



*Connecting Our Riverfront for Everyone*

**Kansas City, Missouri / BUILD Grant Application**

July 18, 2018

**RideKC**

 **portkc**

 **RideKC  
STREETCAR**



# KCATA / PORT KC – RIVERFRONT STREETCAR EXTENSION

## Project Name

KC•CORE

*Kansas City: Connecting Our Riverfront for Everyone*

## Lead Applicant

Kansas City Area Transportation Authority (KCATA  
also known as RideKC)

## Co-Applicants

Port KC

Kansas City Streetcar Authority (KCSA)

## Project Supporters

The City of Kansas City, Missouri (KCMO), as well as a broad list of supporters from throughout the metropolitan area located in [Supporters of the Project](#) (page 27).

## Contact Information

**Robbie Makinen, President/CEO KCATA**

1200 E. 18th Street  
Kansas City, MO 64108

**816-346-0212**  
[rmakinen@kcata.org](mailto:rmakinen@kcata.org)

**Zoraya Rowlands, Interim CEO & President Port KC**

300 Wyandotte, Suite 100  
Kansas City, MO 64105

**816-559-3750**  
[zrowlands@portkc.com](mailto:zrowlands@portkc.com)

**Tom Gerend, Executive Director KCSA**

600 E. 3rd Street  
Kansas City, MO 64106

**816-627-2525**  
[tgerend@kcstreetcar.org](mailto:tgerend@kcstreetcar.org)



*Figure 1:  
Kansas City Mayor  
Sly James welcoming  
the crowd at the  
KC Streetcar  
Opening Day  
Celebration  
at Union Station.*



The Honorable Elaine Chao  
Secretary of Transportation  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

# RideKC

July 18, 2018

Dear Secretary Chao,

Momentum is building along Kansas City's Riverfront. Currently, one development is complete; another is nearing completion. The addition of residential units, retail spaces and recreational amenities are breathing new life into this once dormant area, and **Kansas City's Riverfront is emerging as a destination**. After decades of being known only as a long-forgotten site, developers are seeing the value of this regional resource.

Port KC has full ownership of this 77-acre area and for years has been leading the site preparation and revitalization efforts to attract new development investment. Due to these continuing efforts, this former brownfield site has been cleared, cleaned and made ready for new opportunities. **While the Riverfront area has massive potential for new development, in order for this area to realize its full economic development potential, one critical challenge must still be addressed.** Currently, the Riverfront is isolated and cut off from the greater Downtown Kansas City area by a combination of existing topography challenges, including: class I freight railroads, an interstate highway, and two bridges. For cyclists and pedestrians seeking access to connect with and enjoy the recreational amenities found at Berkley Riverfront Park, it is dangerous to navigate with routes that are indirect and circuitous – thus dissuading many from visiting the area.

**And now, through an innovative public-private partnership, there is an opportunity to leverage private dollars to create connectivity and accelerate the success of the Riverfront – creating jobs and tax revenue for the city and region.**

**KC•CORE: Connecting Our Riverfront for Everyone** will physically reconnect Berkley Riverfront with a pedestrian- and bicycle-friendly 0.7-mile extension of the City's successful Downtown streetcar system – extending from its current terminus near 3rd Street and Grand Boulevard across the existing Grand Avenue Bridge and onto the Riverfront. This extension will also include construction of a new multi-use trail that will widen the Grand Avenue Bridge, which is currently very narrow and only accommodates two lanes of travel for trucks and automobiles. This is the most direct access point onto the Riverfront area, yet today it remains unsafe for use by pedestrians and cyclists as there are no accommodations in place to support this connectivity.

**Hailed as one of the most successful modern streetcar's in the nation**, KC Streetcar's impact on growth and development is supported by ridership figures and economic development dollars. **KC•CORE will continue the momentum from this successful transit investment.** Already, since the announcement of the proposed streetcar extension, three new developers have made commitments to invest and develop on the Riverfront. As shown in the recent overwhelming supportive vote for the creation of the Transit Development District, residents and leaders are eager to continue our area's success and to extend this success and mobility benefits to other parts of the city.

The Kansas City Area Transportation Authority (KCATA / RideKC) and its co-sponsors, Port KC and the Kansas City Streetcar Authority (KCSA) with the support of the City of Kansas City, Missouri (KCMO) are pleased to submit the following application for BUILD funding that will reconnect the Riverfront to serve all Kansas Citians and its guests while improving safety, providing enhanced access to employment opportunities and igniting and accelerating economic development activity on Berkley Riverfront. This project is fully supported by elected officials and a broad coalition of community organizations and local stakeholders. KC•CORE emanates from years of community-based planning efforts and support that established the vision and need for a reconnected and revitalized Riverfront that serves as a vibrant place for all.


Respectfully,



Robbie Makinen  
President/Chief Executive Officer  
Kansas City Area Transportation Authority



Zoraya Rowlands Interim  
CEO & President Port KC  
Port KC



Tom Gerend  
Executive Director  
Kansas City Streetcar Authority



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## 1. PROJECT DESCRIPTION

**Now is the time to capitalize on the catalytic momentum of the Kansas City Streetcar.** Kansas Citians are [demonstratively invested](#) in the success and expansion of the streetcar—it [embodies KC pride](#)—and represents a bold reinvestment in our Downtown and neighboring communities. The [KC Streetcar](#) represents a revival of our midwestern city and is credited as the primary catalyst for the construction boom occurring near the alignment—[even earning the attention of the nation](#). But the 2.2 mile modern starter line was never the final stop and residents and civic leaders are working together to extend its benefits to other parts of the city.

While not a part of this application, the [Main Street Extension south to the University of Kansas City-Missouri \(UMKC\)](#) will continue the starter line through the heart of Midtown—connecting two of the largest employment centers in the region as well as universities, cultural, retail and entertainment destinations. This planned expansion, together with proposed Riverfront Extension (KC•CORE), will form the spine that is essential for an integrated regional transit system.

**KC•CORE - Connecting Our Riverfront for Everyone** is a proposal to:

- Extend the momentum, mobility and economic development benefits of the existing [KC Streetcar](#) to **connect a long dormant area of the Kansas City Riverfront** ([Berkley Riverfront](#)) to Downtown—expediting the rate and value of planned private investments.
- Connect the urban core of the city to recreational green space with the construction of a new multi-use trail alongside the extended streetcar alignment—**improving the quality of life and livability** for many who would not have previously made the trek to this disconnected area.
- Introduce a **regional park-and-ride** opportunity to the Riverfront—providing convenient access for those commuting from the northland metro to Downtown for work and play.

KC•CORE builds upon the success and enhances previous USDOT Capital investments in the region and **showcases a superb example of local government teamwork operating at a peak level**. KC•CORE partners include:

- Kansas City Streetcar Authority (KCSA),
- Port Authority of Kansas City, MO (Port KC),
- City of Kansas City, Missouri (KCMO)
- Grant Applicant Kansas City Area Transportation Authority (KCATA, branded as RideKC)



Figure 2:  
Photo of the sleek &  
modern KC Streetcar  
featured in the NY Times  
Sunday, July 8, 2018.  
Photo credit: Anna Petrow

**KC Streetcar**  
starter line  
successfully  
leveraged



**TIGER V**

funding with  
more than

**65%**  
local financing

## Project Description (1. continued)

KCSA, Port KC, KCMO and KCATA are combining forces to advance the KC Streetcar and are each providing direct administrative, operational, and financial support to deliver this highly anticipated, three-quarter-mile extension of the modern KC Streetcar by 2021.

### 1.1. Project Background

On May 6, 2016, [streetcars began operating again](#) in Kansas City for the first time in almost 60 years. This rebirth of urban rail transit was supported by the successful implementation of a [\\$20 million TIGER V](#) award in 2013 and was led by a strong and well-established partnership between the City of KCMO, KCATA and KCSA. Total project costs were \$102 million for the initial 2.2-mile KC Streetcar starter line and were funded—in addition to TIGER—by over \$67 million in local resources from a voter-supported [Transportation Development District \(TDD\)](#) surrounding the corridor. **Since opening day, the KC Streetcar, operating on Main Street in the heart of Downtown, has been a resounding success and remains one of the most well-utilized streetcar systems in the United States with an average daily ridership of 5,800 trips and surpassing 4 million trips within two years of operation (projected ridership was approximately 2,600 per day). During the summers of 2017 and 2018, KC Streetcar ridership has consistently exceeded 10,000 rides at least one day each week.**

The modern KC Streetcar currently serves as a primary connector between downtown Kansas City's major attractions, employment centers, and entertainment areas and includes Union Station, Crown Center, Crossroads Arts District, Central Business District, Power and Light Entertainment District and the historic River Market. The streetcar has been successful in providing greatly improved multi-modal connectivity to residents, visitors and employees Downtown, and it has also been a powerful catalyst for numerous economic development projects near the alignment. **In the four years since the initial KC Streetcar project was announced, over \$2.2 billion in new economic development activity has taken place near the streetcar alignment and includes new hotels, residential units, office space and retail shopping.**

