





APPLICANT:
City of Saint Charles, Missouri

PROJECT TYPE:
Road and Bridge | Bike & Pedestrian
Environmental Restoration

CONTACT:
Brad Temme, P.E.
Director, Department of Engineering
200 North Second Street Second
Floor, Room 202
Saint Charles, MO 63301-2851
(636) 949-3237
brad.temme@stcharlescitymo.gov
bangertisland.com

Total / Requested Amount
\$24,772,037 / \$10,000,000



BANGERT ISLAND RIVERFRONT TRANSFORMATION PROJECT PHASE 1

USDOT BUILD DISCRETIONARY GRANT PROGRAM

JULY 2019

CITY OF SAINT CHARLES, MISSOURI

USDOT BUILD DISCRETIONARY GRANT APPLICATION

TABLE OF CONTENTS

Project Description	1
Project Context	8
Addressing the Problem:	0
Infrastructure Availability	9
Addressing the Problem:	10
Environmental Sustainability	10
Addressing the Problem:	11
Stormwater Control	11
Addressing the Problem:	12
Partnerships	12
Project Partners	15
Letters of Support	15
Selection Criteria	15
Economic Competitiveness	16
Environmental Protection	19
Quality of Life	21
State of Good Repair	24
Safety	25
Non-Federal Revenue for	26
Transportation Infrastructure	
Investment	
Innovation	26
Partnership	27
Project Pandings	29
Project Readiness	
Schedule Trackwisel Face in it.	29
Technical Feasibility	29
Assessment of Project Risks and	30
Mitigation Strategies	20
Benefit-Cost Analysis	30
Legislative Approvals	30
Financial Feasibility	30
Federal Wage Rate	

Federal Wage Rate Certificate

Attachments

Appendix A: Benefit-Cost Analysis Summary (Excel

Document Provided)

Appendix A1: Benefit-Cost Analysis Spreadsheet **Appendix A2:** Certified Real Estate Appraisals **Appendix B:** Financial and Property Acquisition

Commitment Letter

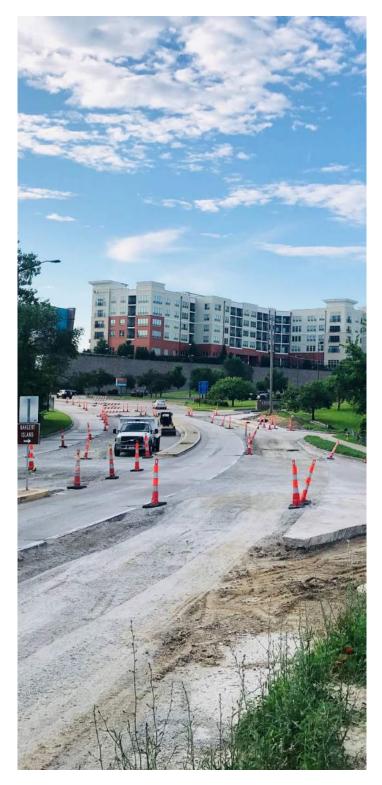
Appendix C: TIP Commitment Letter **Appendix D:** Letters of Support **Appendix E:** Project Schedule

Appendix F: Cost Estimate

Appendix G: Funding Commitments

Appendix H: Plan Sheets and Technical Plates

Appendix I: Press & Public Outreach Appendix J: Draft Environmental



USDOT BUILD DISCRETIONARY GRANT APPLICATION

I. Project Description

Upon the banks of the Missouri River in St. Charles Missouri, William Clark and Meriwether Lewis set forth to discover the western frontier on May 21, 1804. The history and future of St. Charles is tied to the Missouri Riverfront. Historic Main Street in St. Charles served as the State Capitol from 1821 to 1826 and as a center for economic prosperity and growth for the developing nation. As the western development of this great nation occurred, development along the City of St. Charles riverfront remained isolated to approximately one quarter of the City's total riverfront due to impacts from a changing river and poor access to the rapidly developing new modes of transportation. Today St. Charles is prepared to unlock the potential of expanded riverfront development, and by doing so will create a center for economic activity for the St. Louis metropolitan region. The Bangert Island Riverfront Transformation Project, known locally as "RIVERPOINTE", will create approximately 4,000 jobs and stimulate approximately \$1.5 billion in growth.

The City of St. Charles has been working diligently to free a quarter of the City's riverfront from the constraints that have left this area blighted and underutilized for almost 200 years. In 2008 the City began efforts to reinvigorate 1.6 miles of riverfront located south of Interstate 70, which carries approximately 1 million vehicles a week, to the Family Arena. The City has partnered with the United States Army Corps of Engineers to do extensive river modeling and hydraulic design to ensure that the project will improve both the economic activity of the region and the environmental resources along the Missouri River. During the past 10 years the City of St. Charles has invested a significant amount of resources and time into the project and the City has acquired property to work with the United States Army Corps of Engineers and is currently poised to move forward with the riverfront development.

In 2018, the City of Saint Charles applied for the USDOT BUILD Grant. In 2018, the City's application received a rating of "Highly Recommended" and "Moderate Risk." Following a debrief with senior USDOT officials, the City moved forward to improve the application and reduce the level of risk associated with the implementation of the project and provide a more shovel ready project.

Since the 2018 application the City has addressed specific BUILD Grant debrief guidance including:

- Acquiring all property (\$1 million non-federal investment)
- 2. Beginning road construction (\$1.6 million non-federal investment)
- 3. Design of basin (\$1 million non-federal investment)
- 4. Beginning site grading (\$100,000 non-federal investment)
- 5. NEPA materials preparation
- 6. Coordination with Local FHWA Officials
- 7. Applying BUILD Grant Funds on Phase 1 Area only
- 8. Concept design of innovative 1.7 mile autonomous trolley system

However, with all of this forward movement, challenges still exist in making this plan a reality. Investment in key infrastructure to feed the area remains partially unfunded. Without investment this area will likely remain dormant for many years and will remain choked by environmental degradation caused by channelization of the Missouri River.

The City of St. Charles, State of Missouri and St. Charles County are poised to invest a significant amount of nonfederal revenue for transportation infrastructure. The City of Saint Charles and St. Charles County have already invested over \$3.7 million in the project. In early 2019, the City advertised a Request for Proposal for Phase 1, and is currently in discussions with several development teams. The project looks to connect and enhance the surrounding investments in the City. Located north of the project area is Historic Main Street and Ameristar Casino and Hotel Complex, just west of the project lies the Streets of St. Charles Development, and on the southern end the project is bounded by the Family Arena. In particular, portions of Historic Main Street suffer from car-centric development where residents will commonly drive from short distances only to struggle to find a place to park within a 2-block radius of their final destination. In addition the Katy Trail State Park, the longest rails to trails conversion in the country, runs directly through the project area adding to the profound impact that the transformation of this area will have on regional, statewide and national travelers. The St. Charles Convention Center will also enhance the usage of the proposed multi-use development area.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

The infrastructure investment requested from USDOT BUILD funds will match local City, State, and County investment to create accessibility to the area by constructing the nation's longest autonomous electric trolley system, constructing over 6 lane miles of new roads, new signals, new street lighting, bicycle and pedestrian infrastructure, transit improvements, green infrastructure, reconstruction of the existing inadequate roadway infrastructure located along Arena Parkway which runs the perimeter of the project, and creating stormwater control and flood protection from the Missouri River.

The master plan for development of the Bangert Island Riverfront is complete and has been phased to prioritize quick implementation. The 2019 BUILD application focuses on the implementation of a 20-acre area immediately south of Interstate 70, known as Phase 1. Because all property is owned for the Phase 1 area, preliminary design and NEPA permitting material preparation has commenced to allow for immediate implementation of \$24 million in key infrastructure. The investment will create around 1 million square feet of prime development ground located within the urban core of the fastest growing County within the State of Missouri (+10.3% since 2010). The Missouri State Office of Administration projects even greater long term growth in St. Charles County which is estimated to realize 75.8% growth between 2000 and 2030. This growth is primarily focused west of the City of St. Charles creating longer commutes, and bottlenecks in the existing interstate highway infrastructure. Incentivizing growth in the City of St. Charles will reduce future vehicular commuting patterns and the burden on the transportation network. At the beginning of the 21st Century, our nation faces challenges unlike any other time in our history.

Requested BUILD funds are intended to provide the infrastructure necessary to provide equitable access to middle class jobs, spur economic activity and access to the diverse business community. The improvements will strengthen the urban core of St. Charles County and provide a foundation for the future growth and success of the region.

BUILD funding will complete missing components needed to create 0.5 miles of new roadways, 1 mile of reconstructed roadways, 3 miles of new sidewalks, 0.5 miles of new or improved trails, 1.7 miles of new transit facilities, and 20 acres of high value development.

Project Highlights

Provides critical vehicular and multimodal transportation infrastructure to spur new and sustainable development

Construction of the longest Autonomous Electric Trolley route in the United States

Creates an estimated \$1.5 billion impact to the local economy and will create 4,000 new jobs according to INPLAN modeling

Restores sensitive aquatic habitat in an area damaged by Missouri River channelization

Enhances access to existing major regional riverfront attractions

Growth in the urban core creates travel time savings, operational cost savings, reduced accidents, and reduced vehicular emissions

Significant growth in property value, and sales to surrounding businesses

Elimination of repetitive flood damages caused by degradation of the side channel chute and elevation of the surrounding property

Replaces obsolete poor quality existing roadway infrastructure with new sustainable infrastructure

Leverages multijurisdictional transportation investments to generate economic stimulus, new jobs, and increased mobility for all citizens

This project serves a population within walking (1/4 mile) and biking (3 miles) distance of approximately 100,000 people, 10,000 students, and more than 40,000 employees and is located adjacent to Interstate 70 which carries approximately 1 million vehicles per week. The project will contain the following key components:

New Roadway Infrastructure

- Lombard Street Extension from South Main Street to new roundabout.
- New Phase 1 loop road from Old South River Road to Lombard roundabout to Old South River Road

USDOT BUILD DISCRETIONARY GRANT APPLICATION

 Old South River Road Reconstruction from South Main Street to South River Road.

Reconstructed Roadways

 South River Road/Arena Parkway from South Fifth Street to Friedens Road

On-street Bicycle / Pedestrian Facilities

- New ADA accessible sidewalks located on both sides of the street along:
 - o Lombard Street Extension from South Main Street to new roundabout.
 - New Phase 1 loop road from Old South River Road to Lombard roundabout to Old South River Road
 - Old South River Road Reconstruction from South Main Street to South River Road
 - O South River Road/Arena Parkway from South Fifth Street to south of Friedens Road

Off street Trail Facilities

 Reconstruction and realignment of the Katy Trail through Phase 1 built at an elevation above the 500 year floodplain

New Autonomous Electric Trolley service

- New 1.7 mile asphalt trolley trail for Autonomous Electric Trolley service from the existing SCAT hub located at Clark Street and Riverside Drive to Phase 1 development area
- 2-15 passenger Autonomous Electric Trolley Vehicles built in the U.S.A.
- Connection to existing St. Charles Area Transit System linking throughout City & metro-area

Water Quality Improvements

- New water quality basins will create aquatic habitat to mitigate damage caused by river channelization.
- Water quality basins will more than offset any impacts of increased development and roadway construction

Stormwater Improvements

 20 acres of ground directly removed from flood damages by elevation.



