

US EPA ARCHIVE DOCUMENT

Greening America's Capitals

JEFFERSON CITY, MISSOURI

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Greening America's Capitals is a project of the Partnership for Sustainable Communities between EPA, the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (DOT) to help state capitals develop an implementable vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green building and green infrastructure strategies.

EPA is providing this design assistance to help support sustainable communities that protect the environment, economy, and public health and to inspire state leaders to expand this work elsewhere. Greening America's Capitals will help communities consider ways to incorporate smart growth strategies into their planning and development to create and enhance interesting, distinctive neighborhoods that have multiple social, economic, and environmental benefits.

Jefferson City, Missouri was chosen as one of the first five state capital cities to receive this assistance beginning in the fall of 2010, along with Boston, Massachusetts; Charleston, West Virginia; Hartford, Connecticut; and Little Rock, Arkansas.

More information at <http://epa.gov/smartgrowth/greencapitals.htm>

This project was funded in part by EPA's Office of Water in support of its urban water work. As part of the Urban Waters Movement, EPA is seeking to help communities – especially underserved communities – as they work to access, improve, and benefit from their urban waters and the surrounding land. By more effectively leveraging existing programs, EPA aims to support projects and build partnerships with a variety of federal, state, tribal, and local partners that foster increased connection, understanding, and stewardship of local waterways. By promoting public access to urban waters, EPA will help communities become active participants in restoration and protection.

More information at <http://www.epa.gov/urbanwaters/index.html>

› Executive Summary

Missouri's state capitol building is located just one block from where Wears Creek enters the Missouri River in Jefferson City. The creek has the potential to be restored and transformed into an attractive public space, a "recreation destination," as community members call it, with environmental, social, and economic benefits.

The U.S. Environmental Protection Agency's (EPA) Greening America's Capitals program worked with residents, business owners, and state and local government representatives to develop an environmentally and economically sustainable vision for the Millbottom area, a gateway to the state capitol building. This vision proposes the cleanup and restoration of Wears Creek, connects services and amenities to the riverfront via trails, adds parks and gathering spaces, identifies adjacent sites for adaptive reuse of existing buildings, and proposes street and parking improvements. Together, these improvements will not only improve the environmental performance of the creek and adjacent areas, but will also restore the waterway as a centerpiece of Jefferson City's community life and economic growth.

This report provides Jefferson City with both a comprehensive vision for the Millbottom area and a set of incremental steps to achieve that vision. The project team developed the designs in this report through a three-day workshop in Jefferson City that engaged a range of state and local stakeholders, including the mayor and city council, business and property owners, state and local government employees, and members of the public. The project team included Jefferson City, EPA, Spectrum Consulting Group, and BNIM.

Jefferson City, its partners, and its stakeholders could use the designs proposed in this report, as well as the action steps provided, to guide the revitalization of the Millbottom area into a destination with vibrant public spaces, walkable streets, new attractions, and a cleaner and healthier Wears Creek that will serve residents and visitors of this historic state capital.

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01 > Envision

background of Jefferson City's Greening
America's Capitals project and outcomes

> The Vision

As the capital of Missouri, Jefferson City has a responsibility to lead the state. This responsibility extends beyond legislation and political leadership; it includes the responsibility to lead with action.

The Greening America's Capitals project gave Jefferson City the opportunity to bring together stakeholders and design experts to generate a new vision for the gateway to the capitol. The community vetted goals and discussed specific strategies to implement this vision of transformation for the area around the capitol known as the Millbottom area. It is important to citizens of Jefferson City to create a destination that provides amenities for residents, welcomes visitors, protects natural systems, and injects new life into the community. Residents hope that this revitalized area will become a focal point of an extensive regional outdoor recreational network and will inspire healthy living and community engagement.

The revitalization of the Millbottom area could be a model for many American cities that are struggling with similar issues of rainwater management, natural resource restoration, encouraging walking and bicycling, perceived safety, and opportunities for small businesses. Jefferson City's vision connects all of these issues in a way that will simultaneously restore Wears Creek, reinvent the area, and use the floodplain to protect environmental resources. Restoring the creek and adding adjacent green infrastructure features will help the city protect built areas from flooding and give investors more confidence in surrounding properties. The series of public workshops held as part of the Greening America's Capitals program demonstrated that excitement about and support for this vision is strong, and the time for action is now. This plan lays out a path to unlock the potential of an underused area and transform it into a thriving and beautiful gateway to Jefferson City.



Figure 1 > The Millbottom area full build-out scenario

Transforming Millbottom into a thriving and beautiful gateway to Jefferson City involves many initiatives. Restoring Wears Creek improves its capacity to handle rainwater and inspires human connection with nature. Creating a robust trail network that connects the dots and reconnects with the Missouri River offers residents the chance to explore the beauty of the natural environment in a healthy and active way. Transforming streets to welcome pedestrians, bicycles, transit, and automobiles creates a safer and more livable community. Accommodating parking with green infrastructure improvements while considering new land use potential reduces negative environmental impacts and catalyzes economic growth. Integrating a well-programmed park attracts people, stimulates engagement with nature, and increases knowledge and advocacy of environmental issues.

State and local government staff, property owners, and the community at large agreed upon six overarching goals for the Millbottom area (page 13). These goals set the framework for the public work sessions around the topics of:

- Ecology and waterways
- Neighborhoods, transportation, and tourism
- Healthy lifestyles and recreation
- Economic development

The participants in the work sessions came from the public and private sectors. Each work session identified specific projects and policies that would support its topic area. The full group of participants then prioritized projects based on their ability to help achieve all six goals for the Millbottom area. The project team organized these specific projects under the categories of five initiatives. Actions from each initiative can be implemented concurrently to build interest and investment from diverse perspectives.

The initiatives are:

Wears Creek Restoration - Wears Creek is a neglected asset for Jefferson City. Its restoration would enhance the beauty of the capital district and improve the area's capacity to handle rain events without flooding.

Trails + River Access - A robust trail network and connections with the Missouri River will offer residents the chance to explore the beauty of Jefferson City's natural environment.

Complete Streets + Transit Connectivity - Streets belong to everyone and are the most abundant public space in many communities. This initiative transforms streets to welcome pedestrians, bicycles, buses, and potentially trolleys. It includes beautifying streets with plantings and natural rainwater treatment.

Parking Improvements - Parking is necessary in the capital district. This initiative offers an approach for accommodating parking that makes parking lots more attractive and reduces the amount of pollution and erosion from rainwater runoff.

Parks + Adaptive Reuse - Much of the Millbottom area in the capital district is subject to occasional flooding. This initiative integrates a park system that increases the area's capacity to protect against flooding. The initiative identifies areas that are suitable for redevelopment from the perspectives of both flooding and economic potential.

Each initiative includes a discussion of impacts, action steps, and precedents to outline options for implementation. A few resources for implementation tools are offered in Appendix A and some options for financing resources are offered in Appendix B. These initiatives identify ways to approach the complex issues of revitalizing a historically, environmentally, and socially significant place as a catalyst for change and as a model for other communities.

› The Six Goals

01 › Transform the Millbottom area into an attractive gateway to the Capitol

02 › Re-Connect the people of Jefferson City to the river through pedestrian and bike improvements as well as waterfront programs and projects

03 › Improve water quality, provide flood mitigation, and promote ecological education and responsibility by transforming “grey to green” in the floodplain

04 › Encourage economic revitalization through adaptive reuse and vibrant public spaces

05 › Connect existing attractions to one another, and link ongoing initiatives in the Millbottom area to leverage their combined capacity and stimulate future investment

06 › Lead by example incorporating emerging technologies and green building techniques into environmentally and economically sustainable planning and design

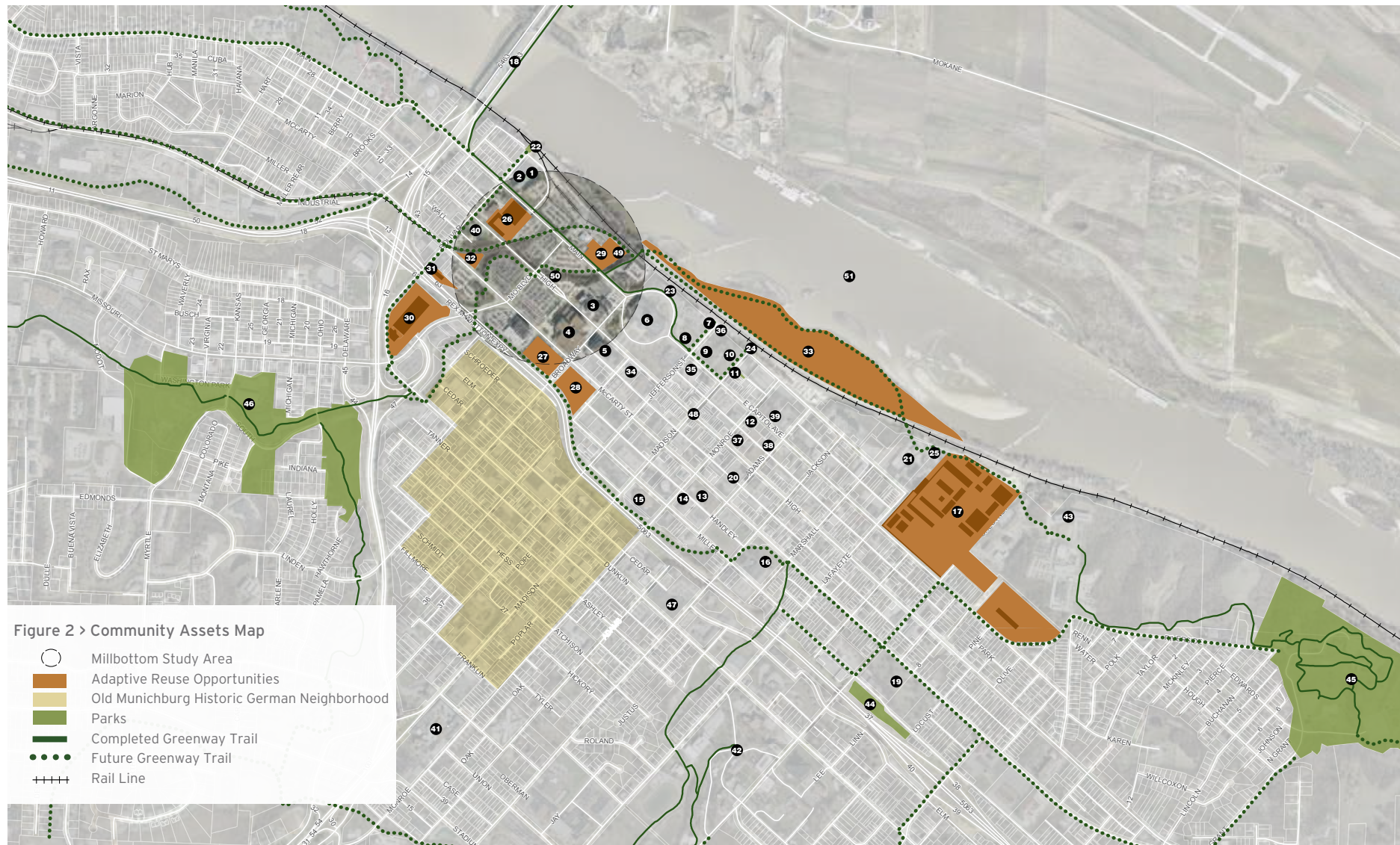


02 > Context

a brief description of conditions and process

The Missouri River played a critical role in the founding of Jefferson City. It provided sustenance, transport, and trade for the city's founders and determined the location of primary hubs of commerce and governance throughout the state.

Today, the capital district has a diverse mix of institutional, commercial, and residential uses. The Community Assets Map (Figure 2) highlights many public and private facilities and public spaces in and around the Millbottom area. Numerous projects are currently underway in this area. The Jefferson City Area Chamber of Commerce's economic development and strategic plan, *Transformation*, says it well: "While the challenges facing Jefferson City are real, so are the opportunities. The community has the potential to reinvigorate activity within its core and become a regional destination for talent." In the study area northwest of the capitol building, connecting existing assets is crucial for successful on-the-ground results. The study area contains state facilities, surface parking, and some commercial uses. Wears Creek flows through the area, and the Missouri River, though adjacent, is separated from the area by rail lines. This combination of built and natural features sets the stage for a new vision for an important hub of the city. Transformation and reinvigorated activity in the study area, known as the Millbottom area, could have rippling impacts on the capital city and the state of Missouri.



- | | | | | |
|---|-----------------------------------|--|-------------------------------------|-------------------------------------|
| 1. Wolfner Memorial Library | 10. Governor's Mansion | 21. New Federal Courthouse | 31. Shoe Factory | 42. Lincoln University |
| 2. Missouri State Archives | 11. Cole County Historical Museum | 22. Rotary Centennial Park Overlook | 32. Intercity Bus Terminal (vacant) | 43. Department of Natural Resources |
| 3. Church | 12. Church | 23. State Capitol Overlook | 33. Adrian's Island | 44. E. Miller Park |
| 4. Harry S. Truman State Office Building | 13. City Hall and Police Station | 24. Madison Street Overlook | 34. United States Post Office | 45. Ellis Porter Park |
| 5. Missouri Supreme Court | 14. Parks and Recreation | 25. Lafayette Street Overlook | 35. Jefferson Building | 46. Washington Park |
| 6. Missouri State Capitol | 15. Miller Performing Arts Center | 26. MoDOT | 36. Amtrak Station | 47. Division of Employment Security |
| 7. Jefferson's Landing - Missouri Historic Site | 16. School | 27. Potential State Parking | 37. Cole County Court House | 48. Downtown Jefferson City |
| 8. Katy Trailhead Plaza | 17. Missouri State Penitentiary | 28. Potential Conference Center and Structured Parking | 38. Cole County Assessor Building | 49. Old Trolley House |
| 9. Carnahan Memorial Garden | 18. Bike/Ped Bridge to Katy Trail | 29. Former Railyard | 39. Church | 50. Wears Creek |
| | 19. Fairview Cemetery | 30. St. Mary's Hospital | 40. City Fire Station #1 | 51. Missouri River |
| | 20. New County Jail | | 41. Capital Regional Medical Center | |

The Millbottom study area has diverse challenges and opportunities including a large amount of land in the floodplain, a large amount of impervious surface, and a large amount of city and state-owned land (Figure 3). Wears Creek frequently floods as a result of both runoff from upstream and backup from the Missouri River. The urbanization of Millbottom has encroached on the natural area of Wears Creek, leaving a very small riparian buffer to mitigate rainwater runoff and flood water.