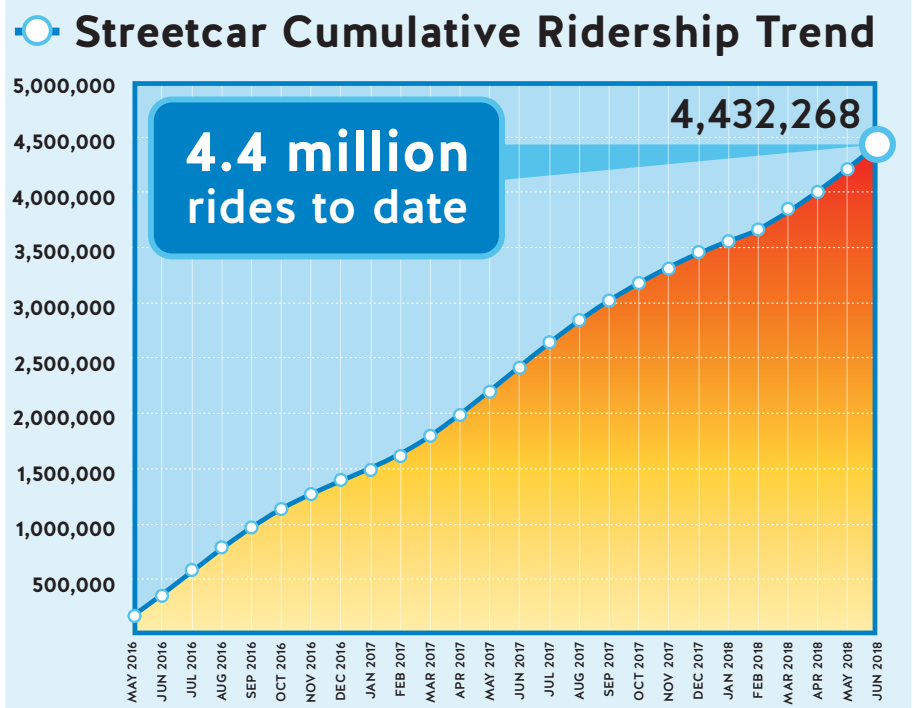
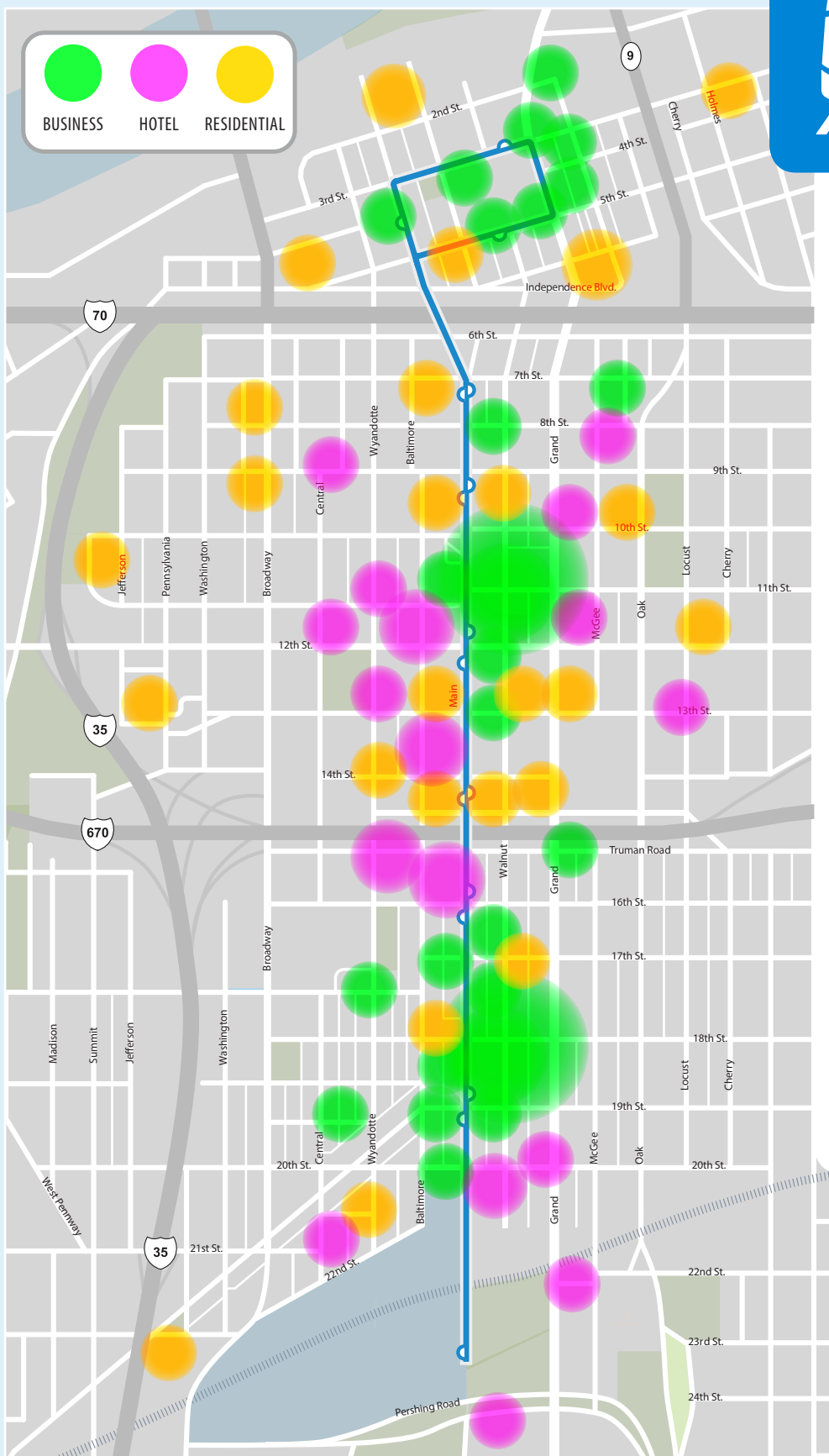


Figure 3:  
KC Streetcar  
cumulative ridership  
May 2016-June 2018.



Figure 4:  
On Friday, July 6, 2018  
the KC Streetcar hit  
an astounding record of  
19,181 rides;  
the week ended  
with 78,990 total rides.



**\$2.2 Billion**  
in new investments  
since KC Streetcar  
was approved in  
December 2012.

## Economic Development and KC Streetcar by the Numbers:

### Residential \$1.64 Billion

- 📍 Downtown population doubled to **24,000**
- 📍 **4,927** units complete or under construction
- 📍 **4,081** units planned

### Hotels \$662 Million

- 📍 **2,221** rooms complete or under construction
- 📍 **695** rooms planned

### Office \$242 Million

- 📍 **\$128 million** completed or under construction in office investment
- 📍 **\$114 million** planned in office investment

### Parking Lot Conversions

- 📍 **10** vacant surface parking lots undergoing transformation and redevelopment

Figure 5:  
The KC Streetcar starter line  
has been a catalyst for economic  
development near the alignment.  
Dollar figures represent  
complete, under construction  
& planned for 2013-present.  
Provided by the [Downtown  
Council's State of Downtown  
Dashboard](#).



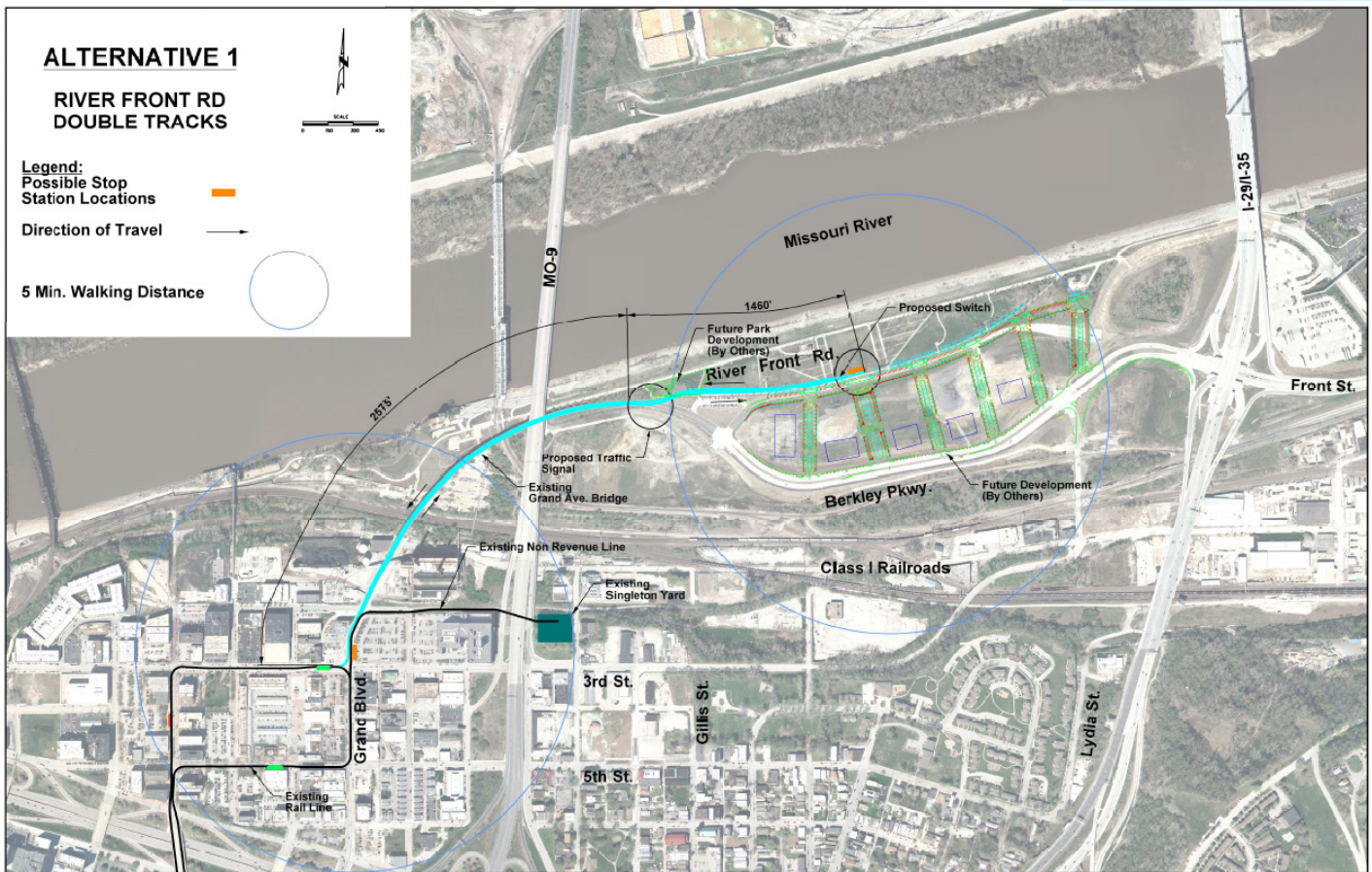


Figure 6:  
Berkley Riverfront  
Streetcar Extension  
Preferred Alignment

### Project Background (1.1 continued)

Because of its popularity, outstanding ridership, and effectiveness in attracting economic development, the initial planning for future expansion of the starter line began shortly after opening day. One of the first areas targeted for expansion was Kansas City's Berkley Riverfront, located northeast of the starter line's existing terminus in the River Market. [Berkley Riverfront](#) is home to the [Riverfront Heritage Trail](#) and 77 acres of shovel-ready, remediated land that has development commitments under the ownership and control of [Port KC](#) (Port Authority of Kansas City). To further explore this streetcar expansion opportunity, Port KC joined with KCMO, KCSA, and KCATA to fund and evaluate the feasibility of extending the KC Streetcar alignment to serve the Berkley Riverfront area.

