



Amenitized Riverwalk



Civic Gathering Spaces



First Street Development

A continuous riverwalk with large and small circulation loops, unique destinations and gathering spaces, constructed with distinctive materials and amenities, will be a significant attraction for the community. The Bob Leonard Memorial walkway is a great start to completing a continuous downtown riverwalk. Continue to develop the riverwalk as public agencies invest in the riverfront, and as riverfront properties redevelop.

Recommendations

- Create a continuous riverfront circulation loop from the Union Pacific railroad bridge on the north to Prairie Street on the south
- Create a series of secondary circulation loops along both sides of the river and at each river crossing location
- Create a series of connected gathering spaces that transition into the downtown and neighborhoods
- Construct the riverwalk using distinctive materials and incorporate history, culture and art to create a unique identity
- Include ample furnishings, pedestrian amenities and lighting for user comfort and safety
- Segregate pedestrian and bicycle traffic
- Provide grade-separated crossings where possible, and safe at-grade crossings where necessary

First Street Development

Provide continuous riverfront access along the future development. Include a civic plaza space between 1st Street and the river. Improve the at-grade pedestrian and bicycle crossings at Main Street and Illinois Street.

Beith House Plaza

Provide a civic plaza with a sculpture or fountain amenity and pedestrian amenities and furnishings. Include parking and a vehicular drop-off. Encourage private redevelopment on the adjacent property that engages the riverwalk with patios and other outdoor dining experiences

BMO Harris Bank Site

Provide a pedestrian connection along the river and under Main Street Bridge. Encourage private redevelopment of the existing property. Reorganize/reduce parking to provide pedestrian access along the riverfront and a Civic plaza with sculpture or fountain amenity. Restore/reconstruct the shoreline wall.





INDIANA AVE

3RD AVE

Piano Factory Bridge

OHIO AVE

In River Improvements

Improve Hazeltine Park

Riverside Ave South

Downtown Gateway

S RIVERSIDE DR

SOUTH AVE

South Loop

Surf Wave

Bob Leonard
Memorial Walkway
Bench, Typ.

Lighting, Typ.

Connect to Walks

Stairs to Prairie St

PRAIRIE ST

Riverwalk Redevelopment Plan

Riverwalk



Bob Leonard Memorial Walkway

Bob Leonard Memorial Walkway

Add pedestrian and walkway lighting, furnishings and pedestrian amenities. Include cultural components representing art and local history. Add trees and plantings, and improve at-grade pedestrian and bicycle crossings.



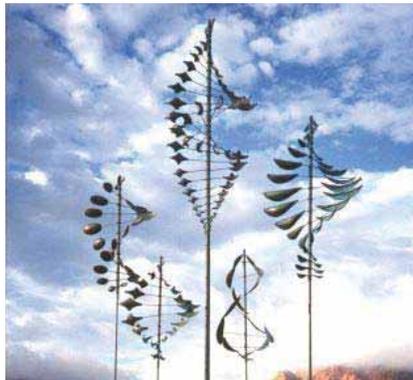
Shared Street

Riverside Avenue North

Divert vehicular through-traffic along 2nd Avenue to provide a “shared street” and direct riverfront access along Riverside Avenue. Include streetscape improvements continuous to Main Street including paving, lighting, trees, landscape and amenities. Provide segregated pedestrian and bicycle circulation along the riverfront with the through circulation route clearly identified. Include a civic plaza with a sculpture or fountain amenity at the Piano Factory Bridge landing. Stabilize the shoreline with naturalized restoration techniques. Encourage private development on the adjacent property.

Riverside Avenue South

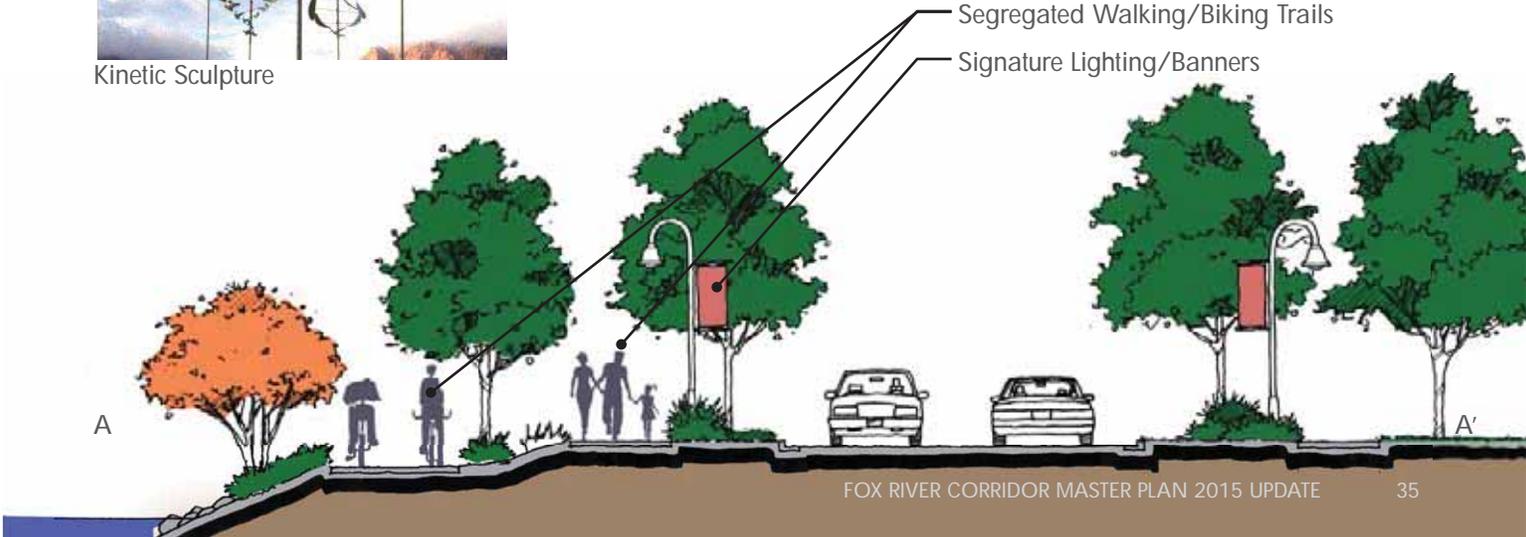
Segregate pedestrian and bicycle circulation along the riverfront and stabilize the shoreline with naturalized restoration techniques. Provide pedestrian overlook/gathering spaces in various locations. Improve Hazeltine Park as a destination play environment. Implement Streetscape improvements including lighting, trees and landscape.



Kinetic Sculpture

“In River” Improvements

Study the condition of the Piano Factory Pedestrian Bridge and determine timeline for repairs or replacement. Develop a “surf wave” south of the Indiana Street Bridge. Install a kinetic sculpture and landscaping on the existing island south of the Piano Factory Bridge. Promote temporary Art Installations on the river between Main Street and Illinois Street. Stabilize the shoreline with naturalized restoration techniques throughout.



Regional Trails

The Fox River Trail and the Great Western Trail connect to an extensive regional trail system that extends throughout the Fox River valley and beyond. The trails are already an attraction throughout the region and improvements to connect gaps, especially through downtown, along with adding clear signage, support facilities and amenities, will strengthen the system within the community and as a part of the regional system.

Recommendations

- Utilize the Union Pacific railroad bridge to connect the Great Western Trail located west of downtown, to the Prairie Path located east of downtown
- Extend the west-side Fox River Trail north along the Route 31 right-of-way, taking care not to disturb Ferson Creek Fen.
- Improve the east-side Fox River Trail north connection by providing a more direct route along the east side of Pottawatomie Park and/or along the riverfront
- Connect trail gaps throughout the downtown and beyond
- Improve trail signage
- Provide support facilities and amenities



Clearly Delineated Trail System



Trail Signage and Crossing



Red Gate Rd Bridge Trail Connection



Dedicated On-Street Bike Lane

“Bridgeview”

The Union Pacific railroad bridge offers fantastic views of the river. The proximity to the River Park presents an excellent opportunity to create an observation platform in combination with the regional trail connection as a unique attraction in the community.

Recommendations

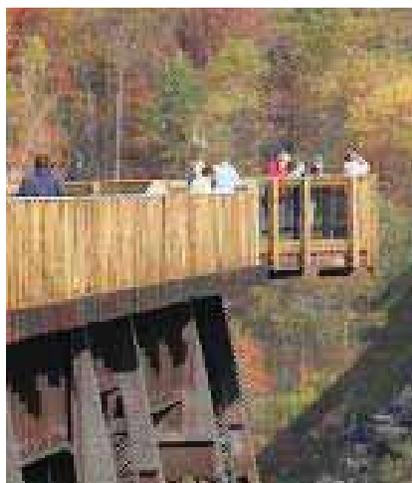
- Obtain the rights to use the existing railroad bridge and right-of-way
- Construct an observation platform in combination with the regional trail connection
- Provide pedestrian furnishings and amenities, and potentially vendor services



