BRENT SPENCE
BRIDGE CORRIDOR

Moving the Economy,
Creating Jobs

BRENT SPENCE BRIDGE PROJECT

PROJECT SUMMARY REPORT

NOVEMBER 4, 2021

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

KENTUCKY TRANSPORTATION CABINET

HNTB

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1. REPORT PURPOSE AND PROJECT BACKGROUND

The purpose of this Brent Spence Bridge (BSB) corridor project report is to:

1. Summarize the process, results, and commitments of the preliminary engineering and activities related to the National Environmental Policy Act (NEPA) up to the approval of the FONSI in 2012.
2. Summarize the work efforts since 2012 relative to design, traffic, tolling, environmental, financing and procurement. Include accomplishments and any recommendations for further action.
3. Provide details of the current state of the project.

Key characteristics of the BSB corridor are described below:

- The corridor consists of 7.8 total miles of I-71 and I-75 located within portions of Ohio and Kentucky.
- The BSB carries both I-71 and I-75 over the Ohio River.
- The BSB opened in 1963 and was originally designed to carry 80,000 vehicles per day (VPD) with current traffic volumes of 160,000 VPD.
- The corridor exhibits congestion and safety-related issues due to capacity constraints for current traffic demand, which is exacerbated by design deficiencies along the corridor.

The BSB project goals are to improve the operational characteristics in the BSB corridor for both local and 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.

On October 14, 2004, The Kentucky Transportation Cabinet (KYTC) and the Ohio Department of Transportation (ODOT) recognized the need to improve the Brent Spence Bridge (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 five times from 2004 to the present, including a December 12, 2012 supplement that established a Bi-State Management Team (BSMT) to focus on procurement, financing, and project communications. A detailed timeline and description of the bi-state agreements is included in Appendix B.

In August 2012, the Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) identifying the selected alternative for the BSB 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 effects to the environmental impacts of the project. The preferred Alternative I was further evaluated to apply practical design principles which included an update to design standards, traffic counts, and traffic operations to determine potential cost savings. As a result of this effort, 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 collector-distributor system that separates the interstate through traffic from the local street connections. Initial evaluation of both concepts shows that they remain within the footprint of the original NEPA document.

Funding was not a primary focus during the NEPA phase of the BSB project development, which was primarily concerned with selecting a preferred alternative to address the identified transportation needs. Once preferred Alternative I was selected and the preliminary cost estimates were finalized, the states recognized that the project cost was more than could be accomplished with their traditional funding programs. For this reason, the states looked at ways to reduce

costs in design as well as in procurement with alternative delivery, financing, and funding methods such as design-build, public-private partnerships (P3), and tolling. Legislation in place at the time allowed both states to consider tolling, and regional businesses and industries strongly supported moving the project forward using alternative methods.

During these studies, local interests expressed concern about the impacts of tolling and associated traffic diversion. In response to these concerns, the Kentucky General Assembly passed legislation in April 2015 that prohibited the authorization of tolls for any project involving the interstate highway system that connects the Commonwealth of Kentucky with the State of Ohio. Several studies and reviews relative to the impacts of tolling were put on hold in 2015 with the legislative change. Should the Kentucky General Assembly remove the tolling prohibition for interstate highway projects between Kentucky and Ohio, the BSB project would require the continuation of these impact studies and an environmental update.

2. PROJECT DEVELOPMENT PRIOR TO 2012

Development for the alternatives for the BSB was initiated in October 2004 with KYTC as the lead state agency. ODOT became the lead state agency in November 2004 and continues as the lead agency today. To satisfy the requirements of NEPA, KYTC and ODOT completed numerous resource-specific technical studies to determine potential impacts to the human and natural environment. These efforts were documented in resource-specific technical reports, which are not described in detail in this Summary Report. The results of the resource-specific studies were incorporated into the evaluation of alternatives throughout the project's development. A summary of the decision-making documents that culminated in the identification of the Selected Alternative and the approval of the FONSI is provided below and included in the timeline of reports in Appendix A.