The [Streetcar Riverfront Extension and Multi-Modal Feasibility Study](#) was initiated in early 2017. The primary goal of this feasibility study was to generate alternatives that would improve overall multi-modal connectivity to the Riverfront while simultaneously supporting economic development opportunities for the surrounding area.



## Project Background (1.1. continued)

The *Streetcar Riverfront Extension and Multi-Modal Feasibility Study* determined that extending the Downtown Streetcar 0.7 miles from the intersection of 3rd Street and Grand Boulevard to the northeast utilizing the Grand Avenue Bridge to access the Riverfront ([Figure 6](#)) was financially, structurally, and operationally feasible and would greatly improve and enhance multi-modal connections in the area for transit riders, pedestrians, and cyclists. **The feasibility study received strong support from the public for the extension of the streetcar to serve the Berkley Riverfront, and for the multi-modal features that will improve existing pedestrian and cyclist safety and access.**

In June 2017, the KCSA Board of Directors [unanimously endorsed](#) the findings and recommendations of the *Streetcar Riverfront Extension and Multi-Modal Feasibility Study*. The Board of Commissioners for Port KC also voted to unanimously support the recommendations made in the feasibility study. In addition, the two proposed streetcar extensions (Riverfront / KC•CORE and the Main Street Extension to UMKC) were recently accepted into the Mid-America Regional Council's Transportation Outlook 2050 long-range plan.

## 1.2. Project Scope

This BUILD project is a continuation of the lasting and successful partnership of KCSA, KCATA, KCMO and Port KC. It builds on the planning, public outreach and early conceptual engineering conducted in the feasibility study to **Connect Our Riverfront for Everyone**.

The KC•CORE project scope includes a 0.7-mile, bi-directional track extension of the modern KC Streetcar system onto the Berkley Riverfront; one new streetcar station; overhead catenary and electrification systems; and an additional streetcar vehicle. The project also includes the addition of a bicycle and pedestrian multi-use trail onto the existing Grand Avenue Bridge to address the lack of safe space for pedestrians and cyclists on the existing structure. With this improved connectivity to Berkley Riverfront, [Kansas City's bicycle sharing program](#) (B-Cycle) will be expanded to serve the area. Through Port KC's most recent development agreement, up to 200 parking spaces will be available for commuters. This will be especially beneficial for commuters from the northland and I-29 commuting corridor.

Over the last several years, Port KC annually has more than 20 events [attracting up to 80,000 people](#) to the Riverfront ([KC RiverFest](#)). To date, shuttles and temporary bus service have been initiated to support these events. **There is not currently safe pedestrian access to the Riverfront without shutting down the Grand Avenue bridge to traffic. KC•CORE proposes safe access for both pedestrians and bicyclists via streetcar and the new bike/pedestrian pathway.**

### The study specifically examined:

- ✓ Streetcar route alignments
- ✓ Bus transit connectivity
- ✓ Park-and-Ride regional connectivity
- ✓ Multi-modal connections for bicyclist and pedestrians
- ✓ Streetcar and bus operations planning
- ✓ Capital and operating cost estimation
- ✓ Engineering feasibility assessment
- ✓ Economic development opportunity
- ✓ Public engagement and input

## Project Scope (1.2. continued)

**KC•CORE is truly multi-modal and regional in nature.** As the KC Streetcar alignment expands, it will continue to serve as the spine of a coordinated regional public transportation system of rail and bus services—providing residents of the region critical access to employment, education, entertainment, and services. This transit system has been developed in the region’s long-range transit plan, [Smart Moves 3.0](#). **KC•CORE will integrate into the regional system by connecting Berkley Riverfront to the Downtown transit center and the park-and-ride facility at 3rd Street and Grand Boulevard**—providing direct seven-day-a-week connections to the following RideKC bus routes:

- Main Street MAX BRT
- Route 10 – Woodland / Brooklyn to Historic 18th & Vine Jazz District
- Route 77 – Casino Cruiser serving Downtown, City of North Kansas City and the Northland area of Kansas City
- Route 85 – Paseo serving south Kansas City
- Route 103 – 3rd St. Fairfax to Kansas
- Route 201 – North Oak, the primary transit line north of the Missouri River

The KC Streetcar operates seven days a week and maintains ten-minute headways during morning and afternoon peak periods and 12- to 18-minute headways in the midday and at night. Hours of operation are:

- Monday – Thursday: 6:00a – 12:00a
- Friday: 6:00a – 2:00a
- Saturday: 7:00a – 2:00a
- Sunday: 7:00a – 11:00p

These same frequencies and hours of operation will be extended to Berkley Riverfront—greatly improving accessibility and mobility options for new residents and connecting to new jobs in the area.

**As part of this project, the existing KCATA-owned park-and-ride facility at the intersection of 3rd Street and Grand Boulevard will be further enhanced to facilitate rider transfers between the KC Streetcar and bus routes emanating from points throughout the bi-state region.** The 3rd and Grand location provides access and connections to nearby bike and car sharing opportunities, while also continuing to serve as a park-and-ride facility.



Figure 7:  
Existing Downtown  
transit center at  
10th & Main Street



The **multi-modal**  
components  
included in

**KC•CORE**  
will expand a  
**comprehensive  
transportation  
system**

providing new  
access to:

**JOB MARKETS**

**RESIDENTIAL  
COMMUNITIES**

**ACTIVITY  
CENTERS**



Figure 8:  
KC•CORE  
Project Area

## 2. PROJECT LOCATION

The KC•CORE project is located on the northern edge of the Central Business District of Kansas City, just north of the River Market and Columbus Park neighborhoods along the banks of the Missouri River (Berkley Riverfront). The general project area is shaded in dark gray in the above Figure 8. The project area is located within the Missouri 5th Congressional District, represented by Congressman Emanuel Cleaver II. The project is also located in the Kansas City, MO-KS Urbanized Area ([43912](#)) according to the United States Census Bureau.

Berkley Riverfront is generally bounded by the Missouri River on the north, Interstate 29/35 to the east, Burlington Northern Santa Fe (BNSF) / Union Pacific (UP) freight rail lines on the south, and the Missouri Highway 9 (Heart of America) Bridge on the west.



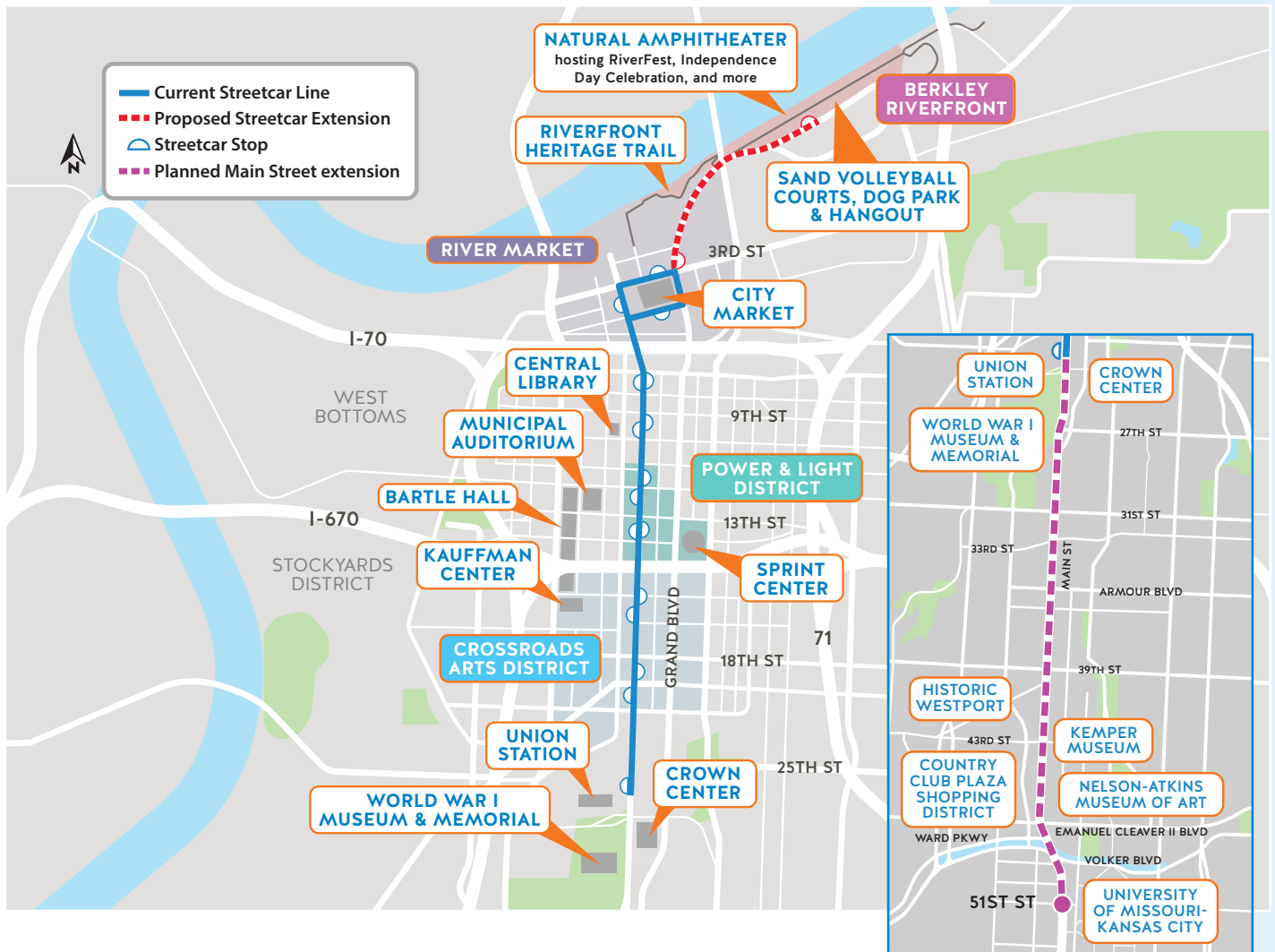


Figure 9:  
Downtown streetcar  
alignment and  
activity centers

As shown in Figure 9 above, the existing KC Streetcar operates a 2.2-mile alignment on Main Street from its southern terminus at Union Station near Pershing and Main Street north to 3rd Street and Grand Boulevard. In the River Market District, at the northern end of the route, the streetcar operates on a short counter-clockwise loop around the [City Market](#) on 5th Street, Grand Boulevard, 3rd Street and Delaware Street. **While the existing route provides connectivity among many of the region's premier attractions, retail areas, and employment centers, it does not provide connection to the many amenities that Berkley Riverfront has to offer residents and visitors.**

## 2.1. Berkley Riverfront History and Context

For many years, the Riverfront has been an underutilized cultural and recreational asset—having served as the historic birthplace of Kansas City. Today this area is primed for new residential and commercial development, but is highly **isolated from the activity of the adjacent River Market and Columbus Park neighborhoods by multiple freight railroads, interstate highways and difficult topography.**

## Berkley Riverfront History and Context (2.1. continued)

Currently, the principal attraction in the area is the recreational space of Berkley Riverfront, a 17-acre park that parallels the Missouri River. Berkley Riverfront functions as a regional destination—hosting numerous family-friendly festivals, community events and music performances throughout the year that draw crowds from throughout the metro area. The park currently includes a beach volleyball center, areas for group and individual fitness activities, a dog park, weekly fitness classes, the Riverfront Heritage Trail and other recreational amenities for residents of Downtown and the Kansas City region.



