MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION Project Name: Brent Spence Bridge Corridor Project	
Project Sponsor	Kentucky Transportation Cabinet, with Ohio Department of Transportation
Previous submission for USDOT discretionary grant funding?	No
A project will be evaluated for eligibility for consideration for all three programs, unless the applicant wishes to opt-out of one or more of the grant programs.	__ Opt-out of Mega __ Opt-out of INFRA _X_ Opt-out of Rural
MPDG Request Amount	$1,660,000,000
Estimated Other Federal funding (excl. MPDG)	$366,928,372
Estimated Other Federal funding (excl. MPDG) further detail	Other Federal funding from Federal Formula dollars: $366,928,372 Other Federal funding being requested from other USDOT grant opportunities: $0
Estimated non-Federal funding	$743,733,292
Future Eligible Project Cost	$2,770,661,663
Previously Incurred Project Costs	$190,200,143
Total Project Cost	$2,960,861,806
INFRA or Mega: Amount of Future Eligible Costs by Project Type	2) A highway or bridge project on the National Highway System: $2,770,661,663
State(s) in which Project is located	Ohio and Kentucky
INFRA: Small or Large project	Large
Urbanized Area in which Project is located	Cincinnati, OH--KY--IN
Population of Urbanized Area (2010 Census)	1,624,827
Population of Urbanized Area (2020 Census; unofficial ACS estimate)	1,677,769
Is the Project located (entirely or partially) in Area of Persistent Poverty or Historically Disadvantaged Community?	Map available here. Tracts intersected by the Project corridor: APP only- 39061002700, 39061002800, 39061026300, 39061026500, 21117060300 HDC only- 21117061600 Both APP and HDC- 39061002900, 39061026900, 39061000200, 21117065000, 21117065100

Continued:

MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION **Project Name: Brent Spence Bridge Corridor Project**	
Is the Project located (entirely or partially) in Federal or USDOT designated areas?	Yes, partially in Opportunity Zone. Map available here.
Is the Project currently programmed in: • **TIP and STIP** • **MPO Long Range Transportation Plan** • **State Long Range Transportation Plan** • **State Freight Plan**	• OKI TIP, Ohio 2021-2024 STIP (ODOT PID 89068, ODOT PID 113361, ODOT PID 114161, ODOT PID 116649) • Kentucky 2021-2024 STIP (KYTC Kenton County 6-17) • OKI 2040 RTP • Ohio Statewide Freight Plan and Kentucky State Freight Plan

Several supporting documents are provided via direct links through this narrative document. All of the supporting documents can also be accessed here.

KYTC's Unique Entity Identifier (UEI) number is MFCBQTH5FFK3.

The KYTC Authorized Organization Representative (AOR) for this application is:

Susan B. Oatman, PE
Transportation Engineer Specialist – Statewide LPA Coordinator
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EXECUTIVE SUMMARY

The **Brent Spence Bridge Corridor Project (Project)** shown to the right is an ideal candidate for extraordinary USDOT Grant Program funding as requested in this application; it is critically important to national freight movement and too complex to be funded by traditional highway and bridge programs. In addition, the Project is well-suited for Federal support for multiple reasons including, but not limited to, the following:

A narrated video providing an overview of the BSB Corridor Project is available HERE.

- ✓ **The Project's objectives align directly with the USDOT's mission** of delivering a world-leading transportation system and serving the American people and economy through the safe, efficient, sustainable, and equitable movement of people and goods;
- ✓ **The Project will address the second-worst truck bottleneck in the nation**, as ranked by ATRI in February 2022, improving a critical highway network connection from Florida to Canada that carries more than $2B worth of freight every day and more than $700B worth of freight every year, approximately three percent of US Gross Domestic Product (GDP);
- ✓ **The Project will deliver a robust 2.37:1 Benefit/Cost Ratio** – more than 50% higher than the expectation for projects of this size and scope;
- ✓ **The number of cars and trucks that travel over the Brent Spence Bridge (BSB) is double the number of vehicles it was designed to carry**; a new companion bridge is needed for interstate and local traffic to navigate safely through this growing region, and to keep goods moving without costly delays along this vital national freight corridor;
- ✓ **The Project will improve access to the central business districts of Cincinnati, Ohio, and Covington, Kentucky** and will support local businesses and underserved communities in historic neighborhoods, such as Over-the-Rhine and Mainstrasse; and
- ✓ **Ohio and Kentucky are working together to deliver a shovel-ready project**, have pledged the resources needed to meet local match requirements, and have approved and are advancing a preferred Project alternative.

The rendering above depicts a new companion bridge across the Ohio River linking Cincinnati OH (at left) to Covington KY (at right), directly adjacent to the existing Brent Spence Bridge. The "tiered arch" design depicted is a preliminary concept.

Put simply, the passage of the Bipartisan Infrastructure Law (BIL) has created a once-in-a-generation opportunity to improve the quality of life for the millions of Americans who use the federal highway system to travel between Ohio and Kentucky and beyond, and the opportunity to invest in local businesses and a growing workforce by improving safety and travel along one of the most important national corridors for commerce and freight in the heart of America.

The time to act is now. The State of Ohio and the Commonwealth of Kentucky have worked cooperatively for well over a decade to advance a design solution, have committed significant state matching funds, and stand ready to move the Project forward upon securing Federal funding. This critical improvement has been highlighted as a national priority by the last three Federal administrations, drawing national attention as early as 2011.[1] Receipt of the requested MPDG funding would allow construction to begin by the end of 2024.

The Project will construct a companion bridge alongside the existing Brent Spence Bridge (BSB), rehabilitate and reconfigure the existing bridge, and construct improvements to an approximately eight-mile interstate corridor serving the bridges. This investment will separate traffic into an interstate system and local system, providing not only improved national goods movement, but also congestion relief and safer access to destinations in both Ohio and Kentucky for residents and employees in the region.

The Project will improve quality of life and equitable access to employment hubs, educational and healthcare centers, and other destinations, better connecting residents of Areas of Persistent Poverty and Historically Disadvantaged Communities to opportunities directly served by the corridor. Approximately 70% of the more than one million jobs in the region are located within five miles of the bridge corridor, and approximately 60% of the 2.1 million people in the region live within five miles of the corridor.[2] The additional cross-river capacity and improvements to the bridge approaches, both north and south, will support business growth and air cargo capacity expansion at Cincinnati/Northern Kentucky International Airport (CVG), while improving air quality and system resiliency and supporting sustainable development patterns.

PROJECT AND APPLICANT ELIGIBILITY

The Project is eligible for both the Mega and INFRA programs as it is a surface transportation project comprised of bridge and highway elements on the National Highway System and National Highway Freight Network. The Project is nationally and regionally significant and meets all Statutory Project Requirements as presented in Section VIII of this narrative.

The Kentucky Transportation Cabinet (KYTC) and the Ohio Department of Transportation (ODOT), state agencies of their respective executive branches and committed financial partners for the Project, submit this application jointly under eligibility as a "group of States." KYTC is the lead applicant and will serve as the primary point of contact. KYTC and ODOT have executed and refined a Memorandum of Understanding and are finalizing an Interstate Cooperative Agreement to outline funding and contractual responsibilities. Both KYTC and ODOT are committed to creating good-paying jobs, a free and fair choice to join a union, and high labor standards including Equal Employment Opportunity. Both agencies commit to meeting or exceeding participation targets: Buy American provisions, Americans with

[1] President Obama stands up for the American Jobs Act at the Ohio River's Brent Spence Bridge | whitehouse.gov (archives.gov)
[2] Brent Spence Bridge - OKI Regional Council of Governments

Disabilities Act (ADA) compliance, Title VI/Civil Rights requirements, and other applicable Federal procurement, compliance, reporting, and assessment requirements.

I. PROJECT DESCRIPTION

The **Brent Spence Bridge (BSB) Corridor** is a critical connector for residents, employees, and freight deliveries between Ohio and Kentucky on a nationally recognized corridor for freight and interstate travel. The Project corridor covers 7.8 miles of I-75 and I-71 from just south of Dixie Highway in Kentucky to just north of the Western Hills Viaduct (WHV) in Ohio and includes the existing BSB that carries I-71 and I-75 across the Ohio River. Project goals are to improve the operational characteristics in the corridor for both local and interstate traffic by adding capacity, streamlining traffic flow, improving level of service and safety, correcting geometric deficiencies, and maintaining connections to key transportation corridors. These align with USDOT strategic goals of improving safety and equity, increasing economic strength and competitiveness, and achieving climate and sustainability benefits.

Figure 1 provides a conceptual diagram and descriptions of key elements of the **Brent Spence Bridge Corridor Project (Project)**. The Project will separate interstate through traffic from local traffic on the collector-distributor (C-D) network in Ohio and Kentucky, rehabilitating and reconfiguring the existing BSB to accommodate local (C-D) traffic on two bridge decks while restoring wide shoulders. The Project will also construct a new companion bridge immediately west of the existing BSB to accommodate interstate through traffic on two bridge decks, with wide shoulders to accommodate emergency vehicles and future bus-on-shoulder operations. The number of available lanes for river crossing will increase from 8 to 16 in total, with a design that minimizes the need for lane change movements on the bridges. The Project also includes complete reconstruction of the interstate approach corridors in both states, with at least one additional travel lane per direction through the corridor and upgraded interchanges to separate interstate and local traffic in advance of the bridges. More Project information is available in the November 2021 Project Summary Report, and in several supplemental documents available here, including design concept drawings and right-of-way (ROW) acquisition information.