Unique Observation Platform



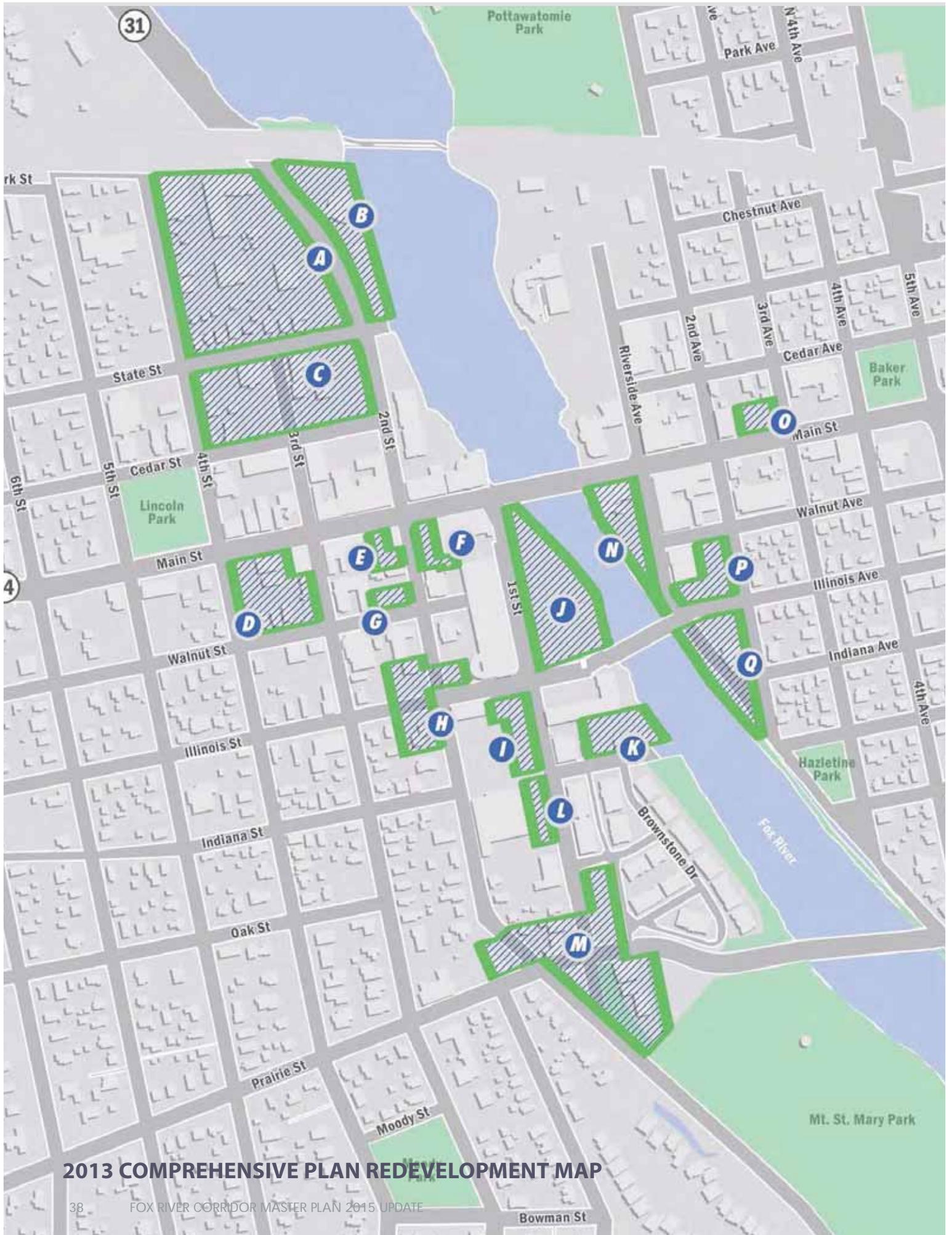
Private Vendor Services



Overlook Constructed on Existing Trestle



Iconic Overlook Structure



2013 COMPREHENSIVE PLAN REDEVELOPMENT MAP

Destinations

Destinations are places that offer a unique experience and people will make a special trip to visit. There are many existing destinations throughout the corridor, although the proposed destinations are complimentary to the riverfront attractions.

Promote complimentary destinations such as:

- Residential, office, hotel, retail and dining infill
- Rowing training center
- Recreational activities (climbing/ropes/zip line courses)
- Camping
- Seasonal activities (food trucks, rentals, etc)
- Electric boats/public boat docks

Residential, office, retail and dining infill

The proposed development of the river corridor is likely to trigger redevelopment for commercial real estate parcels in the downtown. Development is expected to happen in two-waves. The first will happen in sites with the greatest proximity to the river, while the second will happen throughout the downtown, dependant on the success of the first wave.

Success of the river redevelopment will hinge on both physical design and financial factors. Creating a pedestrian friendly and attractive downtown will attract more users, allowing for infill development to follow the initial wave of redevelopment. The scale of St Charles should also be respected so that projects will be large enough to produce financial returns without overwhelming the future demands for space.

The Police station parcel is the most attractive site for redevelopment as it will have direct access to the new river amenities. This parcel is attractive for a hotel and banquet facility as well as additional restaurants and retail.

The parcels along route 31 to the west are close enough to enjoy river views and have access to amenities but are adjacent to a residential neighborhood and are well suited for a residential product that wraps around a garage. A setback from Route 31 on the east end for a small parking lot would match the setbacks to the north and give the appearance of plenty of parking making the first floor appealing for retail.

Sites “N”, “P” and “Q” could be redeveloped as a small boutique hotel, with retail and restaurant uses. While not directly on the improved stretch of the river, unlike the other parcels in town, these parcels have direct access to the new amenities.

These developments, described in more detail in the appendix, could result in total investment value of almost \$210 million (preliminarily) and support more than 220 full-time-equivalent jobs in the downtown.



Riverfront Hotel



Riverfront Mixed Use Development

Rowing Training Center

Rowing is increasing in popularity on a national level and the St. Charles section of the Fox River is particularly attractive for rowing. Three rowing clubs currently utilize the river; Row America, the St. Charles Rowing Club, and Wheaton College. A shared rowing training center can serve all users and become a destination for the larger regional rowing community.

Recommendations

- Coordinate with the active rowing clubs to determine the desire and program for a community rowing training center
- Consider sites along the riverfront that could serve as a Rowing Training Center
- Establish a budget and process to advance the design, planning and construction of the Rowing Training Center



Open Air Rowing Shelter



Boat House, Community Center

Camping

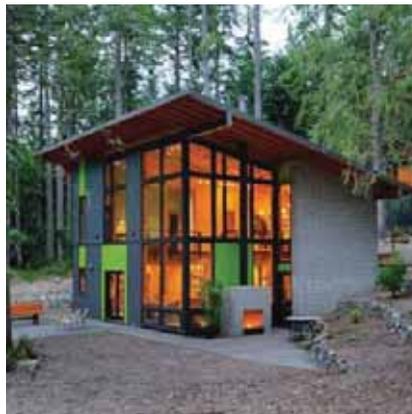
Camping is a complementary use for river and trail users. Similar to hotels, nearby overnight accommodations will become a destination. Interesting cabin facilities can also offer a unique nature experience for non-traditional users.

Recommendations

- Evaluate riverfront sites to determine the feasibility to provide camping



Camping in Close Proximity to River



Unique Cabin Facilities

Seasonal Activities

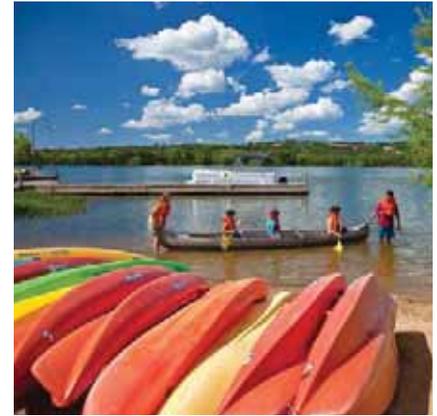
As active uses along the Riverfront gain in popularity, seasonal programs and activities become more economically feasible. Food trucks, vendors, equipment rentals and similar items contribute to the livelihood and popularity of the area.

Recommendations

- Determine the economic feasibility of providing seasonal programs and activities
- Recruit private entities to operate seasonal programs and activities



Food Trucks Offer Seasonal Dining Opportunities



Equipment Rentals for River Related Uses

Public Boat Docks, Electric Boats

Power boating continues to be a popular activity along the river. Stakeholders expressed the desire to dock in close proximity to the downtown on a temporary basis. Paddle boating is offered from Pottawatomie Park, but electric boats would offer a fun alternative for passive users to gain access to the water

Recommendations

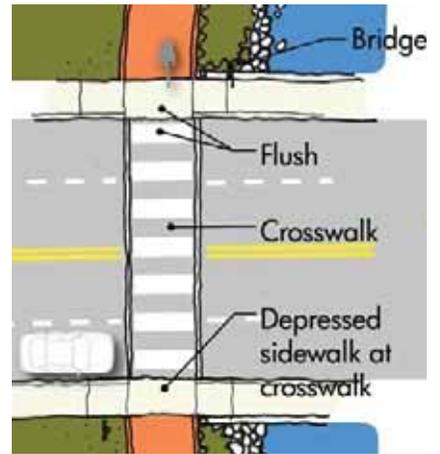
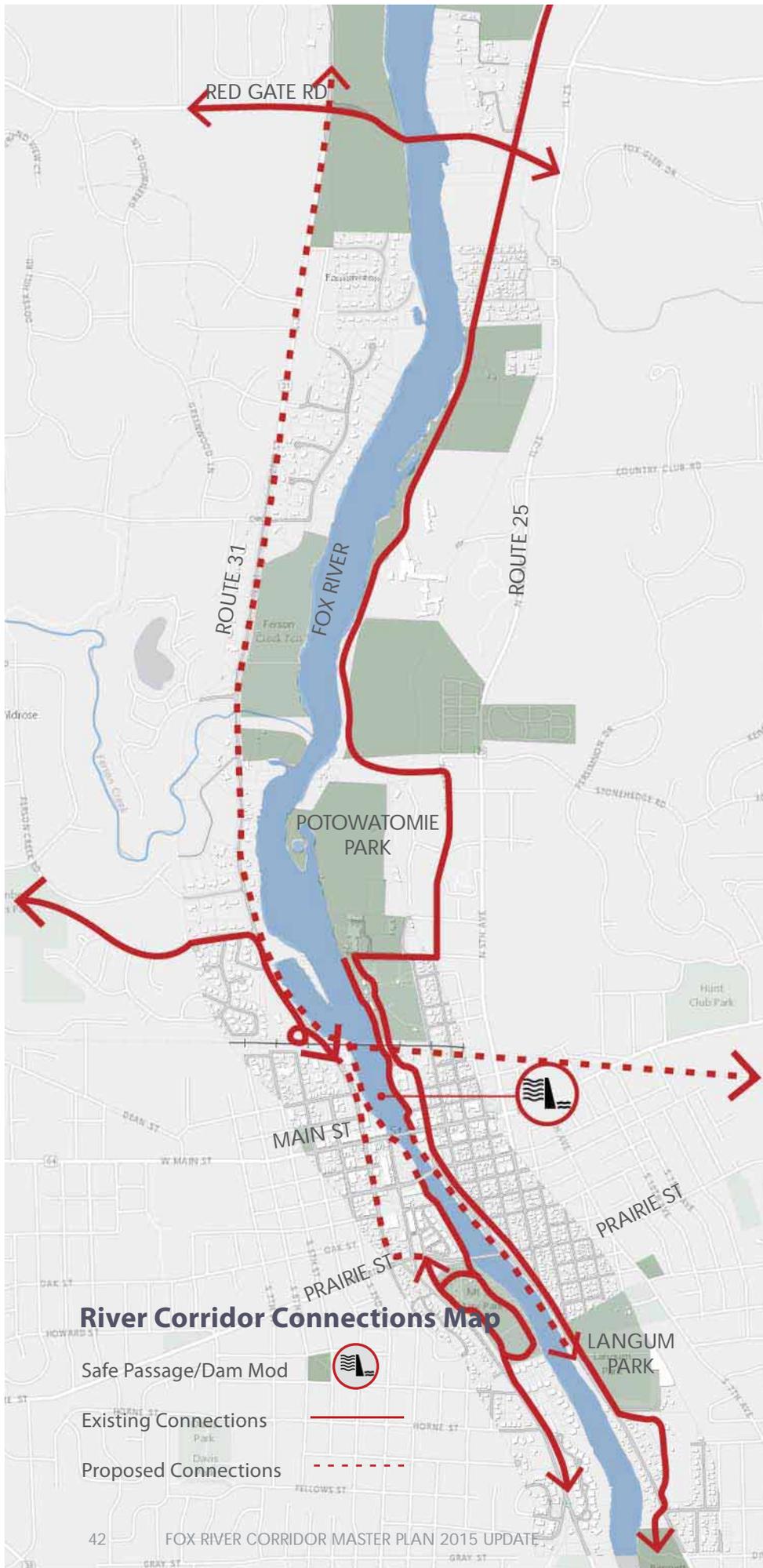
- Explore the possibility to provide docking facilities at Pottawatomie Park
- Explore the possibility to provide electric boats either through the Park District or as a private operator



