THE NEW BUCK O’NEIL (U.S. 169) CROSSING

A crossroads connecting the nation.

TIGER Discretionary Grant Application
FY 2017 National Infrastructure Investments

The City of Kansas City, Missouri
Table of Contents

1. Project Information 3-6
   Project Description 3
   Project Location 6

2. Project Parties 7

3. Grant Funds, Sources, Project Funds 8

4. Merit Criteria 9-19
   Safety 9
   Economic Competitiveness 12
   State of Good Repair 16
   Innovation 18
   Quality of Life 19

5. Project Readiness 20-22
   Project Schedule 21
   Risk 22

5. Appendices 23

The New Buck O’Neil Crossing

ORGANIZATION:
City of Kansas City, Missouri

AGENCY:
Department of Transportation

DUNS #:
0731342310000

CONTACT INFORMATION:
Robert Mariner,
Deputy Director

E-mail: robert.mariner@dot.gov
Phone: 202-366-8914
Project information

The Kansas City region has long been an important economic crossroads for our nation, dating back to its history as the last trading outpost at the convergence of the Oregon, California, and Santa Fe Trails before they separately headed west. Kansas City’s infrastructure has always supported this prominence as a crossroads for trade and freight and the Buck O’Neil Bridge – formerly the Broadway Bridge – is a critical piece of that infrastructure. Now, however, the existing Buck O’Neil Bridge faces a convergence of challenges that will require its replacement, presenting a multi-generational opportunity for the city and region.

The region’s status as the country’s largest rail center by tonnage is one reason Kansas City is a vital economic engine for the nation. Kansas City’s central location, highway system size, and connectivity between all transportation modes are also a strength for moving freight. More than 88 million tons of freight were shipped from or to Kansas City in 2015, with the number expected to top 125 million tons by 2045. These figures also don’t include the significant amount of freight travelling on rail, roads, and waterways passing through the region – again highlighting Kansas City’s status as an economic crossroads.

The existing Buck O’Neil Bridge has served the Kansas City region well. Much as Kansas City operates as an economic crossroads for the nation, the Buck O’Neil Bridge facilitates local, regional, and national connectivity. Built in 1956, it stands immediately west of the site of the original Hannibal Bridge, which in 1869 was the first bridge to cross the Missouri River and was a driving force behind Kansas City’s status as a rail center. The Hannibal Bridge’s replacement still carries rail traffic, and the Buck O’Neil Bridge was erected to divert the replacement’s vehicle traffic.

Today, 45,000 vehicles a day cross the Buck O’Neil bridge between downtown Kansas City and the many rapidly-growing communities north of the Missouri River. In addition, the bridge also serves as a connection point to the north-south Interstate 35 corridor and the east-west Interstate 70 corridor through downtown Kansas City. Both rail and water freight traffic also travel underneath the bridge.

Unfortunately, the Buck O’Neil Bridge was designed and constructed before the interstate system was developed. Now, its current design with associated interchanges no longer has capacity to adequately serve the needs of the
Construction of the Buck O’Neil Bridge 1955

More than 950 crashes have occurred in the project area over the past five years and crash rates at the south project limits are three times higher than the average rates experienced in the Kansas City region.

Kansas City region, nor the needs of interstate travelers. Outdated interchange design, coupled with large volumes of traffic, has resulted in significant congestion and travel delays for commuters and freight. Additionally, more than 950 crashes have occurred in the project area over the past five years and crash rates at the south project limits are three times higher than the average rates experienced in the Kansas City region.

Freight across the bridge has been limited as its allowable weight has been reduced due to the increasingly poor condition of the bridge deck, fatigue of steel members, and deterioration of the bridge’s structural steel – particularly near the bridge expansion joints. The bridge’s condition has required the Missouri Department of Transportation (MoDOT) to increase the frequency of repairs, and potentially invest $52 million for rehabilitation in 2018, at which time the bridge would be closed to traffic for a 24-month period.