Project History and Context

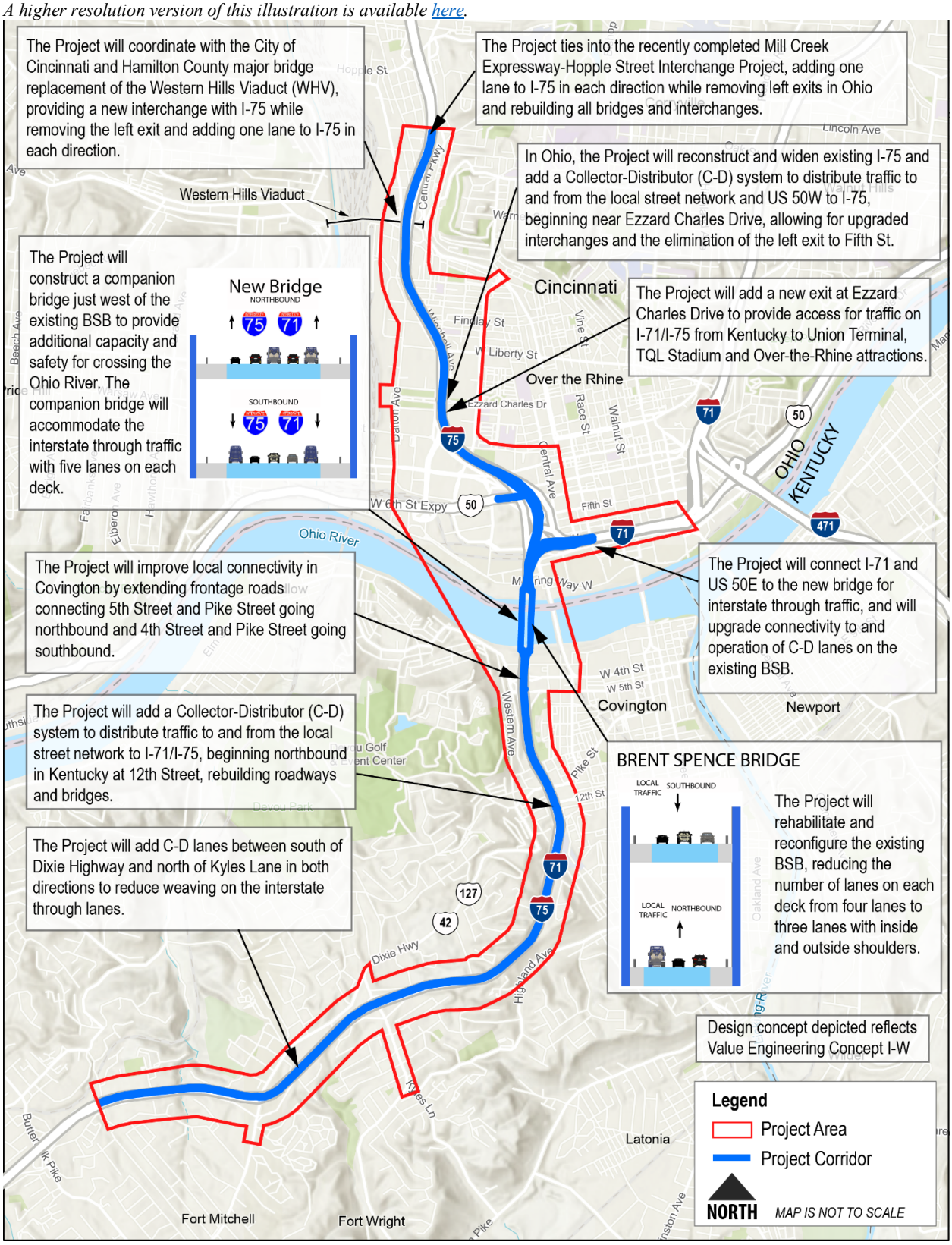
On October 14, 2004, KYTC and ODOT recognized the need to improve the BSB corridor and formally entered into an agreement to jointly develop and deliver a project to replace the existing BSB over the Ohio River. That agreement has been updated and modified six times since 2004, including a December 12, 2012 supplement that established a Bi-State Management Team (BSMT) to focus on procurement, financing, and communications. Through exemplary partnership, KYTC and ODOT have completed numerous studies over the course of the Project.

Key achievements to date in the Project development process are briefly summarized below. Additional detail, including a more complete timeline and history of Project development to date, is available in the Project Summary Report released in November 2021.

- **2005-2009:** Completed feasibility and constructability study and assessed over 25 conceptual design alternatives.
- **2011-2013:** Advanced three design alternatives, ultimately recommending Alternative I, documenting design criteria, and securing a Finding of No Significant Impact (FONSI). Completed travel demand modeling (TDM), developed a financial plan, and evaluated procurement alternatives. Completed financial and risk workshops, and options analysis.

Figure 1: BSB Corridor Project Design Concept

A higher resolution version of this illustration is available here.



- **2014-2017:** Developed a forecasting model and evaluated re-routing scenarios, concluding that none significantly reduced BSB trips. Further examined procurement methods, concluding that BSB rehabilitation should be bundled with a companion bridge. Developed concept for separation of local and interstate traffic. Completed FONSI re-evaluation. ODOT began right-of-way acquisition.
- **2018-2021:** FONSI re-evaluated again in 2018. Held workshop with ODOT, KYTC, and Federal Highway Administration (FHWA) to identify concepts that would reduce construction costs of preferred Alternative I, resulting in the development of Concept I-W, Concept I-S (subsequently eliminated), and Concept I-M. Established baseline and horizon year (2040) traffic volume for the river crossing to be used in near-term design and traffic studies.

Project development efforts by both agencies have incurred a cost of approximately $190.2M through 2021 (see Section IV for additional detail). Most recently, ODOT and KYTC executed a 6th Supplement to the Memorandum of Understanding (MOU) on February 28, 2022 that provides a mutual commitment to state-level funding, with a more detailed Interstate Cooperative Agreement to follow later in 2022 that will define a Project governance structure and identify powers and duties to support funding and procurement.

Transportation Challenges to be Addressed

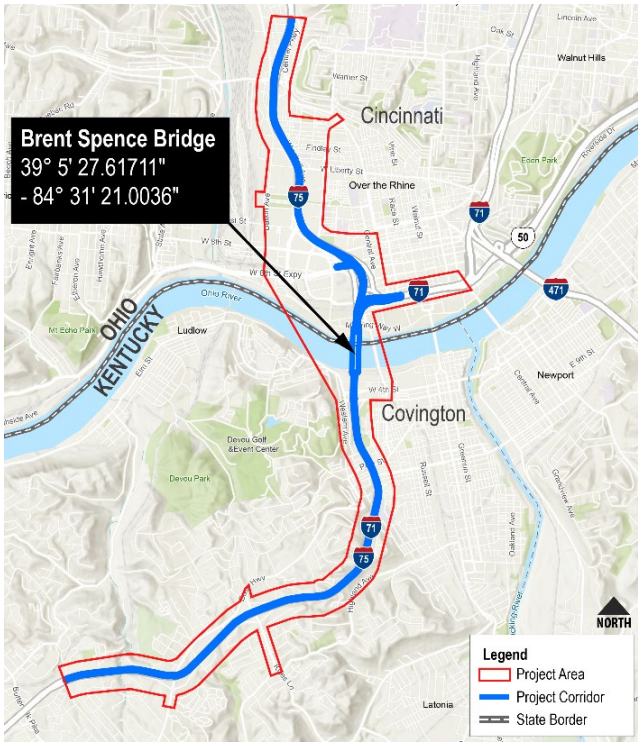
As the second-worst truck bottleneck location in the nation, the Project corridor exhibits safety and congestion issues due to capacity constraints, which are exacerbated by design deficiencies along the corridor. As noted in the Revised FHWA Re-Evaluation of the Project in March 2018, the BSB was constructed to accommodate 80,000 vehicles per day when it opened to traffic in 1963 but as of 2020 carried 160,000 vehicles per day. Traffic volumes are projected to increase to 227,900 vehicles per day by 2040, per the Analysis of Design Concepts released in May 2020. Current design deficiencies include left exits in Ohio (requiring weaving and slow vehicles in the left lane), narrow or no shoulders (no space for driver correction or broken-down vehicles), non-standard horizontal curves (impacting sight distance and speed/vehicle control), and vertical curves (impacting ability to stop and start during wet conditions). Increasing traffic volumes coupled with these significant deficiencies have resulted in safety concerns that the Project will address, as discussed in more detail in Section V.1. The Ohio-Kentucky-Indiana Regional Council of Governments (OKI), the Metropolitan Planning Organization for the surrounding region and corridor, has noted that the lack of travel time reliability due to bridge congestion is a key concern for business growth in the region. Economic and equity challenges that the Project will address are discussed in more detail in Section V.3 and Section V.5.

Anticipated Project Outcomes

These documented challenges have led to the proposed construction of a companion bridge and related corridor approach improvements in both states to be considered a top priority by KYTC, ODOT, and OKI. The Project will improve the operational characteristics in the Project corridor for both local and interstate through traffic by improving traffic flow and level of service, improving safety, correcting geometric deficiencies, and maintaining connections to key regional and national transportation corridors. The new companion bridge will add capacity and flexibility for carrying interstate and local traffic over the Ohio River, improving both safety and travel time reliability in both states. These outcomes are discussed in more detail throughout Section V.

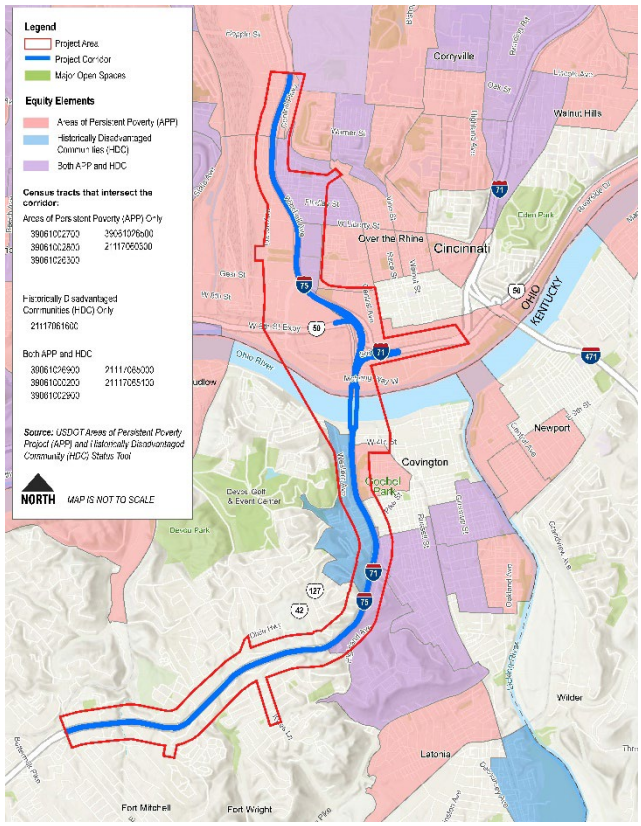
II. PROJECT LOCATION

The illustration on the top right defines the Project location, including geospatial data. The southern limit of the Project is approximately 5,000 feet south of the midpoint of the Dixie Highway Interchange on I-71/I-75 in Fort Mitchell, south of Covington. The northern limit of the Project is approximately 1,500 feet north of the midpoint of the WHV Interchange on I-75 in Cincinnati. The eastern and western limits of the Project corridor generally follow the existing alignment of I-75, a major throughway for local and regional mobility within the Greater Cincinnati/Northern Kentucky region. Locally, I-75 connects to I-71, I-74, I-275, and US Route 50. The BSB provides an interstate connection carrying I-71 and I-75 over the Ohio River, providing a critical connection along the national I-75 corridor stretching from Florida to Canada, as depicted in the Executive Summary.