Future Riverfront Development will stimulate economic activity (Phase1)

Project Costs	
New Roadway Construction:	\$8,612,037
Roadway Reconstruction:	\$1,610,000
Autonomous Electric Trolley	\$5,950,000
On-Street Bicycle / Pedestrian Facilities:	\$600,000
Stormwater Facilities:	\$8,000,000
Total Project Costs	\$24,772,037
Sources of Funding	
Non-Federal BUILD Match	\$12,772,037
Federal BUILD Request	\$10,000,000
Non-Federal U.S. Corps of Engneers Grant Match	\$1,000,000
Federal U.S. Corps of Engineers Grant	\$1,000,000
Federal Funding	44%
Non-Federal Funding	56%

This project will transform the Riverfront in St. Charles into an economic center of growth and prosperity by providing access to land parcels that have been constrained by environmental degradation.

This project provides increased access to major attractions and employers including the \$385 million Streets of Saint Charles mixed-use development, the Family Arena, Historic Main Street St. Charles, Ameristar Casino Hotel and Spa.

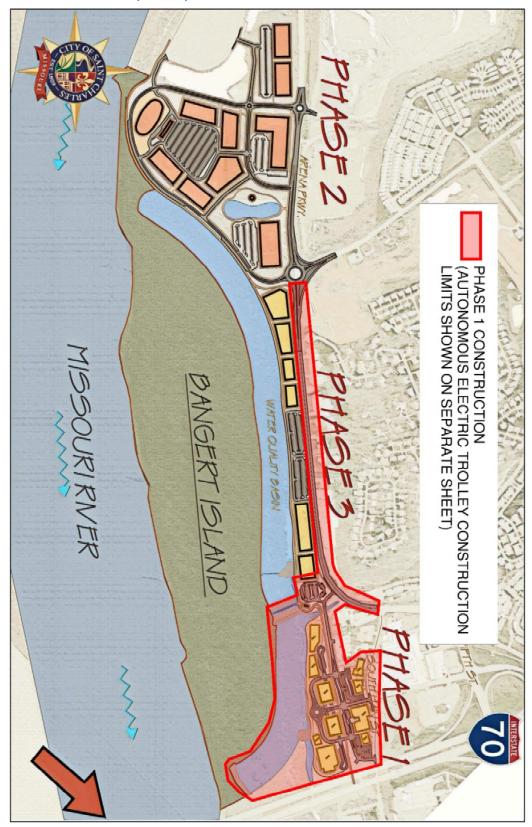
In short, this project provides primary access to thousands of regional jobs, services, and amenities and is strategically positioned amid the most dense and mixedincome neighborhoods in the entire county.

This project brings calculated benefits of \$133,311,000, for an overall benefit to cost ratio of 7.19 at a 7% discount rate.

Please visit www.BangertIsland.com for video testimonials from project supporters, fly through videos, before and after point of view renderings, and for more information.

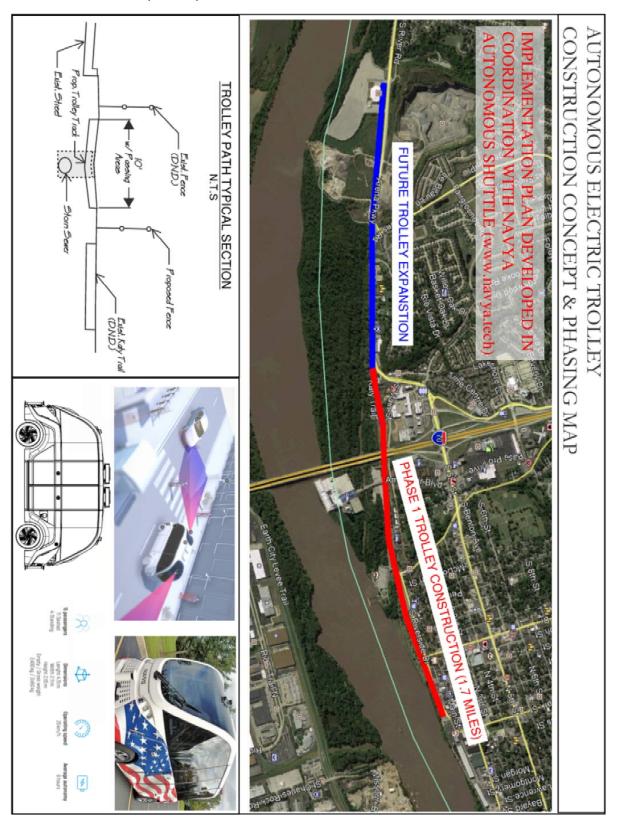
USDOT BUILD DISCRETIONARY GRANT APPLICATION

BUILD PROJECT MAP (1 OF 2)



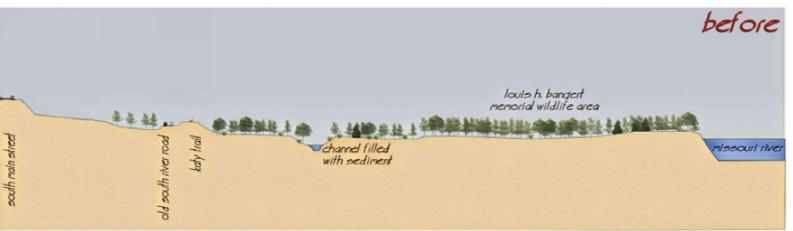
USDOT BUILD DISCRETIONARY GRANT APPLICATION

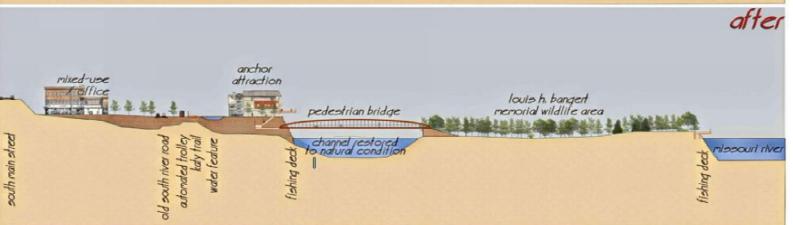
BUILD PROJECT MAP (2 OF 2)



USDOT BUILD DISCRETIONARY GRANT APPLICATION

PROJECT CROSS SECTION

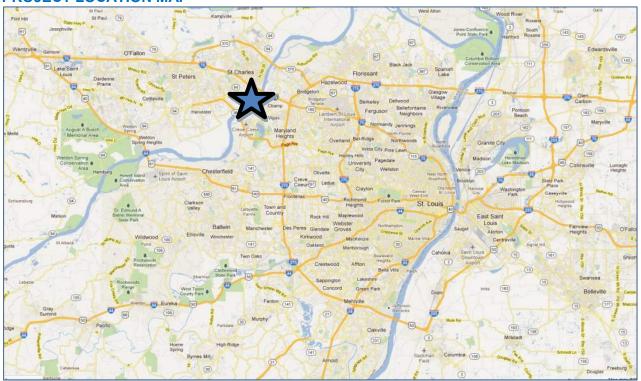






USDOT BUILD DISCRETIONARY GRANT APPLICATION

PROJECT LOCATION MAP



Bangert Island Riverfront Transformation Project - Project Location

Improvements Being Made By	Proposed Improvements
Saint Charles	Property Acquisition (Complete), Water Quality Basin, Roadway, Sidewalks, Trails, Traffic Signals, Transit, Stormwater, Water, Sanitary Sewer
St. Charles County Road Board	Property Acquisition, Roadway, Sidewalks, Trails, Traffic Signals, Transit, Stormwater
State of Missouri	Water Quality Basin, Storm Sewer
BUILD Grant	Roadway, Autonomous Electric Trolley, Sidewalks, Trails, Traffic Signals, Stormwater

USDOT BUILD DISCRETIONARY GRANT APPLICATION

II. Project Context

The Bangert Island Riverfront Transformation Project is situated along the Missouri River near the confluence of the Mississippi and Missouri Rivers. St. Charles and St. Louis Counties are the two largest counties in the St. Louis area, and are separated by the Missouri River. St. Charles was the kick-off point for the 1804-1806 Lewis and Clark expedition, and played a key role in the settlement of the western United States. Founded in 1765, the cultural heritage of Saint Charles lives on through its historical museums, festivals, and the nationally known Historic Main Street St. Charles which attracts over a million visitors a year.



St. Charles skyline at sunset http://www.greatriversgreenway.org/photo-details.aspx?tabid=237&photoid=170

Three major river crossings connect auto oriented travel between St. Louis and St. Charles Counties, including two new Missouri River crossings. The twelve-mile, six-lane, MO 370 connects I-270 in Saint Louis County with I-70 in Saint Charles County and was completed in 1996. A second freeway, MO 364, recently completed construction and connects I-270 in Saint Louis County with I-64 in Saint Charles County. I-70 is the largest of the three river crossings and carries 153,994 vehicles a day.

The Katy Trail, a popular 237 mile cross state trail that runs along the St. Charles side of the Missouri River, is at the center of the project area. Unfortunately the Katy Trail is subject to Missouri River flooding in the project area and is disconnected from the surrounding existing development by significant grade difference.

The project area is an economic hub for both Saint Charles and St. Louis Counties and the greater Saint Louis region. As such, it offers the region's highest potential return on investment for transportation infrastructure. St. Charles is home to more than 60,000 residents and provides more than 24,000 jobs.

St. Charles has worked for over 10 years with the Corps of Engineers to develop a solution that unlocks the enormous potential of the Bangert Island Riverfront area. Extensive Missouri River modeling studies have been conducted by the Corps and the have determined that construction of a chute along the River with compensatory fill on the embankment will not impact navigation on the Missouri River. The project has been considered for several Corps funding programs but has been delayed for several years from execution by the changing science of Pallid Sturgeon habitat restoration methodology. While the overall concept of the project achieves the same goals that have been pursued for 10 years the Corps has been unable to identify a Continuing Authorities Program (CAP) that fits the project and drive it into construction. Currently the Corps continues to assist the City through their PAS (planning assistance to states) program to further the NEPA material preparation and project design. During the project process with the Corps the City took the necessary action to become the cooperative landowner of Bangert Island to push the Corps project into final design. Today the Bangert Island Project is poised to move forward to realize the myriad of benefits outlined in this application but has been stagnated by the loss of the CAP program funding from the Corps.