Figure 10:  
Berkley Riverfront's  
Annual Fourth of July  
celebration brings crowds  
from around the  
Kansas City metro.

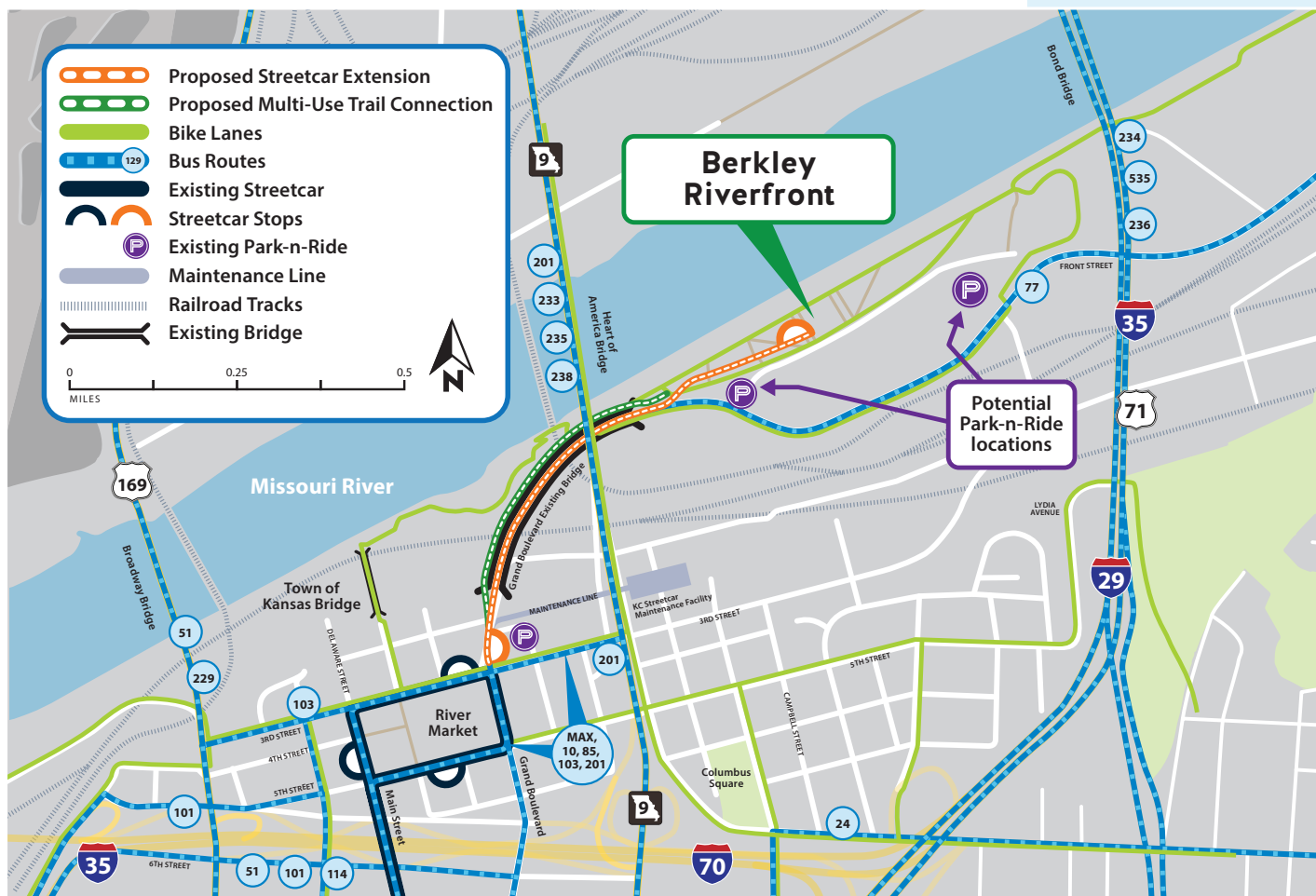
**Due in large part to the lack of connectivity and isolation from Downtown, the available land on Berkley Riverfront has been slow to attract private sector development interest and investment.** Through sustained, continual efforts by Port KC to market these properties, the [Union](#)—the first residential mixed-use project is open and operational. **The addition of new streetcar service and enhanced multi-modal connectivity for Berkley Riverfront is expected to significantly accelerate and intensify the level of interest and development density in the Riverfront area.** As new residences and employment centers are constructed on Berkley Riverfront it is estimated that ridership on the streetcar and bus transit systems will both experience growth—including an increased population that will use the expanded transit service to access the programming and amenities available at Berkley Riverfront.

## 2.2. Public Transit and Berkley Riverfront

With this proposed extension of KC Streetcar service to Berkley Riverfront, there is an opportunity to explore modifying existing bus routes—taking full advantage of this new service by leveraging existing transit assets and infrastructure in the nearby areas. [Figure 11](#) on the following page illustrates transit and multi-modal connections in the River Market and Berkley Riverfront areas alongside proposed KC•CORE improvements.

The current terminus of the Downtown Streetcar starter line is near the park-and-ride lot located in the River Market at 3rd Street and Grand Boulevard. This area is well-served by transit service today and is a developing hub where several transit service types—streetcar, local bus, and bus rapid transit—interact.

**With Streetcar,  
Riverfront  
development values  
increase by **40%**  
**2** and occur  
years earlier.**



### Public Transit and Berkley Riverfront (2.2. continued)

This park-and-ride facility is owned and operated by the KCATA and accommodates 193 free parking spaces for transit riders. This location also serves as a layover point for several KCATA bus routes, with an operator restroom facility that provides operators short breaks and schedule recovery opportunities. **There are six (6) existing bus routes that come together at 3rd and Grand and operate through the River Market and/or the Riverfront areas to provide access throughout the greater KC metro region.**

As the owner of this park-and-ride facility, the KCATA has explored the redevelopment potential of this site and is currently considering entering into a public-private partnership agreement with a local developer to construct a multi-story commercial office development with ground-floor retail.

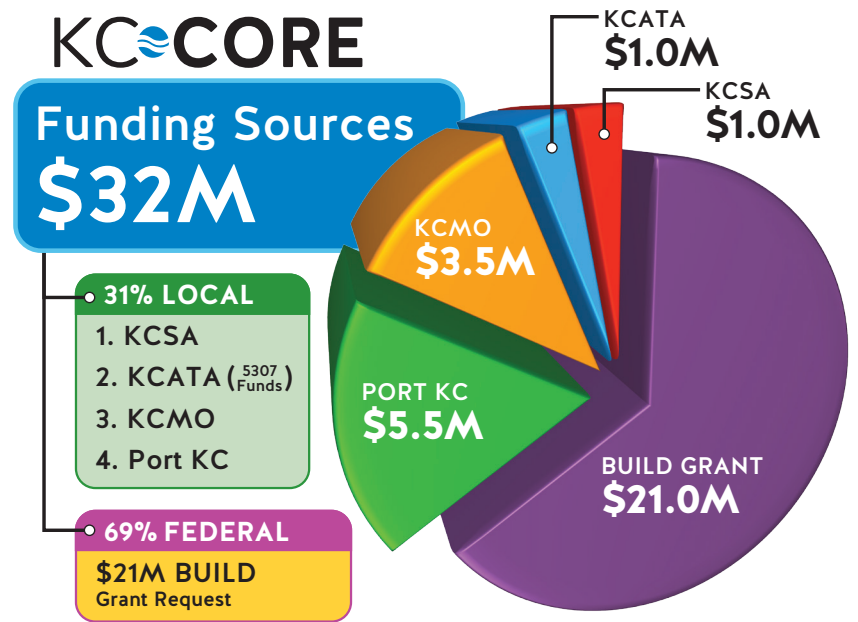
On the Riverfront, Port KC is in the process of negotiated the daytime use of approximately **200 parking spaces for a commuter park-n-ride**. These spaces would be available for all and would serve commuters from north Kansas City into easily accessing downtown work and entertainment locations via streetcar.

Figure 11:  
Transit Routes &  
Multi-Modal Facilities



### 3. GRANT FUNDS & SOURCES / USES OF PROJECT FUNDS

KC•CORE is supported by a solid financial plan of capital, and operation and maintenance (O&M) funding. These two funding sources are in turn supported by a solid project estimate for the capital costs and the two-year history of operational costs for future operational funding needs. The following summarizes the two funding needs with additional information presented in [Section 5 \(Project Readiness\)](#) and [Section 7 \(Cost Share\)](#) of this application.



#### Capital Sources of Funds

The total [estimated cost](#) of the project is \$32 million. Of that \$32 million, KCATA, Port KC, and KCSA are seeking \$21 million in BUILD funding to match an \$11 million local investment to implement KC•CORE.

Port KC has [committed \\$5.5 million](#) in direct funding to the capital project budget. This \$5.5 million contribution represents an allocation of Port KC cash reserves, utilization of existing lines of credits, and the present value of current performing land leases. The Kansas City Streetcar Authority (KCSA)'s Board has [allocated \\$1 million in capital funding](#) for the project toward an additional storage track siding at the existing Vehicle Maintenance Facility. On the west side of the Grand Avenue Bridge, the City of Kansas City, Missouri (KCMO) has [agreed to provide \\$3.5 million](#) to support the construction of the bike/pedestrian pathway. Finally, KCATA has committed \$1 million in Section 5307 urbanized area formula funds to assist in funding the KC•CORE project.