- **Feasibility and Constructability Study of the Replacement/Rehabilitation of the Brent Spence Bridge (May 2005)** – Documented initial alternatives.
- **Planning Study Report (April 2006)** – 25 conceptual alternatives, including the No Build, were studied with five mainline Build Alternatives and several sub-alternatives recommended for further study.
- **Conceptual Alternatives Study (April 2009)** – Eight conceptual alternatives were evaluated, and two feasible alternatives (designated Alternatives E and I) were recommended for further development. This work incorporated extensive public involvement, including:
    - A project website, newsletters, media communications, and a roving project display
    - Six Project Advisory Meetings
    - Six meetings and one survey of the Project Aesthetic Committee
    - Four public meetings
    - One right-of-way public meeting for residences and businesses in Kentucky
- **Bridge Type Selection Report (March 2011) –** Recommended three bridge alternatives over the Ohio River based on the project's functional and budgetary requirements and public feedback received during the bridge type selection process. The bridge types that were recommended for further consideration included Tied Arch, Two Tower Cable Stayed, and Single Tower Cable Stayed bridges.
- **Preferred Alternative Verification Report (PAVR) (May 2011)** – Compared the two feasible Build Alternatives E and I and the No Build Alternative. Alternative I was recommended as the preferred alternative based on design, local access, traffic operations, estimated costs, environmental impacts, and stakeholder coordination.
- **Access Point Request (August 2011) –** Documented various design and performance criteria for Alternative I to substantiate that the proposed changes in access to the interstate system would not degrade the operation or safety when compared to the existing conditions.
- **Environmental Assessment (EA) (March 2012)** – Documented the findings in the PAVR for the two feasible Build Alternatives E and I and the No Build Alternative. In accordance with NEPA, the EA presented:
    - Project purpose and need
    - Alternative development process

- Impacts of each alternative and mitigation measures
- Public involvement and agency coordination
- Recommendation of a Preferred Alternative
- 60-day formal public comment period, two public hearings

Based on public comments and coordination between ODOT, KYTC, and the cities of Cincinnati and Covington, a refined Alternative I was identified as the Selected Alternative for the BSB Corridor. Two bridge types for the companion bridge were also included in the Selected Alternative:

- Alternative 1: Arch Bridge – simply supported arch with inclined arch ribs
- Alternative 3: Cable-stayed Bridge – two towers, vertical legs/tower

- **FONSI (August 9, 2012)** – FHWA determined that refined Alternative I will have no significant impact on the human or natural environment.

The approved FONSI included several environmental commitments. The commitments, including a status for those items that have been addressed since 2012, are listed below:

1. The acquisition of property for right-of-way will be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act).

   STATUS: ODOT has acquired nearly all right-of-way for the project based on the Alternative I footprint and in accordance with the Uniform Act. Additional right-of-way may be required in Ohio upon the refinement of alternatives. KYTC has yet to finalize any property acquisitions.

2. Construction of the project will not commence until the necessary permits have been completed-for Water Quality Certification through the Ohio Environmental Protection Agency (OEPA) and Kentucky Division of Water, United States Army Corp of Engineers Section 404, and US Coast Guard (USCG) Section 9 - on any segments impacting these resources to ensure compliance with the Clean Water Act of 1972.
3. An effect determination on the Indiana bat and mussel species within the Ohio River will be made on the Selected Alternative following field reviews and coordination with resource agencies to satisfy the requirements of the Endangered Species Act. Additionally, best management practices will be used during placement of bridge piers to minimize impacts to aquatic life. In addition, in stream work within the Ohio River will be restricted between March 15 and June 30.
4. Coordination with the Kentucky Department of Fish and Wildlife Resources will occur in the spring prior to the rehabilitation of the existing Brent Spence Bridge or the demolition of the bridge approaches to address nesting of peregrine falcons per the Migratory Bird Treaty Act of 1899.
5. Phase I ESA will be conducted for the Harrison Terminal site at 1220 Harrison Avenue in Cincinnati. Based on known information about the following sites, if dewatering is necessary for construction purposes plan notes for petroleum contaminated soil (PCS) and contaminated groundwater will be developed and placed into plans: 351 John Street, 514 West Third Street, and 302-304 Central Avenue. Phase II ESAs will be conducted as identified in the EA as required by Comprehensive, Environmental Response, Compensation and Liability Act (1980) as amended by the Superfund Amendments and Reauthorization Act (1986).

STATUS: ODOT has acquired 90 percent of the parcels for the project, including the sites listed above. All necessary Phase II ESA work has been completed.

6. Coordination will be undertaken with the Kentucky Heritage Council (KHC) to address properties that were inaccessible for Phase I survey or required highly invasive activity, such as deep testing, as specified in the Section 106 Memorandum of Agreement for Kentucky.

7. Mitigation measures documented in the Section 4(f) de minimis finding for Goebel Park and the MOAs for Lewisburg Historic District, Longworth Hall and Queensgate Playground and Ball Fields will be followed in accordance with applicable sections of 36 CFR 800 (Section 106) and 23 CFR 774 (Section 4(f)).