The upcoming decisions regarding the future of the Buck O’Neil Bridge will require an innovative, long-term vision for the region, one that will serve as an added catalyst for the continuing economic surge of downtown Kansas City. This vision must look beyond immediate needs, address quality of life, sustain economic competitiveness, and prepare Kansas City for the next 100 years of growth as the nation’s economic crossroads. Replacement, rather than repair, of the Buck O’Neil Bridge presents an opportunity to leverage benefits far beyond improvement of a deteriorating asset. Planning a replacement will improve system performance by promoting national, regional, and local connectivity and freight movement. It will also improve quality of life through expanded transportation choices, neighborhood livability, and economic development.
Benefits of the New Buck O’Neil Bridge will include:

- Keep the current structure open for traffic while a new bridge is being built, rather than closing the current structure for significant amounts of time during repair

- Support to national and regional economic vitality with improved connections to Interstates 29 and 35, enhancing connections into downtown Kansas City and Interstate 70

- Traffic will be rerouted to create a direct connection between U. S. 169 and Interstate 35

- Improved interchange operations at downtown Kansas City and the Charles B. Wheeler Downtown Airport, modernizing the U.S. 169 / Harlem interchange and reducing recurring congestion and significantly enhancing operational safety

- Implementing a new bicycle and pedestrian crossing of the Missouri River

- Innovation opportunities encompassing key federal priorities including acceleration of environmental documentation and permitting

- Promoting of alternative project finance solutions from private entities by including optional financing opportunities as part of the project delivery process

- Adopting principles from the SEP-14 program to integrate the design/build delivery method with NEPA

- Replacing a weight-restricted bridge with an unrestricted bridge to enhance truck freight movement

- Enhancing the regional freight network through:
  - Consideration of a new river crossing for the BNSF, eliminating a national freight bottleneck
  - Port KC consideration; improved truck and rail access and rail capacity to further develop this multi-modal port
  - Truck freight improvements, particularly freight moving north on I-35 accessing Interstate 29, avoiding bottlenecks on the northeast corner of the downtown Kansas City loop
  - Increased opportunities to enhance freight facilities and commercial development in the downtown KC Harlem neighborhood
  - Airport freight and accommodation to businesses using the Charles B. Wheeler downtown Airport, the fourth busiest airport in Missouri
Project Location

- US-169 Missouri River crossing (north/south) in Kansas City, Missouri
- Provides access to Central Business District (south end)
- Provides access to Charles B. Wheeler Airport and northland areas (north end)
- Facilitates connection to I-35 and Interstate 70 (south end)

![Project Location: The Buck O’Neil Bridge](image)
The City of Kansas City, Missouri, (Kansas City) is the designated application sponsor and is proud to lead a regional, state and federal effort to permit, design, and construct the Buck O’Neil Bridge. As the lead applicant, Kansas City will commit more than $35 million of local funds to the project.

MoDOT, who owns and manages the U.S. 169 corridor including the existing bridge, has offered up to $100 million of combined state and federal funds to support the replacement of this vital national project.

The Mid-America Regional Council (MARC), is playing a crucial role in facilitating project planning and assisting with promoting the importance of the project to all other municipalities in the region.

Local entities supporting the project include:

**Counties:**
Clay, Jackson, and Platte

**Municipalities:**
North Kansas City, Gladstone, Liberty, Riverside, and Parkville

**Business and Business Associations**
The Kansas City is requesting $25 million in TIGER FY 2017 Discretionary Grant funds to construct the new Buck O’Neil Bridge, connector ramps, and approaching roadway. The TIGER Grant would fund 7.24 percent of the construction project cost. Total federal funding for the project would be approximately $105 million, or 58 percent of the project construction cost. MoDOT will utilize approximately $20 million in state transportation funds to match available federal funding allocated to the state for a total project share of $100 million. Kansas City will provide $35 million in funding utilizing local tax revenues. The remaining project funds will come from other regional sources including sub-allocated federal funds and other available local revenue to complete the funding package.

Kansas City will engage the services of an engineering firm upon notification that this request for TIGER FY 2017 funds has been awarded to start NEPA documentation and permitting. Kansas City, MoDOT, and MARC are committed to work together to address other project costs not related to construction. The use of MoDOT’s State Infrastructure Bank to address immediate project expenditures and leverage the local funds committed by the Kansas City is one innovative financial solution that may be pursued.
Safety

Safety is always at the forefront in both evaluating transportation investment decisions, and determining what project strategies will be implemented when planning a new project. Nearly 66,000 vehicles a day are anticipated to cross the Buck O’Neil Bridge and maneuver through its associated interchanges by 2040, an increase of 33 percent over existing traffic volumes. Motorists experience higher-than-average crash rates usually resulting from significant congestion, and U.S. 169 was initially developed to serve as a city street not the major, economic arterial it currently serves as for the region.