Governor Mike Parson, County Executive Steve Ehlmann, and City of Saint Charles officials after a productive meeting on the Bangert Island Riverfront

USDOT BUILD DISCRETIONARY GRANT APPLICATION

Addressing the Problem: Infrastructure Availability

A major impediment to the development of the Bangert Island Project and the surrounding area is the lack of existing infrastructure. Infrastructure investment in this area has been neglected due to the stormwater impacts from the Missouri River.

A majority of the project area is cut off from the surrounding roadway network, with a five lane urban arterial running along the perimeter of the project area (5th Street/South River Road/ Arena Parkway) that connects to local driveways and Old South River Road which is a two lane low volume route. Inadequate and poorly placed parking create impediments to the future growth of Historic Main Street. Although the City has recently invested in pedestrian improvements to help connect the Bangert Island Riverfront to Historic Main Street and the Ameristar Casino, the area lacks connectivity that would otherwise be made for pedestrian friendly walkable attractions. The St. Charles Area Transit System (SCAT) does not provide an efficient direct connection between Historic Main Street to the Bangert Island Area. New sidewalks and trails are also needed to connect the Katy Trail to the existing bicycle and pedestrian network.

The Bangert Island Riverfront Transformation Project will create a 1.7 mile long Autonomous Electric Trolley route, the longest in the United States. This type of investment in innovative infrastructure helps the United States keep pace with other countries including China, France, and the Netherlands who are actively investing and implementing similar cutting edge technology. On a local level, the installation of the 1.7 mile trolley line will alleviate the parking concerns along Historic Main Street, and encourage existing residents of the surrounding and proposed development to look for alternate modes of transportation and promote a pedestrian centered visits. A connection will be created to link this activity node and autonomous trolley to the St. Charles Area Transit route, which provides access throughout the City of St. Charles and also links to METRO that provides additional transit access throughout the St. Louis metropolitan area.

In addition to the implementation of the Autonomous Electric Trolley Route, the Phase 1 project would build approximately 0.5 miles of new roadways and improve 1 mile of existing roadway. The improved roadway system will include street lights, traffic signals, curb and gutter, aesthetic enhancements, and other improvements.

Portions of these improvements are already underway, and St. Charles County is currently constructing the S. River Road/Arena Parkway Improvements and Parking Lot improvements. These new and reconstructed roadways will be constructed with bicycle and pedestrian improvements, and will additionally complement and supplement trail improvements linking to the Katy Trail.

Roadway construction will follow state and national standards, sidewalks and trails will be constructed to meet federal ADA guidelines for accessibility. The City of St. Charles staff has been LPA certified by the Missouri Department of Transportation to manage federally funded projects.

The Bangert Island phase 1 project area lies immediately adjacent to the successful Streets of St. Charles development. This 27 acre mixed use development started in 2008 amidst the financial crisis. The site elevation of the Streets of St. Charles matches the proposed site elevation for the Bangert Island project and has direct access to the existing arterial road network. Over the past 10 years this site has transformed from a blighted motel into an anchor for regional growth. Cullinan Properties who has developed the Streets of St. Charles is almost finished developing this entire 27 acre tract. Within the next year the growth experienced on this site will be realized and future growth in this area will not occur unless investment is made to make the Bangert Island project area accessible to the transportation networks. Negotiations are being finalized with private development teams on the Bangert Island Project initiative to inject private investment dollars into the future success of the Bangert Island Riverfront Transformation, provided that the infrastructure and stormwater improvements are available to transform the blighted area into a destination like no other in this region of the United States.



Bangert Island Phase 1 site improvements

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Streets of St. Charles (www.streetsofstcharles.com)

Addressing the Problem: Environmental Sustainability

The Bangert Island Riverfront Transformation Project is located in an environmentally impacted area. The improvements proposed by the project will repair and improve the environmental resources in the project area while creating great opportunity for economic growth.

On page 4 of the 2001 Bangert Island HSR Model Missouri River Miles 34.3 to 28.1 Final Report written by the US Army Corps of Engineers – St. Louis District the problem description reads:

"Bangert Island at River Mile (RM) 31.1 to RM 29.0 on the Missouri River was once an island separated from the bluff at St. Charles by a side channel. However, closure structures were constructed in the 1930s and 1940s that likely led to deposition within the side channel. The deposition choked the original side channel entrance to the point of closure by 1980 and effectively reattached Bangert Island to the bluff. At the time of this study, only portions of the side channel conveyed water to drain Bangert Island and nearby St. Charles neighborhoods along the adjacent bluff.

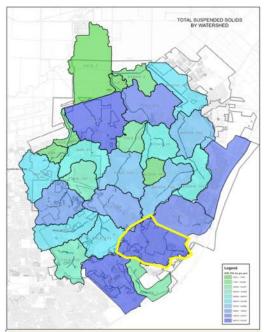
The closure of the side channel led to the loss of environmental features in this reach of the Missouri River. The side channel provided flow diversity not available in the main river channel. The flow diversity allowed for off river habitat for various aquatic species. The island itself acted as a predator-free habitat for avian species. Before side channel closure, the Bangert Island area had considerably more sandbar areas that are attractive to various species; these have since been buried under plant life and woody debris."

On August 2, 2016 City of St. Charles voters overwhelmingly approved Proposition P. Proposition P is a half-cent sales tax over 15 years that funds Parks (1/3) and Stormwater (2/3) improvements within the City of St. Charles. Stormwater improvements proposed under Proposition P address both water volume and water quality issues within the City.



In anticipation of vote, the City completed a Comprehensive Stormwater Masterplan in April 2015. The Stormwater Masterplan identified volumetric stormwater improvements along Crystal Springs Creek which feeds into the Missouri River via the Bangert Island chute as well as stormwater quality improvements based on environmental impact. The following exhibit shows the total amount of suspended solids within the City by watershed. The Crystal Springs watershed that feeds into the Bangert Island area has the highest concentration of suspended solids in the City. The Bangert Island Project will create natural filtration that will remove these pollutants from the water entering the new water quality basins and ultimately the Missouri River. The completion of the project will create over 40 acres of high quality riparian area. These basins will also help reduce the downstream head elevation and provide volumetric relief to residents who live upstream of the project area on Crystal Springs creek who experienced unprecedented flooding in 2011 and 2013 when localized strong storm events occurred in the area.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Stormwater Quality Map of Total Suspended Solids

The water quality basin improvements also provide the material needed to make stormwater improvements to the embankment ground and proposed roadway network. This material will be transported on site to the Phase 1 area, screened, placed, and compacted to roadway construction standards to provide flood mitigation (see the project cross section on Page 6 for a pictorial description). At the completion of the project this area will provide an amenity and a functional water quality improvement for the entire area that will offset impacts from the project and throughout the watershed.



Rendering of the type of smart growth and sustainable development implemented with the riverfront development project

Addressing the Problem: Stormwater Control

The Bangert Island Riverfront Transformation Project will raise over 20 acres of ground to remove it from flood risk. This removal will additionally benefit other adjacent properties to this project area that will be removed from

flood risk by providing protection from river flooding through elevation improvements to the ground between the river and the benefitted properties. The impact of this transformation coupled with transportation infrastructure investment will create an opportunity for growth that is unparalleled in the region or the State.



Existing buildings along S. River Road routinely flood, most recently in 2017 and 2019.

Significant storm events in 2011, 2013, 2017, and 2019 caused flooding damage that impacted residents in and adjacent to the Bangert Island project area. Public support for stormwater improvements proposed by the City's Proposition P was overwhelming (64% approval). Recent surveys showed that 97% of residents "believe the City is delivering on the promises made from the Prop P program." The passage of Proposition P provides the City with the opportunity to put these funds to work in concert with infrastructure investment from the BUILD program coupled with State of Missouri Funding and St. Charles County Road Board funds to produce a landmark project with multifaceted benefits.

A reduction in the tailwater elevation along Crystal Springs Creek will also help reduce the catastrophic flooding that the City experienced in 2011 and 2013 upstream of the project area. As the side channel chute filled in from the 1930s and 1940s until closure in the 1980s the tailwater of Crystal Springs creek was negatively impacted creating less vertical drop to covey water over a much longer and flatter distance to the Missouri River. The excavation and creation of the basin will aid in the restoration of pre-channelization conditions that were seen on Crystal Springs creek prior to the 1930s and 1940s.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Crystal Springs Creek Flooding upstream of Bangert Island Project Area

A necessary consideration when intensifying land use is the control of stormwater runoff from the site. The Bangert Island Riverfront Transformation Project will make the necessary volumetric stormwater detention improvements needed to offset the proposed hard surface infrastructure development. These improvements will complement the improvements noted above for water quality purposes, and provide an environmentally responsible design for riverfront improvement.

Addressing the Problem: Partnerships

The Bangert Island Riverfront Transformation Project has formed partnerships across the City and State to bring this project to fruition. Partnerships on the project include the US Army Corps of Engineers, the State of Missouri, St. Charles County, private developers, community groups, the regional planning agency, business groups, and a vast amount of political support from our elected officials.

Governor Mike Parson has met with the City and shared his enthusiastic support, and invited the City to apply for funding from various State agencies on a competitive basis. In the 2019 State Legislative session, HB 19.130 earmarked \$1,000,000 in State of Missouri funding for the project.

In the 2018 State Legislative session the Missouri House and Missouri State Senate passed a senate concurrent resolution of support (SCR 37) for the Bangert Island Riverfront Transformation Project. The State Senate supported the measure 31 yes, 2 absent. The State House supported the resolution 135 yes, 5 no, and 21 absent. This overwhelming support from our State Legislature,

paired with Governor Mike Parsons' support and Lieutenant Governor Kehoe's support has been instrumental in our pursuit of this pivotal project.

U.S. Senator Blunt and U.S. Senator Hawley have been instrumental in coordination with state and federal agencies and are enthusiastic and the City has coordinated extensively with their staff to garner support for the project. U.S. Congressman Luetkemeyer has helped the City in partnering with the U.S. Army Corps of Engineers to ensure the project provides both economic, environmental, and flooding benefits without affecting the navigational capacity and qualities of the main channel.

Institutions: Lindenwood University supports regional non-motorized transportation alternatives to provide vital infrastructure for their 10,000 student population.

Health Care Providers: SSM Healthcare supports the Bangert Island Riverfront Transformation project because it will spur economic activity, and provide access for mobility impaired citizens to access the community.

Regional Planning Agency: East-West Gateway Council of Governments is supportive of the Bangert Island Riverfront Transformation Project because it creates accessibility to this underdeveloped area through transportation improvements.

Business Groups: Large and small business alike support the Bangert Island Riverfront Transformation Project including the Missouri Chamber of Commerce, the Missouri State Director of Economic Development Rob Dixon, Ameristar Casino, Cullinan Properties, Bike Stop Cafe, TR Hughes Development, Home Builders Association of St. Louis & Eastern Missouri, OPO Startups, Millstone Properties, Cushman Wakefield, and Drury Hotels as it will provide a catalyst for continued economic growth in the region.