   STATUS: ODOT's financial mitigation commitments for the Queensgate Playground have been completed. For Longworth Hall, the right-of-way appraisals have been completed, and the MOA was updated in 2018. No action with regard to the Lewisburg Historic District MOA has occurred since the approval of the FONSI.

   a. The 4(f) de minimis determination for impacts to Goebel Park requires the use of an estimated 2.59 acres of flood-prone park property from the southwest corner of Goebel Park which be replaced with an estimated 2.38 acres of currently state-owned property that is at higher elevation and adjacent to the northwest corner of Goebel Park; the taking of an approximately 360 feet of walking trail will be mitigated by reconstructing the walking trail within the park and on locations to be determined in coordination with the City during the project's final design phase; and the taking of the basketball court and associated resources will be mitigated with funding of approximately $77,600 of project funds for the replacement and enhancement of the basketball courts or for other outdoor recreation facilities within the park.

   b. FHWA and KYTC will ensure the Kentucky Department for Local Government will complete 6(f) conversion, with approval by National Park Service, before property transfers or construction activities commence in Goebel Park. Additional coordination may be necessary through final design and right of way acquisition.

   c. FHWA and KYTC acknowledge the City of Covington's sentiments that the proximity of the existing expressway alignment has impacted the operations of the pool and pool area at Goebel Park through noise and dust. They recognize the project's selected alternative may potentially further affect operations as a result of any increases in noise or dust. While these affects are not considered to substantially impair the functions of the pool, FHWA and KYTC will coordinate with the City of Covington during Phase II Design of the project to design roadway and bridge elements to reasonably minimize these potential impacts.

8. The location and the designs of noise walls and other noise mitigation will be identified during the final design in accordance with the respective State's approved noise mitigation policies.

   STATUS: The noise walls in Ohio will be revisited with the HAM-75-1.05 (PID 113361) project from Linn Street to Findlay Street and the HAM-75-1.95 (PID 114161) project from Findlay Street to north of the Western Hills Viaduct (WHV).

9. The Project Advisory Committee and Project Aesthetic Committee will continue to meet and provide input during the final design and construction phases.

   STATUS: The BSB Project Advisory Committee and Project Aesthetic Committee will be reestablished as part of the project development for HAM-75-1.05 and HAM-75-1.95.

10. Coordination with utilities will continue through the design and construction phases.

    STATUS: Duke Energy facilities near the Ohio River have been relocated. The City of Cincinnati is working to move the Duke Energy substation and tower facilities near the WHV as part of their bridge replacement project, though some portions of the relocation are also required for the HAM-75-1.95 project. Additional utility coordination is ongoing.

11. ODOT and the Metropolitan Sewer District of Greater Cincinnati (MSD) have been acting cooperatively on water quality issues within the Mill Creek and Ohio River watersheds. ODOT will continue with its efforts of separating the highway drainage from the combined sewer systems as part of the project. Where separation is not feasible, adequate detention will be provided. Additionally, ODOT will include storm water Best Management Practices (BMPs) during construction and in the corridor's final design. The type and location of BMPs will be determined during the design process. ODOT will participate with MSD efforts to bring applicable agencies together to discuss, investigate, and evaluate mutually beneficial arrangements.

    STATUS: ODOT prepared a draft Corridor Drainage Study in 2017 (see Section 3.3.1). Drainage will be designed and BMPs will be included in the HAM-75-1.05 and HAM-75-1.95 projects. Additional drainage studies and modeling are ongoing by MSD.

12. KYTC and Kentucky Sanitation District #1 (SD1) will act cooperatively on water quality issues within the Ohio River watershed. KYTC will strive to separate the highway drainage from the combined sewer systems as part of the project. Where separation is not feasible, adequate detention per KYTC standards will be provided. Additionally, KYTC will include storm water Best Management Practices (BMPs) during construction and in the corridor's final design. The type and location of BMPs will be determined during the design process. KYTC will participate with SD1 efforts to bring applicable agencies together to discuss, investigate, and evaluate mutually beneficial arrangements.

13. During construction, access into neighborhoods and to community facilities will be maintained to the extent practical through controlled construction scheduling and/or provisions of alternate routes of entry. A Maintenance of Traffic (MOT) plan will be developed and implemented to maintain traffic operations throughout the corridor and minimize disruption to the surrounding communities. The MOT plan will be coordinated with the Regional Incident Management Task Force.

14. The project sponsor committed to USEPA that a commitment will be added to the contract documents to ensure that the contractor(s) shall comply with all applicable EPA diesel emission requirements including newer heavy-duty requirements (Tier 111) of the August 9, 2011 standards.