Crash types, severity and location trends available from Missouri State Highway Patrol records (2010-2014) have been analyzed to identify any geospatial or causal trends to be potentially addressed by the project. Both approaches to the existing Buck O’Neil Bridge were identified as having very heavy concentrations of crashes. North of the bridge, crashes are very dense around the interchange with Harlem Road and the Charles B. Wheeler Downtown Airport. This interchange is configured with on-and off-ramps that access U.S. 169 on the left, which run counter to driver expectations. Additionally,
the ramps are very steep and have very short areas before merging with mainline traffic. The southern connection, formed with the intersection of U.S. 169 with 5th and 6th streets present a safety challenge by overstressing the capacity of the signalized intersections, creating long queues resulting in a high frequency of rear end crashes.

Many different improvements and countermeasures included with the Buck O’Neil Bridge replacement plan proposed to reduce the number and severity of crashes within the project limits. These treatments include a combination of operational and geometric strategies focused on improving both the critical crash locations and types identified in the existing crash data analysis. Proposed treatments focus on elements that have a proven track record of providing quantifiable crash reductions. A summary of the proposed treatments with crash modification factors (CMFs) derived from traffic projects, as well as published safety performance functions (SPFs) - as identified and adopted by AASHTO’s “Highway Safety Manual” (HSM) - are provided on the following page:
Rerouting U.S. 169 traffic to/from Interstate 35

Currently, northbound drivers need to exit Interstate 35, then drive through at-grade signalized intersections at Broadway and 5th and Broadway and 6th to access northbound U.S. 169. Similar traffic patterns are needed for southbound drivers. The proposed project includes a direct connection between U.S. 169 and Interstate 35 that will dramatically reduce the traffic demand and improve safety performance at these two intersections. A CMF of 0.67 was used at the 5th Street Intersection and 0.54 at 6th Street.

Modernizing the U.S. 169 / Harlem Interchange

The existing U.S. 169 and Harlem interchange is one of the primary concentrations of crashes in the study corridor. The current interchange configuration has substandard feature, including left-hand entrance and exit ramps, short merge distances and acceleration distances. The proposed interchange configuration addresses all the existing deficiencies and reroutes southbound on-ramp traffic to adjacent access points further from the bridge. The existing and proposed improved interchanges were modeled using HSM crash prediction models with a CMF of 0.57.

Buck O’Neil Bridge Width

The existing Buck O’Neil Bridge has a substandard width and does not provide any shoulders for through traffic. The proposed bridge replacement will provide the opportunity for a wider corridor, including shoulders meeting current design standards. A CMF (0.77), was created using HSM values for the existing and proposed shoulder width. This was applied to the existing crashes across the bridge to calculate the proposed crash reduction associated with providing wider shoulders.

50 percent fewer crashes are projected after evaluating the proposed improvements using published CMFs.

The proposed project will also provide other safety improvements for which the crash reduction could not be quantified. Traffic operations are projected to improve dramatically with the proposed project reducing delay and queue length for daily commuters. This is likely to reduce the high number of rear end crashes often associated with poor operations and delay. The current practice of pedestrians and bicyclists crossing the bridge on the median grate system will be replaced with a barrier-separated, multi-use trail, eliminating conflict points with vehicular traffic.
Economic Competitiveness

Thanks to an innovative bridge replacement design, traffic will not be impacted during construction of the new bridge, which is significant given the economic importance of this corridor locally, regionally and nationally. A well-planned new Buck O’Neil Bridge will result not only in improved rail and truck freight movement, but also better and more efficient access for commuters and visitors to, from, and through Kansas City’s Central Business District.

Freight and Commuter Traffic Impact
Currently, the U.S. 169 interchange with Interstate 70 at the south end of the Buck O’Neil Bridge accommodates two differing purposes: getting U.S. 169 traffic to the interstate system via either Interstate 35 or Interstate 70, and providing travelers with access to and from downtown. Traffic is evenly split between those two purposes, but the overall volumes are large and are competing for the same space. The competition results in daily congestion in several different directions, impacting daily commutes, freight traffic, and access to the Central Business District. Based on regional travel demand modeling, there is significant “pent-up demand” for use of the interchange. If additional capaci-
ty and improved design function are added to the interchange, traffic will divert from other major roadways. If the current delays at the interchange are reduced, significant volumes of traffic will divert from Interstates 635, 35, 29, Route 9, and the east side of Interstate 435.