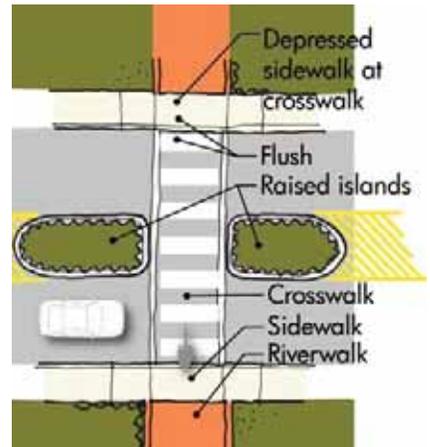
Accommodate Power Boat Access to Downtown



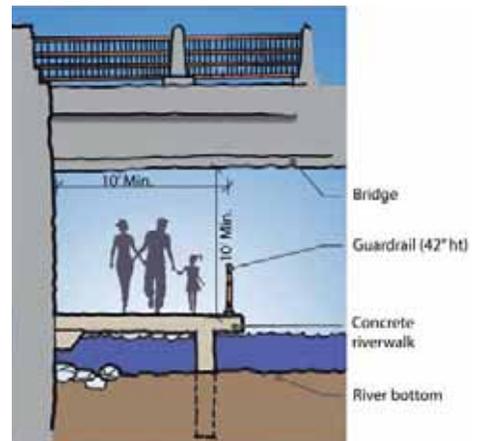
Electric Boat Rentals



Standard Crosswalk



Standard Crosswalk with Pedestrian safe zone



Under Bridge Connection

Connections



Delineated Crosswalk with Pedestrian Safe Zone



Under Bridge Connection



Gateway

Vehicular, bicycle, and pedestrian connections are critical to the success of the corridor. Vehicular connections have traditionally taken precedence, although providing continuous pedestrian access, regional bicycle trail connections, and safe crossings are important factors to create a complete circulation system.

Maintain existing connections, and:

- Complete both sides of the Riverwalk
- Extend the Fox River Trail, both sides, north of RR
- Extend Great Western Trail
- Modify the dam, create a navigable route
- Signature bridge
- Grade separated where possible, safe at-grade where necessary
- Gateways and wayfinding

Complete both sides of the Riverwalk

As described previously, the riverwalk can become an attraction in its own right, but it also provides important pedestrian connections along the riverfront and throughout the downtown.

Extend the Fox River Trail and Great Western Trail

Similarly, the trail system is an attraction that can be extended to provide improved bicycle and pedestrian connectivity throughout the community and beyond.

Modify the dam, create a more navigable route

We don't often think about the river as a connection, but currently the dam is an impediment to providing river connectivity. Modifying the dam and creating a navigable route completes a waterway connection that has been absent for many years. This would also allow this section of the river to become part of the National Water Trails System.

Signature bridge

The northwest section of the downtown is somewhat disconnected from the riverfront and a signature pedestrian bridge would provide a direct connection to the river and the east bank in addition to becoming an iconic riverfront structure in the community.

Grade separated crossings where possible, safe at-grade crossings where necessary

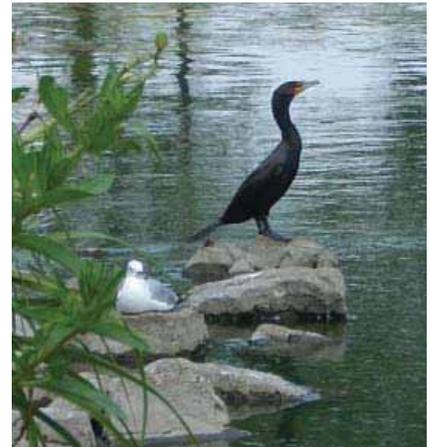
Separating pedestrians and bicycles from vehicular traffic at crossings is the most desirable solution to create a safe and comfortable environment. Wherever possible, provide grade separated crossings, but where impractical, improve at-grade crossings with traffic calming devices, signals, and signage.

Gateways and wayfinding

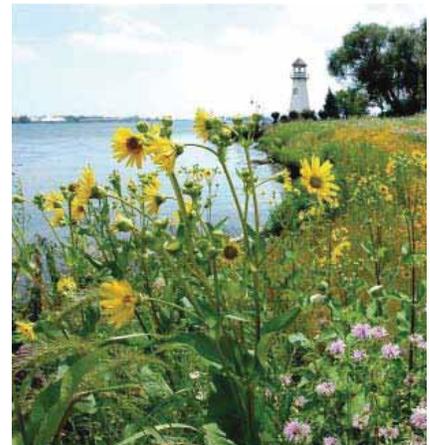
Gateway components can define the limits of the community and provide a clear identity for the riverwalk. A comprehensive family of wayfinding signage can communicate the desired image while helping people navigate along the riverfront.



Fishing Station



Wildlife Habitat



Naturalized Shoreline Restoration

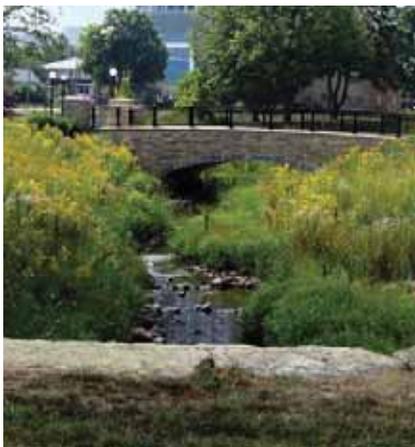
Natural Assets



Permeable Paving/ Bioswales



Shoreline Stabilization



Tributary Restoration

Many of the natural areas within the project area have degraded to a certain degree and should be improved over time. Large scale projects and initiatives are identified that can have a significant positive impact on the river and environment. Although specific technical and scientific study is beyond the scope of this project, it is important to note that all new improvements should have a positive effect on the environment. The community does not have control over what happens upstream or on many private properties, but improving the natural environment with all initiatives sets a positive example.

Maintain, improve and embellish existing assets

- [Modify the dam, manage sediment in upstream pool](#)
- [Modify Boy Scout Island](#)
- [Naturalize the shoreline](#)
- [Rehabilitate river tributaries](#)
- [Complete the Riverwalk amenities](#)
- [Incorporate stormwater best management practices](#)

Modify the dam, manage sediment in the upstream pool

Dam modification will create a more natural environment with improved aeration, wildlife passage, and habitat restoration. Managing the sediment in the upstream pool will continue to be a challenge but will be improved from the existing condition. Further study will determine the specific impacts related to dam modification.

Modify Boy Scout Island

Boy Scout Island was once an actual island. Currently it is a peninsula creating a stagnant bay of water that is challenging to maintain. Modify Boy Scout Island to return it to an island, improving water flow and allowing for creation of new wildlife habitat and ecological restoration. Provide a bridge to access the island and improve the power boat launch and parking lot