15. The KYTC and Kentucky Office of Local Programs will complete the required 6{f) conversion as mitigation with approval by National Park Service, before construction activities commence in Goebel Park:

    a. The use of an estimated 2.59 acres of flood-prone park property from the southwest corner of Goebel Park will be replaced with an estimated 2.38 acres of currently state-owned property that is at a higher elevation and adjacent to the northwest corner of Goebel Park.

    b. The taking of approximately 360 feet of walking trail will be mitigated by reconstructing the walking trail within the park on location to be determined in coordination with the City during the project's final design phase.

c. The taking of the basketball court and associated resources will be mitigated with mitigation funding of approximately $77,600 of project funds for the replacement and enhancement of the basketball courts or for other outdoor recreation facilities within the park.

d. FHWA will ensure the Kentucky Office of Local Programs will complete 6(f) conversion, with approval by US NPS, before property conversions or construction activities commence in the park.

Although not listed as a specific environmental commitment, the FONSI also stated that, regardless of the bridge type ultimately selected for construction, the Selected Alternative must meet specific navigational requirements regarding the elevation of the highest point on the bridge, the minimum provided underclearance, the length of the main span and placement of its piers, and vertical clearance above the bottom deck surface.

3. PROJECT DEVELOPMENT 2012 TO 2021

This section summarizes the project development studies and analyses that have occurred from the approval of the FONSI to the present (September 2021). The studies are grouped into the following categories:

1. Design
2. Traffic and Tolling
3. Environmental
4. Financial
5. Procurement

The sections below provide a summary of each study or report, including any recommendations included in the document. A timeline showing all studies and reports from 2005 is included in Appendix A.

3.1 DESIGN

- **DRAFT Report - BSB Project: Practical Design/Value Engineering Workshop Report (October 17-19, 2012)**

  This report provided an overview of the workshop activities, outcomes, and next steps. (This report is updated, yet still in draft form in *the Value of Money Analysis* (February 2013) listed in Section 3.1.4.) The primary objective of the three-day workshop was to (1) provide a high-level evaluation by experts to generate technical ideas for delivering the BSB project quickly, economically, and safely; (2) conduct a field visit and discuss with ODOT, KYTC, and FHWA the opportunities and constraints; and (3) generate technical ideas. The workshop identified nearly 100 ideas for improvements to the Alternative I design:

  - Practical Design Ideas: Low-cost and low-impact ideas such as adding truck climbing lanes, reducing the number of lanes across the river, reducing the number of lanes in Kentucky, using the posted speed as the design speed, and using the minimum required vertical underclearance.
  - High Value Ideas – Roadway: Two cost-saving concepts were prevalent during the workshop - reducing the reconstruction of overhead crossings on the Ohio side and separating interstate from local traffic. Other cost saving ideas included the reusing of existing ramps and interchange bridges and additional interchange alternatives for Dixie Highway and Kyles Lane.
  - High Value Ideas – Bridge: Cost-saving ideas included using network tied arches for the navigation span only, using single-level bridges instead of double-decker, and considering other arrangements for the river bridges.

  The technical ideas were grouped according to high, medium, and low value designations based on the potential benefit to the project combined with the difficultly and/or likelihood of implementation. High value ideas were to be studied in more detail as part of post-workshop activities.

- **BSB Project: Potential Cost Savings Estimate (February 2014)**

  This report summarized construction cost savings for the BSB project based on analysis of technical ideas from the Practical Design/Value Engineering Workshop held in October of 2012. This included $150 million in savings for an adjusted bridge design and $26.5 million for roadway reductions.

The bridge changes included a reduction in the main span pier spacing from 1,000 feet to 870 feet (approval received from the Coast Guard in January 2013); the use of network tied arch bridges for the navigation span only; and reduced inside shoulders from 14 feet to 8 feet and outside shoulders from 14 feet to 12 feet on both the upper and lower decks.

The roadway changes were based on potential diversion associated with tolling. These included the reduction from three lanes to two lanes on the southbound collector-distributor system and the reduction of one travel lane on northbound I-71/I-75 from south of Kyles Lane interchange through the 12th Street interchange. These design changes were not developed further but may be considered in future designs.