In addition to roadway traffic, the existing bridge and roadway configuration negatively impact the region’s rail freight. BNSF Railway operates a major intermodal/rail yard north of the Missouri River and east of U.S. 169. Access to the intermodal/rail yard from the south requires crossing the Missouri River at the Second Hannibal Bridge immediately east and downstream of the Buck O’Neil Bridge. Coming off the second Hannibal Bridge, the railroad tracks make a sharp turn commonly referred to as the “Gooseneck”, which results in greatly reduced speeds underneath the south end of the Buck O’Neil Bridge, adding to delays and operating expenses for rail operations. Additionally, because of the narrow clearance created by the design of the bridge on the south end, long freight cannot travel along the rail tracks underneath the bridge. This forces long freight to find another, slower path through the region and impedes rail freight traffic.

Creative, strategic redesign of the bridge will alleviate the congestion impeding commuter and freight traffic at both ends of the bridge, as well as rail traffic traveling underneath the bridge.

The project will ultimately allow better commuter access in, from, and through Kansas City’s Central Business District, and will allow Kansas City to build upon its significance as a freight move, removing national and regional bottlenecks and adding greater opportunity for the region.
• **Rail** – The BNSF rail crossing of the Missouri River, nearly adjacent to the existing Buck O’Neil Bridge, provides level of service F (severely congested) and restricts train speeds to 5 MPH for the four class 1 rail lines that utilize the bridge daily. The project will consider the future needs of the BNSF to realign their rail crossing of the Missouri River, increasing allowable travel speeds promoting added opportunity for more trains to pass daily.

• **Water** – Port KC, is revitalizing shipping on the Missouri River. Current access limitations for rail and truck traffic are restricting factors for growth potential. The new Buck O’Neil Bridge will consider future rail and truck access needs to Port KC providing opportunity for growth.

• **Roadway** – The existing bridge and location of U.S. 169 would serve as an ideal connection for north-bound Interstate 35 truck traffic to access north-bound Interstate 29, and avoid the congested system-to-system interchange at the northeast corner of the downtown Kansas City loop serving both Interstates 35 and 70. The existing roadway geometry, interchange operations and poor condition of the exist bridge severely limit commercial vehicles making this movement. The proposed addition of directly connecting the new Buck O’Neil Bridge with both west-bound Interstate 70 and Interstate 35 will enhance commercial vehicle connectivity to Interstate 29 via U.S. 169.

• **Air** – The Charles Wheeler B. Downtown Airport is a 24-hour, 7-day a week full service general aviation facility. Improved access will provide for airport freight and business accommodation.
Leveraging Downtown Revitalization Efforts

Innovative and creative replacement of the bridge, rather than repair of the current bridge, will allow the economic development momentum ongoing in downtown Kansas City to continue by maintaining access while a new bridge is built. Maintaining that access is critical for regional and local connectivity, allowing the economic progress made through investments both north and south of the bridge to continue forward uninterrupted. Modeling from MARC anticipates that the daily impact to the region due to closure of U.S. 169 at the Buck O’Neil Bridge would include an added 46,413 miles of travel and 1,450 hours of travel. Additionally, a new, added direct connection between U.S. 169 and Interstate 35 will allow for more efficient access to downtown Kansas City and the Central Business District.

The economic development climate in downtown Kansas City, immediately to the south and east of the Buck O’Neil Bridge, has changed considerably since the 2007-2009 recession. Prior to the recession, Kansas City invested in the creation of the Sprint Center and the adjacent Power + Light Entertainment District downtown. These investments corresponded with the City’s expansion of the Bartle Hall convention facility’s new ballroom, and each project contributed to expanding tourism and increasing awareness of events being held in the area.

As the housing market began to rebound, interest in building new or converting older buildings into residential uses throughout the urban core also expanded. Additionally, Kansas City recently completed the KC Streetcar line, connecting the River Market District south to Union Station — offering free rides to residents and visitors alike. KC Streetcar has spurred approximately $2 billion in new economic development activity throughout the downtown area and has drawn outside investors into the Kansas City development market.

Kansas City’s Northland has experienced significant growth over the last several decades, including numerous large-scale residential developments. The growth has resulted in an increase in traffic entering the Kansas City Central Business District daily. Access to the Northland from the Central Business District occurs either across the Buck O’Neil Bridge and U.S.169, across the Heart of America Bridge through North Kansas City, or across the Bond Bridge, and Interstates 29 and 35. The majority of the Northland traffic, about half, uses the Bond Bridge while the Buck O’Neil Bridge and Heart of America Bridge comprise about 25 percent each.