Development of the natural land, both upstream and in the immediate area, causes runoff in quantities that the remaining riparian buffer and stream corridor cannot handle. Before development, the entire floodplain functioned as a riparian buffer, capturing sediment and other pollutants as well as holding and infiltrating flood waters. It is no surprise, therefore, that there are currently flooding problems in Wears Creek because much of the riparian buffer in the floodplain has been converted to paved surfaces. With approximately 51 percent of the Millbottom area in the 100-year floodplain (Figure 3), sustainable planning and design in this area is imperative. The restoration of Wears Creek and the addition of green infrastructure in the Millbottom area and the creek's watershed will help minimize flooding and start to restore the creek's natural hydrologic cycle.

About 68 percent of the study area is impervious surface such as surface parking, roads, and roofs (Figure 3). As a result, rainwater quality and quantity become significant sources of contamination for the creek and the river. Water quality is impaired because rainwater runoff picks up and carries with it many different pollutants that are found on paved surfaces, such as sediment, nitrogen, phosphorus, bacteria, oil and grease, trash, pesticides, and metals. The expanse of impervious surface greatly increases the quantity of rainwater runoff because these surfaces prevent water from soaking into the ground at the point of contact. In a 90 percent storm event (approximately 1.37 inches of rain), runoff from 47 acres of impervious surface in the study area would create more than 1.5 million gallons of rainwater runoff. To visualize how much water this is, 1.5 million gallons of water fits into a 24-foot diameter tank that is 78 feet tall! Funneling that amount of swiftly flowing rainwater runoff from paved surfaces into the creek, with no opportunity for intermediate infiltration, results in poor water quality, bank erosion, and flash flooding. Wears Creek suffers from all of these effects. However, retrofitting half of the impervious surface surrounding Wears Creek with green infrastructure to minimize and manage this rainwater would reduce runoff by approximately 40 percent.

Figure 4 illustrates a vulnerability study showing which properties are located in the 100-year floodplain. Parcels in the 100-year floodplain, as the land most vulnerable to flooding, should be redeveloped in a way that allows for maximum infiltration, evaporation, or reuse of runoff close to its source. Design that preserves or restores natural drainage features and patterns will contribute to a better balance between built and natural systems for the immediate area and also for the downstream hydrologic system.

Environmental, social, and economic considerations must inform decisions about the redevelopment of Millbottom. City and state entities own more than half of the Millbottom land (Figure 3). This public ownership presents an exceptional opportunity for the city and state to lead by example in showcasing innovative rainwater practices and green building techniques to redevelop properties in a way that revives the environment and the economy.

51%

 of the study area is
in the floodplain

68%

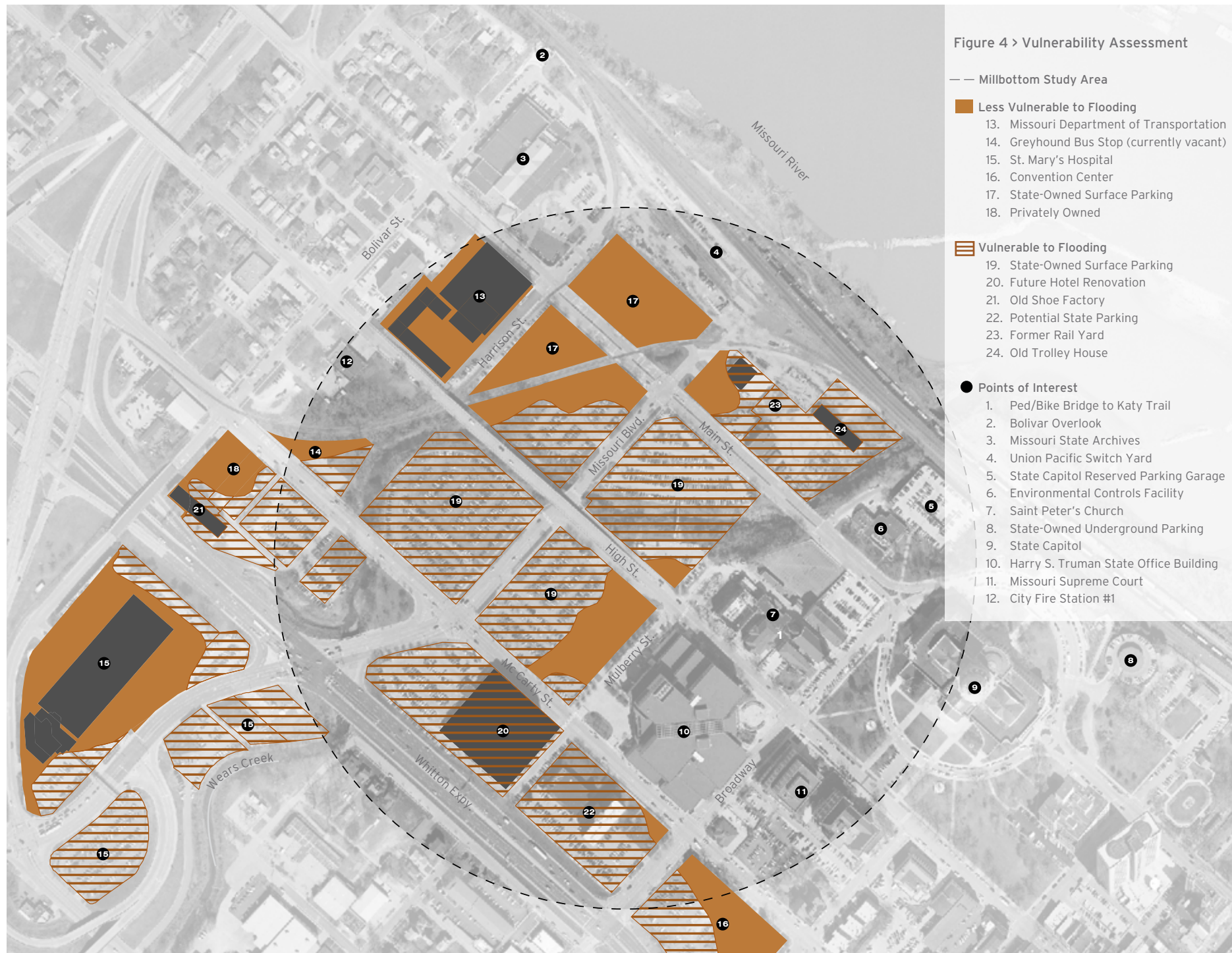
 of the study area is
impervious surface

59%

 of the study area is
owned by the city
and state


Figure 3 > Site challenges bring opportunities

The ownership, floodplain, and expanse of impervious surface are challenges to be addressed in sustainable planning and design for the Millbottom area.



To kick off the Greening America's Capitals project, Jefferson City hosted a three-day design workshop to explore strategies for the Millbottom area. Together with the public, the project team explored projects to stimulate economic development and environmental restoration, while creating new public spaces and encouraging walking and biking. These strategies focused on connecting people with the city's valuable natural resources, especially the riverfront and Wears Creek. The workshop also identified possible demonstration projects to educate a larger audience about the benefits of green design and advocate for further replication and implementation of prioritized strategies, projects, and programming.

During the first day of the workshop, the project team hosted a public meeting to understand the community's vision and priorities for the capital district. This meeting solidified the vision and goals for the project and guided the entire planning process. The public remained involved throughout the workshop; the project team presented designs and options to the public at the end of each day.

Workshop Participants included:

- Citizens
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- State of Missouri Office of Administration
- Lincoln University
- City of Jefferson Area Chamber of Commerce
- City of Jefferson Planning Department
- City of Jefferson Police Department
- City of Jefferson Office of Administration
- City of Jefferson Office of Tourism
- City of Jefferson Parks and Recreation



Figure 5 > Community Workshop



Day two of the workshop began with work sessions attended by technical experts and representatives from stakeholders such as the Missouri Department of Natural Resources, the Missouri Department of Transportation, the Missouri Department of Economic Development, the Missouri Office of Administration, the Jefferson City Area Chamber of Commerce task forces, and many others. The four work session discussions were focused around the following topics:

- Ecology + Waterways
- Neighborhoods + Transportation + Tourism
- Healthy Lifestyles + Recreation
- Economic Development

During these work sessions, the participants prioritized projects and identified possible steps towards improving the Millbottom area (Figure 6). After the work sessions, the project team synthesized the preferred projects into perspective drawings of the site that showed how priority strategies might look, and included plan-view images of how the projects could be knitted together into a larger vision for the Millbottom area.

On the evening of day two, the team presented to the public and facilitated breakout discussions to receive additional input on important features of the area and prioritization of strategies.

Day three included presentations of findings to the public, stakeholders, city council, and state legislators. The project team was able to match the design scenarios with community-vetted project lists to convey the role of public input on developing the vision.



Ecology + Waterways Work Session

Summary of Projects	Project Priority		
	low	medium	high
Wears Creek Bank Stabilization	<div></div>	<div></div>	<div></div>
Wears Creek Riparian Buffer	<div></div>	<div></div>	<div></div>
Parking Lot Stormwater Management	<div></div>	<div></div>	<div></div>
Wears Creek East Branch Restoration	<div></div>	<div></div>	<div></div>
Educational Outreach for Wears Creek	<div></div>	<div></div>	<div></div>
Green Parking Lot Demonstration	<div></div>	<div></div>	<div></div>

Neighborhoods + Transportation + Tourism Work Session

Summary of Projects	Project Priority		
	low	medium	high
Wears Creek Recreation Destination	<div></div>	<div></div>	<div></div>
Main St. Pedestrian and Bike Improvements	<div></div>	<div></div>	<div></div>
High St. Pedestrian and Bike Improvements	<div></div>	<div></div>	<div></div>
Shared Parking Garage	<div></div>	<div></div>	<div></div>
Missouri Blvd. Pedestrian and Bike Improvements	<div></div>	<div></div>	<div></div>
Trolley Loop	<div></div>	<div></div>	<div></div>
Transit Stop Reuse	<div></div>	<div></div>	<div></div>
Riverfront Amenity with Pier Access	<div></div>	<div></div>	<div></div>
Community Programming Connections	<div></div>	<div></div>	<div></div>

Healthy Lifestyles + Recreation Work Session

Summary of Projects	Project Priority		
	low	medium	high
Wears Creek Trail System	<div></div>	<div></div>	<div></div>
Adrian's Island Access	<div></div>	<div></div>	<div></div>
Park Programming	<div></div>	<div></div>	<div></div>
Amphitheater	<div></div>	<div></div>	<div></div>

Economic Development Work Session

Summary of Projects	Project Priority		
	low	medium	high
Power Plant - Ameren Adaptive Reuse	<div></div>	<div></div>	<div></div>
Convention Center and Shared Parking	<div></div>	<div></div>	<div></div>
Dunklin Street Bridge	<div></div>	<div></div>	<div></div>
High Street Viaduct	<div></div>	<div></div>	<div></div>
Adrian's Island Bridge Access	<div></div>	<div></div>	<div></div>
Marina	<div></div>	<div></div>	<div></div>
Saint Mary's Adaptive Reuse	<div></div>	<div></div>	<div></div>
Missouri Department of Transportation Adaptive Reuse	<div></div>	<div></div>	<div></div>
Shoe Factory Adaptive Reuse	<div></div>	<div></div>	<div></div>

Figure 6 > Project priority from the community perspective

The community identified and prioritized strategies to achieve the vision for the study area. During the evaluation process, the project team assigned high-priority a value of three, medium-priority a value of two, and low-priority a value of one. The project team tallied and averaged all results for each strategy. If the average was higher than 2.5, the strategy earned a high-priority rating. If the average was between 2.5 and 2, the strategy earned a medium-priority rating, and if the average was less than 2, the strategy earned a low-priority rating.



03 > Implement

five initiatives and their corresponding strategies to transform the Millbottom area

1 ► Wears Creek Restoration

Stabilizing the ecology of Wears Creek will restore its capacity to handle rainwater for downtown Jefferson City and create inspiring human connections with nature.

Below are incremental strategies to advance this initiative.

1A/ WEARS CREEK COMMUNITY CLEAN-UP

Community participation is imperative for Wears Creek to become an attractive public amenity. Cleanup of the creek includes trash removal and clearing undesirable vegetation and small tree limbs.

1B/ PLANTINGS ON HIGHLY VISIBLE BANKS

Plantings can quickly transform and enhance the appearance of an area, as well as help to stabilize the banks from erosion. In order to maximize the impact both in terms of public perception and aesthetic value, initial planting efforts should be strategically located in highly visible areas.

1C/ WEARS CREEK RIPARIAN BUFFER

A riparian buffer is an area along the stream channel designated for vegetation. This buffer plays a key role in rainwater management by allowing room for the water to flow during flood events and provides environmental

benefits such as improved water quality, a corridor for habitat and wildlife, and better erosion control. A wider riparian buffer would allow more space for water in high rain periods or when the Missouri River backs up into Wears Creek. This widening would also help improve the quality and health of vegetation and soil in the buffer. Adjacent land uses and impervious surface coverage should be considered in establishing buffer widths along the creek.

1D/ MAIN BRANCH BANK STABILIZATION + RESTORATION

The reclamation of Wears Creek as a healthy stream corridor is contingent on proper bank stabilization and restoration. Stream-bank experts should develop a comprehensive stream corridor restoration plan to rebuild and revegetate stream banks.