The Project is located within the "Cincinnati, OH--KY--IN" Urbanized Area, with a population of 1,624,827 per the 2010 US Census. The unofficial 2020 Census (ACS) population estimate is 1,677,769. The Project is also located in a Federally designated Opportunity Zone, as depicted here.

The illustration on the lower right depicts the Project corridor in relationship to adjacent and overlying Areas of Persistent Poverty (APP) and Historically Disadvantaged Communities (HDC), identified as qualifying census tracts per USDOT. A higher resolution version of this illustration and a complete list of qualifying tracts are available here. The Project provides connectivity and safety benefits to these designated tracts along most of the corridor, also improving access to job opportunities, healthcare, education, and other regional resources outside the Project corridor. These equity, connectivity, and quality of life outcomes are discussed in more detail in Section V.5.



III. PROJECT PARTIES

KYTC's mission to provide "safe, efficient, environmentally sound, and fiscally responsible" transportation and ODOT's mission to "provide safe and easy movement of people and goods from place to place" are well aligned. As the lead grant applicant, KYTC has considerable demonstrated experience with the successful receipt and administration of Federal transportation grant funds. Since FY2014, KYTC has successfully administered projects that have been awarded $252M of USDOT grant funding. ODOT will serve as contracting lead for Design-Build and Design-Bid-Build contracts, providing construction oversight. According to a recent news release from ARTBA, Ohio was among the top five states nationally in 2021 to leverage Federal funds to advance roadway and bridge projects, with 796 projects. KYTC and ODOT have a historic practice of contractual coordination of needed work on existing Ohio River bridges and their approaches, with respective costs borne as appropriate by each agency.

This application is the result of substantial and consistent cooperation between ODOT and KYTC since 2004 to initiate and move the Project forward. The two states will continue to advance the Project under the existing MOU until the Interstate Cooperative Agreement is executed in 2022 to allow for the most efficient and timely delivery of the Project. The governors of Ohio and Kentucky are aligned in a joint pursuit to obtain the necessary Federal funding to advance the Project, as officially announced in February 2022.

The Project is strongly supported by multiple stakeholders, with ongoing local guidance provided by a Project Advisory Committee (PAC). The advisory committee, which includes representatives of OKI, counties, municipalities, local agencies, local community groups, and local businesses, was formed early in the Project development process to better align the Project with regional and community needs. The committee has been updated and will be engaged as part of future Project development, convening next in late June 2022 and serving through the life of the Project. Many members of the PAC, in addition to other stakeholders, have provided letters of support for this application; approximately 200 support letters can be reviewed here.

IV. GRANT FUNDS, SOURCES AND USES OF ALL PROJECT FUNDING

This section describes the Project budget and the plan for covering the full cost of the Project from a combination of Federal and State sources over several funding cycles. This MPDG funding request for the Project includes a fully committed non-Federal share through Project completion, as described in the sections below.

Previously Incurred Expenses

Previously incurred costs cannot be considered part of the local matching requirement, nor can they be reimbursed with MPDG grant funds. However, previously incurred expenses related to the Project serve to demonstrate the sustained commitment of the partners to complete the Project in a timely manner while preserving the corridor in good condition. Project development efforts to date have incurred a cost of approximately $190.2M through 2022. KYTC's expenditures were comprised of 100% federal dollars (toll credits were applied for match) while ODOT's expenditures were 65% Federal. The previous expenditures are summarized in **Table 1** on page 8.

Table 1: Previously Incurred Expenses (in millions)

	KYTC	ODOT	Total
ROW	$0.00	$39.52	$39.52
Utility	$0.02	$45.87	$45.89
Engineering	$15.98	$47.70	$63.68
State Labor	$1.28	$2.24	$3.52
Construction	$29.40	$8.19	$37.59
TOTAL	**$46.68**	**$143.52**	**$190.20**

Future Eligible Costs

The Project partners have developed a cost estimate for future eligible costs, reflective of the current conceptual stage of design and engineering. The cost for the preferred Project alternative, Concept I-W, is the result of a value engineering exercise and includes a contingency factor of 25% that is appropriate for the current stage of Project development.

Table 2 below presents forecasted Project costs across the multi-year Project Development and Construction period. Construction will primarily occur between 2024-2028. However, ODOT will separately contract the final Project segment in FY 2028. The complete cost estimate can be reviewed in more detail here.

Table 3 below presents a breakdown of the anticipated sources of future Project funds, broken out to reflect MPDG, Other Federal, and Non-Federal funds by amount and percentage. This table also presents the funds over the multi-year Project development and construction period. Additional detail regarding the Project Funding Plan can be reviewed here.

Table 2: Use of Project Funds (Cost Estimate by Fiscal Year, in millions)

Note: Totals may not add due to rounding.

	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29-31	Total
ROW	$41	$43	$0	$0	$0	$0	$0	$84
Utility	$5	$24	$14	$0	$0	$0	$0	$43
Project Development	$0	$64	$75	$59	$37	$24	$6	$266
Construction	$0	$385	$609	$609	$306	$346	$123	$2,378
TOTAL	**$46**	**$517**	**$698**	**$668**	**$343**	**$370**	**$128**	**$2,771**

Table 3: Sources of Project Funds (Funding by Fiscal Year, in millions)

Note: Totals may not add due to rounding.
Note: Totals in Table 2 and Table 3 do not match; see detailed Project Funding Plan for more information.

	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total	%
MPDG Funding	$40	$444	$600	$575	$0	$0	$1,660	**60%**
KYTC Federal	$33	$36	$40	$15	$7	$0	$131	**13%**
ODOT Federal	$13	$0	$94	$0	$0	$129	$236	
KYTC State	$137	$176	$67	$58	$2	$0	$441	**27%**
ODOT State	$3	$0	$24	$0	$244	$32	$303	
TOTAL	**$226**	**$657**	**$825**	**$648**	**$253**	**$161**	**$2,771**	
% Federal								***73%***

Federal Funding Status and Request

This MPDG request equals just below 60% of the future eligible Project costs and does not exceed the allowable 60% maximum. The Federal MPDG request assumes a multi-year allocation beginning in FY2023. KYTC's and ODOT's other federal dollars include National Highway funds. The States intend to submit a Bridge Investment Program application. Should the Project not receive the requested amount of MPDG funds and future Federal funding tranches as identified in **Table 3** on page 8, the Project would be delayed for the foreseeable future until additional funding can be identified.

Non-Federal Funding Commitment

As indicated in **Table 3** on page 8, a total of $441M from Kentucky and $303M from Ohio have been committed to the Project for construction and matching funds. State sources for Kentucky include $250M from the Commonwealth's General Fund along with KYTC Road Funds. State sources for Ohio include a combination of state motor fuel tax funds and state highway bonds.

If the full Federal funding request is secured, Ohio and Kentucky are committed to completing the Project per the schedule outlined in Section VII. The state funding commitment for both Ohio and Kentucky is documented in the 6th Supplement to the Memorandum of Understanding (MOU).

Funding Stability: The non-Federal share of funding committed to the Project is not being used for any other Program(s) and does not include any previously incurred, expended, or encumbered funds. The non-Federal share of funding is not subject to any restrictions that would impact the Project schedule.

Ongoing Maintenance: Both ODOT and KYTC, as the non-Federal share funding partners, commit to maintain any Federally supported infrastructure investments included in this Project scope for their full lifecycle.

Financial Condition of the Project Sponsor: In the five-year period between 2017 and 2021, KYTC awarded a total of $4.75B, and ODOT awarded $9.84B, in highway and bridge contracts and obligations, including construction, engineering, and land acquisition. With an annual operating budget of more than $3B per year, ODOT is well positioned to manage D-B and D-B B contracts and oversee construction on the Project. As agencies of state government, KYTC and ODOT are able to access capital markets to sell general obligation debt backed by the full faith and credit of the state government.

V. PROJECT OUTCOME CRITERIA

The Project Outcome Criteria outlined for the MPDG programs are well aligned with the Project proposal. Each of the six Criteria are discussed separately in the sections that follow. Baseline data prior to construction, monitoring at agreed-upon intervals, and a post-completion report related to several of the criteria will be provided as required by the MPDG NOFO and as described in the supplemental Data Collection Plan.

1. Safety

The existing BSB was not designed to handle the current or future volume of daily traffic, resulting in significant safety concerns. The addition of the new companion bridge will allow for distribution of traffic onto two bridges and the proposed reconfiguration of the existing BSB to re-establish adequate shoulders and lane widths, which will reduce crash potential. Added capacity at the Ohio and Kentucky approaches will further improve safety by reducing congestion-related crashes. In addition, separating interstate through traffic from local traffic on the bridges and the collector-distributor (C-D) system will improve safety by reducing weaving and merging for all travelers.

Existing congestion and design deficiencies are manifested in the crash data for I-71 and I-75 in Ohio in particular (2018-2020) with 94% of all crashes (1,936 in total) related to Sideswipe Passing (43%), Rear End (32%) and Fixed Object (19%). Sideswipe Passing crashes exceed the statewide average of 27%. Furthermore, 32% of crashes occurred in wet conditions, which exceeds the statewide average of 23%. At 0.9%, the fatal and serious injury crashes are in line with the statewide average, but a reduction of all crash types and severity is a goal of the Project. The Benefit Cost Analysis (BCA) (see Section VI) found that shifting traffic to the new bridge is expected to result in more than 150 avoided crashes annually, amounting to over $20M in benefits in the opening year of the Project alone.