Political Support: The project has enjoyed the enthusiastic coordination with Senator Blunt and Senator Hawley's staff to help advance the project. United States Representative Blaine Luetkemeyer has been instrumental in garnering USACE support. The project is supported by United States Representative Ann Wagner, County Executive Steve Ehlmann, Missouri State Senator Robert Onder, Missouri State Senator Bill Eigel, Missouri State Representative Chrissy Sommer, Missouri State Representative Tom Hannegan, Former State Senate Pro Tem Tom Dempsey and Saint Charles Mayor Daniel J. Borgmeyer.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Stakeholders are engaged on plan to improve stormwater conditions

Why Invest BUILD in the Bangert Island Riverfront Transformation Project?

The Bangert Island Riverfront Transformation Project has National Significance.

The City of St. Charles is known throughout the nation as a unique and charming destination. With its existing assets and regional location, this project is uniquely positioned among other communities in the nation to seize upon this opportunity that generates economic development, puts residents closer to jobs, reduces vehicle miles traveled, enhances quality of life, creates environmental habitat lift, and eliminates flooding for almost 300 acres of prime development area while maintaining the island in its natural state.

BUILD funds play a pivotal role in filling the missing infrastructure improvements needed to realize the vision of a rich and vibrant riverfront, jobs, and a broader mix of uses are all integrated in an area of diverse transportation choices.

The Bangert Island Project is positioned to start construction quickly. The FY 2019 Appropriations Act requires that FY 2019 BUILD Transportation Discretionary Grants funds are only available for obligation through September 30, 2021. The Bangert Island Transformation Project is ready to satisfy applicable administrative requirements, including transportation planning and environmental review requirements. The project plan has been in development with the US Army Corps of Engineers for over 10 years, the project concepts have been analyzed and addressed. All FY 2019 BUILD funds will be expended by September 30, 2026.

The Bangert Island Riverfront Transformation Project will Stimulate New Private Investment.

Private investment is continuing in the Saint Charles downtown core. More than \$627,000,000 has been invested over the past 5 years, with an additional \$322,000,000 of investment anticipated within the next 5 years.

Lindenwood University, founded in 1827, is the secondoldest higher-education institution west of the Mississippi River. At nearly 17,000 students, it is one of the fastest growing universities in the Midwest. Lindenwood recently invested more than \$115 million to construct improvements including the J.Scheidegger Center and has committed \$69 million to create a "University Center" near its campus on First Capitol Drive.

SSM Saint Joseph Medical Center: Established in 1885, it has recently invested more than \$45 million to update their medical facilities and bring better healthcare to their patients. That investment resulted in additions to services, equipment, physicians and staff. The Health Center has invested several million dollars more with its acquisition and relocation of a U.S. Post Office site adjacent to its campus.

Cullinan Properties and Streets of Saint Charles: The Streets of Saint Charles is a \$385 million, 1.5 million square foot mixed-use development under construction at I-70 and Fifth Street. The project will create a "town square" with amenities for shopping, living, working, dining, and entertaining. The Streets of Saint Charles Redevelopment includes high-quality, affordable housing¹. The investment of BUILD funds into the Bangert Island Project provides a critical link to the Missouri River and also the Katy Trail. The BUILD investment will stimulate the existing Streets of St. Charles development, and the Streets of St. Charles will draw additional interest in the area extending the benefits of the investment of the BUILD grant.

Ameristar Casino and Resort Spa: Ameristar Casino was built in 1994, and a full-service hotel and health spa was added at a cost of \$240 million in 2008. This property generates significant tax revenue for the City and employs an estimated 1,300 persons. The transportation interconnections produced by the investment of BUILD funds substantially increases access to jobs and commercial activity realized at the Casino. The addition of Missouri Riverfront attractions just south of Ameristar will benefit Ameristar's continued growth and dominance as the leading Casino in the St. Louis metropolitan area by attracting new visitors to the area and will also provide the necessary infrastructure for a connection to the south along the Riverfront. The addition of a fixed line trolley from the St. Charles Area Transit hub to the Bangert Island area will

http://www.stltoday.com/suburbanjournals/stcharles/news/article_6c778d05-3d24-5bf6-afb1a5a652369a18.html

USDOT BUILD DISCRETIONARY GRANT APPLICATION

provide a stop and connection throughout the City and St. Louis County to Ameristar Casino.

The Bangert Island Project provides the core transportation system required to leverage further private investment.

The Bangert Island Riverfront Transformation Project Builds on Success.

Saint Charles is proud of the City's heritage and excited about the future. Volunteerism and investment are high, as evidenced by the City winning two awards from the AAA Midwest Traveler Magazine in August, 2011.

The City was selected as the Best Historical Small Town and the Festival of the Little Hills was selected as the Best Craft Fair in the Midwest. In addition, three other awards were received in the immediate area; Ameristar Casino Resort Spa was voted Best Casino; Boone's Colonial Inn was voted Most Romantic B&B; and the Katy Trail was voted Best Bike Trail in the Midwest.

The Bangert Island Riverfront Transformation Project ties together significant efforts from a wide range of governments, businesses, and individuals to create a coherent and comprehensive transportation system that serves the community, leverages ongoing private and public investment, and encourages growth.

The Bangert Island Project is focused on creating the necessary infrastructure to create a place where economic recovery and access to all citizens can transform the riverfront from an unutilized flood fringe to a center for economic prosperity and new business. The project will overcome the physical barriers that limit access and use of the area.

Why Now?

President Trump visited St. Charles in December 2017 to talk about tax reform and economic prosperity. During his visit, the President highlighted many of our local partners' efforts to create jobs and opportunity within St. Charles. St. Charles is focused on creating an environment for growth and prosperity. Investing BUILD funds in the Bangert Island Riverfront Transformation Project will build on the existing successes in St. Charles and create opportunity for future growth that will be an example for responsible riverfront development for the rest of the nation.



President Trump holds rally at St. Charles Convention Center (politifact)

Even though St. Charles has been able to continue growth in the community through the Streets of St. Charles and other developments, development potential is waning due to the lack of availability of sites without constraints for development. Even though the potential for the Bangert Island area is unmatched, the project site would be very difficult for a private developer to accomplish without the support and assistance of the City of St. Charles, the US Army Corps of Engineers, the St. Charles County Road Board, and BUILD.

Strong anchors for success exist surrounding the Bangert Island project area. Successful established businesses and attractions neighboring the project area will drive the rapid development and success of the Bangert Island project. Complementary businesses and development will increase the potential of the existing businesses and will create a winwin for the entire area.



Ameristar Casino Resort and Spa St. Charles

USDOT BUILD DISCRETIONARY GRANT APPLICATION

Project Partners

There is a community vision for the Bangert Island Riverfront Transformation Project that the City, citizens, and other agencies and private organizations all support; a vibrant riverfront that stretches from the historic roots of Main Street to the future Bangert Island project area.

The City has worked closely with the local community leaders in the development of this initiative. Numerous meetings with the public and coordinating agencies have been held. City Staff has testified on behalf of the project to the Missouri State House and Missouri State Senate.

Financial Partners

City of Saint Charles

The City of Saint Charles is the ninth largest city in the state of Missouri, and the second largest in Saint Charles County, with a population of 70,329 and had a \$142 million appropriation budget in 2019. The City of St. Charles is committed to funding this project.

State of Missouri

In 2019, the State of Missouri ear-marked \$1 million in the State's annual budget to assist in funding the project. The City is currently pursuing other funding programs on a competitive basis.

Corps of Engineers

The Corps of Engineers continues to partner with the City of St. Charles on a \$2 million Planning Assistance to States (PAS) grant. This work furthers refines the details of the responsible riverfront development plan and advances the preparation of NEPA materials.

St. Charles County Road Board

The St. Charles County Road Board is committed to funding this project with the assistance of BUILD funds. The St. Charles County Road Board was formed by a vote of the residents of St. Charles County in 1985 and has been reauthorized an additional 3 times by voters. This half cent sales tax promotes the expansion and construction of transportation infrastructure in St. Charles County.

Letters of Support

In addition to the financial partners, there are many other partners assisting the region in realizing its dream to become a more sustainable community, promote healthy and active living, and provide non-motorized transportation alternatives, including Governor Mike Parson, Senator Blunt, Senator Hawley, and Congressman Luetkemeyer. The City has received unequivocal support from many

community leaders, local businesses, local institutions, local non-profit agencies, and regional agencies (see Appendix for support letters).

Please visit www.BangertIsland.com to view additional video testimonials of support for the Bangert Island Riverfront Transformation Project.

III. Primary Selection Criteria

Because of the planning and forethought invested into this project since the initial concepts were proposed over a decade ago, this project has transformed into a multifaceted project that naturally fits the criteria for the 2019 BUILD Grant. This initiative combines a road infrastructure project, with permanent job creation, riverfront development, innovative transit, pedestrian infrastructure, road and bridge construction, and intersection safety improvements all supported by nonfederal investment. And while similar projects may be hampered by environmental opposition, this project has roots in a creative idea advanced by the US Army Corps of Engineers to address critical aquatic habitat and stormwater quality issues in the area.

"What? A river development good for environment"

proclaims the 2010 Post-Dispatch column about Bangert Island development. This headline captures the complexity and diversity that makes the Bangert Island Riverfront Transformation project align perfectly with the 2018 Build Grant selection criteria. This project will be a model of the innovative approach the US Department of Transportation has requested to change the way infrastructure is built, financed, and maintained.



May 2010 Post-Dispatch column on development at Bangert Island

The Bangert Island Riverfront Transformation project will provide numerous long term benefits to the region. This project benefits the region in each merit selection criteria category. This project provides a once in a generation opportunity to couple innovative infrastructure construction with critical environmental restoration work. The project will be a catalyst to promote increased physical activity and healthier lifestyles, decrease long-term needs on suburban infrastructure costs, and create a desirable, high density mixed use environment for decades to come.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

Economic Competitiveness

Economic Competitiveness: Vehicle Operating Cost, Value of Time, Direct Property Value Increase, Indirect Property Value Increase

Benefit: \$84,591,000

First and foremost, this project will be a tremendous economic force in the region. According to IMPLAN Economic Impact Analysis, when complete, it is estimated the development will create 4,000 new jobs for the region and have a \$1.5 billion dollar economic impact. Importantly, the project will also increase the regions attractiveness to businesses by creating more dense pedestrian friendly development that encourages living, working, and playing locally. This type of multi-use development will change the tide on the regions ability to attract national and international employers.

Recently, the St. Louis metro area has failed to attract the top national and international employers to the region. The primary reason for the regions inability to compete against other cities across the nation is due to lack of development friendly locations with excellent road, pedestrian, transit infrastructure in place; this development would change the tide, and singlehandedly create a development that will draw the best and the brightest international talent. This project will position the St. Louis metro area to become the Silicon Valley of the Midwest.