1E/EAST BRANCH CLEAN-UP + PLANTINGS (OFF MAP)

The east branch of Wears Creek between Washington and Monroe Streets is upstream from the Millbottom area. The health of the upstream watershed is very important in flood mitigation and downstream water quality. The east branch of Wears Creek is highly visible from Missouri Boulevard and surrounding sites. Picking up trash and improving plantings is a great way to begin changing the public valuation of this natural resource.



1A/Wears Creek community clean-up . 1B/Plantings on highly visible banks . 1C/Wears Creek riparian buffer . 1D/Main branch bank stabilization + restoration



Wears Creek Restoration

INITIATIVE IMPACT

The two direct impacts of this initiative are: 1) improved public perception of the area and 2) increased capacity to absorb and clean rainwater. The creek and adjacent land serve as the “front porch” to the capitol and are the first things visitors see when coming into the city. The cleanup and restoration of Wears Creek have the potential to create a more supportive and attractive context for redevelopment in Millbottom and the surrounding areas. Developing new recreational opportunities around this rediscovered natural amenity, including connections to existing trails, can encourage more people to walk and bike in the area. In addition to these benefits for people and the economy, stabilizing the stream banks and reestablishing riparian plant life improve the ecosystem and its capacity to handle rain events.

Building community pride and participation around this revived amenity is crucial to its re-emergence and maintenance. The workshop revealed a large group of stakeholders who are ready to re-create Wears Creek as a public asset. By engaging community members in task forces, volunteer planting teams, creek cleanup crews, and related education and outreach, the initiative will continue to be a catalyst for positive change in the capital district. The restoration of Wears Creek has the potential to benefit the community, environment, and economy of Jefferson City.

ACTION STEPS

- Identify an initiative champion in the form of a nonprofit, city department, state agency, or some combination.
- Plan for public process and citizen engagement.
- Conduct a stream inventory and a feasibility study for stabilization.
- Use the inventory and feasibility study to delineate and prioritize community volunteer projects from projects that must be funded and put out to bid.
- Have the initiative champion organize a cleanup day in coordination with the leader of the citizen engagement plan.
- Led by the initiative champion, work with the city to hire consultants for landscape design and engineering projects along Wears Creek as determined by the inventory and feasibility study.
- Implement and monitor a long-term citizen engagement plan.

PRECEDENTS

Figure 8 > Confluence Park. Denver, CO

Located in Denver’s Lower Downtown (LoDo), Confluence Park surrounds the convergence of Cherry Creek and the South Platte River. The park includes trails, grassy overlooks, benches, and pedestrian bridges. The rivers are used for recreation, including swimming and kayaking. The park connects to regional trail networks and integrates into the surrounding neighborhoods of converted warehouses and infill development. This example of a public park centered on a stream in a mixed-use warehouse district is a direct precedent for the potential of a restored Wears Creek.

Figure 9 + 10 + 11 > Buffalo Bayou Promenade. Houston, TX

The Buffalo Bayou Promenade connects Houston’s downtown to the river park through a previously impassible tangle of highways. This 1.2-mile linear park is designed to increase flood capacity and restore the bayou channel by preserving trees and reintroducing native vegetation that will control erosion. This formerly neglected and polluted waterway has become a community asset with parks and trails that attract people downtown. The park illustrates the power of restoring waterways and creating connections to regional recreational opportunities.



Figure 8 > Confluence Park. Denver, CO



Figure 9 > Buffalo Bayou community clean-up. Houston, TX

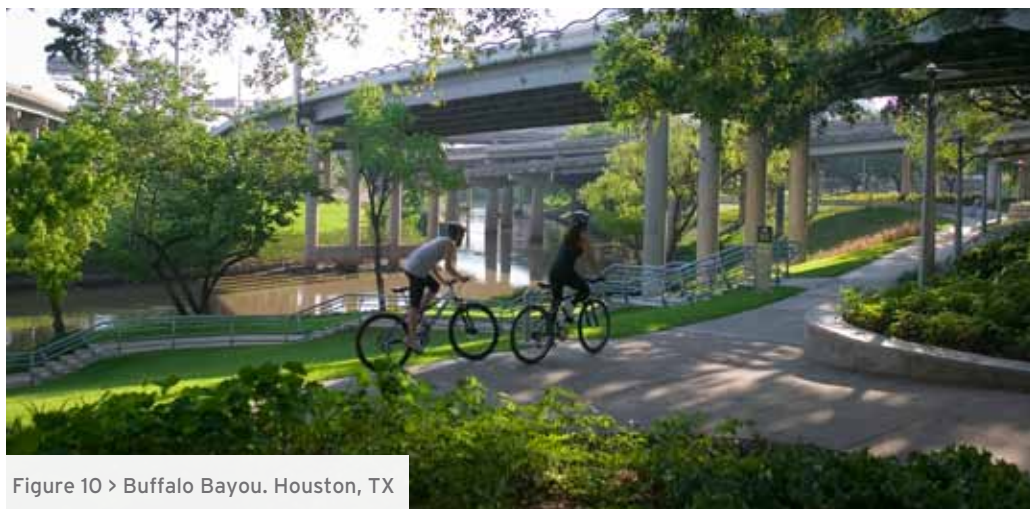


Figure 10 > Buffalo Bayou. Houston, TX



Figure 11 > Events at Buffalo Bayou. Houston, TX

2 > Trails + River Access

Through projects linking trails and creating access to the Missouri River, Jefferson City will connect its people, history, and natural resources.

Below are incremental strategies to advance this initiative.

2A/ BIKE PARKING + WAYFINDING SIGNAGE

Bike parking and wayfinding signage by the Katy Trailhead and Capitol Overlook help residents and tourists spend time—and money—in Jefferson City. These elements are especially important in heavy traffic areas but can also be added throughout the Millbottom area and capitol complex.

2B/ WEARS CREEK TRAIL SYSTEM

Expansion and enhancement of the Jefferson City trail system would make better use of this important community asset. The trail segment in the Millbottom area will provide direct access to the restored Wears Creek, creating a compelling landscape amenity in the heart of Jefferson City. Connection to the existing greenway at Dunklin Street will be important for the successful expansion of the Wears Creek trail system. Other important points to which the trail system could connect include the Missouri River Pedestrian Bridge, Adrian's Island, and downtown.

2C/ ACCESS POINTS FROM TRAIL TO STREET

Access points in and out of the Wears Creek trail system are important to increase use. Multiple access points increase convenience, improve safety, and are good locations for pedestrian amenities, signage, and bike parking.

2D/ ADRIAN'S ISLAND TUNNEL ACCESS

Pedestrian access to the Missouri River is a priority identified by community members in the work sessions. The creation of a pedestrian tunnel is one option the city is currently considering to access the Missouri River, and future access points could further improve use in the area. The riverfront access tunnel should be accessible by all users and should accommodate pedestrians and small emergency vehicles. Safety measures should include clear sightlines and appropriate lighting.

2E/ MISSOURI RIVER PIER ACCESS AT BOLIVAR

Pedestrian bridge access to the riverfront at Bolivar Overlook could provide a vital and highly visible link to the riverfront. Accessibility issues should be taken into account with all future access points.

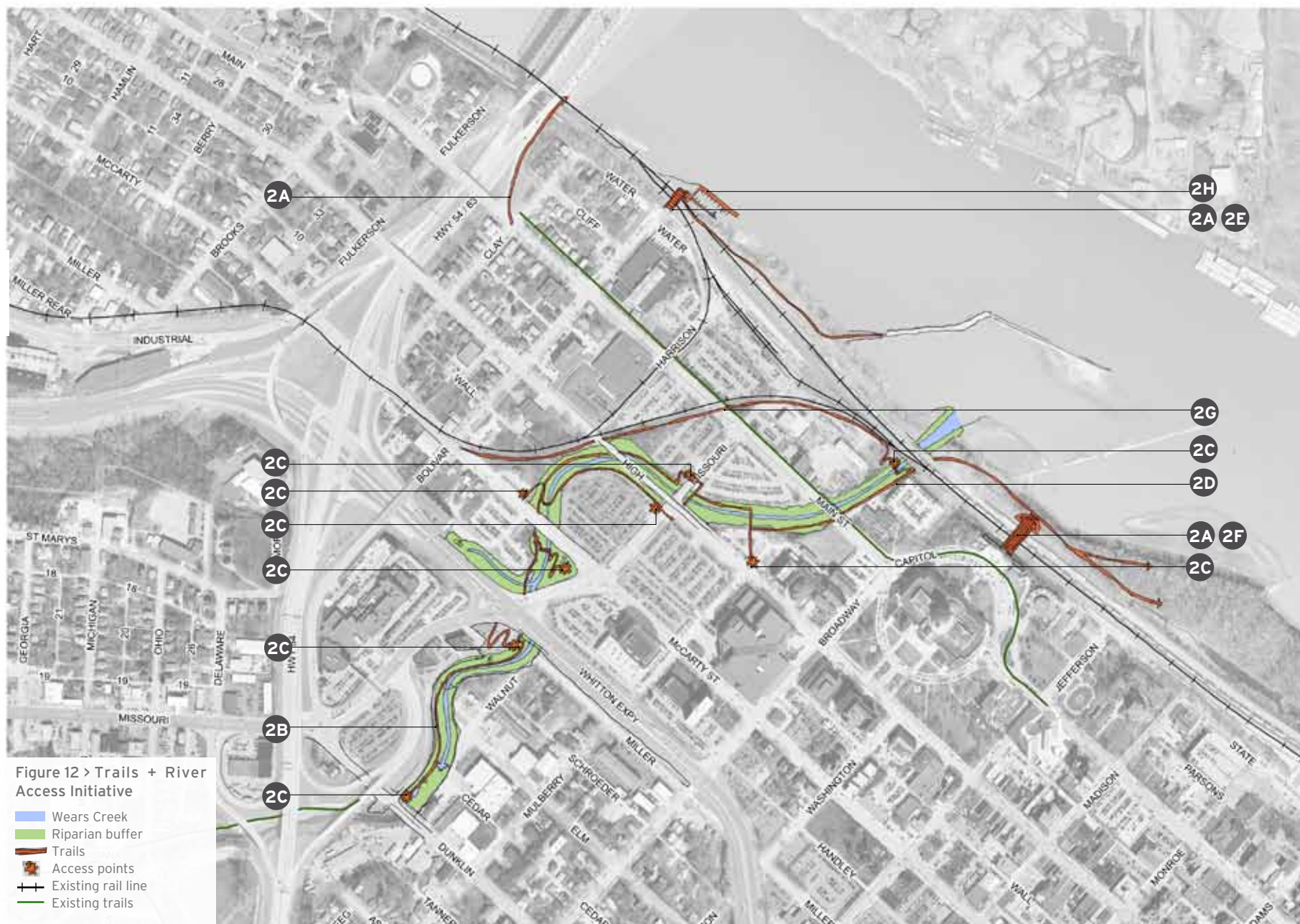
2F/ MISSOURI RIVER PIER ACCESS AT CAPITOL OVERLOOK
Pedestrian bridge access to the riverfront at the Capitol Overlook could be a signature project for Jefferson City and further enhance riverfront access.

2G/ RAIL-TO-TRAIL PEDESTRIAN + BIKE PATH

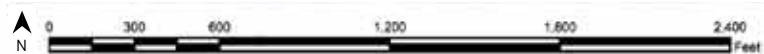
Adaptive reuse of the rail line as a rail-to-trail or rail-and-trail could create a convenient trail loop in conjunction with the Wears Creek Trail System. If coupled with cultural signage and thoughtful design, this trail could be an excellent opportunity to celebrate the history of Jefferson City.

2H/ MARINA

A strategically located small-boat marina has potential to improve access to the Missouri riverfront for recreation. The success of such a project is dependent on adequate trail access and could make the area safer by greatly increasing pedestrian activity. Barriers to this project include a lack of vehicular access.



2A/Bike parking + wayfinding signage . 2B/ Wears Creek trail system . 2C/ Access points from trail to street . 2D/Adrian's Island tunnel access . 2E/Missouri River pier access at Bolivar . 2F/Missouri River Pier access at Capitol Overlook . 2G/Rail-to-trail pedestrian + bike path . 2H/Marina



Trails + River Access

INITIATIVE IMPACT

A continuous trail network will create new opportunities to connect with Jefferson City's vibrant natural resources. The current trail system, though extensive, has some gaps to be filled on the south side of the Missouri River. The projects in this initiative will also provide an opportunity to link the trails with the newly installed pedestrian/ bike access on the bridge over the Missouri River and the Katy Trail on the northern side of the Missouri River.

Access to the river by foot is a challenge in light of the area's topography, and an active rail line is currently a barrier to reaching Adrian's Island. An at-grade rail crossing is difficult to negotiate with the railroad; however, a tunnel, a bridge at the Bolivar overlook, or a bridge from the Capitol Overlook could provide access to the riverfront.

ACTION STEPS

- Identify a lead agency or organization to steward river revitalization, plan for access to Adrian's Island, and manage habitat revitalization on the island.
- Create a long-term plan for regional green infrastructure improvements throughout the watershed. Design a park along Wears Creek in the Millbottom and a preserve on Adrian's Island.
- Work with the railroad to acquire land to access the river, and explore the potential for long-term management by the city.
- Determine multiple access points where the city could build a bridge over the rail line to provide access to the river, and develop a plan to build potential access bridge(s).

PRECEDENTS

Figures 13 + 14 > Town of Kansas Bridge. Kansas City, MO

This public space in downtown Kansas City, Missouri creates a connection to the Missouri River. It bridges a rail corridor and connects a mixed-use neighborhood to the archeological site of the original Town of Kansas and a regional trail along the Missouri River. The cultural significance, linkages to recreational opportunities, and improved pedestrian access to the riverfront are examples of what a similar initiative could accomplish in Jefferson City.