Maintaining, and ultimately improving, connectivity between these two areas of economic growth on either side of the Missouri River is vitally important to the region’s economic competitiveness. Moving forward with a replacement of the Buck O’Neil Bridge — rather than repair — will ensure that Kansas City can continue to leverage the significant public and private investments made on both sides of the river, without the interruption of bridge closure. Additionally, the creative and innovative design associated with bridge replacement will ultimately improve interchanges on both sides of the bridge, facilitating both visitor and commuter movement between the two areas.
MoDOT recently completed an extensive inspection of the Buck O’Neil Bridge, which identified numerous structural deficiencies in need of rehabilitation. Significant deterioration of structural elements such as steel stringers and bearings has occurred due to roadway drainage exposure. These elements need to be repaired or replaced, and deck replacement will be required to minimize this type of damage in the future. In addition, hanger cable retainers are missing, gusset plates and structural members are exhibiting extensive rust, expansion joints need to be replaced, and some cracking due to repetitive stress is evident. Also, approach spans have repetitive stress cracking and similar extensive rust and corrosion issues. The center river pier has a large scour hole on all sides and, at this point, is only embedded in one foot of shale. Repainting the entire bridge, repairs to the tie beams, lower laterals, floor beams and bridge railings have been proposed. Scour countermeasures have been suggested at the center river pier to protect against further undermining.

MoDOT completed a conceptual study of the repair and rehabilitation requirements of the Buck O’Neil Bridge in March 2017 as part of the inspection process. Four improvement scenarios were evaluated: a short-term repair option, a long-term repair option, a “hybrid” of short- and long-term, and a second “hybrid” that included some span replacements. An evaluation of replacement in-kind was also evaluated to serve as a baseline.

Based on the result of this conceptual study, MoDOT has adopted the recommended longer term, 35-year rehabilitation option as the preferred approach. MoDOT added the recommended longer-term project to their Statewide Transportation Improvement Program (STIP) with a total of $52.1 million in State Fiscal Year 2019. The conceptual study further added that complete in-kind replacement will be required at the end of the 35-year period, with an estimated uninflated cost of $98 million. The rehabilitation proposed by MoDOT will require a mini-

State of Good Repair

MoDOT recently completed an extensive inspection of the Buck O’Neil Bridge, which identified numerous structural deficiencies in need of rehabilitation. Significant deterioration of structural elements such as steel stringers and bearings has occurred due to roadway drainage exposure. These elements need to be repaired or replaced, and deck replacement will be required to minimize this type of damage in the future. In addition, hanger cable retainers are missing, gusset plates and structural members are exhibiting extensive rust, expansion joints need to be replaced, and some cracking due to repetitive stress is evident. Also, approach spans have repetitive stress cracking and similar extensive rust and corrosion issues. The center river pier has a large scour hole on all sides and, at this point, is only embedded in one foot of shale. Repainting the entire bridge, repairs to the tie beams, lower laterals, floor beams and bridge railings have been proposed. Scour countermeasures have been suggested at the center river pier to protect against further undermining.

MoDOT completed a conceptual study of the repair and rehabilitation requirements of the Buck O’Neil Bridge in March 2017 as part of the inspection process. Four improvement scenarios were evaluated: a short-term repair option, a long-term repair option, a “hybrid” of short- and long-term, and a second “hybrid” that included some span replacements. An evaluation of replacement in-kind was also evaluated to serve as a baseline.
MoDOT has identified a short-term solution as well, which would provide a five-year rehabilitation to extend the life of the existing bridge. The implementation of a five-year rehabilitation project in 2018 would align with the timeline to open the new bridge to traffic, keep U.S. 169 open to traffic during construction of the project, and allow nearly all the planned rehabilitation expenditures to be used as part of the financing for the project.

The project would construct a new Missouri River crossing and the new Buck O'Neil Bridge would be designed and constructed to provide a minimum of a planned 100-year service life. Estimates are that the new bridge will require no planned contracted maintenance expenditures for a 35-year period.