The proposed development is bounded by successful job creating developments. The Family Arena, Streets of St. Charles, Ameristar Casino all draw people to the region, but are left disconnected, geographically and economically, from each other. The Family Arena, owned and operated by project partner St. Charles County, is located on the southern end of the development. The Family Arena is a 10,000 person event center hosts concerts, conventions, sporting events. The development detached from any supporting development, including dining, lodging, employment, and secondary entertainment; Family Arena guests are forced to travel by car from locations around region.



Photo of the St. Charles County owned Family Arena

Even though the Arena is located adjacent to the Katy Trail, the Nation's longest rail-to-trails conversion, the Family Arena is not currently easily accessible to bicyclists or foot traffic. Despite all these shortcomings, St. Charles County has recently been approached by private entities interested in purchasing the Arena. This offer signals the understanding of the economic potential of the development site. The Bangert Island Riverfront Transformation project will make the Arena more attractive to national events, and will give it the infrastructure necessary to host large sporting and concert events.

Near the northern end of the project, Cullinan Properties began development at Streets of St. Charles in 2008 and quickly established itself as a primary entertainment destination in the Midwest. With excellent surrounding amenities and careful planning, the Cullinan Properties' development managed to thrive during the Great Recession that destroyed economic growth in so many locations across the nation.



Photo of Streets of St. Charles Development Summer Concert Series

USDOT BUILD DISCRETIONARY GRANT APPLICATION

As a community partner, Cullinan Properties is committed to ensuring continued growth that has already brought so much economic benefit to the region.

This mixed-use development to the west of Bangert Island provides more than 1 million square feet of dining, shopping, entertainment, residential, and office space. This selective 27-acre mixed use development has been successful in drawing highly sought employers from across the nation. A side effect of the nearly-full development is that otherwise attractive tenants have been turned away due to lack of space.

In the past year, Cullinan Properties has approached the City and discussed the expansion of Streets of St. Charles to the Bangert Island Riverfront Transformation Project footprint, and has marketed space in Bangert Island Riverfront Development at meetings and nationwide conventions, including the International Council of Shopping Centers annual Retail Convention (ReCON). Their promotional materials have marketed the Bangert Island site as opening in 2022.

Construction has commenced on South River Road/Arena Parkway Construction and design and NEPA materials preparation is underway. In 2020, the project will begin adding more jobs to the region, increasing to a total of 4,000. This project will attract businesses and workers to a presently vacant or underutilized property, thus providing additional stimulus for economic development within the region.

In addition to the previously discussed economic benefits, this project will also greatly reduce the number of regional vehicle miles traveled (VMT), thereby reducing the annual investment citizens are required to make in non-renewable resources (gas and oil). At present, nearly all of region is only accessible by automobile in spite of its relative density in the historic core. By reducing local car trips by leveraging dense multi-use developments, increasing active transportation trips, and expanding the opportunity for non-automobile commuting through local autonomous electric trolley service, this project will contribute to the reduction on reliance on foreign energy. The addition of the autonomous electric trolley will make this development a true Transit-Oriented Development (TOD).

By providing a more efficient live-work-play environment, residents will travel nearly 13 million fewer miles per year, and are expected to save \$5 million annually in vehicle operating costs. Additionally, the reduction of miles driven results in a time benefit. Calculated according to USDOT guidance, drivers will save over \$6.3 million annually. Additional benefits derived from the reduction of vehicle miles traveled are further discussed in the subsequent sections. This type of multi-use development also reduces the need for the future federal-aid facilities and creates greater value for local public and private development. Additionally, "net new" value will be created by relocating development opportunities to this development that would otherwise occur in more generic (i.e., "placeless") auto-dependent greenfield sites.

Decreasing transportation costs and providing multimodal options will create more dollars spent in the local economy.

The compact, mixed-use development combined with the multi-modal transportation options will allow residents to live closer to employment centers and reduce private vehicle trips to get places. This will create a direct reduction in transportation costs per household per year. Multi-modal neighborhoods allow households to own none or one car (instead of two or three), freeing up expendable income for things like food and entertainment. By creating compact development and housing options near employment centers, or providing cheaper transportation options, more money can also be spent on local businesses.

This project will create a highly functional multimodal development that will attract jobs, students, and investment from an international pool, ensuring that these key institutions will continue to be economically competitive through the delivery of very high quality services.

In addition to the direct jobs and economic benefits provided by the Bangert Island Riverfront Transformation Project will also encourage growth on surrounding parcels of land. Adjacent to the Phase I is another 13.4 acres not currently developed to its highest and best use. This project will provide immediate benefits in terms of increasing land values to property owners, and encourage additional private investment.

Without the infusion of outside investment the BUILD Discretionary Grant would provide, one-quarter of the City's riverfront will continue to develop in a way that is not consistent with the highest and best use. The 325 acre area will continue to flood and remain underutilized for years to come.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

Although the Certified appraisals are provided for the pre-developed conditions, several properties appeared to have higher market values according to the St. Charles County Assesor's records. By using the higher of the two values, this allows the analysis to provide a conservative and realistic assessment when comparing to future property value increases. On average, it the market value of the existing un-improved property was \$120,359 per acre or \$2.76 per square foot. Certified appraisals of adjacent properties estimate the improved property will garner \$13 per square foot or \$566,000 per acre. All certified appraisals are provided as attachments of the Benefit Cost Analysis. Analysis shows a benefit derived from the direct improvement of parcels of \$6.3 million.



Residents oppose unpopular waste transfer center proposal near Family Arena

Over the years, residents of the City of Saint Charles have seen multiple proposals for redevelopment of adjacent properties, including portions of the "old quarry" site across the street from the development. The private developments proposed over the years were unattractive to nearby residents, and would have damaged property values in the area for years to come.

"The City has talked about developing that whole area into some kind of riverfront project for the past five or ten years. Putting a trash transfer station in that proximity would negate the ability to do any of those things."

> Scott Stork, St. Charles County resident interview with KSDK News Channel 5

This project will attract development attractive to nearby property, and will increase surrounding residents' property values. It is expected surrounding property that is not currently developed to its highest and best use will see an increase in value approximately 135% or \$861,000 for the 13.4 acres adjacent to improvements. Separately, along the shores of the silted-in channel, several blighted-

homes are frequently damaged by flooding along the Missouri River. The City has already approached multiple property owners to discuss the relocation to less flood prone areas. This relocation would not only provide a benefit to the current property owners, but also reduce the draw on an already financially strained National Flood Insurance Program.

In addition to increasing benefits to current residents, this project will bring international investment and interest. Lindenwood University, about 1 mile north of the project is a fast growing university that offers 120 undergraduate and graduate programs to approximately 10,000 students including students from 49 states and 70 countries. Their ability to continue to attract the best and brightest students from international locations is predicated on providing top notch programs in a community that is safe, appealing, and accessible to a population that does not have access to automobiles. Previous and ongoing investments in the City's road, transit, trails, and sidewalk systems ensure efficient multi-modal access for students throughout the City. This development will further enhance and leverage the use of existing infrastructure built with non-federal investments.

In the center of St. Charles, SSM Saint Joseph Medical Center recruits its physicians from all over the globe. Like Lindenwood, their ability to fill strategic positions in their faculty is a function not only of the attractiveness of the hospital as an institution but also the attractiveness of the community in which they will live. Like many other hospitals across the country, SSM Saint Joseph Medical Center seeks out the very best physicians from a very competitive international pool. Community quality of life, such as walkability and bikeability, is a critical factor in attracting this talent.



Rendering of Bangert Island Riverwalk

Current population projections in Saint Charles County predict growth spreading toward outlying, greenfield development. The resulting reduction of nearly 13 million vehicle miles annually will increase the efficiency of the existing roadway systems thereby reducing congestion that would be attributed to additional vehicular trips

USDOT BUILD DISCRETIONARY GRANT APPLICATION

without the presence of non-motorized transportation alternatives. Secondarily, this project will increase the desirability of housing in the region with a more attractive and effective non-motorized transportation system for owners and employees of businesses and institutions in this area. In turn, we are confident that people will consider relocating to this area in lieu of driving in from outside this area, in particular from greenfield areas.

By orienting mixed-use development around an enhanced transportation network and public realm, a "place premium" will be realized that otherwise will be lost if development occurs in a more generic environment.

The most highly-valued real estate developments are those that create a vibrant mix of uses around a well-defined public realm. Whether it is retail, office, or residential development, greater economic returns (in the form of higher occupancy, rents, and land values) result from placemaking than they otherwise would in commoditized developments. The revitalization of this project area will be oriented around more dense development and improved multimodal transportation network.

Environmental Protection

Environmental Sustainability: Ecosystem
Benefits, Emissions Benefits
Benefit: \$5,990,000

Another of the pillars of the Bangert Island Riverfront Transformation Project is the environmental restoration the project will provide. Historically, Bangert Island played an important role in the natural diversity that often accompanies the river. Navigational changes made years ago by the US Army Corps of Engineers caused extensive damage to the aquatic habitat.

The shallow water habitat and forested wetland once provided by the island provided diverse habitat for fish, avian, mammalian, and macroinvertebrate populations that thrive in the complex natural ecosystems.

In the early 1900's, the US Army Corps of Engineers (USACE) began further work to channelize and stabilize the river for navigation purposes in the St. Charles area. In 1912, USACE was commissioned to create a navigational channel along the Missouri River between Kansas City and St. Charles. In order to accomplish this goal, the US Army Corps of Engineers extensively used wing dykes and levees to straighten and channelize the

river. Over the next 50 years, the channel would be further modified. In 1925, USACE began widening and dredging the channel to a width of 200 feet in order to ease the navigational difficulties and further reduce the dangers of transporting goods down the river. Later in the 1940's the Missouri River Bank Stabilization and Navigation Project aimed to further increase the river's navigational channel to a width of 300 feet. Today, it is estimated that nearly 1/3 of the Missouri River flows through artificially straightened channels.

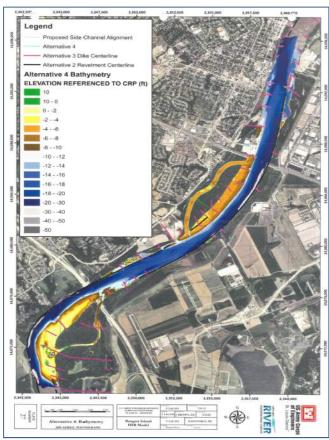
While making for an efficient mode of transportation for agricultural goods down the river, the channelization of the river has destroyed aquatic ecosystem and natural wetlands in the area. Areas along the Missouri River that once consisted of shallow water riverine habitat were damaged by wing dikes, revetment, and levees. Near Bangert Island, closure structures were constructed in the 1930's and 1940's near the inlet of the side channel chute between river mile 31.1 and river mile 29.0. These constructed navigational changes altered the properties of sediment deposition.

"The deposition choked the original side channel entrance to the point of closure by 1980 and effectively reattached Bangert Island to the bluff. The closure of the side channel led to the loss of environmental features in this reach of the Missouri river."