Figure 15 + 16 > Katy Trail. Dallas, TX

The Katy Trail is a conversion of the old Missouri-Kansas-Texas Railroad into trails for walking, jogging, skating, and biking. Downtown Dallas has been especially successful in transforming an abandoned rail corridor into trails that connect downtown to other areas of the city and provide a recreation destination in the heart of the city. The Katy Trail in downtown Dallas is a great example of how trails can link destinations, eliminate barriers to walking and biking, and provide an amenity that brings people downtown.

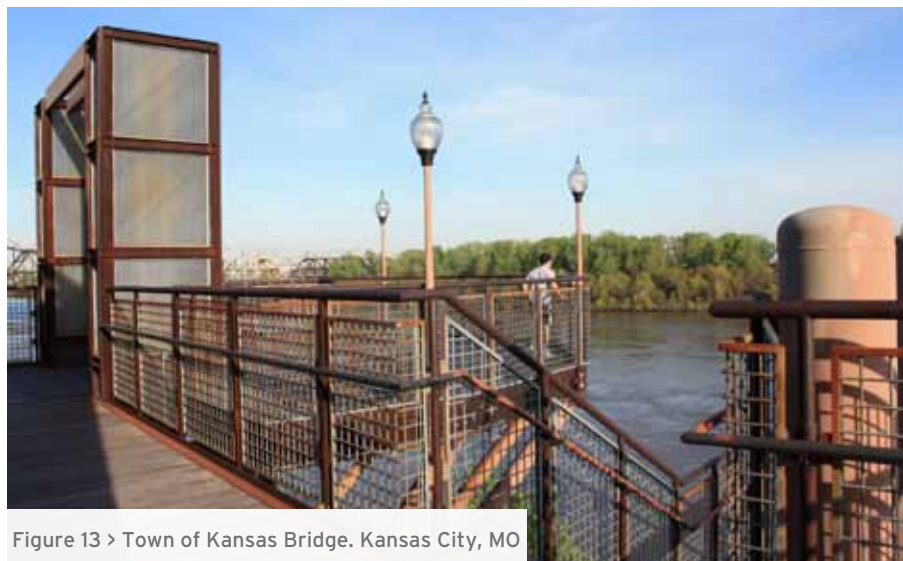


Figure 13 > Town of Kansas Bridge. Kansas City, MO



Figure 14 > Town of Kansas Bridge. Kansas City, MO



Figure 15 > Katy Trail. Dallas, TX



3 › Parking Improvements

Using green infrastructure in parking lots can reduce pollution and runoff from parking lots, and new land uses on current parking lots could highlight the floodplain's potential to be an amenity that reduces flood impacts and serves as a community green space.

Below are incremental strategies to advance this initiative.

3A/ NEW LAYOUT FOR EXISTING PARKING LOTS

Revising an existing parking lot's layout could eliminate inefficiency and reduce the total parking area without a significant loss in the overall number of parking stalls. The additional space could become green space that better manages rainwater and makes the parking lot more aesthetically pleasing.

3B/ GREEN INFRASTRUCTURE IMPROVEMENTS

A parking lot incorporating pervious pavements and other green infrastructure components could be a pilot project for the study area and a statewide example for surface parking design. The implementation of green infrastructure in parking lots can include deep rooted native plantings in beds that capture runoff, pervious paving to allow infiltration, tree plantings, and below-grade cisterns to capture and reuse rainwater for irrigation. (Reference Figures 17-20 for imagery of these techniques.) Educational signage could be an additional benefit for those experiencing this exemplary environment. (Figure 24).

3C/ CONVENTION CENTER SHARED PARKING GARAGE

If properly programmed, a shared parking garage that serves the proposed convention center could also alleviate the demand for surface parking in the study area, freeing land for other uses with greater economic impact.

3D/ SHARED PARKING GARAGE

An additional future garage could further enable the development of the study area. This future garage could serve a wide range of parking needs.

3E/ POTENTIAL STATE PARKING GARAGE

Parking garages play a significant role in freeing land for the revitalization of the Millbottom area. As parking demand is examined, shared parking solutions and integrated retail should be considered.



Figure 17 > Bioswale



Figure 18 > Wetland with parking beyond



Figure 19 > Permeable asphalt



Figure 20 > Permeable pavement



Parking Improvements

INITIATIVE IMPACT

Parking is currently the predominant land use in the Millbottom area. Parking on state-owned lots is currently free to state employees and generates no revenue, posing a challenge to the goal of retrofitting these sites into more costly parking structures. The state of Missouri is willing to work with other community stakeholders to seek mutually beneficial solutions, potentially including a joint city/state effort to erect a multi-level parking facility to serve state employees, visitors, and clients of the planned hotel and conference center. Consolidating parking in structures would create space for other uses and provide space near

the creek to address the restoration of Wears Creek. The expansive impervious surface in this area has exacerbated flooding problems in downtown Jefferson City and decreased the quality of the water flowing into the river. A gradual process that begins with green infrastructure in parking lots and eventually converts parking lots to parks could reduce pollution from rainwater runoff and begin to improve the pedestrian environment. By rethinking parking in this area, Jefferson City can revitalize the capitol's doorstep and provide education, outreach, and advocacy for the benefits of green infrastructure.

ACTION STEPS

- Conduct citizen engagement efforts to build public acceptance and understanding of benefits of parking lot redesign.
- Establish a city and state partnership to negotiate land use changes on state-owned lots.
- Inventory current and projected parking demands, the number of motorists, and destinations.
- Assemble geotechnical information on soils and capacity for water infiltration and building loads.
- Identify priority sites for pilot projects, structured parking, and mixed-use development.
- Develop a plan for phased parking transition, including parking lot restriping, pilot green infrastructure projects, widening riparian buffers along Wears Creek, and the transition to structured parking.
- Build first parking structure to share parking of new downtown developments, including the hotel and the conference center.
- Create incentive programs to reduce the number of commuters driving alone (e.g., carpooling, "park and ride" lots at transit stations).
- Increase the Wears Creek riparian buffer and natural amenities.
- Participate in the annual worldwide event called PARKing Day that turns parking spaces into parks for a day.

PRECEDENTS

Figure 23 > Discovery Center. Kansas City, MO

The Discovery Center redesigned its surface parking lot to include green infrastructure, including bioswales that capture and filter rainwater runoff and constructed wetlands that filter and clean additional runoff. (Figure 22 illustrates similar conditions)

Figure 25 + 26 > Library and TWA Building Parking Garage. Kansas City, MO

Poorly designed parking garages have the potential to sap life from city blocks. They can make walking difficult or uncomfortable and separate ground floor retail uses. Two parking garages that break the mold are at the Central Library and the TWA building, both of which are in downtown Kansas City. The library's parking garage doubles as a massive public art installation that attracts tourists. A small dog park in front of the structure creates an amenity for residents as well. The TWA building's parking structure includes retail space on the ground level and outdoor seating along the sidewalk. This vibrant space creates activity and prevents the detrimental effects of long blank walls.



Figure 22 > Green Infrastructure at Sanitation District No. 1. Fort Wright, KY



Figure 23 > Bioswales at Discovery Center parking lot. Kansas City, MO



Figure 24 > Educational signage at Sanitation District No. 1. Fort Wright, KY



Figure 25 > TWA Building Parking Garage. Kansas City, MO



Figure 26 > Library Parking Garage. Kansas City, MO

4 > Complete Streets + Transit Connectivity

Complete streets make bicycling and walking more convenient, attractive, and safe. Jefferson City could develop a complete streets policy to provide safe pedestrian routes, bike lanes, streetscape enhancements and complement this with new public transit options to attract people to the area.

Below are incremental strategies to advance this initiative.

4A/ HIGH STREET VIADUCT IMPROVEMENTS

All future streetscape improvements could seek to maintain and enhance pedestrian and bicycle access. The future replacement of the High Street Viaduct has the potential to be a pilot streetscape project that improves access and circulation for all types of transportation.

4B/ WHITTON EXPRESSWAY + MISSOURI BOULEVARD INTERSECTION PEDESTRIAN IMPROVEMENTS

Whitton Expressway and Missouri Boulevard are major traffic routes that are difficult for pedestrians to cross. The city could explore both short- and long-term changes to improve these streets, ranging from more clearly marked pedestrian crossings and improved timing and number of crosswalk signals to the creation of green medians or pedestrian bridges.

4C/ TRANSIT PLAZA + WELCOME CENTER

The existing intercity bus terminal is an asset that could be better used as Jefferson City enhances multi-modal transportation throughout the city. Making this a transit plaza and welcome center would promote buses, trolleys, and bicycling and contribute to making the plaza an active public place for locals and tourists.

4D/ BOLIVAR STREET IMPROVEMENTS

From Bolivar Overlook at the river to St. Mary's Hospital, Bolivar Street is an important, pedestrian-scaled, north-south street linking several key amenities in the Millbottom area, including a possible river access point. Since Bolivar Street is also an overpass over Whitton Expressway, pedestrian and bicycle improvements are key to increasing connectivity between Millbottom and the neighborhoods south of the Expressway. These improvements could include better crosswalks and signals for pedestrians, sidewalk enhancements, new lighting and landscaping, and designated bicycle lanes.

4E/ MAIN STREET IMPROVEMENTS

Main Street is the central east-west corridor to the capitol. Main Street could become an exemplary complete street for all modes of transportation and could use green infrastructure techniques for rainwater management and aesthetics.

4F/ JEFFERSON STREET IMPROVEMENTS TO CONNECT TO AMTRAK & MUNICHBURG NEIGHBORHOOD

Making walking and biking on Jefferson Street safer and more appealing better connects the Amtrak station, downtown, and the Munichburg neighborhood. Improving the pedestrian and bicycle connections to the Amtrak station helps attract people to spend the day in Jefferson City.

4G/ DUNKLIN STREET BRIDGE

Continuing the existing trail system from Dunklin Street would increase pedestrian activity and connections in the study area. Coordinate bridge maintenance and improvements with complete streets measures.

4H/ TROLLEY LOOP

This historic transportation mode could be introduced in Jefferson City in the form of a specially designated bus or trolley on a defined loop stopping at landmark destinations in the downtown. Serving tourists, downtown employees, and residents, this service would reduce the need to drive and park in the area.



4A/High Street viaduct improvements . 4B/Whitton Expressway + Missouri Boulevard intersection pedestrian improvements . 4C/Transit Plaza + Welcome Center . 4D/Bolivar Street Improvements
 4E/Main Street improvements . 4F/Jefferson Street improvements to connect to amtrak & Munichburg neighborhood . 4G/Dunklin Street bridge . 4H/Trolley Loop



Complete Streets + Transit Connectivity

INITIATIVE IMPACT

Millbottom is adjacent to the capitol complex, the central business district, and the Missouri River. Historic neighborhoods such as Munichburg are also within close walking distance. As the Millbottom initiatives build upon opportunities for mixed-use development in the area, residents and employees will have other options besides driving to travel to work, home, and play. Mixed-use development paired with street improvements and multi-modal transportation infrastructure can encourage walking, bicycling, and transit use. Increasing the availability and safety of multi-

modal options could attract more people to live and play downtown, thereby increasing Jefferson City's prosperity and vitality.

The public realm is a rich forum for citizen engagement and participation. Some possible means of engagement are volunteer planting days, fundraising races for health causes, educational tours, flash mob activities, and design competitions for public spaces. Local organizations that work on environmental protection, health care, design, arts, culture, and social media could sponsor such activities in collaboration with public entities to bolster public appeal and awareness of ongoing revitalization initiatives.

ACTION STEPS

- Create an infrastructure task force for sidewalks and streets in the study area.
- Inventory the existing condition of sidewalks and streets, including information such as: continuity of sidewalks block-to-block, width of sidewalk, upheaval due to growing root systems, ADA accessibility, potholes, bike lanes, transit stops, pedestrian amenities (trees, benches, lighting, wayfinding signage, trash receptacles), opportunities to integrate green infrastructure, safety of pedestrian street crossings, and overall connectivity. Prioritize identified projects based on their impact and ability to catalyze other projects.
- Connect the existing trail system with additional pedestrian and bicycle improvements, including bike lanes on streets.
- Carry out an exploratory study to evaluate feasibility of a trolley or dedicated bus loop in the Millbottom and downtown.
- Match projects with potential funding sources.

PRECEDENTS

Figure 28 > Complete Streets. Madison, Wisconsin

This street near the capitol in Madison accommodates pedestrians, bicyclists, buses, and automobiles. The National Complete Streets Coalition has identified key elements of comprehensive complete streets policy: <http://www.completestreets.org/changing-policy>

Figure 29 + 31 > Metro Area Express (MAX) + Transit Plaza. Kansas City, MO

The MAX is Kansas City's newest bus rapid transit service that connects the community from the River market to the Plaza and all points in between. Crown Plaza is one major MAX stop that also connects to other bus lines in the city. In addition to the transit stop, this plaza is always packed with kids and families enjoying the fountains, restaurant, and nearby shopping. The MAX connects an estimated 150,000 jobs and thousands of convention visitors with Kansas City.

Figure 30 > Bicycle Sharing. Denver, CO

B-cycle implemented the first bike-share program in the United States in Denver in spring of 2010. Since then, they have expanded to 10 cities, including the Midwestern cities of Chicago, Madison, Des Moines, and Omaha. This service encourages impromptu bike usage and can increase usage of bike trails in downtown areas.



Figure 28 > Complete streets. Madison, WI



Figure 29 > MAX bus line. Kansas City, MO



Figure 30 > Bicycle sharing. Denver, CO



Figure 31 > Crown Center transit plaza. Kansas City, MO



5 > Parks + Adaptive Reuse

Making the Millbottom a focal point for innovative green development approaches in Jefferson City could revitalize the area as a destination for residents and visitors.

Below are incremental strategies to advance this initiative.

5A/ PASSIVE RECREATION AREA

This area would be multi-functional, encouraging spontaneous community activity and providing flood mitigation. Local art, like a sculpture park, could be integrated into the landscape to enrich the cultural fabric of the Millbottom area.