Even with addressing the identified structural deficiencies of the Buck O'Neil Bridge, the planned rehabilitation efforts do not address the recurring congestion faced by motorist or the poor operations at the interchange of U.S. 169 with Interstates 35 and 70. A combination of short weave areas, poor lane balance and signalized movements creates daily bottlenecks and hampers efficient movement. Congestion on the existing bridge and approaching interchanges occurs daily and service levels for U.S. 169, Interstate 35 and Interstate 70 are graded as an E or F during peak travel periods.
Both Kansas City and MoDOT have long histories as being leaders in innovation. This use of innovation is already evident in this project through the partnership formed by the City, MoDOT, MARC and the Federal Highway Administration (FHWA) in undertaking a planning, environment and linkage study (PEL) to assess a range of feasible projects to transform the north side of the downtown Kansas City loop, including U.S. 169 and the Buck O’Neil Bridge. The PEL (http://www.beyonddotheloopkc.com/), a first of its kind study in Missouri, has allowed Kansas City and MoDOT to conduct valuable dialogue about long range transportation system needs, document critical issues, and at the same time engage other interested stakeholders and members of the public.

The spirit of both innovation and partnership between the City and MoDOT will continue after the project is selected for funding. The City will immediately embark upon the preparation of an Environmental Assessment (EA) for the project, and will use, MoDOT’s recently-approved EA for Interstate 270 improvements as a model. MoDOT’s adoption of performance measures, instead of designating a specific preferred solution as part of the Interstate 270 EA, promotes flexibility for future build scenarios. The identified performance measures from the EA can be seamlessly transitioned into Request for Qualification and Proposal documents used to select a design/build team.

Ongoing discussions between Kansas City and MoDOT are exploring the benefits of pursuing both contracting and finance innovation. Most notably, requesting the project be designated as experimental under SEP-14, and the use of progress design/build as an optional approach, would simplify and shorten the timeline for selection of a design/build team and allow critical preliminary design including identification of needed property righ, to occur rapidly. Opportunities to leverage private financing options are also under review, and the use of a design/build/finance proposal could be considered.

Autonomous Vehicles (AV) and Connected Vehicles (CV) have the potential to significantly improve driver mobility, improve safety and enhance the operational performance of roadway systems. While many benefits may be possible with no additional infrastructure, some benefits are only possible when on-board equipment is combined with roadside equipment (RSE). The impacts and needs of AV and CV will be included in the planning and design of the future Buck O’Neil Bridge. Considerations for the infrastructure needs of passenger vehicles, commercial vehicles and freight, and transit vehicles will be considered and included when possible.
A thoughtful, creative plan to replace the Buck O’Neil Bridge will integrate multiple opportunities to improve economic development and quality of life through neighborhood connectivity and accessibility, as well as through expanded transportation options. The current bridge and associated interchange designs directly impact two specific neighborhoods at each end of the bridge, the Harlem area to the north and the River Market neighborhood to the south, suggesting that successful replacement can truly create a stronger local connection and improve quality of life for Kansas Citians.

The Harlem area is located on the north side of the Missouri River between the Buck O’Neil Bridge and the ASB Bridge. In the 1800s and into early 1900s, it was a town of 50 acres with nearly 600 residents, and in 1950 the area was annexed by Kansas City, Missouri. Currently there are only three homes left in the area and one apartment complex. When the ASB Bridge opened in 1911 people began bypassing Harlem and, with the opening of the Buck O’Neil Bridge, the two river bridges combined to create barriers to access the neighborhood. When coupled with neighborhood flooding, these factors contributed to residents moving out of the area. Over the years several plans for development and redevelopment have been proposed, but none have come to fruition.

The River Market is a riverfront neighborhood that comprises one of the first and oldest incorporated districts in Kansas City, Missouri. The River Market has also been known as Westport Landing, the City Market, and River Quay. The River Market is situated between Interstate 70 and the Missouri River and is bordered by the Buck O’Neil and Heart of America Bridges. The neighborhood has seen a resurgence with warehouses increasingly developed into residential developments, restaurants, and markets. The River Market has similar barriers to other neighborhoods in the area, with interstate and highway barriers to the Central Business District and Columbus Park. The addition of the streetcar line has helped to re-connect this neighborhood to the Central Business District. Currently, however, a significant amount of truck freight traffic still travels underneath the Buck O’Neil Bridge to and from the West Bottoms – an industrial area immediately west of Kansas City’s downtown – through the increasingly populated and vibrant River Market Neighborhood. This traffic negatively impacts the pedestrian-friendliness and walkability of the neighborhood.