> -Excerpt from US Army Corps of Engineers Bangert Island HSR Model Report

As explained in the 2011 US Army Corps of Engineers Bangert Island HSR Model Report, "the side channel provided flow diversity not available in the main river channel. This flow diversity allowed for off river habitat for various aquatic species. The island itself acted as a predator-free habitat for avian species. Before side channel closure, the Bangert Island area had considerably more sandbar areas that area attractive to various species; these have since been buried under plant life and woody debris."

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Early concept from 2011 US Army Corps of Engineers Bangert Island technical analysis of concepts for environmental restoration.

The Environmental Protection Agency (EPA) advises on the importance of wetlands downstream of urban areas. These wetlands act as natural detention areas and natural water quality basins. For example, by EPA estimates, bottomland hardwood riparian wetlands along the Mississippi River once stored at least 60 days of floodwater; presently they only store approximately 12 days of flood water. The damage the river control structures caused to the side channel chute has contributed to the increased flooding of homes and commercial buildings.

The elimination of the riparian wetlands has also caused larger discharge of pollutants and sediments to the Missouri River. By slowing water before it discharges into the Missouri River, sediment and other pollutants are removed from aquatic habitat, making the Missouri River more attractive to wildlife and recreation. The City of Saint Charles completed a Comprehensive Stormwater Master Plan in 2015. This study identified the impacts in the project area of polluted surface water. The surface waters directly impact the source of the City's drinking water in addition to a reduction of fish and wildlife habitat.

Crystal Springs at one time flowed into the side channel chute of the Missouri River near the Phase I portion of the Bangert Island Riverfront Transformation Project. This watershed is afflicted with extensive non-point source pollution. The Crystal Springs watershed includes several large commercial developments, in the upper reaches of the watershed, extensive residential development, and Interstate 70. The more than 1,000,000 vehicles per week that travel on the interstate adjacent to the project site contribute significantly to the sediment, or suspended solids, that make its way to the river. The sediment that reaches the river has impacts ranging from reducing fish rearing habitat, create taste and odor problems in drinking water, and impairs recreational opportunities.

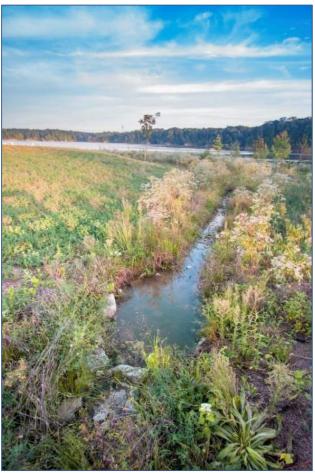


Photo of a recent short-duration high-intensity storm that contributes to flooding and pollution in the Crystal Springs watershed

The figure shown previously in this document shows the measurement of Total Suspended Solids in each of the City's watersheds, and highlights the fact that Crystal springs is one of the most polluted aquatic resources within the City. A darker color denotes a more polluted watershed. Since the side channel cute that once detained and treated the runoff was damaged by river navigation projects, the Creek dumps untreated water straight into the Missouri River.

This project would help restore this shallow water riparian habitat. The one-time side channel chute is now primarily a wooded wetland; this Phase 1 would transform 20.7 acres back to riparian area and transform 2.2 acres to greenspace. Based on Federal Emergency Management Agency land value estimates, this will provide a \$5.9 million annual benefit to the area.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Wetlands and shallow water habitat provide important benefits to ecosystem

In addition to direct environmental restoration improvements, the Bangert Island Riverfront Transformation Project will offer more environmentally sustainable and energy efficient modes of transportation. More, safe and efficient transportation options will encourage users to walk, bike, or take public transit instead of single occupancy vehicles, proving cleaner energy options.

By concentrating and connecting the employment centers, neighborhoods, attractions, transportation centers in a development hub there will be a reduction in greenhouse gas emissions through the reduction of vehicles miles traveled (VMT). It is estimated that the development will directly reduce VMT within the development by 13 million miles annually, which results in a \$354,000 annual benefit by reducing SOx, NOx, and particulates. Additionally, the construction of a multi-use development hub within proximity to destinations as well as increasing usership of regional trail systems will help decrease the overall VMT.

In addition to this reduction in VMT from other modes of transportation, there will be a reduction due to the change in land-use along the corridor. Traffic studies and analysis of multi-use developments commonly discuss the concept of shared trips. A recent study completed by Urban Land Institute conservatively estimated that by developing land in a walkable, compact form a 20% decrease in VMT can be achieved. The planned transportation improvements are the critical first step to start the transportation transformation needed to encourage and promote a walkable environment.



Rendering showing concentration of residential neighborhoods with employment, shopping, and attractions at the proposed Bangert Island Riverfront Transformation Project

The City of Saint Charles is conscious of the decisions they make relating to the environment. In 2010, the City implemented a Green Point Rating System (GPRS) in order to incentivize sustainable development and redevelopment. Special benefits in the form of reduced set-backs increased building heights, site efficiencies, expedited reviews, parking reductions, and building permit fee reductions are provided to development projects that incorporate sustainable technology. The Bangert Island Riverfront Transformation Project will provide the perfect venue for investors to take advantage of the new infrastructure that will be a catalyst for sustainable redevelopment. The GPRS incentive code can be found at the link below.

https://ecode360.com/27718508

Quality of Life

The Bangert Island Riverfront Transformation Project will increase the quality of life for citizens around the region. Improvements to transportation infrastructure, environmental improvements, and smart growth development will make St. Charles County and the City of Saint Charles a more attractive place to live, work, and play.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Photo of mountain biker on one of the natural surface trails on Bangert Island

The transportation infrastructure improvements along Arena Parkway, South Main Street, and Old South River Road will help improve travel time and safety. A roundabout and signal are proposed within the Phase 1 development to help reduce crashes and reduce congestion. It is estimated that the intersection improvements associated with this project will reduce travel time for the vehicles that travel the corridor daily, resulting in a total vehicle travel time savings. Additionally, transit upgrades will provide additional quality of life benefits by reducing the need for privately owned vehicular traffic.



Local businesses are primed to take advantage of recreation based economy.

Separately, the environmental restoration of the side channel chute to a water quality basin will have huge impacts to the quality of life of the region. The water quality basin will serve as a regional attraction. The Bike Stop Café, one of the project supporters and key

stakeholder, immediately realized the business and quality of life potential of the project.

"A lake near Bangert Island would be huge. I mean, it would be the only lake near St. Charles where I would want to get in the water. Does your head go where mine does? I immediately think triathlon. And I assume there could be an opportunity for us to rent kayaks? Who do we need to talk to in order to make sure we can get in the development?" -Jodi Devonshire, Owner of Bike Stop Cafe in Saint

Charles and Chesterfield, Missouri

Bangert Island, which is currently operated and maintained as a County Park has a network of natural surface trails. The development would keep the island park in its natural state and restore damaged habitat. The City has already begun coordination with Tony Caruso, the Gateway Off-Road Cyclists Bangert Island Trail Steward, on the development. In the past Caruso and the Gateway Off-Road Cyclists organization have put numerous volunteer hours to build the trails on the island. This project will preserve the natural surface trails on the island along with extending them to make better connections to the Katy Trail and paved surface development trails and sidewalks.

"The Bangert Island area is the only place in the region where you have a network of crushed gravel, natural surface, and paved surface trails all within a 1-mile radius."

> -Tony Caruso, Gateway Off-Road Cyclists' Bangert Island Trail Steward



Trail sign showing the list of connections to Centennial Greenway Trail, Katy Trail, Bangert Island Natural Trails, and Creve Coeur Lake Park Trails

Creating Complete Streets that contain a multi-modal system will provide low cost major transportation benefits by giving people choices, creating a livable environment

USDOT BUILD DISCRETIONARY GRANT APPLICATION

for residents to enjoy, connecting low-income and elderly populations to modal choice, connecting large job centers with residential neighborhoods, and connecting existing rapidly growing successful developments. On the whole, the development leverages transportation infrastructure to enhance and improve the future. The regional vision involves the creation of multi-modal corridors that includes accessible sidewalks for pedestrians, biking facilities, and a trolley transit route. This project will better serve the nearly 2,000 people that will call this development work or home along with another 100,000 within 3 miles of the development area.





The City plans to expand the current historic trolley (above) to include a state-of-the-art 1.7 mile autonomous electric trolley route (below), which will be the longest operational Autonomous Electric Trolley route in the United States

This project includes the longest implementation of an Autonomous Electric Trolley route in the United States. The installation of the 1.7 mile trolley route will improve access to shopping and dining at Historic Main Street, Streets of Saint Charles, and the Ameristar Casino. The innovative trolley will also help alleviate the parking congestion along Historic Main Street and reduce the number of short duration automotive trips in lieu of pedestrian focused trips.

It is estimated that by providing the pedestrian infrastructure this multi-use development will provide generate more bicycle trips. Additionally, the transportation improvements will provide better opportunities to the disabled, elderly, and low-income

households where amenities are located within walking and biking distance. Providing more and efficient transportation options to these historically underserved populations makes a community more attractive and enriches the lives of all of its residents. SCAT ridership information shows that 88% of riders fall in the reduced, disadvantaged rider fare and 22% are over the age of 62. Creating a riverfront trolley transit system will not only enhance the tourism draw of the development, but also offer residents a lower cost transportation option to regional jobs, medical services, shopping, and educational opportunities located within the development and City of Saint Charles. The less money users spend on transportation costs, the more money they can spend elsewhere. Non-motorized transportation is the key for this possibility.



Rendering of improved Katy Trail, the nation's longest Rail-to-Trails conversion through the Bangert Island Riverfront Development Project.

Complete streets, accessible sidewalks, connected trail systems, and access to public transportation all improve property values and encourage reinvestment in communities. Numerous national studies from the National Association of Homebuilders and the Urban Land Institute indicate a strong preference for urban and/or walkable amenities. The Streets of Saint Charles, SSM Saint Joseph Hospital, Lindenwood University, Ameristar Casino, and other private organizations have invested or are in the process of investing, \$949 million into the community to improve the quality of life for residents, employees, and visitors. Infrastructure investment has not kept up with private investment.



Potential for redevelopment in St. Charles due to BUILD investment

USDOT BUILD DISCRETIONARY GRANT APPLICATION

The Bangert Island Riverfront Transformation Project will help increase community revitalization.

Growth is going to happen in region. In fact, over the next five years, St. Charles County is expected to capture three-fifths of all population growth in the Saint Louis region. Given current trends, the Historic Center/Old Saint Charles is not anticipated to capture any of this growth without improvements to infrastructure, policy, and regulatory changes. Investments made in the core of the community are much more economically suitable and sustainable.

The Bangert Island Riverfront Transformation Project will coordinate and leverage federal policies and investment through the numerous partners and public private partnership.