The Project will construct a new companion bridge which will add capacity to the river crossing, and the distribution of traffic on the two bridges will allow for reduced weaving and merging for all travelers. The existing BSB will be reconfigured from four lanes to three lanes on each deck, allowing space for shoulders. The entire corridor will be rebuilt using current design standards and incorporate Proven Safety Countermeasures as identified by the FHWA into the highway and local street network (more detail available here). Where current standards cannot be met based on physical constraints, such as curve and shoulder design, the proposed plan will improve upon the existing conditions and provide appropriate warning speeds, enhanced signing, and delineation.

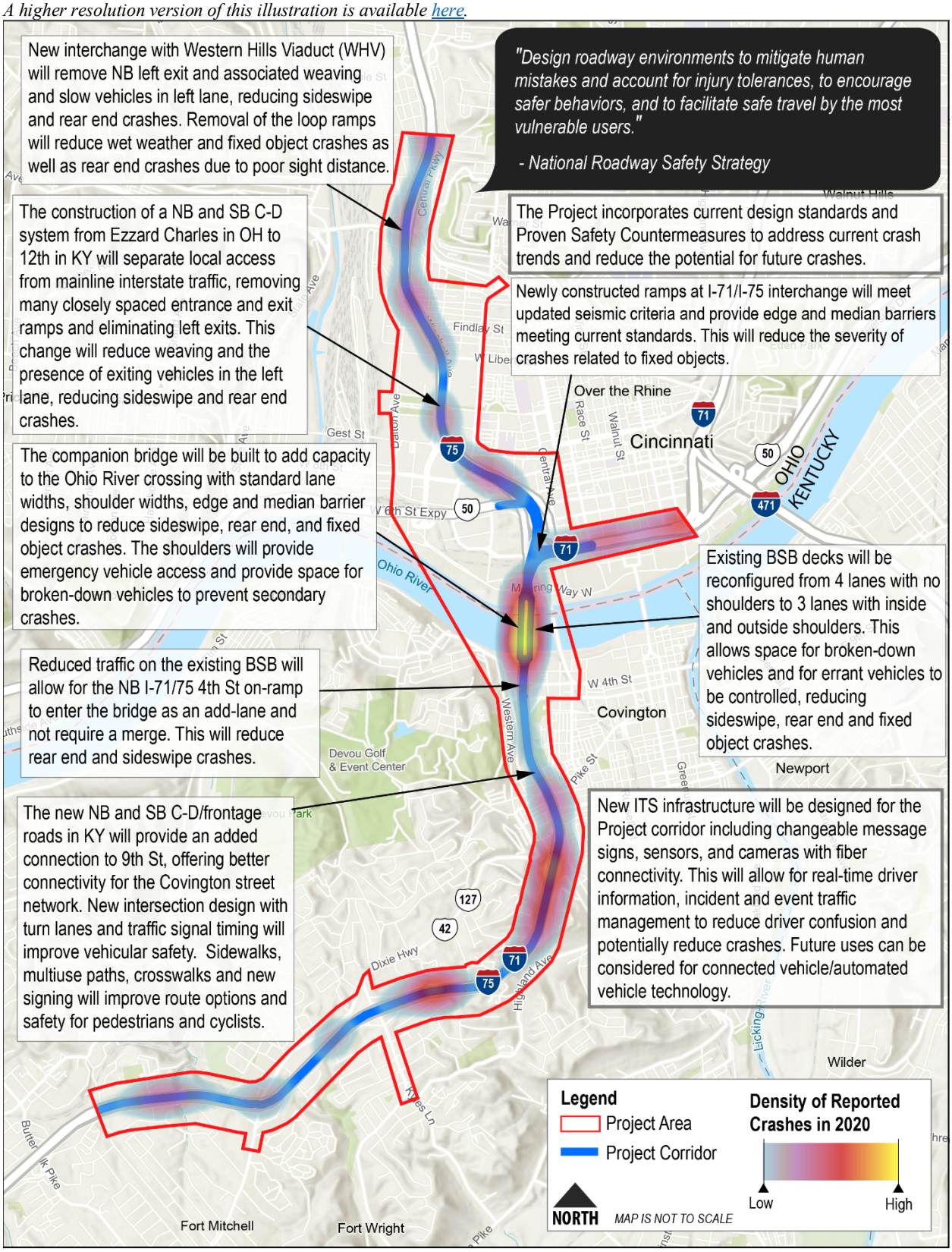
The Project supports the National Roadway Safety Strategy (NRSS), a comprehensive approach to reducing serious injuries and deaths on the nation's roadways. The Project will incorporate elements related to five complementary objectives in the NRSS:

- *Safer People* through real-time user information and messaging, and improved driver expectation and decision-making features.
- *Safer Roads* through safety countermeasures both on the bridges and highway approaches and adjacent local and C-D roadway network, including pedestrian and bicycle network improvements.
- *Safer Vehicles* and *Safer Speeds* through appropriate design speeds and limits and intelligent transportation system (ITS) facilities to support future connected and AV systems and speed management.
- *Post-Crash Care* through emergency vehicle access, routing, and incident messaging.

Figure 2 on page 11 identifies concentrations of crash incidents within the Project corridor and highlights safety-related improvements to be implemented to improve future safety conditions.

Figure 2: BSB Corridor Incident Locations and Project Safety Improvements

A higher resolution version of this illustration is available here.



2. State of Good Repair

In addition to the new companion bridge, the Project will rehabilitate the existing BSB and replace all infrastructure assets on the bridge approaches in both Ohio and Kentucky, bringing the entire eight-mile Project corridor into a state of good repair (SOGR). Modernizing these core assets will strengthen regional system security and resilience and reduce ongoing agency maintenance costs over time, a need reinforced by a November 2020 truck fire on the BSB that forced a six-week emergency closure.

The existing BSB was classified as "functionally obsolete" by the National Bridge Inventory as early as 1998 (note this terminology is no longer current). OKI also documented concerns and needs related to the I-75 corridor generally as early as 2004 in their North-South Transportation Plan. The proposed Project will improve the overall condition of existing state and locally owned transportation infrastructure assets within Project corridor boundaries, including the introduction of a companion bridge that adds redundancy for river crossing incidents, maintenance, and other major events. All roadways within the Project limits, from interchanges to local roads under/over the interstate, will be replaced or upgraded to meet current standards and improve on existing conditions for pavement and roadway design, traffic signal design, street lighting, signing, and pavement marking. The Project will also provide an opportunity to upgrade or install pedestrian and bicycle facilities on the local roadways within the Project limits.

The existing BSB will be rehabilitated, building upon efforts already undertaken by KYTC in recent years. In anticipation of the Project, needed improvements to transportation infrastructure surrounding the Project corridor have been ongoing. ODOT, KYTC, and the cities of Cincinnati and Covington have made significant investments in anticipation of the Project, allowing the full benefit of each to be realized when reconstruction of the Project corridor is complete.

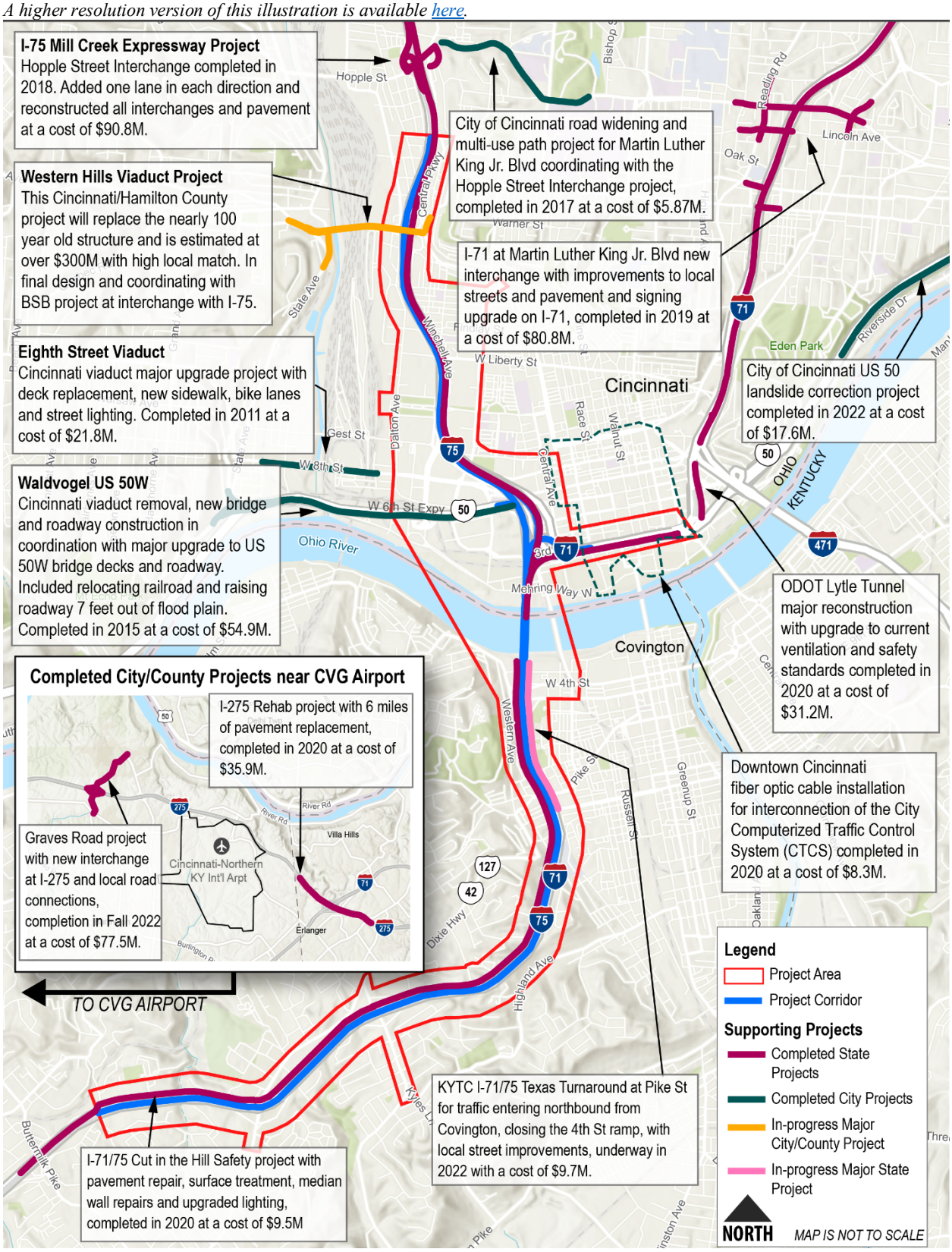
Figure 3 on page 13 identifies the mutually supportive investments in SOGR that have been made in recent years to the overall transportation network that connect to and support the Project improvements. These nearby bridge, roadway, and interchange projects set the stage for the Project as the improved link over the Ohio River.