Naturalize the shoreline

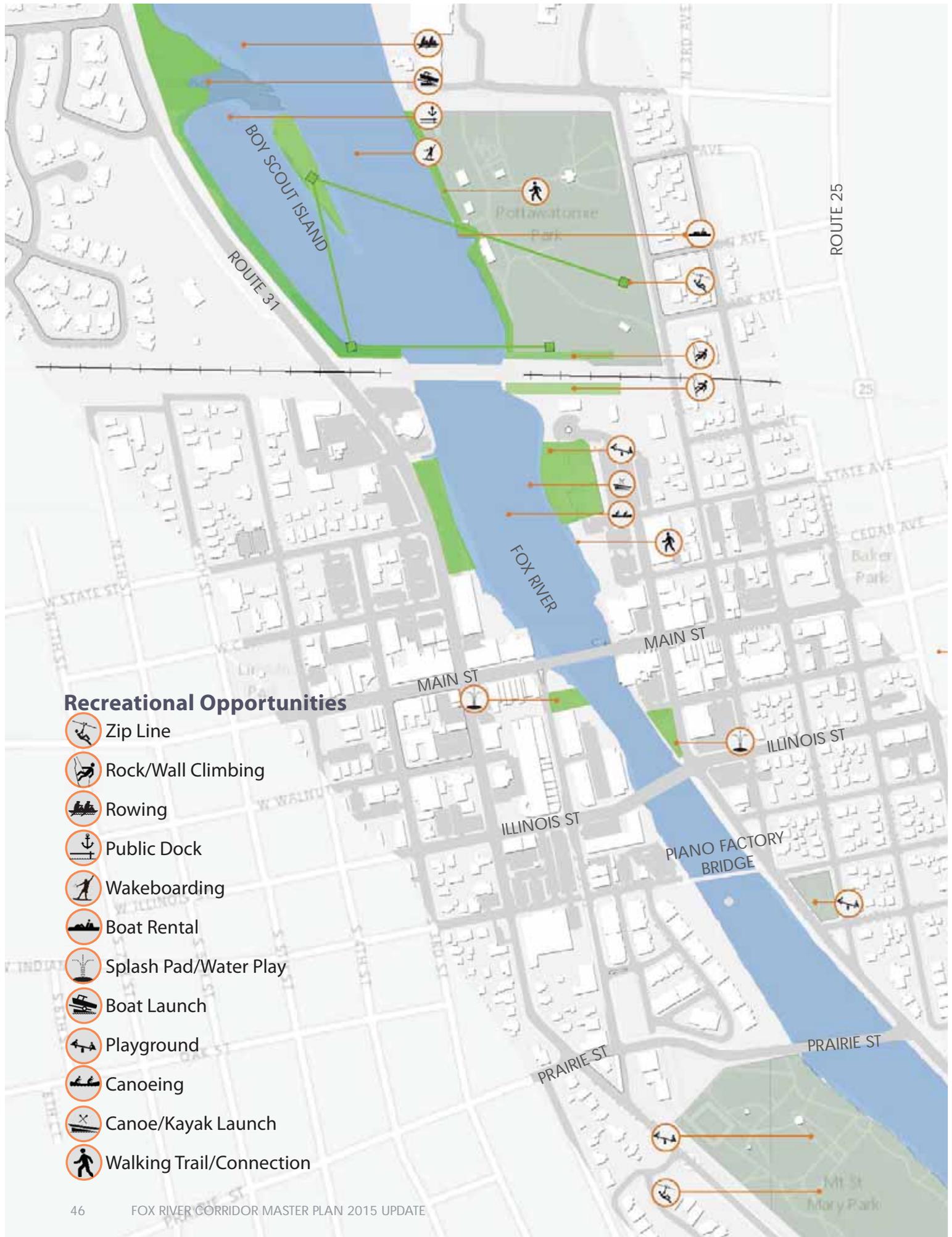
There are approx. 4 miles of shoreline within the St. Charles City limits. Much of the shoreline is natural, although erosion has degraded the shoreline in many locations. Stabilize and restore the shoreline to reduce sedimentation, improve water quality and provide wildlife habitat.

Rehabilitate river tributaries

As development occurred adjacent to the Fox River, many tributaries were disrupted, piped or filled. Restore the river tributaries to a more natural state to improve water quality, wildlife habitat and the environment.

Incorporate Stormwater Best Management Practices

Stormwater best management practices consist of requirements and actions to reduce the amount of stormwater runoff and ways to treat stormwater before it enters the river. Institute policies that require stormwater best management practices for both private and public developments to have a positive impact on the quality of the river.



Recreational Opportunities

-  Zip Line
-  Rock/Wall Climbing
-  Rowing
-  Public Dock
-  Wakeboarding
-  Boat Rental
-  Splash Pad/Water Play
-  Boat Launch
-  Playground
-  Canoeing
-  Canoe/Kayak Launch
-  Walking Trail/Connection

Recreational Assets

The St. Charles Park District already provides many recreational opportunities along the Fox River corridor. Improving the existing assets and taking advantage of the river as a natural resource by adding passive and active activities, along with encouraging private programs and activities, will further establish St. Charles as an active lifestyle community.

Maintain, improve and embellish existing recreational assets

- Provide recreational activities such as splash pads and destination playgrounds along the riverwalk and in downtown plazas and open spaces
- Provide active outdoor recreational activities such as climbing walls, ropes courses and zip lines along the riverfront
- Improve passive recreational activities such as bird watching, fishing, hiking and walking
- Support and encourage private recreation such as rowing, canoeing, kayaking, biking, and power boating
- Provide accessible fishing facilities



Playground



Splash Pad



Zipline/Ropes Course

Provide downtown and riverwalk recreational activities

The Park District supports programs and maintains neighborhood and regional parks throughout the community. Adding small recreational activities such as splash pads and destination play environments throughout the downtown and along the riverwalk will strengthen the riverfront overall.

Provide active outdoor recreational activities along the riverfront

Active recreational activities such as climbing walls, ropes courses and zip lines along the riverfront will support an active lifestyle and help establish St. Charles as a recreational destination.

Improve passive recreational activities

Recreational activities such as bird watching, hiking and walking are extremely popular. Providing convenient and interesting opportunities for people to experience the outdoors, riverfront, community and environment will support achieving the overall project goal.

Support and encourage private recreation

Public agencies can provide support for private activities without providing specific organized programs. Activities such as rowing, canoeing, kayaking, biking, and power boating are all privately organized but can benefit from public support.

Provide fishing stations

Fishing continues to be one of the most popular recreational activities along the Fox River. Provide convenient access to the river in popular fishing areas to support this popular recreational activity.

Cultural Assets

Cultural assets are all of the various items that communicate the attitudes, customs and beliefs that make a community unique. Incorporate and support art, history, programs and events that represent the culture of St. Charles throughout the river corridor.

Maintain, improve and embellish existing cultural assets

- Incorporate Art along the riverfront and throughout downtown
- Represent the history of the community
- Support community festivals and programmed events (Riverfest, Scarecrow, Fine Arts, etc.)
- Complete the Riverwalk amenities

Incorporate Art along the riverfront and throughout downtown

Sculpture, public art, performances and temporary installations all create interest and are attractions along the riverfront. Utilize the riverfront and the river itself for art displays and installations to create a unique riverfront experience.

Represent the history of the community

The City of St. Charles has a rich and storied history. Communicate the history of the community through sculpture, displays, and events for future generations to come.

Support community festivals and programmed events

The community hosts a number of events including Riverfest, the Scarecrow Festival and the Fine Arts festival within the downtown and along the riverfront. Support these community events along with other programs to continue to make St. Charles an attractive place to live and a regional destination.

Complete the Riverwalk amenities

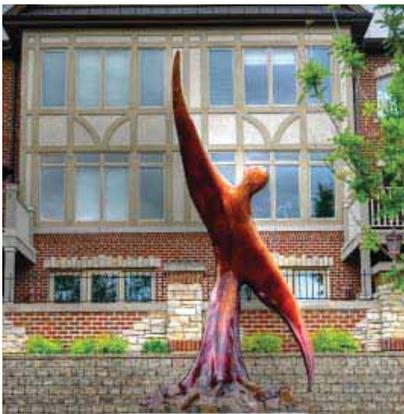
The existing riverwalk is a good start, but adding pedestrian amenities and other cultural assets will contribute to creating a riverwalk that is not just a walkway, but a regional attraction.



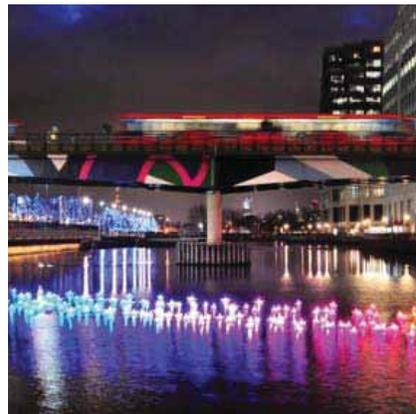
Local Lore and History



Local Events and Festivals



Memorial Sculptures



River Based Art Installations



Unique Cultural Attractions

Brand

The image of St. Charles, “Pride of the Fox”, is closely aligned with the river. Further emphasis on the river by refining the platform, tools and communications will only strengthen the community’s position and create a more recognizable, authentic brand.

Refine existing platform, tools, and communications

- Emphasize the river (programming and communications)
- Emphasize the package (multi-dimensional, lifestyle and visitor appeal)
- Promote new features as they come on line (must be authentic)
- Target audience (local, regional)

Emphasize the river (programming and communications)

The City of St. Charles is known as the “Pride of the Fox” and the identity of the community is closely tied to the river. Emphasize this fact through all programming and communications among the various, agencies, organizations, and groups to project a consistent, coordinated message.

Emphasize the package (multi-dimensional, lifestyle and visitor appeal)

It’s all about the river but there’s more to it than just the river. Emphasize the community as a whole, its diversity, lifestyle and visitor appeal as an active river community.

Promote new features as they come on line (must be authentic)

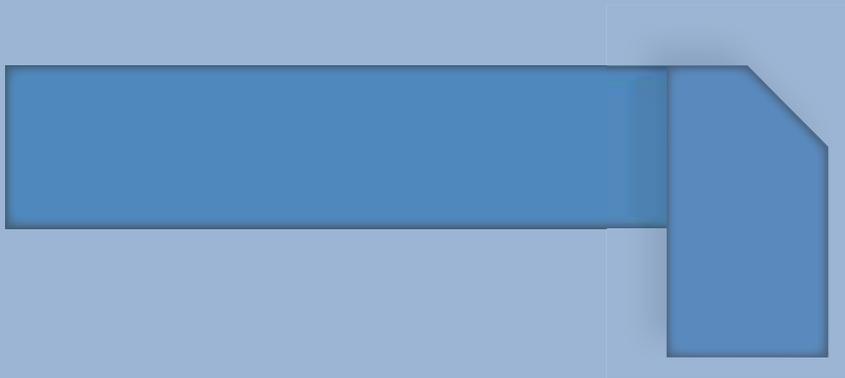
It is important to get the word out and promote new features as they come on line to create interest and attract users. Promotions must be authentic and not oversell an idea which could lead to a disappointing experience and loss of return visitors.

Target audience (local, regional)

Riverfront improvements benefit the local community and economy, creating a better place for its citizens. Targeting a larger regional audience can strengthen the reputation of the community and lead to continued growth and prosperity.