#### O&M Costs and Revenues

*The Streetcar Riverfront Extension and Multi-Modal Feasibility Study* estimated annual operation and maintenance (O&M) costs at approximately \$808,500. Initially, Port KC will fund and support the maintenance and operations via a capitalized sinking fund. In the long term, O&M funding will be sourced from future Condominium Association Assessments (CAA).

Figure 12:  
KC•CORE  
Funding Sources

## O&M Costs and Revenues (continued)

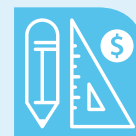
The Berkley Park Condominium Association (CAA), a Missouri Nonprofit Corporation, that was created by Port KC in November 2016 and covers the entirety of the Berkley Riverfront Park Master Planned Development (MPD). All developers are subject to regular and special assessments of the Association.

**Revenues generated from the CAA are dedicated to upkeep and maintenance of amenities in public spaces—including the KC Streetcar. CAA revenues are conservatively anticipated to total \$1.4 million per year by 2030.**

Prior to the CAA revenues eclipsing and covering the annual streetcar increase costs from the extension, Port KC's capitalized fund will create a "sinking-fund-account" to cover the difference in O&M costs for the first number of years that the CAA revenues are less than streetcar O&M costs.

Table 1: KC•CORE Capital Cost Estimate

	FTA Standard Cost Categories	
		Total Column
10	Guideway & Track Elements	\$7,517,000
20	Stations, Stops, Terminals, Intermodal	\$300,000
30	Support Facilities: Yards, Shop, Admin. Bldgs.	\$730,000
40	Site Work and Special Conditions	\$4,588,240
50	Communications	\$4,355,000
60	ROW	-
70	Vehicles	\$6,000,000
80	Professional Services	\$4,372,560
90	Unallocated Contingency	\$4,179,420
100	Finance Charges	-
	<b>Totals</b>	<b>\$32,042,220</b>



# KC•CORE

✂ Planning

✂ Conceptual

✂ ACE Engineering

✂ NEPA

have been funded by  
**local sources.**

## 4. MERIT CRITERIA

### Safety

Safety for all modes of transportation is one of the key elements for KC•CORE. **Currently, accessibility to Berkley Riverfront is inconvenient and dangerous for pedestrians and cyclists.** The most direct route for active transportation users is the Grand Avenue Bridge; however, the structure has no sidewalks or amenities (Figure 13). This forces pedestrians and cyclists to choose whether to (a) travel in vehicular traffic lanes, (b) find other circuitous routes, or (c) cross at-grade railroad tracks.



Figure 13:  
Grand Avenue Bridge  
currently lacks bike  
and pedestrian  
amenities

**KC•CORE includes a new multi-use bike and pedestrian trail that will be constructed along the northern, outside edge of the existing Grand Avenue Bridge. This multi-use path will provide direct and safe access to Berkley Riverfront for pedestrians and cyclists of all ages and abilities.**

Public transportation investments and supportive policies increase traffic safety in several ways, including reduced crash risks (for travelers who shift from automobiles to public transit), community-wide crash reductions (due to fewer total vehicle use), and safer traffic speeds. As public transit travel increases, per capita traffic fatality rates decline. Cities where residents average more than 50 annual transit trips experience about half the average traffic fatality rates as cities averaging fewer than 20 annual trips.<sup>1</sup> This holds true for the Kansas City region as well. **In 2015, 2016 and 2017 KCATA was recognized by the American Public Transportation Association for being one of the safest public transit agencies in the United States. In the KC Streetcar's first two years of operation, there has been a single reported passenger injury and a single employee injury in its over 4,000,000 rides—an outstanding safety record.**

KC•CORE will extend reliable, fast and frequent streetcar and bus service to a new residential area that will provide mobility alternatives—other than the personal automobile—reducing vehicle miles traveled and, therefore, reduced crash rates.

The **KC Streetcar**  
starter line with  
**2.2 miles**  
**= 2M**  
riders/year.

**KC•CORE**  
extension expects  
**1/2 mile** will  
**= 500,000**  
riders/year.



## State of Good Repair

Each of the project partners for KC•CORE will continue their commitment to managing and operating their transit systems in a state of good repair. This commitment requires reinvestment in capital assets, continual maintenance of vehicle fleets and facilities, and employing best practice asset management strategies—all of which KCATA and KCSA excel.

KCATA, KCMO and KCSA are following FTA requirements relating to Transit Asset Management. Each agency has developed, adopted and implemented their own Transit Asset Management Plan that guide their respective agencies in maintaining fleet, facilities, and other capital assets needed to efficiently, effectively, and safely operate transit services for citizens in the Kansas City metro.

In 2016, KCATA adopted and implemented its Regional Transit Asset Management Plan (RTAM). The RTAM for KCATA and its regional partners ties together the ongoing maintenance of capital assets and the replacement and repair of the same assets. It presents plans to bring assets up to a State of Good Repair. It explains how each asset class is maintained throughout its life and how an asset's condition is continually evaluated and maintained throughout its life. **These policies and practices will continue to be employed for KC•CORE to ensure all capital elements are maintained in a State of Good Repair.**

As the owner of the federally funded KC Streetcar system assets, KCMO is responsible for implementing a Transit Asset Management Plan to ensure the system's continued state of good repair. The City's Transit Asset Management (TAM) Plan (adopted October 2017) is being updated to fulfill applicable requirements of 49CFR 625.25 to report on the annual condition of assets.

**To execute the TAM Plan, the City maintains an asset inventory and assesses state of good repair using the FTA-prescribed condition index and decision-support tools.** The TAM Plan will be updated in the future, as necessary, to incorporate additional assets associated with system expansion and amend investment prioritizations to reflect changing system demands.

**Additionally, KC•CORE will improve the Grand Avenue Bridge—expanding its overall useful life as the primary connection to and from Berkley Riverfront for all modes of transportation, including auto, truck, transit, bike and pedestrian.**



Figure 14:  
KC Streetcars  
undergoing routine  
maintenance

 **KCSA &  
KCMO**  
continue to keep  
the streetcar assets  
in a state of  
good repair.

## Economic Competitiveness

**KC•CORE will greatly improve the economic competitiveness of Kansas City for attracting new residents and employment opportunities by expanding a regional, fast, frequent, and reliable transit system.** As Kansas City has experienced significant economic development activity in conjunction with the KC Streetcar starter line, this streetcar extension will catalyze new economic development opportunities on Berkley Riverfront. There are approximately **65,000 jobs within a two-block area** surrounding the current KC Streetcar alignment. **KC•CORE will open up access to these and other employment opportunities for the hundreds of new residential units that will be developed on Berkley Riverfront.**



*Figure 15:  
The Union  
was recently  
completed and is the  
initial development  
on Berkley Riverfront.*

**Within the existing KC Streetcar Transportation Development District (TDD) there has been more than \$2.2 billion in new investments.** Extending the alignment to Berkley Riverfront will expand and increase these benefits and opportunities (as great as \$0.9 billion) to a unique area poised for an economic surge. Introducing the streetcar to Berkley Riverfront is expected to dramatically improve the economic competitiveness of the area—accelerating the speed and intensity of redevelopment. [Figure 16](#) on the following page presents the projection of valuation for the total development value of Berkeley Riverfront with and without streetcar service.<sup>2</sup> **Construction of KC•CORE with a streetcar and multi-modal connections will accelerate development by two years and increase the total development value by an estimated \$320 million—more than an order of magnitude return on the \$32 million investment.**

Berkley Riverfront has already experienced some development with the opening of a [400-unit residential building, the Union](#) (Figure 15). Port KC currently has seven additional parcels available for development. To streamline the development and entitlement process for sites on the Riverfront, KCMO and Port KC created the Berkley Riverfront Development Master Plan (MPD) in 2014. The MPD zoning overlay anticipates buildings with an average height of ten stories. The recently completed development is approximately half the allowable density for the Riverfront. Achievable densities and associated land prices for future phases of development will increase with extended streetcar service and improved bicycle and pedestrian access.

**3-5x  
MORE**  
economic  
growth in  
the existing  
**TDD**  
(vs other areas of the city)

## Economic Competitiveness (continued)

In 2017, Port KC estimated the value of Berkley Riverfront parcels at approximately \$1,000,000 per acre (about \$23 per square foot) or about 77 percent of Downtown property values. This estimate is based on the actual present value of the first long-term land lease for [the Union](#) project that recently completed construction, the negotiated signed terms sheet for a second project, and the [recently completed property appraisal](#).

The *Streetcar Riverfront Extension and Multi-Modal Feasibility Study* assessed land valuations on Berkley Riverfront [in two scenarios, with and without KC Streetcar service](#). This economic development assessment found that with streetcar service, land valuations would approximately double from \$1,000,000 to \$2,000,000 beginning 2018—increasing the total valuation of the available development sites from \$43 million without streetcar to over \$83 million with streetcar service.