- **DRAFT Report - BSB Project Cost Savings Study (Prepared by Parsons Brinckerhoff) (March 18, 2015)**

  This study identified potential construction cost savings related to the BSB project based on two approaches. The first was to consider a reduction in the number of lanes needed based on a tolling scenario, which results in traffic being diverted. The other approach sought to minimize the project to allow for traditional funding by making it a bridge replacement project and tying into the existing pavement at 12th Street in Kentucky and Ezzard Charles Drive in Ohio. Analysis was performed for a new bridge built as a companion to the existing BSB and a new wider bridge built with demolition of the existing BSB – both based on a narrower footprint due to tolling diversion. The report outlined the pros and cons of each proposal and potential construction cost savings, but with no recommendation for the advancement of any design.

- **Whiz Bang Concept (Developed 2015)**

  The purpose of the Whiz Bang Concept was to revise Alternative I such that interstate through traffic could be separated from all local ramp connections. Two options for Whiz Bang were developed:

  - Concept 2 utilized the existing bridge for local traffic (three lanes on each level) and a new bridge to the west for interstate through traffic (with five lanes on each of the two levels).
  - Concept 4 eliminated the existing bridge and placed all traffic on a new bridge to the west. The bridge would have eight lanes on each of the two levels, with interstate and local traffic separated on the structure in five and three lanes, respectively.

  Both concepts were evaluated for traffic operations, variations in local connections in Kentucky, and cost. In October 2019, Whiz Bang Concept 4 was removed from further study, but Concept 2 was progressed for further study as part of the Performance-Based Design Workshop in December 2019 as Concept W.

- **BSB Corridor: Technical Report - Draft Corridor Drainage Study (November 1, 2017)**

  This study was developed to identify right-of-way needs for proposed stormwater detention facilities to meet the Draft Metropolitan Sewer District of Greater Cincinnati (MSD) Stormwater Regulations (June 2017) for the BSB project. The study evaluated 3.0 miles of the I-75 corridor within Cincinnati, Ohio from Marshall Avenue to the Ohio River. Ten detention facilities along the I-75 corridor were identified to meet the proposed regulations. Four of these facilities are located on lands owned by the State of Ohio, one by the City of Cincinnati, and the remaining five have full or partial private ownership.

- **KYTC BSB Strategic Corridor Study (Prepared by Stantec) (2017)**

  This study included the development and evaluation of Brent Spence Bridge bypass concepts, including the proposed Cincinnati Eastern Bypass (CEB). This study included the use of TransModeler to analyze traffic flow

and diversion due to the CEB. It was determined that the construction of the CEB would not eliminate the need for the BSB project, since only ten percent of traffic from the BSB would be diverted. Based on the results of this study, KYTC and ODOT determined that design efforts would proceed for the BSB corridor.

- **Performance-Based Design Workshop (December 2019)**

  A Performance-Based Design Workshop was held with members of ODOT, KYTC, and FHWA from both states. The goal of the workshop was to identify concepts that could reduce the construction cost of preferred Alternative I for the BSB corridor. The Performance-Based Design Workshop identified three new concepts for further traffic operational and design studies:

  - Concept W (Whiz Bang) was designed in 2015 to allow for interstate-only traffic on the new bridge and local connections on the existing bridge.
  - Concept S was designed with a superstreet layout for the local street and ramp connections in Kentucky and Ohio using the Alternative I traffic assignments on the bridges.
  - Concept M was designed to accommodate all I-75 traffic on the new bridge and keep all I-71 traffic on the existing bridge. Many existing ramp connections to the existing bridge would be maintained.

- **BSB Project: Analysis of Design Concepts (May 2020)**

  This report combined three BSB traffic and design studies - *Performance-Based Design Workshop; Traffic Counts, Modeling and Forecast Review;* and *TransModeler Calibration and Results* **-** to develop recommendations for moving forward based on operation, design, and cost. Concept S was eliminated from consideration due to operational constraints. Concept W and Concept M were both considered viable options for the BSB corridor and recommended for further study.

- **Brent Spence Bridge Traffic and Concept Analysis (May 2020)**
  This PowerPoint presentation was developed for KYTC and ODOT leadership as an update to traffic forecasting and concept development efforts from July 2019 to May 2020 based on the *Analysis of Design Concepts* report. This update recommended further study of Concepts W and M.

3.2 TRAFFIC AND TOLLING

- **DRAFT Report – BSB Project: Draft Travel Survey Analysis (February 2014)**

  This report included behavioral and stated preference surveys of current BSB users and neighboring competing bridge travelers. This behavioral study was used to develop data and forecasting model inputs needed for the traffic and revenue study.

- **BSB Project: Employment and Population Forecasts (February 2014)**

  This report included the development of a county-level forecasting model that captured the interplay between population and employment at the level of an individual county. Overall, the forecast area's population was predicted to increase by approximately 410,000 individuals, or 0.3 percent per annum, over the next 40 years.