Redesign and replacement of the bridge will help both neighborhoods more fully achieve their potential. For Harlem increased access will open opportunities for investment and economic development. A more efficient interchange on the north end of the bridge will allow for better vehicle access to the neighborhood, as well as new bicycle and pedestrian access. This access can be transformative for the Harlem area, reconnecting it with the Central Business District through multiple transit options and opening economic opportunities that the area has not seen in decades. In the River Market, the potential for redesigned interchanges associated with replacement of the Buck O’Neil Bridge can provide for more direct truck freight access between the West Bottoms and Interstate 70, potentially alleviating traffic through the neighborhood. This solution would provide a safer environment for pedestrians, adding to the walkability and livability of the neighborhood.
The ongoing Beyond the Loop PEL, which will conclude in March 2018, has identified the replacement of the Buck O’Neil Bridge, including new connections and interchange modifications, as a segment of independent utility allowing it to complete a separate NEPA evaluation. Consultation with FHWA has occurred throughout the PEL development and a determination has been completed that an EA will be the required NEPA document.

Many of the early building blocks required to initiate an EA are being addressed through the PEL process. Current activities on the PEL including public outreach, project coordination and resource agency consultation are ongoing and will promote rapid transition for the EA. Within the PEL process, a NEPA transition plan will be included as part of the study recommendation. Additionally, a solid foundation is established to generate the project purpose and need identification for the EA and many long lead time analysis components covering condition of the existing bridge-along with traffic generation-have been conducted.
# Project Schedule

## Anticipated Design/Build Contracting Methods

<table>
<thead>
<tr>
<th>Activity</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice of TIGER Grant Selection</td>
<td>Anticipated January 2018</td>
</tr>
<tr>
<td>Project Specific Environmental Assessment (FONSI) including Conceptual Access Modification Report</td>
<td>March 2018 to May 2019 (15 months)</td>
</tr>
<tr>
<td>Preparation of Project D/B Bidding Documents</td>
<td>May 2019 through October 2019 (6 months)</td>
</tr>
<tr>
<td>Right of Way Acquisition and Utility Planning</td>
<td>October 2019 to June 2020 (9 months)</td>
</tr>
<tr>
<td>Permitting</td>
<td>October 2019 to August 2020 (10 months)</td>
</tr>
<tr>
<td>Request For Qualifications from D/B Teams</td>
<td>November through December 2019 (2 months)</td>
</tr>
<tr>
<td>Request For Proposal from shortlisted D/B Teams</td>
<td>January 2020 to May 2020 (5 months)</td>
</tr>
<tr>
<td>Proposal Review and Recommendation of Best Value Proposer</td>
<td>June to July 2020 (2 months)</td>
</tr>
<tr>
<td>Contract Execution with Best Value Proposer</td>
<td>August 2020 (1 month)</td>
</tr>
<tr>
<td>Obligation of TIGER Funds</td>
<td>August 2020 (1 month)</td>
</tr>
<tr>
<td>Construction</td>
<td>September 2020 to December 2023</td>
</tr>
</tbody>
</table>
## RISK MITIGATION

<table>
<thead>
<tr>
<th>PROJECT RISK</th>
<th>MITIGATION STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHWA approval of the EA could delay preparation of bid documents.</td>
<td>Mitigation efforts include advancing PEL study efforts continuing with long lead time efforts needed such as traffic modeling and communication with partnering agencies to avoid costly delay in early study requirements.</td>
</tr>
<tr>
<td>Acquisition of needed property could delay the ability to select a design/build team.</td>
<td>Mitigation efforts include advancing the development of right of way plans as a priority initiative upon completion of environmental documentation, in order to maximize time for property acquisition.</td>
</tr>
<tr>
<td>EA processes could reveal commitments or permitting requirements requiring long processing time, delaying the project bidding timeline.</td>
<td>The ongoing PEL process for the North Loop, which encompasses the project area, has completed an exhaustive review of potential cultural and environmental resources that could be impacted, minimizing the risk of added commitments or permitting issues being found during the EA process.</td>
</tr>
</tbody>
</table>
Appendices

A. The New Buck O’Neil (U.S. 169) Crossing Benefit-Cost Analysis
B. Supporting Letters
C. Supplemental information

The supporting documentations listed above can be obtained here:
http://www.marc2.org/Assets/Transportation/TIGER/2017TIGERDocs.htm