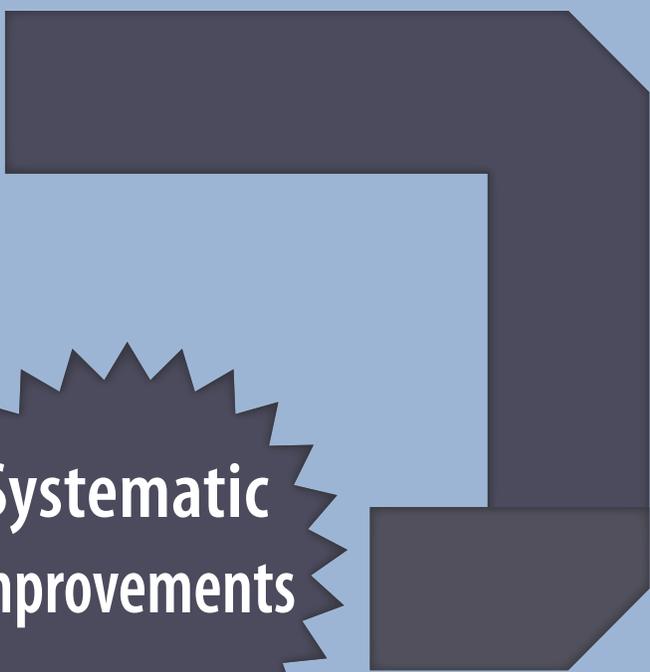


**Prioritize
River**



**Align and
Coordinate**

**Leverage
Water
Quality**



**Systematic
Improvements**

Momentum

The master plan outlines many improvement recommendations. It can be challenging to determine where to begin and how to accomplish meaningful improvements. By acting systematically and incrementally, the community can gain and sustain momentum to accomplish the project goals, objectives and standards.

Advocate the strategy

- Prioritize river and riverfront across partner organizations
- Align and coordinate organizational initiatives
- Leverage water quality to facilitate dam modification
- Commit to systematic, incremental capital improvements

Prioritize the river and riverfront across partner organizations

Various stakeholder agencies, organizations and groups have a number of competing interests to consider. Prioritizing these needs is not easy. The partner organizations must make the river and riverfront improvements a priority to gain and sustain momentum to meet the goals and objectives.

Align and coordinate organizational initiatives

If organizations make the river a priority, the next step is to align and coordinate specific initiatives among the organizations. Each organization has their own interests, but by coordinating together, multiple agencies can align their priorities and leverage river related initiatives.

Leverage water quality to facilitate dam modification

The time is now to align the City's interests with the pending water quality regulatory requirements. Coordination between the partner organizations and the regulatory agencies can lead to implementation of the recommendations as outlined in the master plan.

Commit to systematic, incremental capital improvements

Some of the improvements such as the dam modification are complicated and expensive, and will take a number of years to complete. It is important to get started on these larger scale projects now, although it is just as important to commit to systematic, incremental advancement of a variety of smaller projects on a continuous basis.



Implementation

The Fox River Corridor Master Plan includes dozens of important recommendations to “Create a lively riverfront environment that is the centerpiece of the community”. Fortunately, as detailed in the Opportunity Analysis, St. Charles has the critical natural, cultural and physical resources that enable community leaders to execute the strategy with confidence. However, the size of the study area, the number of improvement recommendations, and the multi-jurisdictional influences make rapid implementation a daunting task.

In this section, the recommendations are translated into specific, prioritized projects and actions that are organized as Public Policy Improvements, Operational Improvements, and Capital Improvements. Each project describes the type, potential cost, potential funding source, and the leaders and partners who are responsible for completing the project. Projects are prioritized based on their level of complication, potential cost, their catalytic potential and expected return on investment.

Both public and private sector leaders and property owners will be responsible for executing the actions outlined in this plan, often in close collaboration with each other. With the periodic assistance of legal, marketing and other business consultants, the Active River Task Force (ARTF) can accomplish many modest cost initiatives such as policy and operational changes, if members are willing to invest the time to work through the issues. By comparison, many of the larger capital improvements will require the assistance of design and engineering consultants and involve considerable City, Park District, and/or Forest Preserve leadership and investment because of their scale, complexity and cost. Since the construction of some of the new capital improvements will depend, in part, on outside grant funding, completion may extend beyond the outlined time horizon. Lastly, private redevelopment is heavily influenced by the market, investor and property owner circumstances that are difficult to forecast. Logically, redevelopment will likely follow and be influenced by the public policy and operational improvements.

Policy Improvements

Park District, City, and Forest Preserve District leaders, property and business owners, and other stakeholders need to closely collaborate to update and refine certain policies that will help advance the strategy. The ARTF, made up of representatives from each of these groups, should continue to remain active to advance the priority policy improvements.

Policy Improvements

COST	POTENTIAL FUNDING SOURCE	ACTION/DELIVERABLE	LEADERSHIP
Codes, Ordinances and Studies			
TBD	TBD	Adopt this River Corridor Master Plan Update, review and update the priority actions and improvements annually	City of St. Charles (City) St. Charles Park District (SCPD) Kane County Forest Preserve District (KCFPD)
TBD	TBD	Complete Police Facility Study	City
TBD	TBD	Continue negotiations with UPRR to purchase vacated RR bridge	City, SCPD, KCFPD
TBD	TBD	Evaluate, incorporate, and require environmental best management practices in ordinances and policies	City, SCPD, KCFPD
Agency Coordination			
TBD	TBD	Vigorously advocate the Active River Strategy with the Fox River Study Group	City, other Fox River cities
TBD	TBD	Synchronize City, Park District and County policies to prioritize river corridor improvements	Active River Task Force/ River Corridor Foundation of St. Charles (ARTF), All River Corridor Partners
TBD	TBD	Review the Strategy with regulatory Agencies to determine project related regulations and requirements	City, SCPD
TBD	TBD	Continue to advocate for the improvements on behalf of all river corridor partners	ARTF
Finance			
TBD	TBD	Select river corridor improvements and align with partner agency Capital Improvement Plans and all sources of revenue (include both simple-to-execute and complex projects like the Phase I study of the dam)	City, SCPD, KCFPD
TBD	TBD	Assign someone to research grant funding and produce periodic memos shared/compared with other corridor partners. Identify best opportunities and partnerships, apply for/facilitate awards	All River Corridor Partners
TBD	TBD	Seek funding through state and federal sources to complete a Phase I study of the dam modification, confirm local match(es)	City
TBD	TBD	Seek corporate and individual donations	Active River Task Force/River Corridor Foundation of St. Charles (ARTF)

Operational Improvements

The Park District, City, and Forest Preserve District are responsible for many day-to-day operational activities such as code enforcement, public property maintenance and programming, along with community outreach and advocacy. Additionally, private property and business owners are responsible for leasing, managing and maintaining their properties. Ideally, all public and private sector stakeholders will work closely together to improve the river corridor. Focusing on areas of common interest and defining how each entity can participate mitigates any potential overlap or competing interests in the work necessary to improve the river corridor. Once again, the ARTF can continue to play an important role in advancing the priority operational improvements.

Operational Improvements

COST	POTENTIAL FUNDING SOURCE	ACTION/DELIVERABLE	LEADERSHIP
Organization			
TBD	TBD	Synchronize 2016 City, Park District, County and organizational operations plans to prioritize river corridor promotion and programming	ARTF, All River Corridor Partners
TBD	TBD	Prioritize operational plan improvements to advance future implementation items	ARTF, City, SCPD, KCFPD, KDOT, Downtown St. Charles Partnership, Inc St. Charles Convention and Visitor's Bureau
Advocacy, Promotion and Marketing			
TBD	TBD	Continue to advance community outreach and advocacy with agencies, potential developers and the public	ARTF
TBD	TBD	Actively encourage private recreational activities such as rowing, canoeing, kayaking, and bicycling programs and groups	ARTF, SCPD
TBD	TBD	Explore the possibility for private vendors to provide specialized recreational activities such as climbing walls, ropes coursed and zip lines	ARTF, SCPD
TBD	TBD	Continue to support and promote the arts and programmed events and activities throughout the river corridor	ARTF, St. Charles Arts Council (SCAC)
TBD	TBD	Align the activities of partner agencies and stakeholders related to "brand" , emphasizing the river, promoting new features, and portraying an active lifestyle and visitor appeal	All River Corridor Partners
Public Space			
TBD	TBD	Continue existing maintenance practices for existing public properties	City, SCPD, KCFPD
TBD	TBD	Develop a plan for maintenance of future capital improvements	City, SCPD, KCFPD

Capital Improvements

This plan identifies many capital improvements, some of which can be completed in a relatively short timeline. Others, because of cost and complexity, will take many years to implement. Park District, City and Forest Preserve District leaders should start with simple, high impact, modest cost projects, then budget for and initiate more complicated, high-investment/high impact projects, as funding allows, giving the highest priority to the most catalytic projects. Leaders should also link the master-planned capital improvements to significant private sector investment, whenever possible to leverage the impacts.

Capital improvement projects typically follow a three phase process: Preliminary Design and Engineering (Phase I), Final Design and Engineering (Phase II), and Construction (Phase III). Customarily, the cost of Phase I and Phase II services is 10 percent of the project value, and the cost of Phase III is typically 3-5 percent of the total project value. With more complex projects, leaders should initiate Phase I consulting services well in advance of the targeted construction date to accommodate sometimes lengthy outreach, design, engineering and multi-jurisdictional permitting timelines.