- **BSB Project: Preliminary Tolling Concept of Operations (February 2014)**

  This report documented the decisions made to date relative to Implementation and Operational Approach; Planned BSB Corridor Toll Facility; BSB Corridor Toll Collection and ITS Systems Concept; Toll Lane System, ITS

and Infrastructure; and CSC System. It was determined that information relative to the tolling system and operation would need to be updated and decisions made based on a given opening date for the bridge.

- **BSB Project: Modeling and Traffic Impacts Analysis Technical Memorandum (March 17, 2014)**

  This memorandum described the technical modeling methodology and analysis for the BSB project. It outlined a process to incorporate tolling into the trip distribution and traffic assignment steps of the regional Ohio-Kentucky-Indiana (OKI) travel demand model. A table showing modeled traffic on Ohio River crossings for No Build, Build Toll-Free, and Build Tolled ($2) was presented. Difference plots comparing Build Toll-Free and Build Tolled model runs for the 2040 AM, PM, and Midday peak hours were also developed from the travel demand model outputs. This methodology can be used in future analyses.

- **BSB Project: Evaluation of Toll Alternatives (May 2014)**

  This report outlined a three-stage process for evaluating toll alternatives for the BSB corridor:

  - Stage 1: Test Peak and Off-Peak Rates in modelling efforts to determine the impact of various toll rates on revenue and traffic to determine a balanced revenue.
  - Stage 2: Conduct Parameter Sensitivity Tests in modelling efforts to consider frequency discounts for commuters, incentives to obtain transponders (video toll premium), and heavy vehicle rates.
  - Stage 3: Run Combined Toll Alternatives by modelling with toll rates developed in Stage 1 and parameters determined in Stage 2.

  This process will be used in future analyses that will form a basis for tolling recommendations.

- **DRAFT - BSB Corridor: Traffic & Revenue Forecasting: Forecasted Traffic Diversion (November 25, 2014)**

  This PowerPoint presentation showed forecasted traffic on other Ohio River bridges based on Louisville 2017 toll rates and year of implementation (2020, 2030, 2040).

- **BSB Corridor: I-71 Re-Routing Traffic Modeling Memorandum (November 18, 2015)**

  This document evaluated three scenarios for re-routing I-71 from I-75 to I-471. The study concluded that none of the scenarios significantly reduced the number of trips across the BSB. Therefore, no further investigation of the scenarios occurred.

- **BSB Corridor: Intersection Traffic Operational Evaluation Approach (December 28, 2015)**

  This document outlined an approach for evaluating operations at 23 ramp intersections and 11 secondary intersections to assess potential traffic operations impacts associated with tolling the BSB. The document summarized an evaluation methodology and proposed deliverables. No additional evaluations were performed.

- **BSB Project: Traffic Counts, Modeling and Forecast Review (December 2019)**

  In this study, previous traffic modeling and forecasts from earlier BSB studies were reviewed, and the 2040 regional travel model from OKI was utilized to project future traffic volumes. The traffic projections included proposed improvements to the bridge and I-71/I-75 corridor in Kentucky and Ohio based on the current selected Alternative I and assumed no tolling, since the Kentucky General Assembly prohibited the use of tolls for interstate highway projects between Kentucky and Ohio. Based on these efforts, KYTC and ODOT established

that the baseline traffic volume on the BSB of 160,000 VPD and a 2040 Toll Free estimated traffic volume of 227,900 VPD will be used in any near-term design and traffic studies.

- **BSB Project: TransModeler Calibration and Results (May 2020)**

  This report described the model calibration methodology, validation results, and operational results for the concepts developed at the Performance-Based Design Workshop (December 2019) and in coordination with geometric design efforts. Traffic analysis of Concept W and Concept M showed reasonable operation and were recommended for further study.

- **Certified Traffic Report – HAM-75 Linn St to Hopple St & Western Hills Viaduct Interchange (June 2021) and Appendix A (Traffic Plates) (September 2021)**

  This report evaluated weaving conditions on I-75 between the existing Hopple interchange and three proposed interchange options for the WHV and developed certified traffic for use in the upcoming design for the HAM-75-1.05 and HAM-75-1.95 BSB projects.