The impact on development potential of Berkley Riverfront for new residential units, average floor heights, commercial square footage, and office space square footage with and without streetcar was also examined. The below *Table 2* demonstrates the **significant positive impact streetcar and multi-modal connectivity improvements would have on future development trends.**<sup>3</sup>

Table 2: Impact on Future Developments by Development Use

### Without Streetcar

Total Residential Units	Total Commercial Square Footage	Total Office Space Square Footage	Total Gross Square Footage	Average Number of Floors
2,992	314,268	195,306	4,071,000	6.5

### With Streetcar

Total Residential Units	Total Commercial Square Footage	Total Office Space Square Footage	Total Gross Square Footage	Average Number of Floors
4,557	314,268	377,760	6,133,000	9.9

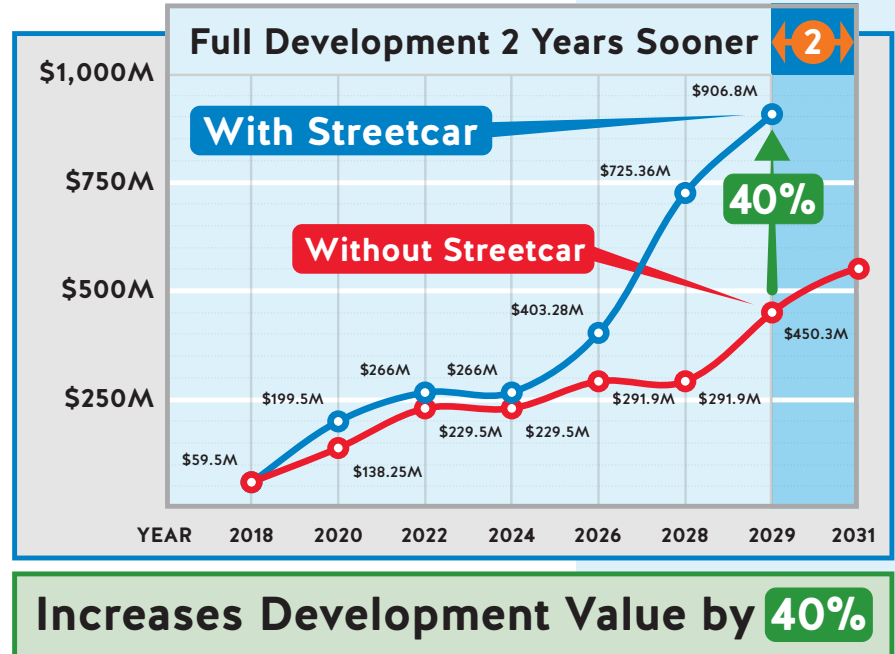


Figure 16:  
KC Streetcar Impact  
on Development of  
Berkley Riverfront





## Environmental Protection

The KC Streetcar is a 100% emission-free transportation mode and will improve the overall air quality in the region. Extending the KC Streetcar and multi-modal bike and pedestrian facilities to the Riverfront, will reduce the need for new residents to rely on personal automobiles. Additionally, KC•CORE will facilitate easier and more convenient access to the regional RideKC bus and BRT system—further reducing auto dependence.

KC•CORE will benefit the environment and will be constructed within the existing right-of-way of previously developed urban environments. As such, there will be no adverse impacts from construction of the KC Streetcar extension and multi-use trail improvements. The project partners initiated the NEPA assessment process for the KC•CORE project in September 2017. **The project has been designated a Categorical Exclusion (CE2) and is currently under final review by the Federal Transit Administration's Region VII office in Kansas City.** The project partners anticipate a Record of Decision on the NEPA assessment in Summer 2018 confirming that KC•CORE will have no adverse impacts to the natural or built environment.

Berkley Riverfront is a remediated former brownfield site. In 2001, Port KC with the assistance of a \$1.75 million grant from the EPA and \$360,000 loan from the Brownfield Revolving Loan Fund cleared and remediated 240,000 cubic yards of debris to make the site safe and available for redevelopment. **KC•CORE will bring this former blighted area up to its highest and best use of residential, commercial, retail and recreation uses for all citizens of the Kansas City metro.** In addition to remediation, Port KC has also made numerous sustainable improvements on the Riverfront including an American Recovery and Reinvestment Act-funded LED Street Lighting project, construction of a solar-powered bus transit station, and pervious pavement park-and-ride lot.

**KC•CORE will continue—and extend—the sustainability benefits that are at the center of the KC Streetcar's operations and mission.** In 2016, the KCSA was [awarded the highest rating for sustainable infrastructure, Envision Platinum](#), by the Institute for Sustainable Infrastructure (ISI). The KC Streetcar was the first transit, and more specifically the first streetcar project, to be awarded this high designation for environmental sustainability. **KCSA's Vehicle Maintenance Facility was awarded a Platinum rating for its sustainable infrastructure.**



Providing mobility options & reducing congestion improves quality of life and strengthens cohesion within a community.

### KC Streetcar

has incorporated additional sustainability features in its strategy for

Sustainable Growth



Economic Development

Long-term Management of Stakeholder Processes



Community Relationship Building.



★ **William Berta**  
President/CEO Institute for Sustainable Infrastructure

## Quality of Life

**For decades, Berkley Riverfront has been an untapped and largely forgotten public green-space asset for the Kansas City region.**

As noted earlier, in the 1990s and early 2000s Berkley Riverfront was remediated to allow for the creation of park land as well as residential and commercial redevelopments. Since that time, Port KC, KCMO and other entities have devoted significant efforts to rebuild, revitalize, and re-imagine the Berkley Riverfront as a vibrant place for Kansas Citians to live, work, and play.

A primary effort to achieve this vision was laid out in the [Greater Downtown Area Plan \(GDAP\)](#) for Kansas City in 2010. This plan, which includes the KC•CORE project area, established five overarching goals for the improvement of Downtown:

1. *Double the Population*
2. *Increase Employment*
3. *Create a Walkable Downtown*
4. *Retain and Promote Safe, Authentic Neighborhoods*
5. *Promote Sustainability*

KC•CORE supports each of the goals of the GDAP by increasing density for Riverfront developments, providing safe bicycle and pedestrian facilities, improving connections to unique, burgeoning neighborhoods and by catalyzing development of employment opportunities along the Riverfront.

**One of the focal points in the KC•CORE project area is the 17-acre Berkley Riverfront Park located along the Missouri River—offering the largest green space near Downtown.** The park maintains space for both active and passive recreation with the Riverfront Heritage Trail and newly constructed sand volleyball complex. It also hosts numerous [family-friendly festivals](#), community events, and music performances throughout the year.

**Over the past decade, the population of the greater Kansas City Downtown area has more than doubled—from less than 10,000 in the 1990s to approximately 24,000 in 2016.** With the number of new residents living in a denser urban environment, access to green space and recreational amenities—such as those available within Berkley Riverfront—are a key component to maintaining a healthy, high-quality of life. New connectivity brought by KC•CORE will make this recreational space more accessible for residents living Downtown as well as for residents of the entire Kansas City region.



*Figure 17: Berkley Riverfront Park offers green space and recreational activities yet remains a largely underutilized asset for the region due to its isolated and difficult to access location.*

*Photo credit: Mark Hennick*

## Quality of Life (continued)

As noted earlier, the KC Streetcar starter line was awarded the Envision Platinum Award from ISI. The KC Streetcar rated especially high in the Quality of Life category based on its creation of an alternative mode of transportation that improves mobility and accessibility for a heavily developed urban area, within walking distance to a mix of commercial, office and residential uses. The system was touted for its proximity to regional transit services, integration with bicycle and pedestrian facilities, and as an alternative to automobiles in the downtown area. **KC•CORE will extend these award-winning quality of life benefits to the Berkley Riverfront.**



Figure 18:  
Existing Smart  
City Kiosk at a KC  
Streetcar Station

## Innovation

KC•CORE is both the result—and creation—of innovation generated from a strong local partnership committed to the execution of a successful public-private investment. Three specific innovations are outlined below.

### Smart City Innovations

The modern Downtown KC Streetcar has many 'Smart City' innovations built into its operations. The 2.2-mile starter line initiated an enterprising collaboration with Sprint to [provide free Wi-Fi](#) accessibility along the length of the alignment. Cisco Systems was another partner in this corridor that deployed an array of cameras and sensors along the streetcar route to provide real-time information for street lighting levels, traffic signal operation, condition and function of water pipes, and pavement condition. Cisco's sensors working with Sprint's Wi-Fi worked together to improve traffic flow and to provide information on obstructions along the alignment so they may be cleared quickly allowing for minimal interruption to streetcar operations.

[Smart Informational Kiosks](#) (Figure 18) were incorporated as innovative technologies into the streetcar system. These kiosks are located at all KC Streetcar station platforms and provide riders with detailed information about the streetcar and bus system. These kiosks also provide information about retail, restaurants and other areas of interest near their location. **These innovative Smart City elements will also be included in the KC•CORE project as the streetcar is extended from the River Market to the Berkley Riverfront.**

**The KC Streetcar starter line has received more than a dozen awards for excellence in design, engineering and sustainability including:**

-  Envision Platinum **Sustainable Infrastructure** Award
-  ASCE 2017 Innovation in **Sustainable Engineering**
-  Best **Regional Project in Transit** by Engineering News-Record
-  Singleton Yard Designated with **LEED Gold Certification**

## Innovation (continued)

### Funding and Finance Innovation

Port KC has full ownership of all property available for development in the Berkley Riverfront and is using the KC•CORE project as a financing lever.

A conservative economic assessment performed for the *Streetcar Riverfront Extension and Multi-Modal Feasibility Study* estimated that **the land value of Port KC's properties within Berkley Riverfront would almost double—from approximately \$43 million to \$83 million—with the construction of a streetcar extension to the area.** The proposed KC•CORE project will require no increase to existing sales or property taxes to finance its capital costs.

On the operations side, the proposed source of funding for on-going operations and maintenance of the streetcar and multi-use trail elements will come from new Condominium Association Assessments and through agreements with private developers. **This innovative public-private partnership will apply to new residential units built on Berkley Riverfront whose tenants would receive many of the benefits of fast, frequent, reliable transit service.** Additional information on this non-federal new revenue finance innovation can be found in [Section 7 Cost Share](#).

### Streetcar Station Design Innovation

The innovative and unique design of the existing KC Streetcar stations will be included in the new station that will be constructed for KC•CORE. **The KC Streetcar stations were designed to provide shared use with both buses and streetcars.**

The center of the platform is a 14-inch height that allows for level boarding of the streetcar to speed-up boarding and alighting times, the station platforms then reduce in height from the 14-inch height to a 10-inch height at the outer ends. This lower boarding area provides inter-operability with RideKC buses that share stops or provide temporary bus bridge service in the rare event of a temporary stoppage of streetcar service. **This innovative approach to station platform design facilitates system redundancy as well and multi-modal integration between RideKC buses and the KC Streetcar.**

**With Streetcar,**

**Riverfront**

development values  
increase by **40%**

**2** and occur  
years earlier.

**KC•CORE**  
leverages an  
**innovative**  
public-private  
**partnership** 



## Partnership

**KC•CORE brings together a multi-jurisdictional partnership of regional transportation and development agencies that have a long and successful history of collaborating in the planning and implementation of similar projects in the Kansas City region** that include the Kansas City Area Transportation Authority (KCATA) as the lead project applicant, co-sponsors Port KC and the Kansas City Streetcar Authority (KCSA), and supporter the City of Kansas City, Missouri (KCMO). Most recently, this partnership collaborated on the development of the *Streetcar Riverfront Extension and Multi-Modal Feasibility Study* that determined a streetcar extension to Berkley Riverfront was structurally, operationally, and financially feasible. This planning effort examined the feasibility and need for a KC Streetcar extension and included extensive public engagement. The project partners heard resounding support for an extension of the streetcar to Berkley Riverfront throughout this public outreach effort.