Capital Improvements

COST	POTENTIAL FUNDING SOURCE	ACTION/DELIVERABLE	LEADERSHIP
Riverpark			
TBD	TBD	Align temporary bulkhead wall (city hall-police station) rehabilitation with Active River Strategy	City
TBD	TBD	Design, engineer, permit and construct the dam modification	City
TBD	TBD	Design, engineer, permit and construct the children's play environment	City, SCPD
TBD	TBD	Design, engineer, permit and construct the signature pedestrian bridge	City
TBD	TBD	Design, engineer, permit and construct the Bridgeview observation area	City, SCPD
TBD	TBD	Design, engineer, permit and construct the continuous riverfront walkway, water access, and observation areas	City
Riverwalk			
TBD	TBD	Create an enhancement plan for the Leonard Walkway for fundraising and construction	ARTF, City, SCPD
TBD	TBD	Design, engineer, permit and construct the Riverside Avenue Riverwalk (North of Prairie)	City
TBD	TBD	Design, engineer, permit and construct the Riverside Avenue (South of Prairie) Riverwalk	City
TBD	TBD	Design, engineer, permit and construct the downtown loop civic plaza	City

COST	POTENTIAL FUNDING SOURCE	ACTION/DELIVERABLE	LEADERSHIP
Riverwalk (cont.)			
TBD	TBD	Design, engineer, permit and construct the Beith House civic plaza	City
TBD	TBD	Design, engineer, permit and construct the Hazletine Park destination play environment	City
TBD	TBD	Explore the possibility to add a kinetic sculpture and plantings on the island	City, SCAC
TBD	TBD	Align Piano Factory Bridge rehabilitation with the Active River Strategy	City
TBD	TBD	Design, engineer, permit and construct surf wave south of Piano Factory Bridge	City
Regional Trails and Connections			
TBD	TBD	Align Fox River Trail sign improvements with the Active River Strategy	Kane County Department of Transportation (KDOT)
TBD	TBD	Design, engineer, permit and construct the Fox River Trail north extension	SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct the Fox River Trail (east side) north extension	SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct the Fox River Trail (west side) north extension	SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct the east/west Great Western trail connection across the railroad bridge	SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct grade separated and at-grade pedestrian and bike connections	SCPD, KCFPD
TBD	TBD	Evaluate existing bike paths and determine areas in need of improvement	ARTF, SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct priority bike path improvements	SCPD, KCFPD
TBD	TBD	Design, engineer, permit and construct river corridor gateways	City, SCPD
Private Development			
TBD	TBD	Align the First Street Redevelopment improvements with the Active River Strategy	ARTF, City
TBD	TBD	Align future riverfront redevelopment projects with the Active River Strategy	ARTF, City
TBD	TBD	Facilitate discussions with stakeholders regarding the potential for a rowing training center, camping and seasonal activities and rentals	ARTF, SCPD

COST	POTENTIAL FUNDING SOURCE	ACTION/DELIVERABLE	LEADERSHIP
Natural Assets			
TBD	TBD	Design, engineer, permit and construct the Boy Scout Island modifications	SCPD, City
TBD	TBD	Evaluate the shoreline to determine locations requiring shoreline restoration	ARTF, SCPD, City
TBD	TBD	Design, engineer, permit and construct shoreline restoration improvements	SCPD, City
TBD	TBD	Determine locations for fishing stations	ARTF, SCPD, City
TBD	TBD	Design, engineer, permit and construct fishing stations	SCPD, City
TBD	TBD	Evaluate river tributaries and determine locations requiring restoration	ARTF, SCPD, City
TBD	TBD	Design, engineer, permit and construct tributary restoration improvements	SCPD, City
TBD	TBD	Evaluate areas with poor drainage and flooding, and determine locations requiring improvement	SCPD, City
Recreational Assets			
TBD	TBD	Evaluate locations throughout the river corridor to incorporate splash pads, destination playgrounds, and specialized recreation opportunities	ARTF, SCPD, City
TBD	TBD	Design, engineer, permit and construct specialized recreational improvements	SCPD
TBD	TBD	Evaluate passive recreational activities to determine potential improvements throughout the river corridor	ARTF, SCPD, City
TBD	TBD	Design, engineer, permit and construct improvements to passive recreational activities throughout the river corridor	SCPD
Cultural Assets			
TBD	TBD	Align the Active River Strategy with the St. Charles Arts Council and other affiliated organizations to promote cultural asset improvements throughout the river corridor	ARTF, City
TBD	TBD	Fundraise and install art and historical components along the riverfront and throughout the river corridor	ARTF, SCAC

Priority Actions and Improvements

Community leaders should use this prioritized list of actions and improvements to guide policy, capital and operational improvements over the next 3 years. They should update this list, annually, to review progress, re-order actions based on changed circumstances, and identify new actions related to emerging opportunities. Costs are uninflated 2015 dollars, and leadership roles are noted with the understanding that elected leaders in the partnering agencies must approve all policies and appropriations.

The recommended actions and improvements are prioritized based on:

- An appropriate return on investment (broadly defined as the use of valuable financial, physical and human resources to create community impacts in support of the River Corridor Strategy)
- Availability of adequate funding (from public or private sources)
- Appropriate control of or access to river and/or corridor property
- Complexity and time to complete (creating and sustaining momentum with a combination of small, large, simple and complex projects)
- Relationship to private sector development (desirable private development adjacent to the river should always advance the corridor strategy)
- Relationship to public sector infrastructure projects (public improvements adjacent to the river should always advance the corridor strategy)

2015

Policy Improvements

Cost	Action/Deliverable	Leadership
NA	Adopt this River Corridor Master Plan Update	City of St. Charles (City) St. Charles Park District (SCPD) Kane County Forest Preserve District (KCFPD)
TBD	Vigorously advocate the Active River Strategy with the Fox River Study Group	City, other downstream cities
TBD	Select river corridor improvements for the 2016 and the 3-year Capital Improvement Plan (include both simple-to-execute and complex projects like the Phase I study of the dam)	City, SCPD, KCFPD
TBD	Seek funding through state and federal sources to complete a Phase I study of the dam modification. Confirm local match(es).	City
TBD	Assign someone to research grant funding and produce periodic memos shared/compared with other corridor partners. Identify best opportunities and partnerships, apply for/facilitate awards.	All River Corridor Partners
NA	Complete Police Facility Study	City
TBD	Continue negotiations with UPRR to purchase vacated RR bridge	City, SCPD, KCFPD

Priority Capital Improvements

Cost	Action	Leadership
TBD	Align Piano Factory Bridge rehabilitation with the Active River Strategy	City
TBD	Align temporary bulkhead wall (city hall-police station) rehabilitation with Active River Strategy	City
TBD	Align Fox River Trail sign improvements with the Active River Strategy	Kane County Department of Transportation (KDOT)
TBD	Align First Street Redevelopment improvements with the Active River Strategy	City

Priority Operational Improvements

Cost	Action	Leadership
TBD	Synchronize 2016 City, Park District, County and organizational operations plans to prioritize river corridor promotion and programming	Active River Task Force/River Corridor Foundation of St. Charles (ARTF), All River Corridor Partners
	Community outreach and advocacy	ARTF

2016

Priority Policy Improvements

Cost	Action	Leadership
	Continue to advocate Active River Strategy with Fox River Study Group	City
	Prioritize river corridor improvements for 2017 Capital Improvement Plans	City, SCPD, KCFPD
	Continue to seek funding for dam modification	City, IEPA
	Continue to monitor grant opportunities	All River Corridor Partners

Priority Capital Improvements

Cost	Action	Leadership
\$1,000,000	Start Preliminary Design/Engineering of the dam modification	City
\$50,000	Complete Preliminary Design/Engineering of Riverside Drive Riverwalk (Ohio-Prairie)	City
\$10,000	Create an enhancement plan for "Leonard" Riverwalk for fundraising, periodic completion	ARTF
\$15,000	Prepare Preliminary Design/Engineering for shoreline enhancements for Riverside Drive, south of Prairie	City
TBD	Design and construct a small project from simple-to-execute projects list	ARTF, City, SCPD

Priority Operational Improvements

Cost	Action	Leadership
	Synchronize 2017 City, Park District, County and organizational operations plans to prioritize river corridor promotion and programming	ARTF, City, SCPD, KCFPD, KDOT, Downtown St. Charles Partnership, Inc St. Charles Convention and Visitor's Bureau
	Community outreach and advocacy	ARTF

2017

Priority Policy Improvements

Cost	Action	Leadership
	Continue to advance dam modification plans	City
	Prioritize river corridor improvements for 2018 Capital Improvement Plans	City, SCPD, KCFPD

Priority Capital Improvements

Cost	Action	Leadership
	Complete Preliminary Design/Engineering of dam modification; Continue funding/implementation strategy	City
\$200,000	Complete Final Design/Engineering of Riverside Drive Riverwalk (Ohio-Prairie)	City
\$25,000	Prepare Preliminary Design/Engineering for Fox River Trail at Golf Course	SCPD, KCFPD
\$100,000	Construct some enhancements on "Leonard" Riverwalk	City
\$60,000	Prepare Final Design/Engineering for selected shoreline enhancements along Riverside Drive, south of Prairie	City

Priority Operational Improvements

Cost	Action	Leadership
	Synchronize 2018 City, Park District, County and organizational operations plans to prioritize river corridor promotion and programming	All River Corridor Partners
	Community outreach and advocacy	ARTF

2018

Priority Policy Improvements

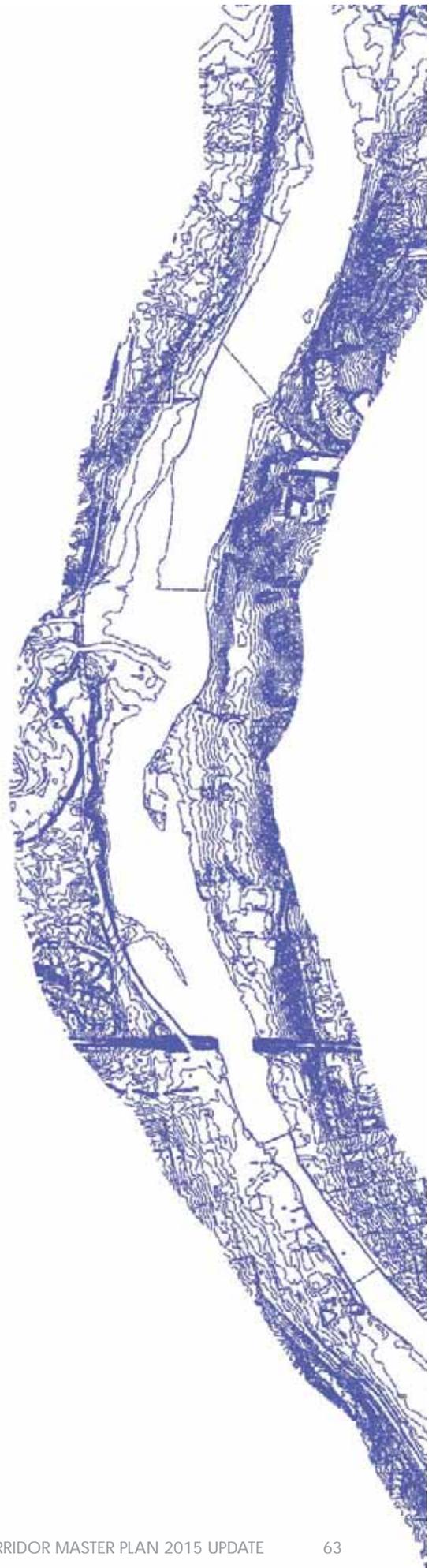
Cost	Action	Leadership
	Continue to advance dam modification plans	City
	Prioritize river corridor improvements for 2019 Capital Improvement Plans	City, SCPD, KCFPD