If the Project is not completed in a timely manner, maintenance costs will increase as the assets in the corridor continue to deteriorate. For example, KYTC performed BSB maintenance in 2017 which included deck overlay with identified joint repair and steel work, as well as lighting replacement. A BSB emergency repair project was completed on December 22, 2020 after a truck crash and fire on the lower deck of the bridge on November 11, 2020 necessitated replacement of a 6,900-sq-ft section of the upper-level concrete deck and underlying steel stringer beams. Damaged deck and barrier walls were also repaired on the lower level. KYTC and ODOT took advantage of the closure to perform scheduled maintenance work, such as repairing drains, cleaning of overhead signs, and repaving the northbound I-71/I-75 approach. KYTC also completed a BSB painting project in November 2021.

Returning the corridor to a SOGR upon Project completion will reduce maintenance costs for the replaced assets. The BCA (see Section VI) estimates that Project will avoid $70M in major rehabilitation costs in 2024. These avoided costs more than offset the build scenario maintenance cost estimated to be $800K annually. Both agencies maintain Transportation Asset Management Plans (TAMPs) to ensure consistent and cost-effective maintenance of all agency assets, commit to coordinating on future BSB Corridor maintenance as appropriate, and will maintain all Project assets in a SOGR. ODOT's TAMP is available here, and KYTC's TAMP is available here.

Figure 3: Project SOGR Improvements and Recent Supportive Investments

A higher resolution version of this illustration is available here.



3. Economic Impacts, Freight Movement, and Job Creation

The Project enhances a direct link between Miami and Canadian ports of entry on an interstate corridor that accounts for over $400B in freight movement annually crossing the BSB, with anticipated growth to over $800B by 2030. Expanding river crossing capacity will both support national economic strength and reduce barriers to local economic opportunity, including for disadvantaged communities, through better connections to regional job opportunities.

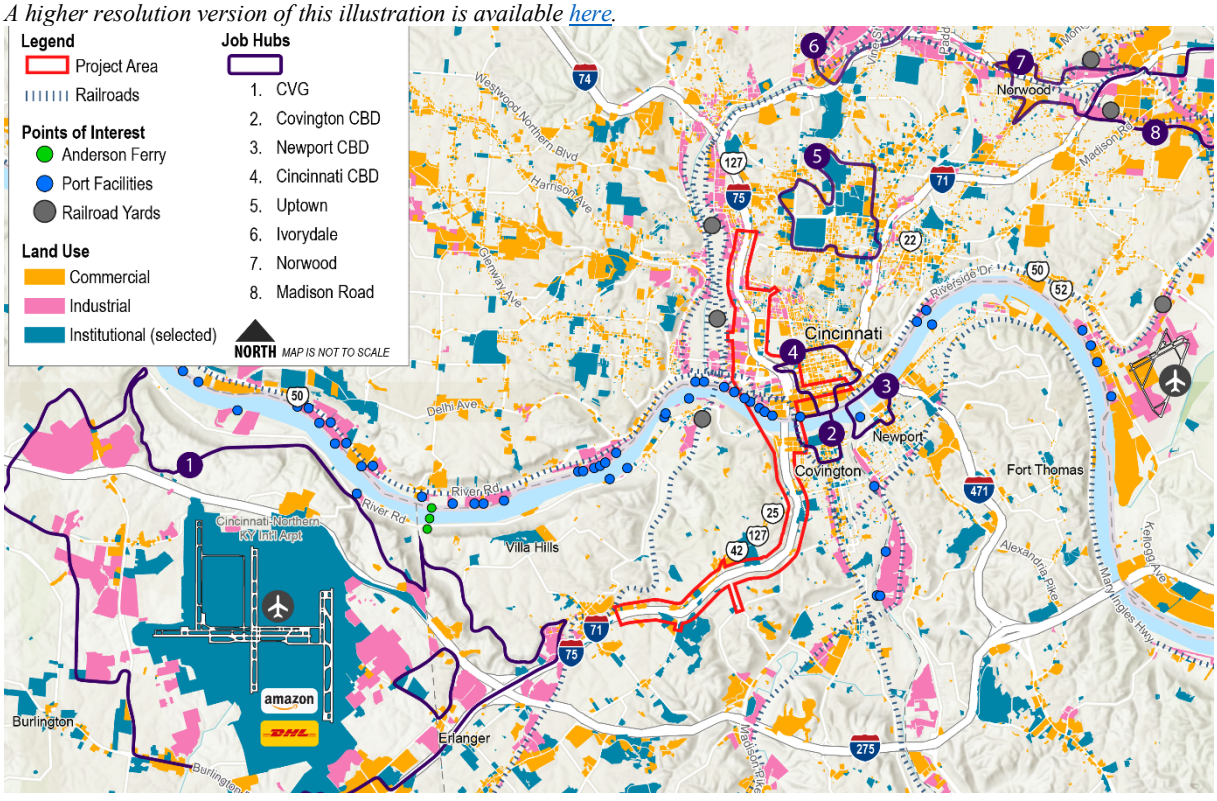
The Project directly contributes to six of the ten outcomes identified in the MPDG NOFO, while contributing indirectly to others, such as multimodal improvements discussed under Criterion 5.

1. *The Project will improve system operations to increase travel time reliability and manage travel demand for goods movement.…; and* **3.** *The Project will decrease transportation costs and provide reliable and timely access….*

OKI has identified current and emerging Job Hubs within the region. Job Hubs are places with concentrated economic activity defined by areas with a job density in the top 5% of the region, with multiple employers in proximity to one another, that align with local development patterns, and that present future economic development opportunities. The Project would provide a critical connection between the Job Hubs in Ohio and Kentucky, which contain many of the major office, manufacturing, and warehousing employment centers that are critical to the economic health of the region. An additional benefit will be improving travel to and from the Port of Cincinnati, which moves nearly 48 million tons of cargo per year, making it the 14th busiest port in the United States. **Figure 4** depicts the Project corridor as it relates to these Job Hubs, along with railyard and port facilities and other significant regional points of interest.

Figure 4: Project Support for Freight and Employment Connectivity

A higher resolution version of this illustration is available here.



CVG is North America's 7th largest cargo airport, moving millions of tons of cargo annually. More than 14,000 badge holders work at CVG daily to accommodate travelers and goods movement, with over 9 million annual passengers anticipated post-pandemic. DHL and Amazon are the two major cargo tenants which benefit from meeting optimal flight time targets to international destinations from CVG. DHL Express opened and plans to expand one of three global super-hubs at the airport, employing 4,400 people. In 2021, Amazon Air Hub operations began at CVG to serve as the central hub for Amazon Air's US cargo network, employing 2,000 people. The nearby Amazon Fulfillment Center in Hebron, KY and associated Amazon Prime station on US 50W in Cincinnati rely on I-75 for safe and timely deliveries and employee travel. Lastly, barge to rail and truck facilities on the riverfront also rely on proximity to I-75.

A truck crash on the BSB in November 2020 resulted in a fire that closed the bridge, forcing all freight carriers to detour for a six-week period. ODOT evaluated the impact of the closure during a recent update of the Ohio State Freight Plan and determined that over 13,250 trucks per day were impacted by the closure, with a median increase of 13 minutes and 17.6 miles per trip.

6. *The Project will result in high-quality job creation by supporting good-paying jobs with a free and fair choice to join a union in project construction and in on-going operations and maintenance, and incorporate strong labor standards.…; and* **7.** *The Project will result in workforce opportunities for historically underrepresented groups….*

KYTC and ODOT are developing Disadvantaged Business Enterprise (DBE) participation and community outreach goals for the Project. The Project is a-once-in-a-generation opportunity for the region's citizens who have been historically underrepresented in the heavy highway construction industry to build careers and financial security through profitable contracts, professional fees, and solid wage earnings. ODOT's Division of Opportunity, Diversity and Inclusion's mission is to foster fairness, opportunity, and equality for employees as well as contractors and consultants. Both KYTC and ODOT are fully committed to the "Justice 40" goals of the Infrastructure Investment & Jobs Act and achieving DBE participation on both sides of the Ohio River, working with local partners in the communities of southwest Ohio and northern Kentucky to implement an outreach plan and engage the local workforce. Specific examples include having robust on-the-job training opportunities, providing equipment, and providing licensure support.

An investment of this nature provides opportunities that go beyond the typical inspection and trade skills required to complete a heavy highway project. There will be opportunities to connect interested participants with support services, career opportunities in related fields such as human resources, and patronage of local businesses by the Project staff. KYTC and ODOT are not only committed to improving infrastructure, but also providing improvements to the community. More information about ODOT's mission related to opportunity, diversity, and inclusion is available in this short video: https://youtu.be/kSrjlXDXm98.

9. *The Project will support integrated land use, economic development and transportation planning….*

Several economic development organizations throughout the region have an interest in the construction of the Project to decrease transportation costs and improve access and reliability to employment centers and job opportunities, as well as health care and education centers in the Uptown area of Cincinnati in particular. The Uptown Consortium, Inc. is currently completing a Mobility Needs Assessment to better understand and accommodate mobility needs in the region, which include issues surrounding congestion and improved connections to job centers crossing

the BSB. The Cincinnati USA Regional Chamber works to increase the economic prosperity of the Cincinnati region, ignite business resiliency, and lead regional connectivity. The Chamber released a statement praising the Infrastructure Investment and Jobs Act, as it will provide critical investments vital to connecting the region.