### *Kansas City Area Transportation Authority (Lead Applicant)*

[The Kansas City Area Transportation Authority](#) (KCATA)—also known as RideKC—is a bi-state agency created by a compact between the States of Missouri and Kansas, and approved by the United States Congress. The compact was authorized by legislation passed in both states in 1965. The compact gives the KCATA responsibility for planning, construction, owning, and operating passenger transportation systems and facilities within the seven-county Kansas City metropolitan area. The compact defines the KCATA district as the counties of Cass, Clay, Jackson, and Platte in Missouri; and Johnson, Leavenworth, and Wyandotte in Kansas.

KCATA is governed by a ten-member Board of Commissioners, five from Missouri and five from Kansas. Responsibility for the management, control, and operation of the Authority and its properties is vested in the Board. The Board exercises its responsibility by adopting all general policies of the Authority, including the adoption of annual capital and operating budgets, the establishment of the goals of the Authority, and the selection of a President/CEO.

The KCATA operates the RideKC bus service, the MAX Bus Rapid Transit service, Flex demand-response routes, RideKC Freedom paratransit service for the elderly and persons with disabilities, and RideKC Van vanpool service. The [operating budget for KCATA](#) to provide its diverse mobility services in FY 17 was \$96,540,411. In 2017, the KCATA provided 13,213,458 trips on its integrated system of public transit services with an average weekday ridership of 40,794.

# KC•CORE

is a continuation  
of a **successful**  
**partnership** between

- ☯ **KC Streetcar Authority**
- ☯ **KC Area Transportation Authority**
- ☯ **Port KC**
- ☯ **City of KCMO**

## RideKC

The **Kansas City Area Transportation Authority**

is the **lead agency**  
and the  
**grant recipient**  
for the

# KC•CORE

**BUILD** Project.

## Partnership (continued)

### Port KC

[Port KC](#), a political subdivision of the State of Missouri, was established in 1977 by the City of Kansas City, Missouri. It operates as a nine-member appointed board and is entrusted with the power to [condemn property, enter contracts, and issue bonds](#). These are unique capabilities and opportunities available to Port KC, which is significantly different than other similar public agencies. **Port KC will continue its role of responsibility and leadership in the areas of environmental stewardship and sustainable development for the Riverfront.**

Port KC's strategic vision for the Riverfront is strong and dynamic, with a mission focused on sustainable design and a conscientious use of resources. **Port KC is crafting Berkley Riverfront into one of the most unique urban settings in the region by combining commerce, nature and an environment that promotes healthy lifestyles with a goal of improving the quality of life for those living, working, and visiting the area.**

### Kansas City Streetcar Authority

[The Kansas City Streetcar Authority](#) (KCSA) is a not-for-profit organization formed for the purpose of managing, operating, and maintaining the KC Streetcar system. The KCSA was incorporated in August 2012 following the creation of the Kansas City Downtown Transportation Development District (TDD) that funded the construction and on-going operation of the streetcar. In addition, the KCSA supports system branding, marketing, public communication and engagement. KCSA is governed by a 13-member Board of Directors composed of residents of the TDD, transit activists, property owners in the TDD, and public officials. While the KCSA is a separate entity, it **works closely with KCATA, the City of KCMO, and the TDD to coordinate service development and long-term management of the streetcar.**

KCSA operates with an [annual budget of \\$4,966,980](#) (FY 16-17). In the KC Streetcar's first year of operation the system recorded a total ridership of over 2,000,000 on its 2.2-mile alignment with an average daily ridership of 5,830.

### City of Kansas City, Missouri

Another important partner for the KC•CORE BUILD project is the [City of Kansas City, Missouri](#) (KCMO) who owns the KC Streetcar and its assets. KCMO has been, and will continue to be, an engaged partner as this project progresses into detailed design and construction. KCMO will provide the KC•CORE project with extensive technical expertise in streetcar design and construction experience to guide this project to its successful implementation in 2021.



## Partnership (continued)

### Project Parties Role in Project

The Kansas City Area Transportation Authority (KCATA) is the lead agency and the grant recipient for the KC•CORE BUILD proposal. KCATA is a designated recipient of federal transportation funding provided by the Federal Transit Administration and has the experience and technical capacity to effectively manage BUILD funds once they have been awarded. Both KCSA and Port KC are co-sponsors to this application and will provide financial and technical support to the project as it advances through planning, design, construction and implementation.

These four agencies have been working cooperatively for many years to improve and extend the reach and reliability of public transit and multi-modal mobility options across the Kansas City metro region. They have planned the future for transit and development with their close involvement on the creation of the [Greater Downtown Area Plan](#) and have collaborated to establish a shared vision for the future of an expanded and enhanced regional public transit system in the [Smart Moves 3.0 Regional Long Range Transit Plan](#), as well as multiple other efforts to improve mobility and development opportunities.

Port KC has invested millions in the construction of numerous trails including the [Town of Kansas Pedestrian Bridge](#) and the [Riverfront Heritage Trail](#). KCATA and KCSA collaborate daily in operation of the streetcar and bus transit systems, ensuring that each system interfaces seamlessly with the other.



We must focus on connecting our **NEIGHBORHOODS** to create a strong urban **COMMUNITY**, flourishing with diversity, fostering **BUSINESS**, maintaining historic neighborhood **IDENTITIES**, and sustaining a safe, vibrant & healthy Greater Downtown Area for current and future **GENERATIONS**.



★ Vision of Greater Downtown Area Plan, City of Kansas City, 2010

## Partnership (continued)

### Supporters of the Project

Supporting the project partners is a wide cross section of agencies and stakeholders from across the Kansas City Metro region. Their individual letters of support for KC•CORE can be viewed via the below hyperlinks.

#### Elected Officials:

- [Roy Blunt, United States Senate](#)
- [Claire McCaskill, United States Senate](#)
- [Emanuel Cleaver II, United States House of Representatives](#)
- [Jason Holsman, Missouri State Senate](#)
- [Sylvester "Sly" James, Mayor-Kansas City, Missouri](#)
- [Jolie Justice, 4th District Councilwoman-Kansas City, Missouri](#)
- [Katheryn Shields, 4th District At-Large Councilwoman-Kansas City, Missouri](#)
- [Jermaine Reed, 3rd District & Committee Chair, Transportation-Kansas City, Missouri](#)
- [Troy Schulte, City Manager-Kansas City, Missouri](#)

#### Businesses:

- [Bark](#)
- [Copaken Brooks](#)
- [Cushman & Wakefield](#)
- [Flaherty & Collins](#)
- [UMB Bank](#)

#### Local Governments / Organizations:

- [AFL-CIO](#)
- [City of Kansas City, Missouri- Board of Parks and Recreation Commissioners](#)
- [Crossroads Community Association](#)
- [Downtown Community Improvement District](#)
- [Downtown Council](#)
- [Downtown Neighborhood Association](#)
- [Jackson County, Missouri](#)
- [Kansas City Regional Transit Alliance](#)
- [Kansas City Area Development Council](#)
- [Labor-Management Council of Greater Kansas City](#)
- [Main Street Community Improvement District](#)
- [Mid-America Regional Council](#)
- [Missouri Department of Transportation](#)
- [Missouri Public Transit Association](#)
- [River Market Community Improvement District](#)
- [River Market Community Association](#)
- [Visit KC](#)

“ This would be the **perfect way to connect KCMO to the riverfront** which is currently **a great resource that is underutilized**”

- KC Stetcar Riverfront Extension & Multi-modal Feasibility Study Open House Participant



## Non-Federal Revenue for Transportation Infrastructure Investment

**New, non-federal revenues have been identified to support the KC•CORE BUILD infrastructure investment.** Based on the conservative forecast developed in the *Streetcar Riverfront Extension and Multi-Modal Feasibility Study*, construction of the streetcar extension would nearly double the land valuation in the Berkley Riverfront from \$43 million to \$83 million. Port KC is the sole land owner of all the land available to develop in this area and will commit its cash reserves to construct the project.

A secondary source of non-federal revenue to support KC•CORE is future Condominium Association Assessments (CAA) and existing [Port Improvement District \(PID\)](#) assessments of new, mixed-use private developments receiving direct mobility benefits from KC•CORE. These revenues would be dedicated to the on-going operations of the streetcar expansion and maintenance of stations, track, vehicles and the associated multi-modal infrastructure. CAAs are conservatively anticipated to total \$1.4 million per year by 2030.

KCMO recognizes the advantage of the streetcar and the installation of the parallel bike/pedestrian path. As such, [KCMO has agreed to fund \\$3.5M](#) of the project in support of the path. KCSA is also directly, financially supporting the KC•CORE extension efforts. The [KCSA Board has allocated \\$1 million](#) to support the design and construction of the needed vehicle storage track at the Vehicle Maintenance Facility.

## 5. PROJECT READINESS

KCATA, Port KC, and KCSA completed the *Streetcar Riverfront Extension and Multi-Modal Feasibility Study* on August 9, 2017, which resulted in the scope of the KC•CORE project as outlined in this BUILD Grant Application. The partnership has been rapidly advancing the project. In September 2017, the project began the federal NEPA environmental review. **Currently, the review is anticipated to result in a Documented Categorical Exclusion (DCE) in August 2018. The project partners are prepared to obligate the BUILD grant funding shortly after receipt of the DCE.**

## PROJECT READINESS (5. CONTINUED)

### Technical Feasibility

Planning, conceptual engineering, capital, operations and maintenance cost estimation were all based on standards established from recent Downtown Streetcar construction (escalated to current year costs). Capital costs and quantities used in the estimates are current and an unallocated contingency has been incorporated into the project budget to mitigate against unforeseen occurrences in construction.