5B/ AMPHITHEATER + FESTIVAL CENTER

The amphitheater and proper programming could attract hundreds of people to Jefferson City. This space could be used for many different community events, for passive recreation, and to mitigate flooding.

5C/ ROTARY PARK WAYFINDING + CULTURAL SIGNAGE

Wayfinding and signs celebrating the history and culture of Jefferson City at Rotary Park would help connect community assets.

5D/ SPLASH PARK

Family-friendly play spaces would make the park more appealing and attractive.

5E/ FARMERS MARKET

The farmers market can promote the local economy and enrich the social fabric of the Millbottom and capitol complex.

5F/ POWER PLANT - AMEREN BUILDING REDEVELOPMENT

The Ameren building's location and private ownership make it an important redevelopment opportunity in the Millbottom. Redeveloping this building could be a model private investment and build excitement to develop this area as a Jefferson City destination.

5G/ SAINT MARY'S REDEVELOPMENT

The Saint Mary's hospital has great potential to be adapted to institutional or educational uses. The attached parking garage is a major asset. The city could require good pedestrian connections to the Millbottom area to complement the trails and Missouri Boulevard improvement projects.

5H/ SHOE FACTORY

The location and iconic architecture of the Shoe Factory makes the building a good candidate for adaptive reuse. The city could consider requiring retail use on the first floor with office or residential space above.

5I/ MISSOURI DEPARTMENT OF TRANSPORTATION

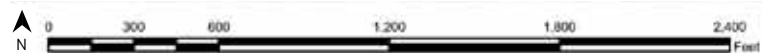
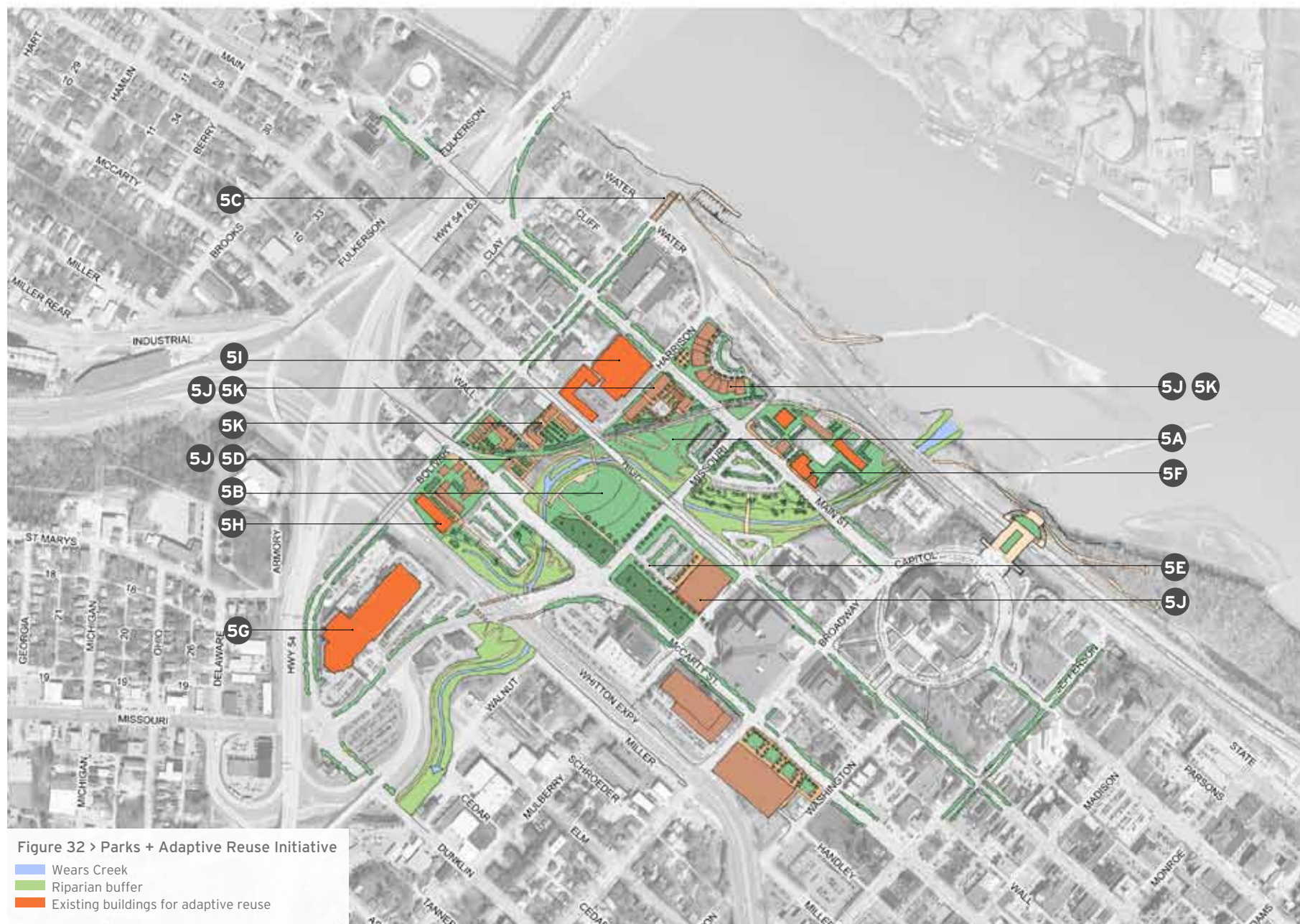
The MODOT structure could be an adaptive reuse project, and the attached parking garage is an amenity that should make the building more attractive for developers.

5J/ RESTAURANTS + RETAIL

Restaurants and retail will help attract people to spend the day in this recreation destination. The city could require a mix of uses in all redevelopment in the Millbottom area to make it a lively, appealing neighborhood.

5K/ HOUSING

Creating living spaces adjacent to the park will be important for the vibrancy of the district. Nearby residences would provide "eyes" on the park, making the park safer and encouraging people to use it.



Parks + Adaptive Reuse

INITIATIVE IMPACT

As initiatives in the area focus investments on the Wears Creek restoration, trail and river access, parking improvements, and transportation infrastructure, the catalytic impact of these investments can increase the economic development potential of the area around the capitol. These improvements can also offer a significant increase to the quality of life of residents and employees of the area as they engage in day-to-day activities as well as new outdoor recreation opportunities. This new interest in the area could increase retail opportunities and demand for multifamily housing, offices, and light industrial spaces

as entrepreneurs locate new small businesses in Jefferson City. The Millbottom area has several brick warehouse and industrial buildings from the early 20th century that could be adapted to meet the demand. Many Missouri communities have successfully used financing tools to renovate structures such as these, maintaining a connection to their past while meeting today's market demands. Employing green building practices in renovation and new infill construction could also benefit the environment and create healthy community connections.

ACTION STEPS

- Revise zoning to encourage mixed-use development.
- Adopt design guidelines that include green building codes for infill development.
- Provide incentives for high-performance renovations.
- Designate a city staff person to work with the Jefferson City Area Chamber of Commerce to identify potential development projects.
- Identify a champion to identify private/public partnerships for development.
- Identify the appropriate agency or organization to steward programming, events, and fundraising for public spaces.
- Begin the process of designing a park and structures for Millbottom and Adrian's Island.

PRECEDENTS

Figures 33 + 34: Discovery Green. Houston, TX

Houston transformed this brownfield parcel with an underused parking lot near the downtown convention center into a 12-acre park. Since opening in 2008, the park has attracted an estimated 2 million visitors and has supported economic development in Houston's downtown area.

Figures 35 + 36: Reuse and Infill Trends in Midwestern Cities

During the last decade, the trend of warehouse district conversions and infill development can be seen in many Midwestern cities. Kansas City, St. Louis, Dubuque, Wichita, Chicago, and Denver all have vibrant warehouse districts, many of which were catalyzed by artist studios and cultural attractions. Downtown Jefferson City has many buildings that could be redeveloped to house offices, apartments or condos, cultural attractions, and other uses. Public investments in parks and infrastructure can encourage redevelopment by making the area more appealing to potential businesses and residents.

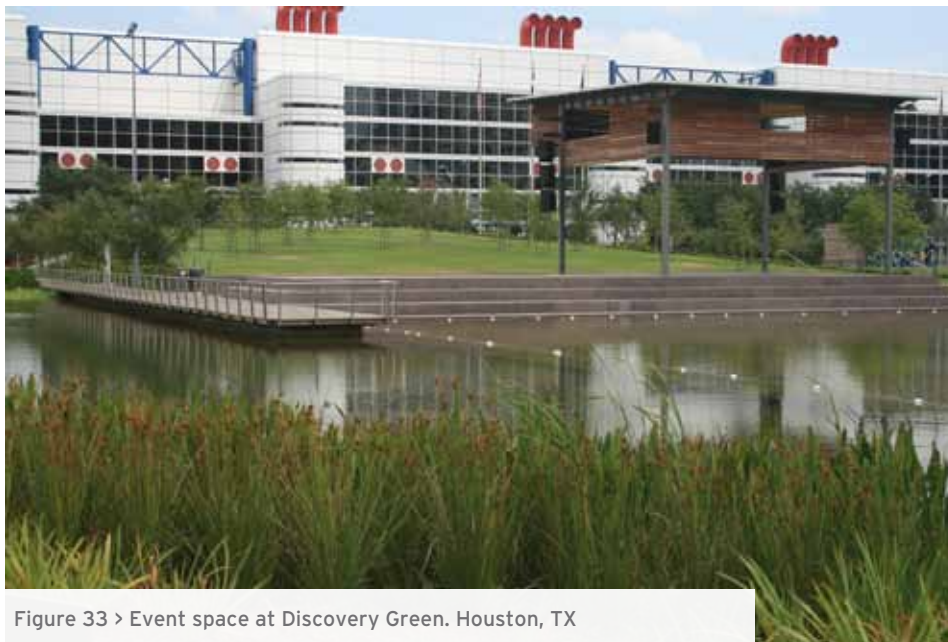


Figure 33 > Event space at Discovery Green. Houston, TX



Figure 34 > Splash park Discovery Green. Houston, TX

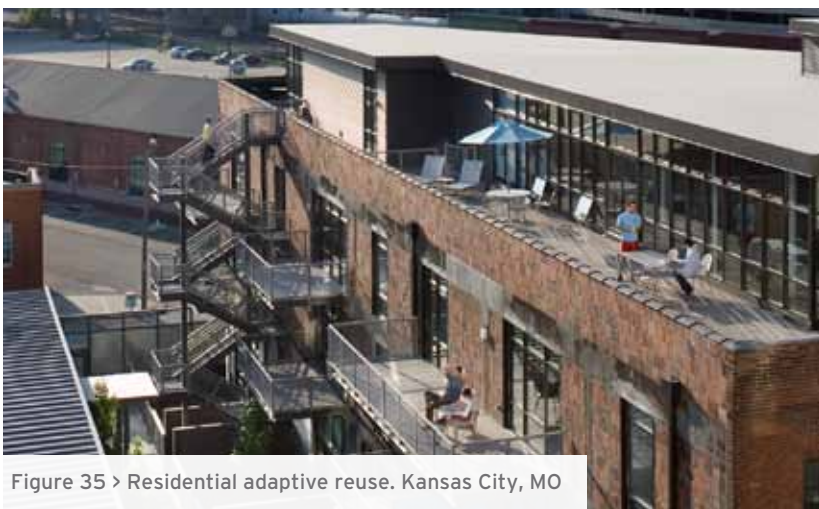


Figure 35 > Residential adaptive reuse. Kansas City, MO



Figure 36 > Commercial adaptive reuse. Kansas City, MO

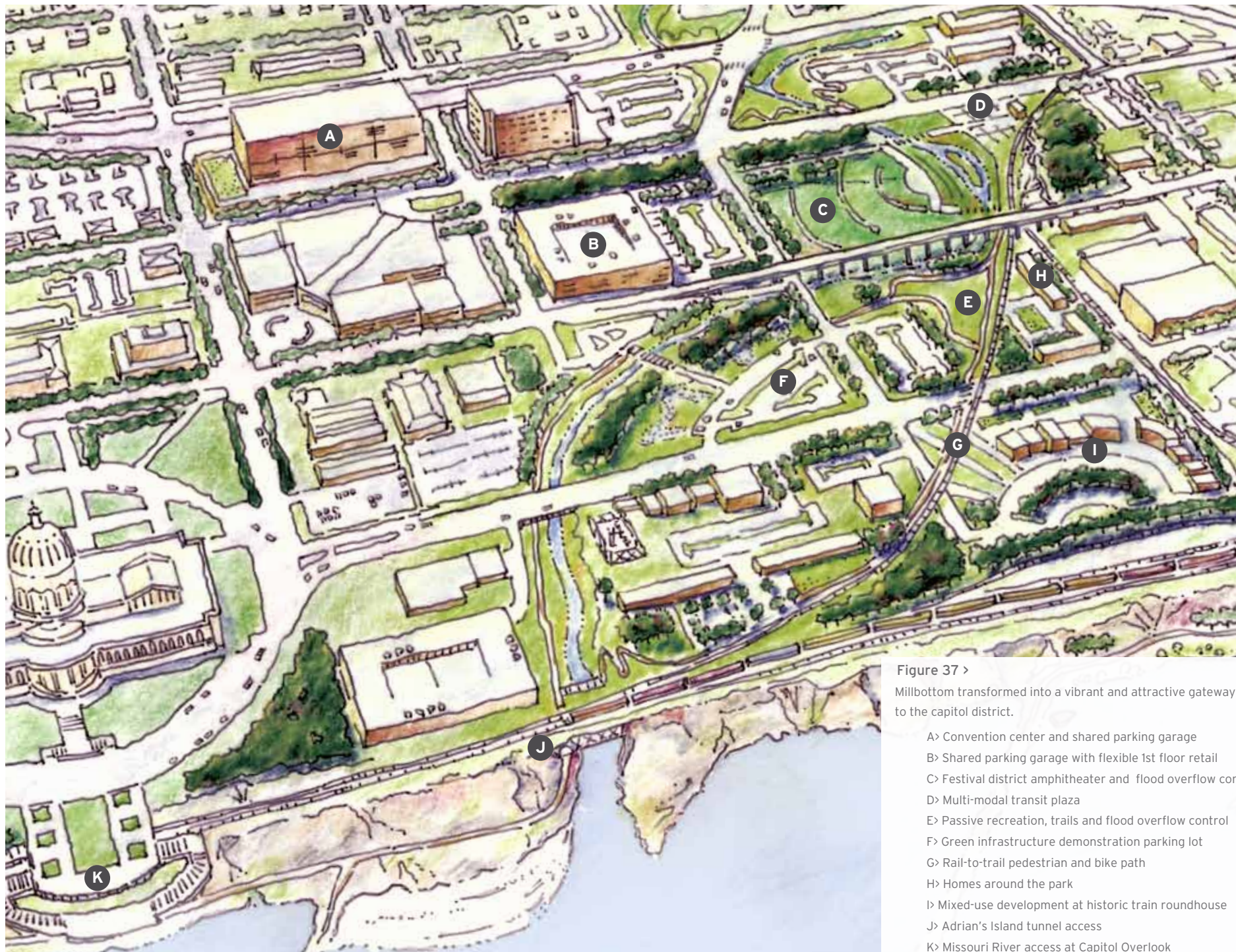


Figure 37 >

Millbottom transformed into a vibrant and attractive gateway to the capitol district.