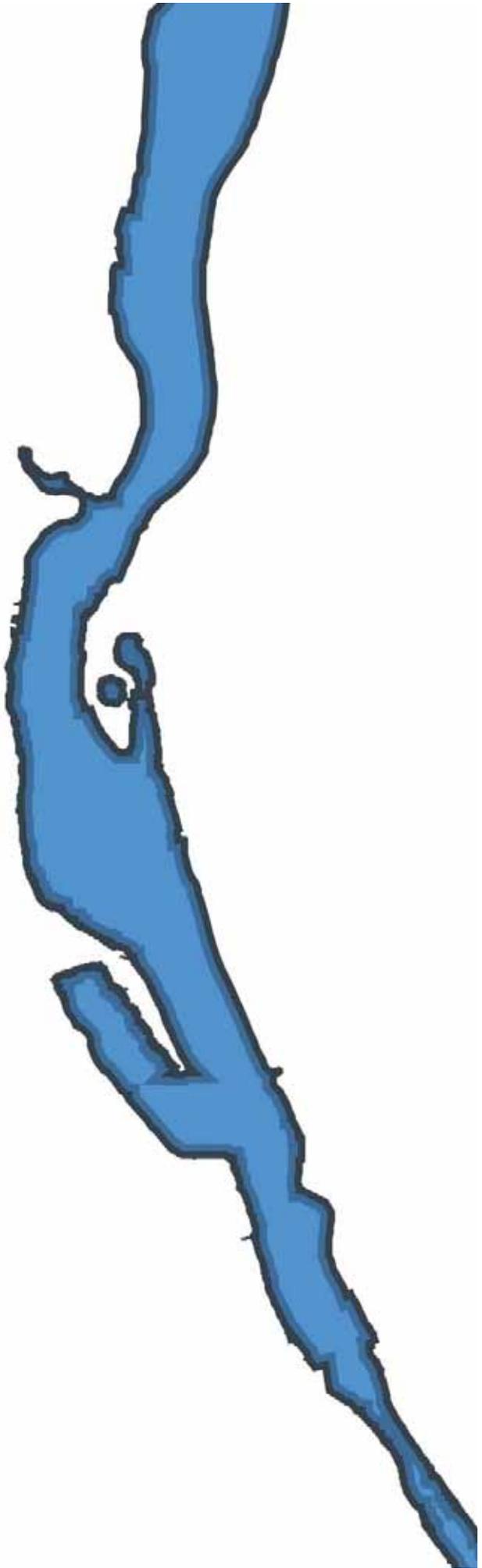
Priority Capital Improvements

Cost	Action	Leadership
\$2,500,000	Construct Riverside Drive Riverwalk (Ohio-Prairie)	City
\$100,000	Construct additional enhancements to "Leonard" Riverwalk	City

Priority Operational Improvements

Cost	Action	Leadership
	Community outreach and advocacy	ARTF







St. Charles Active River Park

Project Summary June 16, 2017

Purpose and Scope

In 2015 the City of St. Charles, the St. Charles Park District and the River Corridor Foundation of St. Charles jointly updated the Fox River Corridor Master Plan intending to provide a strategic framework to enhance the Fox River as a resource for the community from an environmental, recreational and economic development perspectives. The Master Plan provides guidance for public and private investment / projects along the Fox River in St. Charles and recognizes the importance of connectivity of the river and adjacent land uses.

The City has engaged WBK to investigate alternatives to accomplish the objectives of the Master Plan with a focus on the section of the Fox River between Main Street and the Union Pacific Railroad (UPRR) trestle. This section of the Fox River is approximately 1100 feet long and includes the St. Charles – Fox River dam. The St. Charles dam is 300 feet long with a crest elevation of approximately 684. Mean daily flows can be approximated at 1200 cubic feet/second (cfs). Normal pool elevation is approximately elevation 686. Based on the best available records the dam is owned by the Illinois Department of Natural Resources.

The purpose of this study is determine qualitatively if dam modification appears feasible and to develop a set of concept alternatives that accomplish the objectives of the River Corridor Foundation of St. Charles Master Plan without significant / adverse impact to existing recreational uses of the river. This concept study phase will conclude by identifying significant challenges and opportunities created by proposed concept alternatives, as scoping items for future evaluation and engineering.

Existing River / Dam Conditions

Two significant existing challenges exist within the study area of the Fox River; public safety and ecological impacts of the existing St. Charles dam. Public safety concerns with low head dams are well known and documented and including an evaluation of the St. Charles dam in the 2007 Run-of-the –River studies by the Illinois Capital Development Board. Uses of the river are restricted adjacent to the St. Charles dam. Flooding of IL 31 upstream of the St. Charles dam occurs when water levels in the Fox River rise and has traffic impacts. Approximately 820 feet of IL 31 adjacent to the project limits and upstream of the St. Charles dam lies within the 100 year floodplain of the Fox River. Additionally, the dam is a recognized impediment to fish passage and other species who make their home in and around the Fox River. The lack of fish biodiversity in certain segments of the Fox River as a result of dams is well documented and resulted in the advocacy for dam removal or modification to facilitate the restoration of riparian ecosystems. The development of alternatives consider these challenges and seek to improve safety and the Fox River ecosystem.

Opportunities

Water Recreation

Public activity on the water of the Fox River between Main Street and Pottawatomie Park is less than the activity occurring both north and south of the project limits. Direct access to the water is limited within the study area and the study area can be considered underutilized from a recreational perspective. Opportunities involve improved connectivity on the water and access to the water from trails and adjacent land uses. The Fox River serves as a recreational water resource and also as an attraction and backdrop to many land activities including walking, running, bicycling and many other Park District activities. Potential enhancement of water recreation includes improved kayaking, canoeing, and fishing with potential for competitive kayaking and recreational surfing among other water based activities. The project provides an opportunity to better connect Potawatomi Park and the many existing water activities to downtown St. Charles businesses and customers. The Hotel Baker and Municipal Building are historic and significant land uses adjacent to the river with existing river access. We believe opportunities to provide enhanced access to the River and river trail / amenities will appeal to a broader segment of business patrons including potential for boat dock facilities within the pool at or north of the project limits.

Land Based

If a project such as this is implemented we believe significant land use opportunities exist adjacent to the Fox River within the study limits. Opportunities include the relocation of the Police Station on the east side of the river and potential reduction in floodplain limits west of IL 31. Although the extent of floodplain reduction west of IL 31 is uncertain at this concept phase, any reduction together with the proximity to a significant recreational destination is expected to enhance intrinsic land value and encourage evaluation of current land uses. We expect the rekindling of commercial interest to synergize with the river improvements to enhance the downtown business climate for all businesses along and near the Fox River, including Salerno's, Hotel Baker, Century Corners, Third Street and Main Street businesses.

Walking trails – Perhaps the most significant improvement opportunity to enhance recreation and the St. Charles' downtown business district lies with land connections via trails and pathways adjacent to the Fox River. Although an existing Riverwalk exists along the east bank of the river, it is not continuous across Main Street and ends at the Municipal Building / Main Street creating a less than desirable interface for cyclists and pedestrians. Although access from the study area to Pottawatomie Park is provided, access is not obvious nor comfortable when busy. An opportunity exists to improve this condition and perhaps provide a visible gateway from downtown St. Charles to Pottawatomie Park. Although the project limits end at Main Street, the project has potential to safely and easily facilitate pedestrians and bicyclists along the Fox River and to a future riverwalk extension under Main Street. There is also potential to directly connect Main Street to the west bank Riverwalk at First Street further strengthening the commercial / recreational connection. Finally, a west bank Riverwalk has potential to extend north of the UPRR trestle to Boy Scout Island. If accomplished this connection would link Boy Scout Island to Potawatomi Park and to the proposed improvements within the study limits.



Ecological / Cultural

The ability of the project to improve the biodiversity of plants and animals within the study area and adjacent segments of the Fox River is a noteworthy opportunity for the community. We expect fish passage to be significantly improved as a result of the project. We propose to introduce native plants within the study area and adjacent areas to create habitat for fish and other riparian species such as turtles, mussels and birds. Public education of the river ecology can be accomplished through signage and collaboration with Park District and School District activities.

The St. Charles community is proud of its heritage and through historic preservation sustains the memories and stories of past civic leaders and community efforts. Although this project seeks to create a new beginning for this segment of the Fox River, respecting the adjacent historic architecture, incorporating existing art elements and preserving the story of the dam itself can all be incorporated into the project. In addition, an opportunity to expand an understanding of the pre-settlement community and culture can be incorporated into recreational, landscape and other elements of the project.

Alternative River Park Concepts

The project team initiated development of alternatives by starting with the concept sketches in the Fox River Corridor Master Plan. We considered of a wide range of variations including modifying the existing dam, relocation of the dam, discussion on the extent of the study limits and consideration of multi-channel alternatives. We evaluated project elements against project goals, existing challenges and potential opportunities. We have developed three alternatives which we believe significantly improve public safety, enhance fish passage and provide recreational and economic development opportunities. While evaluating alternatives we sought to strike a balance between various interests to minimize impacts while providing benefit in accordance with project objectives.