10. *The Project will help the United States compete in a global economy….*
The BSB is a lynchpin for the I-75 trade corridor stretching from Miami to Canada, one of the busiest trucking routes in the United States. I-75 is a direct link to Canadian ports of entry, so the corridor is particularly crucial for Canadian imports/exports. According to REDI, a regional economic development organization, the Cincinnati region is "located at the intersection of two rivers, three major interstate highways, two class-A railways, two active Foreign Trade Zones, and one international airport…[and] enjoys unbeatable proximity to most major cities within a one-day drive and a globally competitive logistics industry. With DHL, and the addition of the Amazon Prime Air Hub, [the] region is one of the most connected and capable places in the world for moving goods. Simply put, products made here arrive at a customer's door faster. [The] strong logistics industry moves large and small items by train, boat, truck, and plane."

4. Climate Change, Resiliency, and the Environment

Providing additional lane capacity will reduce congestion and related greenhouse gas (GHG) emissions, while also providing critical system resiliency in the corridor. The Project positively impacts disadvantaged communities through improvements to localized air quality and connectivity, while supporting sustainable and fiscally responsible regional development. ODOT and KYTC will also coordinate with sanitation districts in both states to reduce combined sewer overflows with separate stormwater systems and detention facilities within the Project area.

The Air Quality Analysis conducted for this Project determined that the preferred Alternative would not increase regional emission burdens or mobile source air toxic levels. All air pollutant levels are predicted to decrease compared to the No Build Alternative due to improved efficiency of vehicles crossing the bridge. The BCA prepared for this grant application (see Section VI) found that the Project results in savings of $3.5-$6M annually in avoided emissions damage resulting from the reduction in annual vehicle miles, including over 70,000 metric tons of CO2 avoided each year. OKI has noted more generally that if congestion is allowed to further increase, investment interest will shift to "greenfield" locations, exacerbating sprawl and increasing the cost of infrastructure provision over time to support a less efficient pattern of growth. OKI's own scoring criteria prioritizes rehabilitation of existing infrastructure assets over expansion for this reason.

In addition to the freight impacts discussed above, the November 2020 truck crash on the BSB also forced all commuters and emergency responders to be detoured for a six-week period. Construction of the companion bridge will significantly support emergency and disaster preparedness and system resiliency in the region. The inclusion of a wide shoulder on the existing and proposed bridges will further facilitate incident management, emergency response, and evacuation plans. Similarly, the Project required the relocation of major Duke Energy electric grid facilities at the Ohio riverfront; the relocation has already been completed and improves efficiency, reliability, and compliance with current standards overall for utility users.

In Ohio, Mill Creek floods during extreme rain events, and the existing combined sewers flood the creek with sewage, disproportionately affecting low-income neighborhoods. ODOT is

coordinating with the Metropolitan Sewer District (MSD) to build new storm sewers that will separate combined sewers and/or provide retention facilities to mitigate adverse effects on low-income communities. In Kentucky, in coordination with Kenton County Sanitation District 1, the Project will separate interstate runoff from combined sewers that create similar issues for disadvantaged communities in the Willow Run watershed, including drainage improvements at Goebel Park near downtown Covington, parallel to the east side of I-75.

A commitment has been made to conduct field reviews and coordinate with resource agencies to satisfy the requirements of the Endangered Species Act (ESA). Best management practices will be used during placement of bridge piers to minimize impacts to aquatic life, and stream work within the Ohio River will be coordinated with the Kentucky Department of Fish and Wildlife Resources to address nesting of peregrine falcons per the Migratory Bird Treaty Act of 1899.

5. Equity, Multimodal Options, and Quality of Life

I-75 directly connects disadvantaged neighborhoods in Covington and Cincinnati to the greater region and key employment centers, education facilities, and health/cultural institutions. The Project will both establish and support new connections and multi-modal facilities that will increase equity and improve quality of life for all travel modes, including coordinating with the design of local roadways to provide updated or new pedestrian and bicycle facilities for residents of adjacent communities.

Figure 5 on page 18 delineates the presence of Areas of Persistent Poverty and/or Historically Disadvantaged Communities surrounding the Project corridor, highlighting the direct improvement to regional access that the Project will provide for populations in these areas. The Environmental Justice (EJ) analysis conducted in 2015 found that 30% of the total population in areas immediately surrounding the Project was below the Federal poverty level, and 34% was minority. The Project would displace some residents in Kentucky, but commitments have been made to relocate residents to comparable housing that meets their needs. The Project Environmental Assessment concluded that the effects of the preferred Alternative would not be appreciably more severe and greater in magnitude for EJ communities than for non-EJ communities. A description of public engagement that will continue to occur with impacted communities to achieve diverse and meaningful input is included in the Public Engagement sub-section of Section VII. Strategies for engaging and utilizing DBEs are discussed in Section V.3.

The proposed improvements will effectively connect residents of disadvantaged communities along the corridor to job opportunities as described in the Economic Impacts criterion. This includes rail, barge, truck, and other intermodal facilities along I-75 in Ohio, and UPS, DHL, Amazon and other large air cargo and truck facilities at the regional airport in Kentucky. The BSB also carries I-71, which connects to several underserved eastern neighborhoods of Cincinnati and to Uptown. Uptown includes five of the region's largest educational and healthcare anchor institutions: University of Cincinnati, Cincinnati Children's Hospital Medical Center, TriHealth, UC Health, and the Cincinnati Zoo, employing over 90,000 people. Over two million people visit Uptown annually to attend the University of Cincinnati, receive world-class medical care, and enjoy the Cincinnati Zoo and Botanical Garden. The Project will improve travel time and access for residents to these health care, educational, civic and recreational opportunities in the downtown, riverfront, and Uptown areas, as also indicated on **Figure 5** on page 18.

Figure 5: Project Support for Connectivity and Quality of Life

A higher resolution version of this illustration is available here.

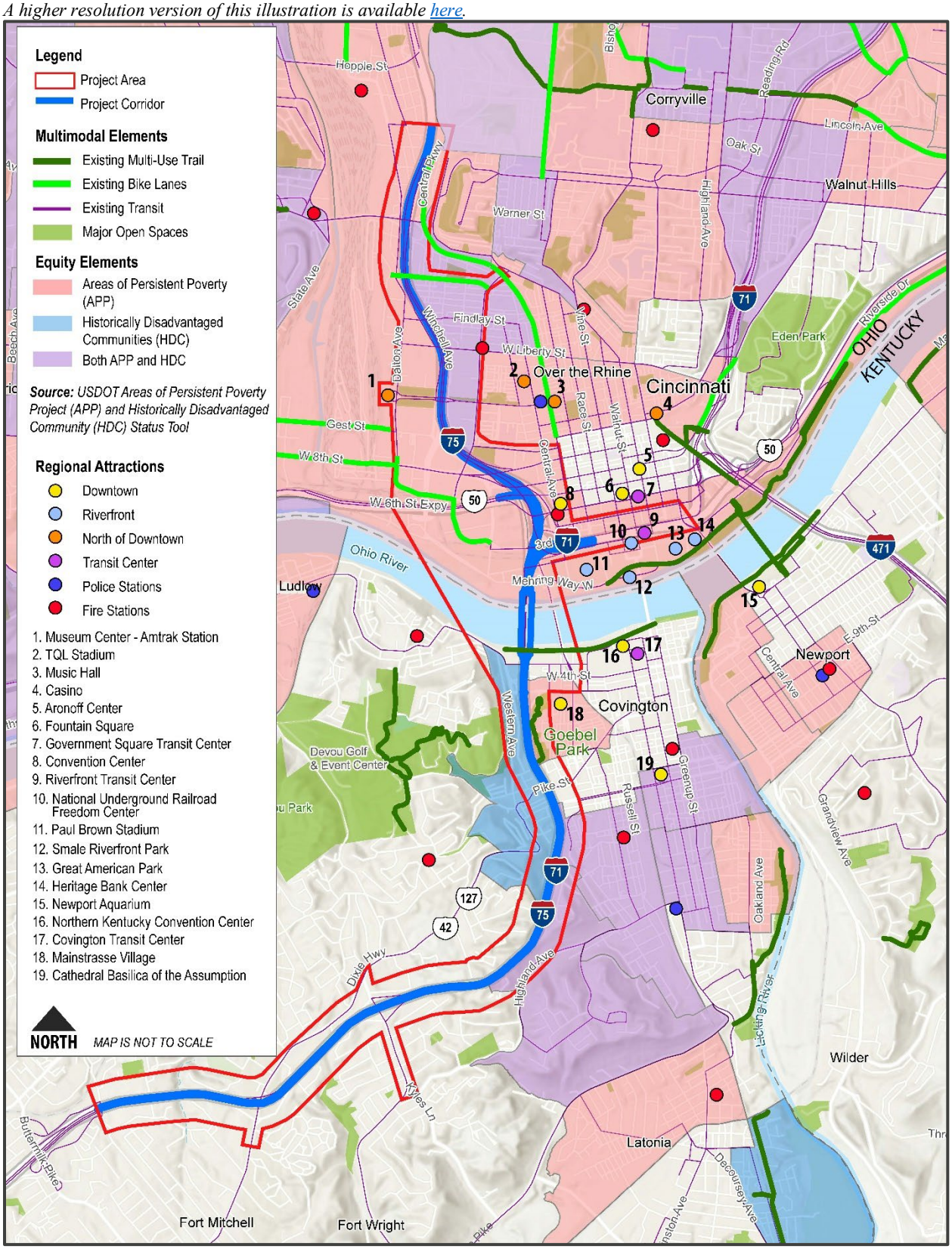


Figure 5 on page 18 also overlays the multimodal network that connects neighborhoods in and near the Project corridor to show opportunities within the Project boundaries to reconnect and improve multimodal facilities and access. Frontage roads and crossroad connections under the highway will be updated to comply with applicable standards, including improved sidewalks, street lighting, and continuity of bike lanes or multi-use trails. New connections will include traffic signals, as warranted, with pedestrian signals and local system interconnection. The Project will accommodate new or upgraded multimodal facilities along local roadways within the corridor. The Riverfront Commons multi-use trail runs beneath the existing BSB along a 11.5-mile route that links Northern Kentucky's six river cities. Frontage road designs being developed with Covington will incorporate pedestrian and bicycle facilities to better connect to this river trail system. In Ohio, the Green Cincinnati plan outlines citywide objectives for a more sustainable future. Green Cincinnati's goals include 'doubl[ing] lane miles of bike trail' and implementing the Cincinnati Riding or Walking Network (CROWN) Plan, which the Project will not impede.