- A> Convention center and shared parking garage
- B> Shared parking garage with flexible 1st floor retail
- C> Festival district amphitheater and flood overflow control
- D> Multi-modal transit plaza
- E> Passive recreation, trails and flood overflow control
- F> Green infrastructure demonstration parking lot
- G> Rail-to-trail pedestrian and bike path
- H> Homes around the park
- I> Mixed-use development at historic train roundhouse
- J> Adrian's Island tunnel access
- K> Missouri River access at Capitol Overlook



Figure 38 > Current View of Wears Creek

The lack of accessible, well-designed public spaces next to Wears Creek limits the ability of people to use and enjoy this waterway as an amenity



Figure 39 > Potential creek restoration and new amphitheater

A restored riparian buffer and new park uses next to Wears Creek, such as the amphitheater seen here, could transform this underused waterway into a vibrant community amenity that accommodates community events and more day-to-day use.



Figure 40 > Green Infrastructure in the floodplain

This concept envisions using green infrastructure to limit and better manage runoff while transforming Wears Creek into a place for people. For example, integrating green infrastructure in parking lots reduces runoff and pollution and creates an opportunity for a pedestrian path along the creek to connect existing and planned attractions.



Figure 41 > Current View of Parking Lot Next to Wears Creek

Wears Creek currently is bounded by parking lots that create runoff, which causes erosion and pollution problems for the creek.



Figure 42 > Current View of Building in Millbottom

This building, within close view of the state capitol, is currently vacant and provides little draw for people to walk in this area or visit it as a destination.



Figure 43 > Economic revitalization through adaptive reuse

New pedestrian amenities in this area could catalyze the redevelopment of vacant buildings around the entrance to the capitol. Activating the street level with retail and other amenities could attract residents and visitors to spend more time in the Millbottom.

› Coordination + Participation

The Greening America's Capitals project provides a unique opportunity for collaboration with a broad range of stakeholders to improve a highly visible but currently underused area of the community. It creates a platform for various federal, state, and local government agencies to work with the private and nonprofit sectors to provide funding and other resources that will be necessary to make the vision a reality. The initiatives identified in this report represent the thoughts and aspirations of the community and stakeholders for this area of Jefferson City.

The desired outcomes from the revitalization and restoration strategies can be achieved through a broad community partnership that maximizes the talents, experiences, and resources of its stakeholders. The project team heard collective agreement from the community on the need to have an interdisciplinary implementation team to see the initiatives through.

The implementation team could represent the various stakeholders in the project and build upon the strong community involvement and support witnessed during the public process. An implementation team could continue to engage the community in ongoing discussion about implementation strategies. The team could begin to





undertake the various action items noted in this report as well as identify resources to finance the ongoing project.

To that end, the stakeholders could explore a variety of local, state, and federal government grants, loans, and development incentive programs to help fund the redevelopment plan. Appendix B includes a brief description of various financing options. The list is not exhaustive but illustrates the breadth and types of funding available. Many of the funding programs and options could be used in conjunction with each other to best leverage private and public funds and/or multiple, related initiatives in the Millbottom area.

During this planning process, it became very clear that the community at large has a commonly held set of goals and a vision for the transformation of the Millbottom area. Jefferson City's excitement and readiness for change is evident, and the diverse stakeholders can come together to make this program a resounding success for enhancing Jefferson City's social, environmental, and economic vitality.



› Appendix A: Tools and Resources

EPA offers a number of useful tools, scorecards, and education/outreach resources to help communities implement smart growth principles and techniques. Specific examples are listed below, and more can be found at <http://www.epa.gov/smartgrowth/>.

Essential Smart Growth Fixes for Urban and Suburban Zoning Codes

Offers 11 Essential Fixes to help local governments amend their codes and ordinances to promote more sustainable development. http://epa.gov/smartgrowth/essential_fixes.htm

Green Infrastructure Municipal Handbook

The Municipal Handbook is a series of documents to help local officials implement green infrastructure in their communities. Handbook topics cover issues such as financing, operation and maintenance, incentives, designs, codes & ordinances, and a variety of other subjects. <http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm>

Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions

Highlights proven approaches that balance parking with broader community goals. <http://epa.gov/smartgrowth/parking.htm>

Sustainable Design and Green Building Toolkit for Local Governments

Addresses the local codes of ordinances that affect the design, construction, renovation, and operation and maintenance of a building and its immediate site to help local governments, the development community, and other building professionals identify and remove barriers to sustainable design and green building in their permitting processes. <http://www.epa.gov/region4/recycle/green-building-toolkit.pdf>

Water Quality Scorecard

This scorecard offers policy options for protecting and improving water quality across different scales of land use and across multiple municipal departments. http://epa.gov/smartgrowth/water_scorecard.htm

> Appendix B: Funding Resources

Resources are arranged in alphabetical order. The financing resource information was sourced and developed using multiple reference materials and public information sites. This information illustrates the variety of resources that could be utilized with the targeted development area.

Brownfield Redevelopment Tax Incentive

The federal Brownfield Tax Incentive provides financial incentives for the redevelopment of commercial/industrial sites that are contaminated with hazardous substances and have been abandoned or underutilized for at least three years. Initially enacted in 1997 and extended through December 31, 2011, the Brownfields Tax Incentive encourages the cleanup and reuse of brownfields. Brownfields are properties where reuse is complicated by environmental contamination concerns. The incentive provides advantages to taxpaying stakeholders conducting environmental cleanup at brownfields site by allowing environmental cleanup costs at eligible properties to be fully deductible in the year incurred, rather than capitalized and spread over a period of years.

To satisfy the contamination requirement, hazardous substances or petroleum must be present or potentially present on the property. Sites listed or proposed for listing on EPA's National Priorities List are not eligible for the tax incentive. Taxpayers must obtain a statement from a designated state agency verifying a property's eligibility for the tax incentive.

In addition to extending the Brownfields Tax Incentive, amendments in December 2006 expanded its scope to allow the deduction of expenses for the cleanup of petroleum products (e.g., crude oil, crude oil condensates, and natural gasoline) that previously were ineligible. This new eligibility for petroleum products applies to cleanup expenses incurred from January 1, 2006 to the tax incentive's current expiration date of December 31, 2011.

The federal Brownfield program is administered by the U.S. Environmental Protection Agency and allows environmental cleanup costs at eligible properties to be fully deductible in the year incurred and is available to developers and investors.

The State of Missouri also has a Brownfields Redevelopment program that is administered by the Missouri Department of Natural Resources. To qualify the following requirements must be met:

- The applicant cannot be a party who intentionally or negligently caused the release or potential release of hazardous substances at the project.
- If the property is not owned by a public entity, the city or county must endorse the project.
- The project must be accepted into the "Voluntary Cleanup Program" of the MO Department of Natural Resources.
- The project must be projected by the Missouri Department of Economic Development (DED) to result in the creation of at least ten new jobs or the retention of 25 jobs by a private commercial operation.

The Department of Economic Development may issue tax credits for up to 100% of the cost of remediating the project property. The DED will issue 75% of the credits upon adequate proof of payment of the costs with the remaining 25% of the credits issued after a clean letter has been issued by the Missouri Department of Natural Resources.

The tax credit may also include up to one hundred percent of the costs of demolition that are not directly part of the remediation activities, provided that the demolition is on the property where the voluntary remediation activities are occurring, the demolition is necessary to accomplish the planned use of the facility where the remediation activities are occurring, and the demolition is part of a redevelopment plan approved by the municipal or county government and the department of economic

development. The demolition may occur on an adjacent property if the project is located in a municipality which has a population less than twenty thousand and the above conditions are otherwise met. The adjacent property shall independently qualify as abandoned or underutilized. The amount of the credit available for demolition not associated with remediation cannot exceed the total amount of credits approved for remediation including demolition required for remediation.

The remediation tax credit's special attributes are that they can be carried forward 20 years and they are sellable or transferable. The total state costs of the project tax credits must be less than the projected state economic impact of the project, as determined by DED. The amount of remediation tax credits issued must be the least amount necessary to cause the project to occur. An applicant must submit an application to DED for determination of eligibility and request for remediation tax credits.

The tax credits can be applied to: Income tax, excluding withholding tax; Corporate franchise tax; Bank Tax, Insurance Premium Tax or Other Financial Institution Tax. An application must also be submitted to the Department of Natural Resources (DNR) for participation in the "Voluntary Cleanup Program." Acceptance into this program is a requirement of the Brownfield Redevelopment Program. Remediation that is performed prior to receipt of a written authorization for remediation tax credits from DED will not be eligible for tax credits and may jeopardize the project's overall eligibility for the program.

Business Energy Investment Tax Credit

The federal business energy investment tax credit available under 26 USC § 48 was expanded significantly by the Energy Improvement and Extension Act of 2008 (H.R. 1424), enacted in October 2008. This law extended the duration until December 31, 2016 for the existing credits for solar energy, fuel cells and micro-turbines; increased the credit amount for fuel cells; established new credits for small wind-energy systems, geothermal heat pumps, and combined heat and power (CHP) systems; allowed utilities

to use the credits; and allowed taxpayers to take the credit against the alternative minimum tax (AMT), subject to certain limitations. The credit was further expanded by the American Recovery and Reinvestment Act of 2009, enacted in February 2009.

Eligible Renewable Technologies include: solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaics, wind, biomass, geothermal electric, fuel cells, geothermal heat pumps, combined heat and power (CHP)/cogeneration, solar hybrid lighting, micro-turbines, and geothermal direct-use.

In general, credits are available for eligible systems placed in service on or before December 31, 2016:

- **Solar**-The credit is equal to 30% of expenditures, with no maximum credit. Eligible solar energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. Passive solar systems and solar pool-heating systems are not eligible.
- **Fuel Cells**-The credit is equal to 30% of expenditures, with no maximum credit. However, the credit for fuel cells is capped at \$1,500 per 0.5 kilowatt (kW) of capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher. (Note that the credit for property placed in service before October 4, 2008, is capped at \$500 per 0.5 kW.)
- **Small Wind Turbines**-The credit is equal to 30% of expenditures, with no maximum credit for small wind turbines placed in service after December 31, 2008. Eligible small wind property includes wind turbines up to 100 kW in capacity. (In general, the maximum credit is \$4,000 for eligible property placed in service after October 3, 2008, and before January 1, 2009. The American Recovery and Reinvestment Act of 2009 removed the \$4,000 maximum credit limit for small wind turbines.)

- **Geothermal Systems**-The credit is equal to 10% of expenditures, with no maximum credit limit stated. Eligible geothermal energy property includes geothermal heat pumps and equipment used to produce, distribute or use energy derived from a geothermal deposit. For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electric transmission stage. For geothermal heat pumps, this credit applies to eligible property placed in service after October 3, 2008. Note that the credit for geothermal property, with the exception of geothermal heat pumps, has no stated expiration date.
- **Micro-turbines**- The credit is equal to 10% of expenditures, with no maximum credit limit stated (explicitly). The credit for micro-turbines is capped at \$200 per kW of capacity. Eligible property includes micro-turbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.
- **Combined Heat and Power (CHP)**-The credit is equal to 10% of expenditures, with no maximum limit stated. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems. This credit applies to eligible property placed in service after October 3, 2008.

In general, the original use of the equipment must begin with the taxpayer, or the system must be constructed by the taxpayer. The equipment must also meet any performance and quality standards in effect at the time the equipment is acquired. The energy property must be operational in the year in which the credit is first taken.

The Business Energy Investment Tax Credit (ITC) is a federal corporate tax credit that is applicable to commercial, industrial, utility, and agricultural sectors. The tax credits were expanded by the American Recovery and Reinvestment Act of 2009 and will last until December 31, 2016.

Clean Cities Community Readiness and Planning Plug-In Electric Vehicles and Charging Infrastructure

In support of goal of putting 1 million advanced technology vehicles on the road in the United States by 2015 with the intent of decreasing the nation's dependence on petroleum and reduce greenhouse gas emissions by accelerating the deployment of plug-in electric drive vehicles and electric vehicle supply equipment (EVSE), the funding under this initiative seeks projects to plan and implement policies, procedures, and incentives that facilitate that development. The planning and policy activities will prepare communities for successful deployment and implementation.