Collectively, SSM Saint Joseph Hospital, the Streets of Saint Charles mixed-use development, and Lindenwood University have invested in recent years or are in the process of investing more than \$949 million. This massive expansion is bringing high quality jobs, expanded education resources, urban housing, and new retail offerings to the Saint Charles market.

While infrastructure work has been completed in support of this local investment there is still a significant amount of work that needs to be done to complete these efforts. Recent major investments, including the funding of \$36 million in upgrades to Interstate 70 just west of this project, will be linked together by this project. This project is intended to give structure to these investments within the region.



© Strava 2017 Heatmap showing bicycle, pedestrian, and kayaking activity

Based on the local investments already expended or committed and the IMPLAN Economic Impact Analysis of future investments through this project, we anticipate that the BUILD funds will help to leverage local investment on a **25:1** basis (local investment vs. federal dollars).

State of Good Repair

State of Good Repair: Reduced Roadway
Maintenance Costs
Benefit: \$763,000

The Bangert Island Riverfront Transformation project will improve the condition of existing roadway and sidewalk facilities and install new transportation infrastructure. Specifically, when the City applied for the BUILD Grant in 2018, Arena Parkway/S. River Road was currently failing, and the County had begun design.

The County has now begun construction on the \$1.6 million in non-federal investment to reconstruct the pavement to arterial standards.

Additionally, the road is being designed with wide outside lanes for bicyclists. By reconstructing portions of South River Road, the City saves in future maintenance costs. Similarly, the bridge and pavement on Old South River Road is in poor condition, and will need to be replaced within the foreseeable future. It is estimated this bridge and pavement reconstruction would cost the City \$2 million.

Separately, the Lombard Street and South Main Street Intersection is projected to meet signal warrants in the next 5 years based on increased growth in Streets of St. Charles at an estimated cost of \$200,000. This project would install a signal at the intersection to alleviate traffic concerns and crash causing safety issues.

In total, this project will reconstruct 3.6 lane miles of deteriorating pavement and bridges, and reduce the future maintenance costs. In addition, the project will construct or extend 1 lane mile of new roads and over 3 miles of new sidewalks and trails.

The project team has the revenue to sustain long-term operations and maintenance of the Bangert Island Riverfront Transformation Project.

The City of St. Charles has an annual appropriation budget of \$3 million for transportation maintenance and operations. The additional investment of 300 apartments or condos, 200,000 square feet of office space, 200,000 square feet of retail development will add to the City's tax base which will help with maintaining and improving the long-term community vision.

USDOT BUILD DISCRETIONARY GRANT APPLICATION



Poor roadway conditions in the project area will be reconstructed

Other Project Benefits:

- Encourages the utilization of existing non-motorized transportation infrastructure including the Katy Trail
- Encourages the utilization of transit infrastructure by installing state-of-the-art Autonomous Electric Trolley Route
- Brings currently non-compliant ADA facilities into compliance with ADA guidelines.



Encourage better utilization of the Katy Trail and improve ADA facilities

Safety

Safety: Avoided Crash Benefit – Smart Growth Benefit: \$41,967,000

While the Bangert Island Riverfront Transformation Project includes measures to enhance transportation safety, the primary measure is more simple: remove vehicles from the road. By utilizing a "Smart Growth" development that is oriented around increasing non-motorized facilities use and higher transit ridership, it is estimated the development will reduce the number of annual vehicle miles traveled by over

13 million. Based on FHWA's Office of Safety Report, Safety Cost, March 2018 and the Fatality Analysis Reporting System (FARS) 2006–2014 (Final File) and 2015 Annual Report File (ARF); National Automotive Sampling System (NASS) General Estimates System (GES) 2006–2015, it is estimated that crashes cost Americans \$47,933,398 per 100 million miles. It is estimated that the community will save more than \$6.2 million annually in avoided crash benefits.

Among the features that helps improve the safety within the development and roadway network, the project will focus on increasing the safety at several accidents that have had multiple accidents in the past few years. Since the Lombard and South Main Street Intersection was constructed in late 2012, 10 vehicles were involved in crashes. This project will signalize the intersection at Lombard. This project is also designed with access control principals in mind, and will further reduce crashes that may have been caused by the influx of traffic caused by the development.



Smart Growth principles will be used to reduce vehicle miles traveled and remedy unsafe conditions

Making non-motorized facilities and transit the centerpiece of this development will improve safety in the region.

The most vulnerable users of the transportation system are pedestrians and bicyclists. The County is currently constructing bicycle lanes after discussions with local cyclists about dangerous on-road facilities along Arena Parkway/S. River Road. The funds will allow for wider on-street bikelanes in their design of Arena Parkway/S. River Road. This project will help increase safety for these users with the following amenities and improvements:

- ADA accessible sidewalks.
- ADA accessible textured crosswalks, pedestrian countdown timers at signalized intersections and raised trail crossings.
- Bicycle facilities to provide ample room for a wide range of cyclists.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

 Traffic separated bicycle and pedestrian facilities from motorized vehicles.

Proposed non-motorized improvements will decrease the number of crashes along the facilities and provide a more livable, walkable, sense of place for users.

Non-Federal Revenue for Transportation Infrastructure

The project uses creative funding mechanisms from a variety of non-federal sources. As financial partners on the project, the City, State of Missouri, and County all have unique funding sources approved by voters that can be drawn from in order to advance this project. The County Road Board, a vital funding road and highway funding mechanism in the area, utilizes a ½ Cent Transportation Sales Tax. These County Funds are limited to funding roadway improvements and associated infrastructure. The City submitted the Bangert Island Riverfront Transformation Project Phase 1 for funding.

In the City's Capital Improvement Plan, the City has devised a strategy to fund the project by utilizing funds from a variety of sources. One generator of revenue for City infrastructure is the Ameristar Casino. "Gaming Funds" are designated to road and bridge related improvements. Additionally, the City will draw on Proposition P funds approved by voters in the City of Saint Charles in 2016. Proposition P was a Parks and Stormwater Improvement tax that utilizes a ½ sales tax. These funds can be utilized for parks, stormwater, and water quality improvements.

Additionally, the City and County have discussed the future use of a "hybrid Tax-Increment-Financing" incentive for possible use that would draw on the City's portion of the sales tax generated by development. Additionally, the City has determined a Community Improvement District (CID) could be a useful tool for future parking garages or other infrastructure to assist in the development of the parcel. The figure below shows a description of sources of funding for the project.

Innovation

Autonomous Trolley: This project will include the implementation of the longest Autonomous Electric Trolley Route in the United States. This type of investment in innovative infrastructure helps the United States keep pace with other countries including China, France, and the Netherlands who are actively investing and implementing similar cutting edge technology.

Design Build Option: The City of Saint Charles has a specific code allowing and promoting design-build projects if there are time constraints. The City is highly

supportive of making the Bangert Island Riverfront Transformation Project a design-build project to meet mandated deadlines, but even without use of design-build, the project schedule demonstrates funding obligation by September of 2020.

Funding Source	FY 2018	FY 2019	FY 2020	FY 2021	Total	Confiden ce Level
Federal - 2019 BUILD Grant (Ph. 1)			\$5,000,000	\$ 5,000,000	\$10,000,000	Medium
Federal - U.S. Army Corps of Engineers PAS Grant Ph. 1		\$1,000,000			\$1,000,000	Acquired
Non-Federal: Missouri State Budget Appropriations Ph. 1			\$1,000,000		\$1,000,000	Acquired
Non-Federal: City Road Ph. 1	\$1,148,013		\$2,000,000	\$1,500,000	\$4,648,013	Budgeted
Non-Federal: City Storm (Prop P) Ph. 1	\$1,000,000	\$3,000,000			\$4,000,000	Budgeted
Non-Federal: County Road Board Ph. 1	\$157,156	\$1,454,331		\$1,462,536	\$3,074,024	High
Non-Federal: City Water Ph. 1		\$50,000	\$250,000	\$250,000	\$550,000	Budgeted
Non-Federal: City Sanitary Sewer Ph. 1		\$250,000	\$250,000		\$500,000	Budgeted
Total	\$2,305,169	\$5,754,331	\$8,500,000	\$8,212,536	\$24,772,037	

National Model: The City of Saint Charles aligns with the Presidential Administration's desire to gain greater impact for every federal dollar spent by reducing unnecessary redtape and changing the way projects are built, financed, delivered, and maintained. The City is devoted to goal of improving project delivery, and has devised several strategies to help streamline design and construction efforts. Through planning and community involvement, the City has a vision with support from numerous private and public partners. The City proposes to track this investment over the next 20 years to measure the benefits and use as a case-study in the years to come.

Alternative Financing: The project uses funds from a variety of sources. The County utilizes a ½ Cent Transportation Sales Tax for a portion of the improvements. The City plans to pull funds from Gaming Funds designated to Street improvements generated by the Ameristar Casino. Additionally, the City will draw on funds approved by voters in the City of Saint Charles in 2016 approving a ½ sales tax for stormwater and water quality improvements. As previously stated, the City and County have designed a "hybrid Tax-Increment-Financing" incentive for possible use that would draw on the City's portion of the sales tax generated by development.

Aggressive Partnership: The City of Saint Charles has actively sought out potential regulatory bodies that had potential to delay the project, and found ways to make them project partners. The City has worked for the past decade to learn with the US Army Corps of Engineers who will be

USDOT BUILD DISCRETIONARY GRANT APPLICATION

responsible for the brunt of environmental permitting, and recently were successful in involving them as project partners in a program that will give a roadmap to avoid permitting slow-downs, maintenance, and hydraulic design. Similarly, the City has engaged state agencies involved in permitting and regulation.

Developer Driven Infrastructure: The City will use strategies used by developers across the Nation that currently allow them to deliver projects more quickly and inexpensively than The City has begun exploring options to partner with developers. Time and time again, City Staff hears that private developers are able to deliver infrastructure faster and more inexpensively than public entities. City staff has begun investigation of a fully developer constructed infrastructure improvements with City staff administering the program.

Environmental Sustainability: The project uses an innovative approach of recycling spoils from an environmental restoration project to spur economic growth.

Partnership

The City has received unequivocal support from many community leaders, local businesses, local institutions, local non-profit agencies, and regional agencies (see Appendix for the numerous support letters from agencies, private organizations, and state and local politicians).

This project has had multiple state resolutions passed in its support. Both the Missouri State House and State Senate passed resolutions expressing support for the project and calling on Federal officials to assist in the project funding and delivery. Every US Senator and Congressman within the projects jurisdiction has supported and assisted with the development of this project over the past decade. Senators Blunt, Senator Hawley, Congressman Luetkemeyer, and many others have written letters of support or recorded videos interviews expressing their support. This project was also discussed with officials when the President made his trip to St. Charles to announce his signature Tax Reform legislation.

Despite the support this project has received from elected officials, Federal assistance through BUILD funding is critical to the Bangert Island Riverfront Transformation Project. Competition for other Federal funding through the Surface Transportation Program (STP) is fierce and must be spread between eight counties and hundreds of municipalities in the Saint Louis region making completion of a project of this magnitude nearly impossible.