Existing public transit stops are anticipated to remain at their current locations in Project corridor communities and future plans for transit will not be precluded by the Project. Widened shoulders on both bridges will allow for the potential of shoulder-running bus service in the future, as currently supported on I-71. The Kenton County Transportation Plan recommends establishing a bus on shoulder on the BSB to better connect to Boone County. Currently, all Transit Authority of Northern Kentucky (TANK) express bus services (8 routes, 210 trips per weekday) cross the BSB. A proposed service redesign includes using the BSB for express and the adjacent Clay Wade Bailey Bridge for local routes. Of the 8 express routes, 67% of weekday trips connect downtown Cincinnati and Covington to the airport and surrounding air freight related jobs.

6. Innovation: Technology, Project Delivery, and Financing

Technology upgrades will contribute to an improved ability to monitor and manage traffic flows as a result of the Project. Constructing a new companion bridge, while rehabilitating the existing bridge on a nationally significant corridor between two states, will also necessitate innovation in governance, contracting, construction phasing, and financing.

As a major infrastructure catalyst for connection and aligned economic growth strategies between two states, the Project will require significant collaboration between several entities which will result in innovations regarding funding, contracting, and technology as described below.

Technology

The Project will include current technology solutions for freeway information and data collection systems in Kentucky and Ohio, including vehicle counting stations, video devices/cameras, incident detection, wrong way detection, variable message signs/traveler information, ramp metering, and other emerging technologies. As discussed in Section V.1, the Project supports the NRSS. The design will incorporate several ITS facility elements related to NRSS objectives, including:

- Improved real-time user information and messaging with updated Changeable Message Signs (CMS) and ITS system;
- Conduit, fiber, and power service that can utilize and/or prepare for future connected and automated vehicle systems and current opportunities for in-vehicle driver information; and

- Real-time messaging for incidents to provide information to travelers

The Project will also incorporate any necessary temporary measures to manage traffic during construction. ODOT requires cameras to monitor conditions during construction and has incorporated ITS infrastructure in project designs in this region since the mid-1990s.

The City of Cincinnati recently completed the upgrade of their Computerized Traffic Control System (CTCS) interconnection cable to fiber in the downtown and riverfront area, providing improved communication capabilities and potential for other smart devices, with the potential to coordinate with ODOT's OHGO system for events and incident traffic control and updates.

Project Delivery

As described in Section VII, both states have collaborated closely on Project development to date and committed to a feasible Project Schedule, as outlined most recently in the 6th Supplement to the Memorandum of Understanding and pending Interstate Cooperative Agreement, defining a Project governance structure and delivery strategy that represents an unprecedented ongoing collaboration to realize a critical bi-state infrastructure improvement.

Project Financing

As described in Section IV, non-Federal funding has been committed by ODOT and KYTC as Project partners in sufficient amounts to leverage the requested Federal funding, based upon the most recent Memorandum of Understanding and pending Interstate Cooperative Agreement noted above, which outline funding and contractual responsibilities. Of particular note is Kentucky's commitment of $250M from the State General Fund in addition to a 20% match from the State Road Fund, unprecedented in the State's history, to ensure that this vitally important Project can proceed.

VI. BENEFIT-COST ANALYSIS

As a result of reduced congestion and additional capacity to accommodate anticipated growth in traffic volumes, the monetized benefits of the Project, including travel time savings, crash reduction cost savings, operating cost savings, and emissions reduction, will exceed Project cost. The Project cost reflected in the analysis includes the full cost of developing, constructing, operating, and maintaining the Project, as well as the expected timing or schedule for costs in each of these categories. The BCA also includes the present discounted value of the remaining service life of the Project assets at the end of the analysis period. As summarized in **Table 4** on page 21, the composite benefit-cost (B/C) ratio for the Project is **2.37:1 or better**, with a **Net Present Value (NPV) of $2.4B**. The NPV of the Project will exceed the requested total, multi-year Federal investment by nearly 50%.

Detailed and transparent documentation of BCA assumptions, inputs, evaluation methodology and results can be found in the separate Benefit-Cost Analysis Technical Memorandum and Benefit-Cost Analysis Model. A description of the baseline condition, sources of data, and key input parameters are included in this detailed supporting documentation.

Potential additional qualitative benefits not reflected in the calculated B/C ratio include: temporary or permanent lane closures impacting traffic on the aging existing BSB, reduced traffic delay associated with peak hour queues and avoided crashes, avoided pavement maintenance on detour routes, benefits associated with the improvements to the local bicycle and pedestrian network, and benefits associated with stormwater flooding mitigation in Goebel Park near downtown Covington.

Table 4: Summary of BCA Results (in millions of 2020$)

Benefits	$
Travel Time Savings	$3,799.1
Reduced Vehicle Operating Costs	$28.0
Reduced Crash Costs	$93.2
Reduced Emissions Damage	$75.8
Residual Value	$111.5
Life Cycle Rehabilitation and Maintenance Costs	-$49.2
Net Benefits	**$4,156.8**
Capital Cost	**$1,753.9**
B/C Ratio	**2.37**
Net Present Value	**$2,402.9**

VII. PROJECT READINESS AND ENVIRONMENTAL RISK

This section provides information to demonstrate that the Project can begin construction in a timely manner after Federal funding support is secured. Requested information related to technical feasibility, Project schedule, Project approvals, and Project risks is included.

Technical Feasibility

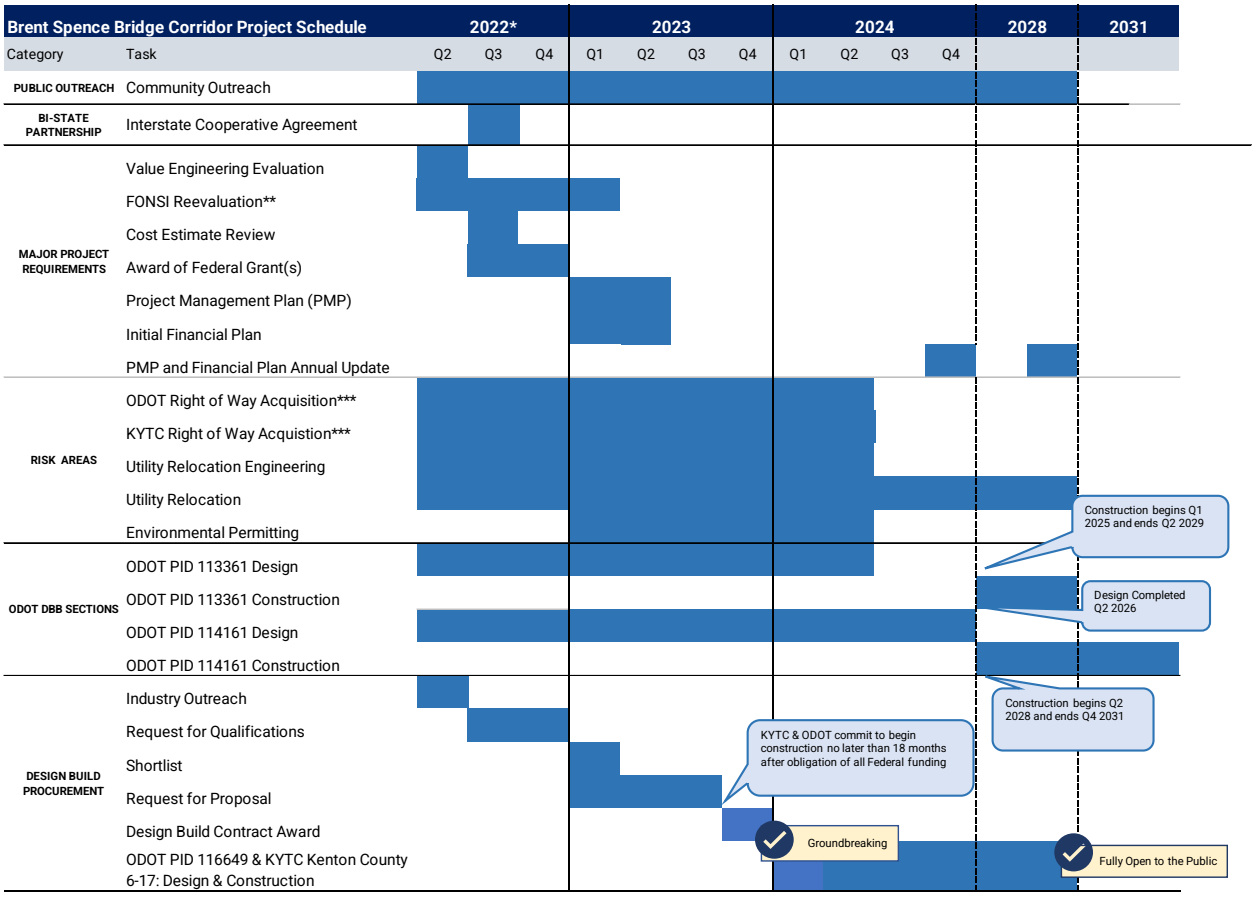
The Project team has conducted engineering and design feasibility studies, which include Technical Feasibility Findings and Analysis of Design Concepts reports. The Technical Feasibility study included a risk analysis which used input value assumptions with a probability of occurrence. This analysis expanded upon the preferred Alternative I with value engineering adjustments referred to as Concepts I-W, I-S, and I-M. TransModeler was utilized to evaluate travel time, speeds, and capacity along the mainline, ramps, and local streets for all three concepts. Analysis included traffic projections to year 2040 with the OKI TDM and development of TransModeler files and value engineering concepts, as presented in the TransModeler Calibration and Results report. During initial analysis, the Ohio "super street" design was found to not be feasible due to physical design constraints, and the Kentucky "super street" design could not accommodate traffic without significant widening; therefore, Concept I-S was removed from further study. The horizontal and vertical design of the remaining concepts were refined, and the alignments integrated into the traffic models and compared to determine cost savings. Additional refinement of the geometry will continue in coordination with the updated 2050 OKI TDM. Design and traffic evaluation will determine the feasibility of the value engineering concepts based on operational characteristics, local connectivity, footprint, and estimated cost. See Section IV for information on the cost estimate, including the contingency factor used. Additional information regarding the Project is available in the November 2021 Project Summary Report, and in several supplemental documents available here, including Project design concept drawings and right-of-way (ROW) information.