This U.S. Department of Energy administers the funds for these efforts and currently has a Request for Proposals (RFP) which will serve as a pilot program to stimulate community based electric vehicle infrastructure readiness planning and implementation activities in anticipation of larger electric vehicle deployment efforts in the future. There is expected to be approximately \$5 million available and up to 15 awards are anticipated in FY 11. Responses to the RFP are due 6/13/11.

Community Development Block Grant (CDBG)

The program provides annual grants on a formula basis to entitled cities and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons.

The U.S. Department of Housing and Urban Development (HUD) awards grants to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services.

Entitlement communities develop their own programs and funding priorities. However, grantees must give maximum feasible priority to activities which benefit low- and moderate-income persons. A grantee may also carry out activities which aid in the prevention or elimination of slums or blight. Additionally, grantees may fund activities when the grantee certifies that the activities meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs. CDBG funds may not be used for activities which do not meet these broad national objectives.

CDBG funds may be used for activities which include, but are not limited to: acquisition of real property; relocation and demolition; rehabilitation of residential and non-residential structures; construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes; public services, within certain limits; activities relating to energy conservation and renewable energy resources; and provision of assistance to profit-motivated businesses to carry out economic development and job creation/retention activities.

Generally, the following types of activities are ineligible: acquisition, construction, or reconstruction of buildings for the general conduct of government; political activities; certain income payments; and construction of new housing by units of general local government.

The State of Missouri receives an annual grant as an entitlement community and the City of Jefferson is eligible to apply for a CDBG sub-recipient award under the State of Missouri Small Cities allocation.

Community Improvement District (CID)

CID's are organized for the purpose of financing a wide range of public-use facilities and establishing and managing policies and public services relative to the needs of the district. A Community Improvement District (CID) may be either a political subdivision or a not-for-profit corporation.

By request petition, signed by property owners owning at least 50% of the assessed value of the real property, and more than 50% per capita of all owners of real property within the proposed CID, presented for authorizing ordinance to the governing body of the local municipality in which the proposed CID would be located. Language contained in the petition narrative must include a five year plan, describing the purposes of the proposed district, the services it will provide, the improvements it will make and an estimate of the costs of those services and improvements, and the maximum rates of property taxes and special assessments that may be imposed within the proposed district. Other information must state how the CID would be organized and governed, and whether the governing board would be elected or appointed. There are specific rules that provide the required elements of a CID petition, and the procedures for publication, public hearings, etc.

Unlike a Neighborhood Improvement District, a CID is a separate legal entity, and is distinct and apart from the municipality that creates the district. A CID is, however, created by ordinance of the governing body of the municipality in which the CID is located, and may have other direct organizational or operational ties to the local government, depending upon the charter of the CID.

A CID may finance new facilities or improvements to existing facilities that are for the use of the public. Such public-use facilities include: Convention centers, arenas, meeting facilities, pedestrian or shopping malls and plazas ; paintings, murals, fountains or kiosks; parks, lawns, gardens, trees

or other landscapes; streetscapes, lighting, benches, marquees, awnings, canopies, trash receptacles, walls; lakes, dams and waterways; sidewalks, streets, alleyways, bridges, ramps, tunnels, traffic signs and signals utilities, drainage works, water, storm and sewer systems and other site improvements; parking lots, garages; child care facilities and any other useful, necessary or desired improvement

A CID may also provide a variety of public services, some of which may be: Operating or contracting for the operation of parking facilities, shuttle bus services; leasing space for sidewalk café tables and chairs; providing trash collection and disposal services; with consent of the municipality, prohibiting, or restricting vehicular and pedestrian traffic and vendors on streets; within a designated “blighted area”, contract with any private property owner to demolish, or rehabilitate any building or structure owned by such property owner; and providing or contracting for security personnel, equipment or facilities.

Funding of CID projects and services must be set forth in the requesting petition that is presented to the local governing body of the municipality in which the CID is located. Funding may be accomplished by district-wide special assessment, rents, fees, and charges for the use of CID property or services, grants, gifts or donations. If the CID is organized as a political subdivision, property and sales taxes may also be imposed within the boundaries of the CID.

A CID involving the target area would be created by ordinance of City Council of the City of Jefferson in keeping with the aforementioned process and procedures.

Energy Efficient Commercial Buildings Tax Deduction

The federal Energy Policy Act of 2005 established a tax deduction for energy-efficient commercial buildings applicable to qualifying systems and

buildings placed in service from January 1, 2006, through December 31, 2007. This deduction was subsequently extended through 2008, and then again through 2013 by Section 303 of the federal Energy Improvement and Extension Act of 2008 (H.R. 1424, Division B), enacted in October 2008.

A tax deduction of \$1.80 per square foot is available to owners of new or existing buildings who install (1) interior lighting; (2) heating, cooling, ventilation, or hot water systems that reduce the building’s total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001 or (3) otherwise make improvements to the building envelope. Energy savings must be calculated using qualified computer software approved by the IRS.

Deductions of \$0.60 per square foot are available to owners of buildings in which individual lighting, building envelope, or heating and cooling systems meet target levels that would reasonably contribute to an overall building savings of 50% if additional systems were installed.

The deductions are available primarily to building owners, although tenants may be eligible if they make construction expenditures. In the case of energy efficient systems installed on or in government property, tax deductions will be awarded to the person primarily responsible for the system’s design. Deductions are taken in the year when construction is completed.

Eligible Efficiency Technologies include: equipment insulation, water heaters, lighting, lighting controls/sensors, chillers , furnaces , boilers, heat pumps, central air conditioners, caulking/weather-stripping, duct/air sealing, building insulation, windows, doors, siding, roofs, comprehensive measures/whole building.

The deduction is available to owners of new or existing buildings with a federal tax liability who install (1) interior lighting; (2) building envelope, or (3) heating, cooling, ventilation, or hot water systems that reduce the building’s total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001. There is no special form to claim the deduction. The IRS instructions

to business forms (e.g., Form 1120 for corporations, Form 1120-S for S corporations, and Form 1065 for partnerships) indicate that the taxpayer should include the amount of the deduction in the amount in the "Other deductions" line of the tax return. A statement listing the types and amounts of "other deductions" should be attached to the return.

EPA Regional, State, and Local Funding Opportunities

The EPA has developed a guide of regional, state and local funding resources to assist local and state governments, communities, and non-governmental organizations who are addressing the varied aspects of smart growth. Please note that this list is not an exhaustive compilation of all possible funding resources in the smart growth arena. It lists state government programs and directors of funding sources maintained by outside organizations and can be found at http://epa.gov/smartgrowth/state_funding.htm.

Façade Improvement Program

The main objective of the City of Jefferson's program is to enhance the aesthetics of the community by improving the facades of older commercial buildings in Jefferson City so that after completion of the work, citizens will recognize improvement in the appearance of the buildings. A secondary objective is to promote mixed use (residential/commercial) in the older commercial areas of the city.

At the forefront of the facade improvement effort is the desire to revitalize the older commercial buildings in Jefferson City. Storefronts and large scale buildings define the overall character of a commercial area and are the focus of the revitalization effort. Focusing on streetscape design early in the improvement process is important in maintaining the character of older commercial districts.

Traditional storefronts are consistent through the use of similar building elements. Buildings should maintain the same height width, proportion of openings and scale as surrounding buildings in a corridor. Missing elements should be replaced with quality materials. General continuity among individual buildings should be maintained and visible.

The general principles of the program are:

- Preserve historic materials and character while keeping a building in use, at times by accommodating new uses.
- Repair deteriorated features and materials to the greatest extent possible. Replace, if needed, with compatible matching new materials.
- Avoid "modernizing" features of the building.
- High-quality materials should be used to convey substance and integrity. (Avoid artificial materials and elements.)
- Building materials, such as brick and stone, are encouraged.
- Screening of roof top equipment shall be required from the street side view. Parapet walls are preferred over the use of screening walls.
- All improvements must be compatible with applicable zoning codes and satisfy permit requirements.
- All exterior improvements must be visible from the street and visible to the public.

The eligible improvements include:

- Facade removal - Exterior building materials on the facade that is not original or is in excess to the building. (Examples: vinyl or aluminum siding).
- Brick or wall surface cleaning - Cleaning of the exterior building features and materials must be done by the gentlest means possible - (Examples: no sandblasting or power washing).

- Patching and painting of facade walls - Repair, rebuild or restore walls including cleaning, sealing, tuck pointing, patching or painting. Colors of materials, signs, window frames, cornices, storefronts and other building features should be coordinated and determined by the nature of the building chosen with their original character in mind.
- Canopy or awning installation/repair - Canopy and awning shapes and colors should relate to the building's architectural elements. Canvas and fire-resistant acrylic are permitted. (Avoid vinyl or plastic).
- Window and/or door replacement/repair - Install, replace or repair doors/windows frames, sills, glazing or glass. Restoration of the original window size is encouraged. The height of storefront windows shall relate to the windows of surrounding buildings. Upper floor windows shall be in harmony with the remaining building proportions and character. (Avoid filling in existing windows.)
- Mortar joint repair - Use materials consistent with the original mortar composition
- Railings, ironwork repair or addition - Original exterior ironwork elements should be restored to enhance the appearance of the building.
- Cornice repair or replacement - Original cornice should be restored or replaced using appropriate quality materials.
- Replacement/repair to exterior steps - Repair, restore, replace or install steps where they affect access to the building using appropriate quality materials. (Avoid prefabricated elements.)

The following are examples of activities that are NOT eligible improvements:

- Routine maintenance of buildings not part of a comprehensive facade improvement project;
- Extermination of insects, rodents, vermin or other pests;

- Air conditioning or heating equipment;
- Fire suppression systems;
- Plumbing;
- Electrical wiring or service upgrades for interior of building;
- Elevator installation or repair;
- Interior floor or ceiling replacement or repair;
- Window displays;
- Acquisition or related costs, legal fees;
- Any other improvements not deemed eligible as part of the facade improvement program.

The program is administered by the City of Jefferson. Eligible applicants must meet the following requirements- 1) The property must be in a commercial zone; 2) The building to be improved must be used, at the time the application is made, for a purpose that requires a commercial zone; 3) The structure must have been constructed before 1951; 4) The property must have a fair market value of \$70,000 or more at the time the application for improvements is approved; 5) The property and its owner(s) must not be delinquent in payment of any State, County, or City taxes; 6) The property must remain in commercial use over the reimbursement period and must re-qualify annually; 7) Eligible, exterior improvements must be significant, exceeding \$10,000 and be completed prior to reimbursement eligibility; 8) Improvements must meet the eligibility guidelines and be approved by the Facade Improvement Committee; 9) Any work done prior to approval is not eligible; 10) A property shall be eligible for the program one time only; 11) Total annual reimbursement may not exceed the property taxes assessed or \$3,000, whichever is less and 12) Eligible owners may receive reimbursement for not more than 3 years starting January 1, 2006. Eligibility must be certified each year.

Leveraging the Partnership: United States Department of Transportation (DOT), Department of Housing and Urban Development (HUD) and Environmental Protection Agency (EPA) for Sustainable Communities

In June 2009, the Partnership for Sustainable Communities was formed by the DOT, HUD and EPA. A resources list of funding and technical assistance programs provided by the three federal government entities can be found at http://epa.gov/smartgrowth/pdf/2010_0506_leveraging_partnership.pdf.

Low Income Housing Tax Credits (LIHTC)

The Low Income Housing Tax Credit is a dollar-for-dollar tax credit in the United States for affordable housing investments. It was created under the Tax Reform Act of 1986 (TRA86) that gives incentives for the utilization of private equity in the development of affordable housing aimed at low-income Americans. The credits are also commonly called Section 42 credits in reference to the applicable section of the Internal Revenue Code. The LIHTC provides funding for the development costs of low-income housing by allowing a taxpayer (usually the partners of a partnership that owns the housing) to take a federal tax credit equal to a large percentage of the cost incurred for development of the low-income units in a rental housing project. Development capital is raised by "syndicating" the credit to an investor or, more commonly, a group of investors. To take advantage of the LIHTC, a developer will typically propose a project to a state agency, seek and win a competitive allocation of tax credits, complete the project, certify its cost, and rent-up the project to low income tenants. Simultaneously, an investor will be found that will make a "capital contribution" to the partnership or limited liability company that owns the project in exchange

for being "allocated" the entity's LIHTCs over a ten year period. The amount of the credit will be based on (i) the amount of credits awarded to the project in the competition, (ii) the actual cost of the project, (iii) the tax credit rate announced by the IRS, and (iv) the percentage of the project's units that are rented to low income tenants. Failure to comply with the applicable rules, or a sale of the project or an ownership interest before the end of at least a 15-year period, can lead to recapture of credits previously taken, as well as the inability to take future credits.

In Missouri, the LIHTC program is administered by the state's housing finance agency, the Missouri Housing Development Corporation (MHDC). The MHDC receives an annual fixed allocation of credits based upon its population. The agency determines which projects to award credits under a "Qualified Allocation Plan" (QAP) and are usually awarded to projects in an "allocation round" held each year, on a competitive basis. Developers (for-profit and not-for-profit) are eligible to apply for tax credits.

Missouri Linked Deposit

The Missouri Lined Deposit Program offers reduced interest rates on certain loans that borrowers can use to improve their businesses and also provides funds for local governments to serve the interests of their constituents. The program represents a partnership between the Missouri State Treasurer's office and various lending institutions to provide low-interest loans to help create and retain jobs, expand the economy and strengthen communities statewide. The Linked Deposit program has approximately \$720 million available for the program offering. When these funds are combined with the funds of program lenders, the net effect is to lower the interest rates to the borrower by approximately 2-3 percent.

The program is administered by the Missouri Treasurer's office. The guidelines are slightly different for each particular group of borrower. For example, the program for Local Governments provides low-interest loans to cities, counties and other political subdivisions for capital improvements or

other significant public programs such as: purchasing fire trucks, improving infrastructure and enhancing public safety. The program for Alternative Energy provides low-interest loans to stimulate alternative energy growth and development. Eligibility guidelines have expanded to make loans available to 1) businesses producing energy or fuel for sale or for their own use or 2) consumers purchasing, installing or constructing equipment that produces alternative energy, such as solar panels or wind facilities.

overpasses and tunnels; landscaping streets or other public facilities including improvement of retaining walls and area walls on public ways; and improvement of property for off-street parking.