President Trump Speaks at St. Charles Convention Center, ½ Mile From Bangert Island Riverfront Transformation Project

US Army Corps of Engineers has played a critical role in advancing the project and has helped steer the project to the current design, ensuring the current path is one that will be easily permitted. The US Army Corps of Engineers is currently a monetary partner with the City on a planning assistance study for the project area



US Army Corps of Engineers and City of Saint Charles Staff at the coordination kickoff meeting for the Planning Assistance Study (PAS) standing on the banks

Cullinan Properties successfully developed Streets of St. Charles, and is committed to a successful development of the Bangert Island Riverfront Development Project. City officials and Cullinan have discussed different teaming arrangements to allow for the expansion of Streets of St. Charles into the new development footprint.

St. Charles County has committed to assisting in the non-federal funding of the BUILD Project and has assisted in outreach. St. Charles County also currently controls the operations and maintenance of the Bangert Island Park Area through a 99 year lease from the City.

Business Groups: Large and small business alike support the Bangert Island Riverfront Transformation Project including the Missouri Chamber of Commerce, the Missouri State Director of Economic Development Rob Dixon, Ameristar Casino, Cullinan Properties, Bike Stop Cafe, TR Hughes Development, Home Builders Association of St. Louis & Eastern Missouri, OPO Startups, Millstone Properties, Cushman Wakefield, and Drury Hotels as it will provide a catalyst for continued economic growth in the region.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

		m	% Disc	3% Discount Rate			7% Discount Rate	a
		Costs			Benefit/	Costs		Benefit/
	(Net	(Net Present		Benefits (Net	Cost	Cost (Net Present	Benefits (Net	Cost
Category	Valu	Value), 1,000 Present Value)	Prese	nt Value)	Ratio	Value)	Present Value	Ratio
Project Construction	\$	20,424				\$ 18,541		
Direct Property Value Increase			\$	8,345			\$ 6,383	
Indirect Property Value Increase			\$	1,450			\$ 861	
State of Good Repair			\$	1,280			\$ 763	
Ecosystem Benefits			\$	10,602			\$ 5,987	
Vehicle Operating Cost - Smart Growth			\$	68,209			\$ 34,145	
Value of Time - Smart Growth			\$	86,302			\$ 43,203	
Emission Benefit - Smart Growth			\$	5			\$ 2	
Avoided Crash Benefit - Smart Growth			\$	83,833			\$ 41,967	
Total	\$	20,424	\$	260,026	12.73	\$ 18,541	\$ 133,311	7.19

Scenario	Benefits	Costs	Net	Costs Net Benefits (Benefit/ Cost Ratio
3% Discount Rate	\$ 260,026	\$ 20,424	\$	20,424 \$ 239,602	12.73
7% Discount Rate	\$ 133,311	\$ 18,541	Ş	18,541 \$ 114,770	7.19

Benefit Cost Analysis Results for Bangert Island Riverfront Transformation Project 30 Years Post Construction

USDOT BUILD DISCRETIONARY GRANT APPLICATION

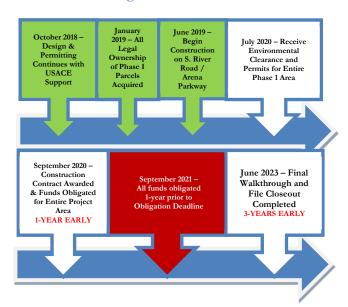
IV. Project Readiness

Project Schedule

Preliminary project activities are underway for the Bangert Island Riverfront Transformation Project. Property acquisition is complete, and construction is underway for the South River Road/Arena Parkway Reconstruction. Environmental NEPA materials preparation and preliminary design are underway with the assistance of the U.S. Army Corps of Engineers. Extensive design efforts have been put forward over the 10-year project development.

Project partners are ready to proceed immediately when awarded BUILD Funds and are committed to obligating funds by June 2021 with completion of all improvements by June 2023. The City's Design-Build code could expedite the design and construction process if awarded 2019 BUILD funds. A detailed schedule is provided in Appendix E.

The City is ahead of the schedule proposed on the original 2018 BUILD Application (highlighted in green), and is projected to obligate funds 1-year in advance of the obligation deadline.



Technical Feasibility

The Bangert Island Riverfront Transformation Project has been in the works for more than a decade. Over the years, the City and US Army Corps of Engineers has cleared major hurdles in order to refine the project to one that is technically feasible from a design, permitting, right-of-way, and construction standpoint.

In the 2011 Bangert Island Hydraulic Sediment Transport Response Model study, the USACE initially recommended the reestablishment of a side channel chute. After further coordination, it was determined that a water quality basin that did not impact the navigational channel but still provided hydraulic and water quality benefits to the Crystal Springs Watershed would be preferred.

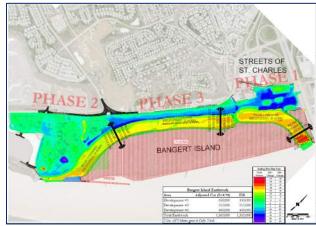


Exhibit showing a portion of the technical feasibility analysis leading to the current phased project approach to allow for faster project delivery

In 2018, the City met earlier with the St. Louis District US Army Corps of Engineers to for a Pre-Application Permitting meeting. The St. Louis District advised the Kansas City district would have jurisdiction over the Missouri River. In partnering with the USACE for Planning Assistance Services, the Kansas City District has initially indicated they would not require a Section 408 permit. Documentation and Delineation work done previously when the project was part of the Missouri River Recovery Project is further being used to advance permitting efforts.

- The Kansas City District of the U.S. Army Corps of Engineers has provided initial review materials for permitting and National Environmental Policy Act (NEPA).
- City owns the entirety of the Phase 1 area.

It was determined from the Master Plan study a phased project approach would be beneficial to project delivery, and contribute to achieving the City's and USDOT's goal of changing the way we build finance and maintain infrastructure. By focusing BUILD Grant funds on Phase 1, the City will be able to start on construction activities immediately following permitting approval which is in process. Additionally, the City identified avenues to advance construction, including implementing strategies commonly used by private development, including the packaging of plans. For example, one strategy to accelerate the construction schedule is to issue a mass grading package that can complete much of the grading while final road design is being completed.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

Although it is possible the improvements will fall within a categorical exclusion, CE, (40 CFR 1508.4) because the improvements fall primarily within a historic river channel that was damaged by US Army Corps of Engineers infrastructure, debrief meetings following the 2018 application indicated that USDOT officials thought an EA with FONSI was possible. Since permitting materials preparation is already underway, this will be achievable in the given timeframe.

The project team is currently preparing NEPA materials, and has included discussion of the preliminary process in a document provided by the U.S. Army Corps of Engineers. The Corps project continues to advance the NEPA work required for this project including the documentation of displacements, wetlands and waterbodies, floodplain impacts, and special/hazardous waste. Data will be collected related to farmland, air quality, noise, cultural resources, 4(f) involvement, and threatened and endangered species. Coordination will be made with all relevant local and state agencies. The categorical exclusion will be posted on the project website when this work is complete.

Assessment of Project Risks and Mitigation Strategies

The FY 2019 BUILD Grant funds will assist the region by building transportation infrastructure needed to realize dense multi-use development. As part of the City of Saint Charles planning and feasibility study, a list of project issues and risks were generated, along with proposed mitigation strategies. This chart can be seen on the attached pages.

Legislative Approvals

The St. Charles City Council passed a resolution of support for the project, and specifically for the advancement and application of the 2019 U.S. DOT BUILD Grant application. Although this project does not require any legislative approvals, it has been supported by multiple local and state legislative actions. The State of Missouri has passed HB19.130 which allocated appropriated \$1,000,000 for the project. The Missouri State Senate and State House passed a continuing resolution to support the project and push federal officials to identify possible funding sources. Additionally, the entire St. Charles Delegation signed a joint letter of support for the project, and every US Legislator within the jurisdiction of the project has given significant support. Senator Blunt helped facilitate discussions with the US Department of Transportation for technical guidance in relation to this 2019 BUILD Grant and Congressman Luetkemeyer has facilitated extensive coordination with the Kansas City and St. Louis Districts of the US Army Corps

of Engineers. This project has extensive planning and support to allow it to move forward immediately pending funding approval.

Benefit-Cost Analysis

The project team conducted a Benefit-Cost Analysis to ensure a greater impact for every Federal US DOT dollar spent. The following table shows a summary of the value of societal benefits over a 30 year period post construction.

A further description of the detailed Benefit-Cost Analysis can be found in the Attachments

	Total Discounted			
Benefits by Selection Criteria	Benefits over 30-Year			
-	Period at 7%			
Economic Competiti	veness			
Direct Property Value Increase	\$6,383,000			
Indirect Property Value Increase	\$861,000			
Vehicle Operation Cost Savings	\$34,145,000			
Value of Time - Travel Time Savings	\$43,203,000			
Environmental Prote	ection			
Ecosystem Benefits	\$5,987,000			
Vehicle Emissions Benefits	\$2,000			
State of Good Rep	pair			
Reduced Maintenance Costs	\$763,000			
Safety				
Avoided Crash Benefit - Smart Growth	\$41,967,000			
Total Benefits (Net Present)	\$133,311,000			
Total Project Cost (Net Present)	\$18,540,761			
Benefit Cost Ratio	7.19			

Financial Feasibility

The FY 2019 BUILD grant funds will be matched with local non-federal funding from various funding mechanisms as described in the "Non-Federal Revenue for Transportation Infrastructure" of this report. As described previously, the City of Saint Charles will draw from Proposition P Stormwater Funds, City Street Gaming Funds, and Water & Sewer Funds. The project will also draw on St. Charles County's ½ cent Sales Tax for Roads and Bridges. The requested BUILD Grant funding of \$10,000,000 will be matched by \$13,772,037 non-federal dollars that will generate a \$1.5 billion economic impact on the region and create 4,000 new jobs.

USDOT BUILD DISCRETIONARY GRANT APPLICATION

V. Federal Wage Rate Certificate

R19-024

Federal Wage Rate Certification

Certification of Compliance with Federal Wage Rate Requirements

Bangert Island Riverfront Transformation Project

FY 2019 BUILD Grant Application

The City of St. Charles, as applicant for the above referenced FY 2019 BUILD Grant application, certifies that it will comply with the requirements of Subchapter IV of the Chapter 31 of Title 40, United States Code (Federal Wage Rate Requirement – Section 1606) as required by the Consolidated Appropriations Act, 2019.

C	;	a	n	9	tı		re
0	1	꾠	n	а	и	u	10

Daniel J. Borgmeyer

Mayor

City of St. Charles, Missouri

Attest

Laura Whitehead

City Clerk

City of St. Charles, Missouri

Signature_

Gina Jarvis

Director of Finance

City of St. Charles, Missouri

Date 7-12-18

Date 7/2/19

Date 07/10/19