3.3 ENVIRONMENTAL

- **BSB Corridor: Preliminary Environmental Justice Analysis (February 4, 2015)**

  During the project's NEPA phase, KYTC evaluated Environmental Justice (EJ) concerns by reviewing census tract and block data and distributing a direct mailing survey to further assess impacts. The survey surfaced a number of questions regarding right-of-way issues to which KYTC responded by holding a right-of-way informational meeting in October 2011. Due to the limited residential impacts in Ohio, ODOT's EJ analysis did not involve an outreach component. The analysis concluded that the overall effects of preferred Alternative I would not be appreciably more severe and greater in magnitude for EJ communities when compared with the effects borne by non-EJ communities. With the introduction of tolling as a potential project funding source, additional EJ studies were initiated. This document identified an expanded boundary to evaluate broader impacts resulting from the use of tolling. No further environmental justice studies or outreach were completed since the Kentucky General Assembly prohibited the use of tolls for interstate highway projects between Kentucky and Ohio.

- **FHWA Re-evaluation of Brent Spence Bridge Replacement/Rehabilitation Project (February 11, 2015)**

  This document from the FHWA determined that the potential to toll the facility would require the preparation of a Supplemental Environmental Assessment (SEA) to evaluate the additional impacts associated with tolling. Building upon the alternatives and findings of the existing EA/FONSI, the SEA would evaluate three alternatives:

  - The facility without tolls from the existing FONSI
  - Tolling of the facility
  - No-Build Alternative

  Until such work was completed, the existing FONSI dated August 9, 2012 would remain valid. No action was taken to prepare the SEA.

- **Revised FHWA Re-evaluation of Brent Spence Bridge Replacement/Rehabilitation Project (March 15, 2018)**

  This document from the FHWA determined that the environmental resource studies were more than five years old and would require additional review to ensure the NEPA decision remained valid based on the possibility of new, changed, or additional regulatory requirements. It also reiterated the 2015 recommendation for additional impact analysis and the preparation of an SEA if tolling is incorporated into the project. It further stated that, once ODOT begins environmental review, they should determine which studies need to be updated to support the environmental decision and coordinate that work with FHWA and KYTC to determine the scope of any reevaluation.

  Until ODOT and KYTC have committed to any potential changes in project scope and the required reevaluation has been completed, the existing FONSI dated August 9, 2012 would remain valid.

3.4 FINANCIAL

- **BSB Corridor: Bi-State Agreements Findings and Recommendations (Prepared by Frost Brown Todd Attorneys, LLC) (December 12, 2012)**

  This document reviewed the status of the project and provided recommendations with respect to the nature of an agreement between Ohio and Kentucky. The report concluded that Ohio and Kentucky's primary goal should be to ensure the agreement is enforceable, with clear terms and conditions setting forth project scope, funding, financing, procurement delivery method, each state's respective obligations, and the manner in which the project will be operated and maintained. In addition, the terms of the agreement should designate a single procurement entity to centralize decision-making for development and implementation. Given the complex and integrated nature of the project, an Interstate Compact was recommended to be pursued by the states.

- **BSB Corridor: Summary of RFI Submittals (January 16, 2013)**

  This RFI was issued on December 20, 2012 to generate industry interest in the BSB project, and to elicit responses from individual firms or teams that have experience in developing and/or financing large transportation infrastructure projects. The RFI indicated that ODOT, KYTC, and FHWA were exploring tolling options, public funding options, and private financing options that could be part of either an availability payment or toll revenue concession. The evaluation of responses was planned to be performed as part of a future value for money analysis.

- **DRAFT Report - BSB Quantitative Value for Money Analysis: Traffic and Revenue Study Phase I (Prepared by Steer Davies Gleave) (January 2013)**

  This analysis combined the existing OKI travel demand model (TDM) framework with a Toll Diversion Model to generate traffic and revenue forecasts for a 50-year horizon from the planned opening date of 2018. The results showed diversion rates between 22 and 26 percent.

- **DRAFT Report - BSB Corridor: Value for Money Analysis Technical Feasibility Review and Findings Memo (February 5, 2013)**

  This study conducted a high-level technical review focused on the feasibility and impacts of various "high-value" road and bridge ideas that were generated at the Practical Design/Value Engineering Workshop (October 2012).

Four river bridge alternatives and one roadway alternative with I-75 relocated to the west and a skewed river crossing were evaluated. Other roadway concepts were also considered:

- Alternative 123: Reuse of the existing BSB piers for a new double-decked tied arch (with three lanes on each deck), and two new single-level network tied arch bridges (with a total of ten lanes), one east and one west of the existing BSB.
- Alternative 125: Construction of two nearly identical single-level network tied arches with one bridge to the east of the existing BSB and the other bridge reusing existing BSB piers.
- Alternative 126: Construction of a new single-level tied arch bridge west of the existing BSB and replacement of the existing BSB with a double-decker tied arch superstructure.
- Alternative 22: Similar to Alternative 123 but with both new bridges east of the existing BSB (with a total of eight lanes).
- Alternative 85: Shift of I-75 to the west along the Freeman corridor and tie into I-71, US 50, and SR 264 with a full interchange, crossing the Ohio River on a single-level bridge west of the existing BSB on a skew.