A NID in the target area can be created by election or petition of voters and/or property owners within the boundaries of the proposed district with the election or petition authorized by a resolution of the City Council for the City of Jefferson.

Neighborhood Improvement District (NID)

A Neighborhood Improvement District (NID) may be created in an area desiring certain public-use improvements that are paid for by special tax assessments to property owners in the area in which the improvements are made. The kinds of projects that can be financed through an NID must be for facilities used by the public, and must confer a benefit on property within the NID.

An NID is created by election or petition of voters and/or property owners within the boundaries of the proposed district. Election or petition is authorized by a resolution of the governing body of the municipality in which the proposed NID is located. Language contained in the petition narrative or ballot question must include certain information including, but not limited to a full disclosure of the scope of the project, its cost, repayment, and assessment parameters to affected property owners within the NID.

The type of typical budget items found in a NID include: Acquisition of Property; improvement of streets, sidewalks, crosswalks and all related components; drainage, storm and sanitary sewer systems and service connections from utility mains, conduits and pipes; improvement of streetlights and street lighting systems; improvement of waterworks; improvement of parks, playgrounds and recreational facilities; improvement of flood control works; improvement of pedestrian and vehicle bridges,

Neighborhood Stabilization Program (NSP)

The NSP is a national program administered by HUD for the purpose of stabilizing communities that have suffered from housing foreclosures and abandonment. With the program, NSP grantees develop their own programs and funding priorities. However, NSP grantees must use at least 25 percent of the funds appropriated for the purchase and redevelopment of abandoned or foreclosed homes or residential properties that will be used to house individuals or families whose incomes do not exceed 50 percent of the area median income. In addition, all activities funded by NSP must benefit low- and moderate-income persons whose income does not exceed 120 percent of area median income. Activities may not qualify under NSP using the “prevent or eliminate slums and blight” or “address urgent community development needs” objectives.

NSP funds may be used for activities which include, but are not limited to: establish financing mechanisms for purchase and redevelopment of foreclosed homes and residential properties; purchase and rehabilitate homes and residential properties abandoned or foreclosed; establish land banks for foreclosed homes; demolish blighted structures; and redevelop demolished or vacant properties.

The City of Jefferson is currently administering the NSP and has established criteria for participation in the program.

New Market Tax Credits (NMTC)

The New Markets Tax Credit (NMTC) Program was established in 2000 as part of the Community Renewal Tax Relief Act of 2000. The goal of the program is to spur revitalization efforts of low-income and impoverished communities across the United States and Territories. The NMTC Program provides tax credit incentives to investors for equity investments in certified Community Development Entities, which invest in low-income communities. The program is designed to allow the CDE to use its local knowledge and expertise to decide what business to invest in or lend to with the funds it raises with the new markets tax credit. The credit equals 39% of the investment paid out (5% in each of the first three years, then 6% in the final four years, for a total of 39%) over seven years (more accurately, six years and one day of the seventh year). A Community Development Entity must have a primary mission of investing in low-income communities and persons. The low income communities are identified through designated census tracts.

The focus area of the study does contain NMTC eligible census tracts. Most businesses located in low-income communities could qualify for loans or equity. Typical firms could include: small technology firms, inner-city shopping centers, manufacturers, retail stores or micro-entrepreneurs. Residential rental property does not qualify as a qualified active low-income business.

The program is administered by the U.S. Treasury, Office of Community Development Financial Institutions which selects and provides annual funding allocations to the CDEs. There are multiple CDE's which have Missouri as a service area.

Property Assessed Clean Energy Program (PACE)

Property-Assessed Clean Energy (PACE) financing effectively allows property owners to borrow money to pay for energy improvements.

The amount borrowed is typically repaid via a special assessment on the property over a period of years. The Missouri legislature enacted the "Property Assessed Clean Energy Act" in July 2010. The act allows municipalities to create Clean Energy Development Boards, which are permitted to develop a local PACE program.

In January 2011, Jefferson City became the first city in Missouri to adopt the PACE ordinance. The program provides 100% of up-front costs for energy efficiency and renewable energy projects for residential and business properties. The Clean Energy Development Board is responsible for establishing financing sources and methods for program application and project selection.

Eligible efficiency technologies include: lighting, lighting controls/sensors, chillers, furnaces, boilers, heat pumps, central air conditioners, CHP/Cogeneration, heat recovery, programmable thermostats, energy management systems/building controls, caulking/weather-stripping, building insulation, windows, doors, roofs, comprehensive measures/whole building, and LED exit signs.

Eligible Renewable Technologies include: solar thermal electric, photovoltaics, wind, biomass, geothermal electric, geothermal heat pumps, daylighting, and geothermal direct-use.

The City of Jefferson has established a Clean Energy Development Board that accepts applications from private residential and business property owners.

Rehabilitation Tax Credits for Historic Buildings

Since 1976, federal law has provided tax incentives for historic preservation. A state tax incentive has been available since January 1, 1998. Federal law provides an investment tax credit equal to 20 percent of approved costs for qualified rehabilitation of certain historic buildings.

for income-producing use. The federal credits are administered by the State Historic Preservation Office in the Missouri Department of Natural Resources and the National Park Service. The Department of Natural Resources' State Historic Preservation Office (SHPO) works with property owners, developers and architects to provide advice on appropriate rehabilitation. SHPO staff review applications for tax certification and make recommendations for approval.

Missouri law provides an investment tax credit equal to 25 percent of approved costs associated with qualified rehabilitation made after Jan. 1, 1998. The federal and state credits can be used in combination for the rehabilitation of commercial or income-producing properties. Rehabilitation of non-income producing residential properties qualifies for the state credits only. The state credits are administered by the Community Development Division in the Missouri Department of Economic Development.

To be eligible for the state or federal credits, a building must be "historic" in nature. To qualify a building must either: be listed individually in the National Register of Historic Places; be a contributing element of a historic district that is listed in the National Register of Historic Places, or be a contributing element of a Local Historic District that has been certified by U.S. Department of the Interior as substantially meeting National Register criteria.

The federal credits are limited to income-producing, depreciable property only. The property may be either commercial or residential rental property. A taxpayer's personal residence would not qualify for the federal credit. The state credits also apply to income-producing property including either commercial or residential rental property. Additionally, a taxpayer's personal residence can qualify for the state credit if the property is a certified historic structure and if the minimum investment threshold is met. The rehabilitation must be "substantial," i.e., a minimum amount must be invested during the rehabilitation. The threshold requirement for the federal program is \$5,000 or the adjusted basis of the property, whichever is larger, within a 24-month (60-month, if phased) test period.

For the state credits, the threshold requirement is 50 percent of the basis, within the project period defined by the applicant, but beginning AFTER the applicant's receipt of a letter from the Department of Economic Development conveying preliminary approval and the applicant's credit allocation.

As noted, the federal credits are administered by the State Historic Preservation Office in the Missouri Department of Natural Resources and the National Park Service while the state credits are administered by the Community Development Division in the Missouri Department of Economic Development. The Department of Natural Resources' State Historic Preservation Office (SHPO) works with property owners, developers and architects to provide advice on appropriate rehabilitation.

Safe Routes to School (SRTS)

Safe Routes to School is a national program to get more students walking and bicycling to school. Funding is available to cities and school districts for infrastructure projects like sidewalk construction, as well as educational and encouragement programs.

Missouri is one of nineteen states that recently received funding to create state-wide networks to help communities leverage federal funding, get more kids physically active, and remove policy barriers to safe walking and bicycling to school.

Safe Routes funding is distributed through state Missouri Department of Transportation and applications are normally accepted once per year. Successful applications require close collaboration with the school district, city government, law enforcement, parents, and community groups. Most SRTS applications include both activities (promoting and encouraging safe walking and bicycling) and infrastructure (bike racks, sidewalks, crosswalks, etc.).

Sustainable Communities

On June, 2009, the U.S. Environmental Protection Agency (EPA) joined with the U.S. Department of Housing and Urban Development (HUD) and the U. S. Department of Transportation (DOT) in an effort to improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. Through a set of guiding livability principles and a partnership agreement that will guide the agencies' efforts, this partnership will coordinate federal housing, transportation, and other infrastructure investments to protect the environment, promote equitable development, and help to address the challenges of climate change.

The livability principles include:

- Provide more transportation choices. Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- Promote equitable, affordable housing. Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicity to increase mobility and lower the combined cost of housing and transportation.
- Enhance economic competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
- Support existing communities. Target federal funding toward existing communities—through strategies like transit oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

- Coordinate and leverage federal policies and investment. Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy
- Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

It is anticipated that there will be distinct and different funding opportunities under the Sustainable Communities program. Application for funding is made directly to the U.S. Department of Housing and Urban Development and is typically done in response to a Notice of Funding Availability that will appear in the Federal Register. The detailed information regarding specific activities, requirements, policy priorities and outcomes will be contained in the NOFA. However, the applicants must usually be a unit of government or local planning agency as HUD does not directly fund individuals through its formula-based programs or its competitive NOFA process.

Tax Increment Financing District (TIF)

Local Tax Increment Financing (Local TIF) permits the use of a portion of local property and sales taxes to assist funding the redevelopment of certain designated areas within your community. Areas eligible for Local TIF must contain property classified as a "Blighted", "Conservation" or an "Economic Development" area, or any combination thereof, as defined by Missouri Statutes.

TIF may be used to pay certain costs incurred with a redevelopment project. Such costs may include, but are not limited to: professional services such as studies, surveys, plans, financial management, legal counsel; land acquisition and demolition of structures; rehabilitating,

repairing existing buildings on site; building necessary new infrastructure in the project area such as streets, sewers, parking, lighting; relocation of resident and business occupants located in the project area

The idea behind Local TIF is the assumption that property and/or local sales taxes (depending upon the type of redevelopment project) will increase in the designated area after redevelopment, and a portion of the increase of these taxes collected in the future (up to 23 years) may be allocated by your municipality to help pay the certain project costs, partially listed above.

Missouri's TIF Act defines a "Municipality" as an incorporated city, town, village or county. The governing body of your municipality is required to establish a TIF Commission, composed of certain members including representatives of other local taxing authorities within the redevelopment project area as defined by state statute. The municipality is also responsible for the approval of ordinances (or resolutions if a county) that establish a comprehensive Redevelopment Plan, and for approval of the specific TIF Redevelopment Project. Responsibilities of the TIF Commission are many, and may include working with the local government in creating the Redevelopment Plan and TIF Redevelopment Project parameters, holding required public hearings, preparing economic impact reports and revenue projections, blight studies and other documents to justify the need for TIF and as required by state statutes governing Local TIF projects.

The City of Jefferson would be required to establish a TIF Commission and would be responsible for the establishment of a comprehensive Redevelopment Plan and for approval of the specific TIF Redevelopment Project.

Transportation Development District (TDD)

A Transportation Development District (TDD) may be created to act as the entity responsible for developing, improving, maintaining, or operating one or more "projects" relative to the transportation needs of the area in which the District is located. A TDD may be created by request petition filed in the circuit court of any county partially or totally within the proposed district. There are specific rules that provide filing procedures and content requirements of TDD creating petitions and before beginning to build or fund any project, the TDD will submit the proposed project to the Missouri Highways and Transportation Commission for its approval. If the proposed project is not intended to be part of the state highways or transportation system, the TDD will also submit its plans for approval by the local transportation authority that will become owner of the project. A "local transportation authority" may be any local public authority(s) or political subdivision(s) having jurisdiction over any transportation service, improvement, or infrastructure in which the TDD is located.

A TDD serves to fund, promote, plan, design, construct, improve maintain or operate one or more "projects" or to assist in such activity. "Projects may include any: street, highway, road, interchange, intersection, bridge, traffic signal light or signage; bus stop, terminal, station, wharf, dock, rest area or shelter; airport, river, or lake port, railroad, light rail or other mass transit and any similar or related improvement or infrastructure.

Funding of TDD projects may be accomplished through the creation of District-wide special assessments or property or sales taxes with a required majority voter or petition approval. Other funding sources requiring voter majority approval may include establishing tolls or fees for the use of the project. The TDD may also issue bonds, notes, and other obligations in accordance with the authority granted to the entity for such issuance.

The Missouri Transportation Development District (TDD) Act for State Highway System Projects requires the formation of a development district be initiated by petitioning the Cole County Circuit Court.

Transportation Investment Generating Economic Recovery (TIGER)

These grants are awarded by the U.S. Department of Transportation on a competitive basis for capital investments in surface transportation projects that will have a significant impact on the Nation, a metropolitan area or a region. Funds under this program will be awarded to State and local governments, including U.S. territories, tribal governments, transit agencies, port authorities, metropolitan planning organizations (MPOs), other political subdivisions of State or local governments, and multi-State or multi-jurisdictional applicants.

The Recovery Act specifies that capital investments in surface transportation projects which are eligible for funding shall include but not be limited to:

- Highway or bridge projects eligible under title 23, United States Code including Interstate rehabilitation, improvements to the rural collector road system, reconstruction of overpasses and interchanges, bridge replacements, seismic retrofit projects for bridges, and road alignments;
- Public Transportation projects eligible under chapter 53 of title 49, United States Code, including investments in projects participating in the New Starts or Small Starts programs that will expedite the completion of those projects and their entry into revenue service;
- Passenger and freight rail transportation projects; and
- Port infrastructure investments including projects that connect ports to other modes of transportation and improve the efficiency of freight movement.

Application for funding is made directly to the U.S. Department of Transportation and is typically done in response to a Notice of Funding Availability that will appear in the Federal Register. Applicants could be JeffTran, the City of Jefferson, Cole County or the Capital Area Metropolitan Planning Organization (CAMPO).



BOOK DESIGN

BNIM

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