**KC•CORE project partners and the Kansas City region have a successful track record managing and implementing USDOT funded investments, delivering them on time and within budget.** The following is a summary of significant federally funded projects that are in progress or successfully implemented in the Kansas City region:

#### **TIGER I – 2009: \$50,000,000 (KCATA)**

- 2 Transit Centers Constructed
- New bus stations along the State Avenue and Metcalf Corridors
- Transit stop improvements in Independence, MO and North Oak Corridor
- Green Impact Zone improvements to Troost Bridge, sidewalks & roadways
- Berkley Parkway construction

#### **TIGER V – 2013: \$20,500,000 (City of Kansas City, Missouri)**

- Kansas City Downtown Streetcar

#### **Small Starts Grant – 2016: \$29,890,000 (KCATA)**

- Prospect MAX Bus Rapid Transit Development (On-going)

#### **1998 TEA 21 - \$1,300,000**

- Town of Kansas Pedestrian Bridge

#### **1999 Transportation Enhancement Grant - \$2,300,000**

- Town of Kansas Pedestrian Bridge

**This four-way partnership between KCATA, Port KC, KCMO, and KCSA has committed not only its technical capacity to effectively oversee, manage and implement KC•CORE, but each has a financial commitment invested to the success of the project.**



emanates from years of community-based planning efforts that established the vision

and need for a reconnected and revitalized

**Riverfront**

which serves as a

**VIBRANT**  
place for all.

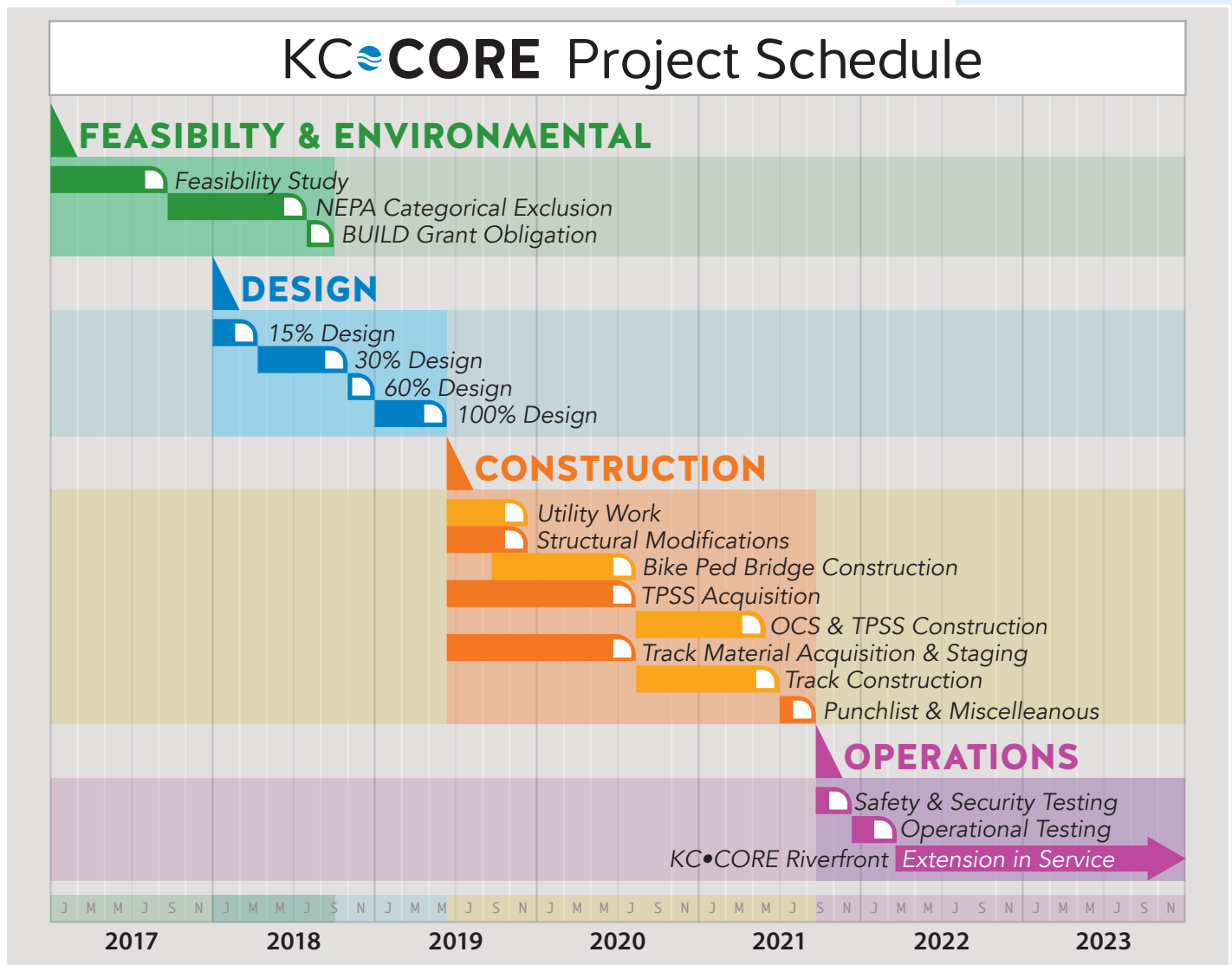


Figure 19:  
KC•CORE  
Project Schedule

## Project Schedule

Figure 19 above presents the project’s implementation schedule. This schedule anticipates NEPA evaluation being completed in third quarter of 2018 with BUILD grant obligation following in later 2018. Based on experience with the construction of the Downtown KC Streetcar starter line, the project schedule anticipates a 20-month construction period beginning mid-2019. The opening of the project’s bicycle and pedestrian improvements is scheduled for mid-year 2020, while the streetcar extension will open for revenue service by May 2022.

## Assessment of Risks and Mitigation Strategies

Each of the project partners is experienced in planning, designing, constructing, and operating large infrastructure projects. This experience is reflected in the KC•CORE project budget and schedule, both of which were developed to be conservative to mitigate against cost risk. The project team is experienced with the federal environmental review process, and has worked previously with FTA Region VII to prepare and document environmental impacts and mitigation.

The streetcar extension's operating revenue plan mitigates against a downturn in the economy by Port KC providing a draw-down funding source and by assuming a very conservative schedule for new development, assessments against which are targeted to transit operations.

## Financial Feasibility

In addition to a reliable cost estimate, the operating and capital funding commitments to the project are solid. KCATA, Port KC, and KCSA are all in strong financial condition. KCATA is a long-time federal transit grantee and experienced manager of USDOT funding.

## Required Approvals

The following approvals are required to execute KC•CORE:

- NEPA – A Documented Categorical Exclusion to comply with the National Environmental Policy Act of 1969 (NEPA) is anticipated for completion in third quarter 2018. Given the historic nature of the riverfront area and the modest impact that the project may have on a public recreational asset, the partnership is working with FTA and the state of Kansas' Historic Preservation Officer to address any Section 106 or 4f concerns.
- Planning – As the regional Council of Governments and Metropolitan Planning Organization for Greater Kansas City, the Mid-America Regional Council (MARC) will promptly program any BUILD funds provided to this project in the region's Transportation Improvement Program.



## 6. BCA RESULTS

A [benefit-cost analysis \(BCA\)](#) was conducted for KC•CORE for submission to the U.S. Department of Transportation (U.S. DOT) as a requirement of a discretionary grant application for the BUILD 2018 program. The analysis was conducted in accordance with the benefit-cost methodology as outlined by U.S. DOT in the 2018 BUILD Benefit-Cost Analysis Guidance. The period of analysis corresponds to 30 years and includes four years of construction and 26 years of benefits after operations begin in 2022.

Table 3: Benefit-Cost Analysis Results, Millions of 2016 Dollars

BCA METRIC	PROJECT LIFECYCLE		
	Undiscounted	Discounted (7%)	Discounted (3%)
Total Benefits	\$183.1	\$57.9	\$107.9
Total Costs	\$53.9	\$36.4	\$44.1
Net Present Value (NPV)	\$129.2	\$21.5	\$63.8
Benefit-Cost Ratio (BCR)	4.96	1.75	3.07

Table 3 above presents the evaluation results for KC•CORE. Results are presented in undiscounted, discounted at seven (7) percent and discounted at three (3) percent (sensitivity) as prescribed by the U.S. DOT. All benefits and costs were estimated in constant 2017 dollars over an evaluation period extending 26 years beyond system completion in 2021. At the seven (7) percent discount rate, **KC•CORE has a positive Benefit Cost Ratio of 1.75.**

## 7. COST SHARE

### Capital Cost Share

As described in [Section 3](#) and shown in [Figure 12](#), the project partnership is committing \$11 million—or 31 percent—towards KC•CORE’s total capital costs. BUILD funding will match the following committed capital revenue sources:

The Local match will be composed of:

- \$5.5 million in Port KC cash reserve and guarantees
- \$1 million in KCSA contributions
- \$3.5 million KCMO grant for the bike/ped bridge construction

See [Section 3](#) for additional information regarding the local matches noted above.

## REFERENCES

1. American Public Transit Association. The Hidden Traffic Safety Solution: Public Transportation. p. ii. September, 2016.
2. Streetcar Riverfront Extension and Multi-Modal Feasibility Study. pp. 59. <http://kcstreetcar.org/wp-content/uploads/2017/05/RvrExt-Feasibility-Report-2017-2.pdf>. August 9, 2017.
3. Streetcar Riverfront Extension and Multi-Modal Feasibility Study. pp. 58-59. <http://kcstreetcar.org/wp-content/uploads/2017/05/RvrExt-Feasibility-Report-2017-2.pdf>. August 9, 2017.

## APPENDICES

### FINANCIAL STATEMENTS

[Kansas City Area Transportation Authority \(KCATA\) Financial Report \(December 31, 2016\)](#)

[Kansas City Streetcar Authority \(KCSA\) Financial Report \(2015 and as of April 30, 2016\)](#)

[Port Authority of Kansas City, Missouri \(Port KC\) Financial Statements \(April 30, 2017\)](#)

### KANSAS CITY, MISSOURI 2013 TIGER GRANT

[Application \(June 3, 2013\)](#)

[Economic Analysis Supplementary Documentation \(June 3, 2013\)](#)

### OTHER SUPPORTING DOCUMENTS

[Kansas City Master Plan which includes Berkley Riverfront Master Development Plan \(p. 79\)](#)

[Berkley Riverfront Master Plan Development Brochure](#)

[Streetcar Riverfront Extension & Multi-Modal Feasibility Study \(WITH APPENDICES\)](#)