Two primary concepts developed from our evaluation, primarily as a result the physical slope of the river across the study area. A single channel configuration achieves water "connectivity" and creates additional riverbank area for walking trails and riverbank amenities. The dual channel configurations expands the single channel concept to create a variety of paddling / water experiences by varying the slope of each channel. The island area is necessary to facilitate varying channel slopes and also creates a point of interest and facilitates enhanced access to the water. From these concepts we developed a total of three feasible alternatives; one single channel and two dual channel configurations. The alternatives are best depicted on three exhibits attached to this summary. A narrative overview of the alternative is provided hereafter:

- All concepts maintain the pool north of the UPRR trestle and have no adverse impact on 100 year flood elevations and will not result in sediment accumulation adjacent to Potawatomie Park.
- All concepts remove the dam in its entirety due to the proximity to Main Street and the adjacent walls of the Municipal Center and Hotel Baker.



- All concepts change the river profile from a single six foot drop at the existing dam to a series of three cascade drop structures across the length of the project. This serves to improve public safety and facilitate fish passage through this section of the river.
- All concepts include an upstream gated control structure with potential to reduce upstream flood elevations, to facilitate sediment transport and to support the existing recreational purposes. The type of gate and configuration is beyond the scope of this study however the Fox River has several gated structures / types between the Chain O Lakes and Dayton.
- All concepts narrow the width of the river from the existing pool condition to create additional riverbank to enhance access / use of the river and improve safety.
- The dual channel configurations have a “Primary” channel; depicted along the west bank of the area and an “Active” channel; depicted along the east bank of the area. This arrangement is reflective of the private land ownership along the west bank seeking to create activity on publicly owned land along the east bank. It also facilitates the confluence of State Street Creek at the west Bank of the river.
- The “active” channel in both dual channel alternatives have, in the terminology of paddle sports, a flatwater segment and a steep / whitewater segment. The primary difference between the dual channel alternatives is the location of the steeper segment being either closer to Pottawatomie Park or closer to Main Street.

Based on information gathered in accordance with the scope of this study we find these three alternatives feasible. It is noted that further study is necessary to define these preliminary concepts and to fully and better understand impacts, costs and schedule. In addition, other alternatives or variations of these alternatives may provide additional benefit or ability to mitigate impacts and may be developed or selected in the subsequent preliminary design phase of the project.

Other Similar / Recent Projects

It is useful to compare the project concepts developed to previously constructed projects providing similar functions. Accordingly, a comparison of the St. Charles Active River Park study area was made to the Glen Palmer Dam modification /Marge Cline Whitewater Park, both on the Fox River in Yorkville, IL. This comparison validates the feasibility of a river park concept in St. Charles. The projects are similar from several aspects including: both projects are on the Fox River, the length and elevation differentials are similar at each dam locations, the Glen palmer Dam project was recently completed (2011) and the Glen Palmer Dam project resulted in agreements between the Illinois Department of Natural Resources (IDNR) and Yorkville for maintenance of the whitewater park. This comparison is made solely to validate the feasibility of a River Park in St. Charles through the similarities in river segments. However, there is no

comparison relative to the adjacent land uses including Potawatomie Park, Hotel Baker, Main Street and adjacent commercial districts.

Regulation

Construction of a project in the Fox River involves a complex regulatory framework that involves public agencies and will also involve private landowner rights. The scope of this study was limited to review and engagement with the Illinois Department of Natural Resources – Office of Water Resources - Northeastern Illinois Regulatory Section (IDNR). Although a majority of the public regulation is under IDNR's authority the following list of regulatory compliance is recognized for consideration in the preliminary design phase of the project.

- The following regulation is under the authority of IDNR:
 - Public Body of water regulated under IAC 3704 rules
 - Dam Safety including construction, removal and operation under IAC 3702 rules
 - Floodway Construction NE IL under IAC 3708 rules

- The following regulation is under the authority of the United States Army Corps of Engineers Chicago District Regulatory Branch:
 - Federal jurisdiction is through the Section 10 Public Waters – River & Harbors Act.
 - Wetland fringe United States Army Corps of Engineers (USACE) jurisdiction under Section 404 of the Clean Water Act

- Regulation under the authority of the Illinois Environmental Protection Agency (IEPA) includes:
 - In river work may be subject to either IEPA Section 401 Water Quality Certification and/or the more stringent IEPA Bureau of Water Anti-degradation rules.

The project team introduced the three alternatives presented herein to IDNR for review and preliminary comment. No regulatory issue was identified that would render the project infeasible nor was a “fatal flaw” identified. In general, IDNR felt the project was feasible from their regulatory perspective. There are regulatory conditions and constraints that will require compliance, however, there is no regulatory conditions identified that we can find at this time to render the project infeasible.

The following regulatory issues need to be resolved or clarified:

- Riparian rights of private land parcels immediately adjacent to the Fox River. These owners have the rights of use and access and public access at these 3 parcels requiring legal review separate from the IDNR process.



- Creation of land within the limits of the river by means of fill will need to be publically owned. This may also give rise to a license to use / operate.
- IDNR is not likely to take ownership of new structures within the river (i.e. upstream control structure / gates) so a public entity willing to commit to ownership and maintenance will be required. We are assuming at this point that the City of St. Charles or the St. Charles Park District would need to fill that role.
- Signage / setback requirements at upstream control structure / gates.
- In-river work restrictions to protect threatened and endangered species. Of primary concern in this area of the Fox River is protecting the breeding habitat and season for the Greater River Red Horse.

It was clear based on our meeting that the type and scope of this project is not typical for IDNR to process. Coordination between sections and workgroups is necessary to coordinate all of IDNR authority and concerns. Although the IDNR-OWR Northeastern Illinois Regulatory Section identified themselves as the coordinating section for IDNR, a well-defined process and schedule could not be provided. Identify a permitting process & schedule with all regulatory agencies and a legal review of riparian rights is warranted in the preliminary design phase of the project.

Construction

The following outline is intended to demonstrate the feasibility of construction and generate an understanding of challenges and timeframes for construction of the project. It is based on a dual channel alternative. We envision the project to span at least two construction seasons and consist of multiple phases. One scenario includes the following major elements and phases:

1. Establish and set a temporary water control structure upstream just south of the UPRR trestle. This structure will serve to maintain the recreational pool north of the project location throughout construction.
2. Remove the existing dam to the elevation of the river bed. Dam abutments may remain pending structural evaluation of adjacent properties / structures.
3. Construct the south portion of the west (primary) channel and two intermediate cascade drop structures. A temporary A-frame structure can be erected parallel to the river to dewater the work area. Construct the south half of a concrete cutoff wall separating the two channels (The exact length of the cutoff wall is uncertain and the term "half" is used as an approximation). It is

anticipated this would be located in the core of the island and facilitate construction of the two intermediate cascade drop structures. The phase will not include State Street creek and will route the Creek north and around the A-frame elements.

4. Construct the north portion of the west (primary) channel and the upstream control structure. Provide A-frame cofferdams from the cutoff wall to the temporary water control structure at the upstream end of the project. Re-route State Street Creek through the recently completed phase. Modify the temporary water control structure as necessary to accommodate the new phase. Complete the north half of the cutoff wall from the prior phase to the north end of the project. Construct the permanent upstream control structure. Install control gates, mechanical and electrical elements including temporary controls.

End Year 1

5. Construct the east (active) channel. Modify the temporary water control structure as necessary to accommodate the new phase, perhaps remove the west half. Provide A-frame cofferdams from the cutoff wall to the temporary water control structure at the upstream end of the project. Construct the active channel head control structure and active channel features.
6. Complete the pedestrian connection to the UPRR pedestrian bridge and east bank walk / bikeway improvements. Modify the temporary water control structure to accommodate this phase.
7. Perform final filling, shaping and "tuning" of river elements.
8. Install bridges and hardscape elements on the island.
9. Install final gate controls and island electrical elements.
10. Construct ancillary plan items and support features.
11. Perform restoration of all disturbed areas including final plantings and landscaping.

Process / Schedule

The process to design and engineer a dam modification / removal project typically includes two phases; preliminary design and preparation of final construction documents. Based on our findings and the need for further refinement, resolution and definition we believe this standard approach to be appropriate. The preliminary and final construction design phases would include:

- Preliminary Design



- Design development of two concepts (~20% design)
 - Field Investigations
 - Sediment depth and constituents
 - Bathymetric survey
 - Rock coring/testing
 - Meetings with all regulatory agencies
 - Refine cost estimates and schedule
 - Identify required field investigations
 - Identify and affirm funding sources
 - Legal evaluation of project
 - Public participation
 - Preliminary Design Report
-
- Go/No-Go Milestone
 - Select preferred alternative
 - Confirm funding sources
 - Continue communication with regulatory agencies & regulatory changes

 - Final Construction Documents
 - Final design development of preferred alternative
 - Final construction Plans, specifications, and contract documents
 - Final construction estimate and schedule / sequencing
 - Permitting and regulatory submittals
 - Legal requirements
 - Intergovernmental agreements
 - Easements / land rights

 - Bidding including major equipment procurement & construction services procurement

 - Construction Services

The project schedule for completion of preliminary and final design should be anticipated to be three years from authorization to proceed. This schedule could vary depending on project scope, sponsor agency interest in alternatives and regulatory requirements or changes. As noted previously, the project schedule for construction is anticipated to be two years. Procurement of a significant mechanical elements (i.e. gates) could be initiated prior to completion of final design to allow for manufacturing lead time if necessary.

Costs

Concept level costs for the project have been developed based on the dual channel alternative and the construction phasing and sequencing noted herein. The goal of this task is to provide order of magnitude funding requirements. The feasibility of achieving the funding level required may be judged based on other projects the City has invested public funds in the recent past. These include Wastewater Treatment Plant Improvements, Red Gate Bridge and the First Street Redevelopment. No two projects of this magnitude are alike or have similar funding sources. Construction costs, without contingencies and soft costs, are estimated in the range of \$15 to \$16 Million. With contingencies and soft costs the total project costs range from \$20 to \$22 Million.

Conclusion

Based on the team's understanding of existing conditions, the scope of proposed alternatives, regulatory requirements and stakeholder interests we believe the development of a successful River Park improvement project in St. Charles between Main Street and Potawatomie Park is feasible and will accomplish the objectives of the Fox River Corridor Master Plan. If public agencies desire to pursue these concepts, the next logical step is to develop a detailed preliminary design scope of services and to verify funding availability for preliminary engineering. This step would include public participation, regulatory agency coordination and legal review of project requirements.