Both ODOT and KYTC comply with Title VI/Civil Rights requirements that ensure that no person is excluded from participation, denied benefits, or otherwise subjected to discrimination under any program or activity on the basis of race, color, national origin, sex, age, or disability. Both agencies further commit to meeting or exceeding required participation targets: ADA, Buy American, and any other applicable Federal compliance, reporting, and assessment requirements.

Additional information can be found here for ODOT and here for KYTC.

Project Schedule

Due to the complexity of the Project, construction will consist of several phases to minimize disruption while also seeking to maximize process efficiencies. A Project Schedule is presented below, indicating upcoming phases and milestones up to and including construction. A more detailed schedule is provided here, including estimated timeframes for all remaining right-of-way acquisition in accordance with 49 CFR part 24, 23 CFR part 710 and other key milestones, illustrating initiation of construction phase activities within the requisite 18 months of obligation. The proposed schedule permits time to address any safety and program requirements deemed appropriate by USDOT after funding has been awarded. Construction phase efforts can begin by the end of 2024 upon obligation of adequate Federal funds.



A larger version of the schedule depicted above is available here, and a map depicting the extents of each Design-Bid-Build (DBB) contract section noted in the schedule is available here.

Required Approvals

Environmental Permits and Reviews

The Project is anticipated to proceed to construction without any delays related to required environmental permits or reviews, as discussed below.

NEPA Status: In August 2012, the FHWA issued a Finding of No Significant Impact (FONSI) identifying the selected alternative for the Project, referred to as Alternative I. Since the approval of the FONSI and establishment of the BSMT, additional studies have been conducted by KYTC and ODOT to better understand financial and procurement options and any potential updates to the environmental impacts of the Project. The preferred Alternative I was further evaluated and, as a result, two value engineering concepts were developed with different lane configurations at the Ohio River crossing. These concepts do not change the access points provided in the preferred alternative nor do they change the concept of creating a C-D system that separates interstate through traffic from local street connections. Initial evaluation of both concepts shows that they remain within the footprint of the original NEPA document. Alternative I-W, which remains within the footprint of the original NEPA document, is anticipated to proceed into more detailed design and engineering. In 2015 and 2018, FHWA determined that the environmental resource studies would require additional review to ensure the NEPA decision remained valid. Until the required reevaluation is completed, the existing 2012 FONSI will remain valid. ODOT and KYTC will be performing another re-evaluation, which will be completed in January 2023.

Ongoing Federal Agency Coordination: FHWA is part of the ongoing FONSI re-evaluation, has participated in update discussions including most recently in February 2022, and will be holding a Cost Estimate Review workshop in late Summer 2022, including a risk assessment. Permitting from U.S. Army Corps of Engineers and U.S. Coast Guard will begin in advance of construction, with final coordination occurring with final design submittal from the Design-Build team.

Public Engagement and Outreach

The Project Schedule presented above indicates the anticipated timeline for upcoming and ongoing community engagement, which builds on a strong foundation of past engagement about the Project as it has evolved over time. In 2005, ODOT and KYTC developed a Public Involvement Plan (PIP) for the Project, and held meetings with 40 advisory committee members and 24 interested parties. Committee members acted as liaisons between the Project Team and stakeholders throughout the region. The PAC met several times during the development and selection of the preferred alternative. Since then, updates have been provided to the public primarily via the Project website, responding to public comments received. An addendum to the PIP is being developed to guide future outreach as part of the environmental clearance re-evaluation process.

The PAC will be reestablished in 2022 and will remain engaged throughout the Project, with an objective to foster communication between the Project team, stakeholders, and impacted communities. Updates to the Project website and E-Newsletters will also be utilized to provide Project updates to the public on an ongoing basis. It is anticipated that the first meeting of the renewed PAC will be held in late June 2022. Beyond the members of the PAC, public sector officials and agencies representing the Project area are kept updated on Project progress and asked for ongoing input to ensure local needs and concerns are reflected. Additionally, KYTC will fund a staff position in Covington to act as a community liaison for the Project.

Letters of Support

This MPDG application is supported by a wide-ranging coalition that includes multiple transportation agencies, industry and trade associations, and units of government. Many have provided letters of support; around 200 letters can be reviewed here.

State and Local Approvals

The Project is included in OKI's 2040 Regional Transportation Plan, which serves as the region's Federally mandated Long-Range Transportation Plan (LRTP), and in the OKI TIP. It is also named on the highway project list on the 2021-2024 Ohio Statewide Transportation Improvement Program (STIP) (ODOT PID 89068, ODOT PID 113361, ODOT PID 114161, ODOT PID 116649) and the 2021-2024 Kentucky STIP (KYTC Kenton County 6-17).

Federal Transportation Planning Requirements

The BSB is listed as a Mega-Project in the 2017 Kentucky Freight Plan and the Ohio Statewide Freight Plan. The Ohio State Freight Advisory Committee called attention to significant freight bottlenecks associated with the BSB during a December 2020 meeting and the Project was presented as a project-level recommendation during the Kentucky Freight Advisory Committee's 2022 Freight Plan presentation. An update to the Ohio State Freight Plan is nearing completion, with a draft document submitted for Federal review in April 2022.

Assessment of Project Risks and Mitigation Strategies

Project risks are managed and tracked in accordance with the Project Risk Register. Risks are tracked by category and sub-category (an example is 3rd party coordination/railroad), and by the probability of occurrence and the potential impact to the Project (cost, schedule, etc.). The risks are reviewed and updated regularly, with in-person meetings including ODOT, KYTC, and FHWA occurring as needed. The next in-person review meeting is scheduled for June 1, 2022. Some risks currently being tracked and managed are acquisition of additional right-of-way (scheduled to be completed by the end of 2022; more detailed information available here), potential construction delays due to material shortages, utility relocation and conflicts, soil conditions outside the current roadway design, and agency permits. In addition, a Monte Carlo session led by FHWA has been scheduled for August 2022.

The potential for unknown environmental risks is minimized significantly by the fact that the Project has obtained the requisite environmental approvals. Substantial and ongoing public outreach efforts will mitigate the potential for pushback from impacted communities or delays in needed local approvals. ODOT and KYTC have a history of delivering projects on time, and at or under budget.

The Project partners have completed several other large projects over the last ten years to allow for adequate detours or alternate routes during construction, including the I-71 interchange at MLK with pavement and signing upgrades, Lytle Tunnel, I-471 rehabilitation in Kentucky, the Hopple Street Interchange Project, and the MLK Project at Hopple.

VIII. STATUTORY PROJECT REQUIREMENTS

The Project meets the statutory project requirements to qualify for this grant application. The minimum INFRA project size requirement for the States of Ohio and Kentucky is $100M, per Section 5.ii.3 of the NOFO. For large projects, the Project must address the following:

1. For Mega and INFRA- **YES, the Project will generate national or regional economic, mobility, and safety benefits**. As described in Section V, the Project will support local business growth while improving a vital national corridor for commerce and freight, result in improved and more equitable access to employment hubs and other destinations while improving safety for all users.

2. For Mega and INFRA- **YES, the Project will be cost effective**. As described in Section VI and supporting BCA documentation, the composite benefit-cost (B/C) ratio for the Project is **2.37:1 or better**, with a **Net Present Value (NPV) of $2.4B**. The NPV of the Project will exceed the requested total, multi-year Federal investment by nearly 50%.

3. For INFRA- **YES, the Project will contribute to the accomplishment of all seven (7) of the goals described in 23 U.S.C. § 150**. As documented throughout Section V the Project will: 1) reduce traffic fatalities and injuries, 2) bring corridor assets into a SOGR, 3) reduce congestion on the National Highway System, 4) improve the reliability and efficiency of the surface transportation system, 5) support regional economic development through improvement of the National Highway Freight Network, 6) protect the natural environment while enhancing transportation system performance, and 7) utilize efficient and effective project development and delivery practices to reduce costs and promote economic and job growth.

4. For INFRA- **YES, the Project is based on the results of preliminary engineering**. As described in Section VII, environmental assessment is complete, with a re-evaluation to be complete by January 2023. Preliminary geotechnical investigation already completed will be supplemented with additional borings. Additional project development efforts are also well underway: topographic surveys, hydraulic analysis, utility engineering and relocation, traffic studies, financial plans, and material specification and quantity estimates.

5. For Mega and Infra- **YES, with respect to related non-Federal financial commitments, one or more stable and dependable funding or financing sources are available to construct, maintain, and operate the Project, and contingency amounts are available to cover unanticipated cost increases.** As described in Section IV, non-Federal funding has been committed by ODOT and KYTC as Project partners, and an adequate cost estimate contingency (25%) is included to reflect the current phase of Project development.

6. For INFRA- **YES, the Project cannot be easily and efficiently completed without Federal funding** -and- For Mega- **YES, the Project is in significant need of Federal funding**: As described in Section IV, the Project cannot advance without the Federal funding requested. In the absence of Federal funding the timeframe for the Project will be significantly increased, and/or the scope might require significant reduction.

7. For INFRA- **YES, the Project is reasonably expected to begin construction no later than 18 months after the date of obligation of funds**. As described in Section VII, the Project can be expected to begin construction by the end of 2024 if Federal funding is obligated by September 2023.

8. For Mega- **YES, the applicant has sufficient legal, financial, and technical capacity to carry out the Project**. As described in Section III and Section VII, both ODOT and KYTC have demonstrated capacity to successfully undertake the Project and have established by mutual agreement an achievable Project Schedule for completion once Federal funding is secured.