After presentation of these alternatives at the Tolling Considerations Workshop on November 27, 2012, Alternative 123 was selected for comparison to the preferred Alternative I. Further analysis included a comparison of construction and MOT phasing, environmental review, initial and life cycle cost, and risk analysis. The estimated cost savings for Alternative 123 was $370 million. The report stated that there were differences in access to and from the interstate and local systems, and additional right of way and environmental impacts with Alternative 123. There was no specific recommendation to proceed with this design, but a list of environmental-related items was included as next steps for the BSB project.

This report incorporated the Toll Diversion report prepared by Steer Davies Gleave listed above. It also contained an updated version of the workshop summary within the appendices titled: *Draft Report – Practical Design/Value Engineering Workshop Report – October 17-19, 2012.*

- **BSB Corridor: BSB Replacement/Rehabilitation Project Initial Financial Plan Executive Summary (December 31, 2013)**

  This document presented an Executive Summary of the Initial Financial Plan for the BSB project. That plan was to use a design-build-finance-operate-maintain (DBFOM) approach via an availability payment form of a P3 to construct, operate, and maintain the project. Funding was expected to be derived primarily from project tolling, with financial support for development activities provided by both states. Toll revenues were expected to be leveraged through a combination of capital market financing and, to the extent available, the Transportation Infrastructure Finance and Innovation Act (TIFIA) federal financing program. The total project cost estimate for the project was $2.63 billion, exclusive of interest and financing costs and operations and maintenance costs. The anticipated opening day for the project was in 2020. This plan was supported by the business community to accelerate delivery of the project.

  Recommended next steps were for the states to work to secure necessary authority to deliver the project as a DBFOM project, finalize the financial structure, and refine the environmental document.

- **BSB Project: Path Forward (December 2015)**

This report summarized governance and legislation, technical, and financial goals for the project based on studies to date. No specific recommendations were provided.

- Governance and Legislation Goals:
  - Establish a governance structure with Ohio and Kentucky
  - Establish the legislation necessary to use the selected procurement and funding methods
  - Assure consistency between states
- Technical Goals:
  - Decide which alternative to carry forward
  - Decide whether to rehabilitate or reuse the existing substructure
- Financial Goals:

  A key assumption in the *Path Forward* report was that the principal decision point for moving the BSB Project forward from a financial feasibility perspective is relative to tolling. To facilitate the lowest possible tolls as well as to drive down or eliminate the public subsidy required, ODOT considered possible ways to enhance the credit of a public sector toll-revenue financing. Goals included:
  - Determine the best method for providing credit support for the project
  - Agree on the most cost-effective project financing package
  - Implement tolls in support of the project financing structure
  - Complete the financing

The Kentucky General Assembly prohibition of the use of tolls for interstate highway projects between Kentucky and Ohio was put in place before this report was issued. Therefore, any implementation of the guidance in this report would require the removal of the toll prohibition.

3.5 PROCUREMENT

- **BSB Project: Options Analysis (September 2013)**

  This report evaluated the use of various delivery options to deliver the BSB project. The study examined traffic patterns and revenue estimates taking into consideration the willingness of customers to pay tolls and the potential for user charges to cause diversion of traffic to other facilities. (This final document incorporates information from the two draft financial reports listed above from January and February 2013.) A Financial Workshop was held on December 18, 2012 to reach consensus on the appropriate financial inputs to the Options Analysis. A Preliminary Risk Workshop was held on January 7, 2013 to identify, qualify, and quantify the risks of the project. A second Risk Workshop was held on March 18, 2013 to further refine the applicability, probability, and severity of risks identified in the Preliminary Risk Workshop.

  The Options Analysis initially considered four primary delivery alternatives:

  - Design-Bid-Build

- Design-Build
- Availability Payment Concession
- Toll Revenue Concession

For both qualitative and quantitative reasons, only the Design-Build and Availability Payment Concession delivery models were considered.

The findings from the Options Analysis were based on preliminary project inputs, which provided a range of outputs for both delivery models. These outputs were indicative but lacked sufficient precision to draw a conclusion regarding the best value approach to delivering the project. Further due diligence and refinement of cost inputs was expected to be performed in the next phase of study.

- **DRAFT Spreadsheet – BSB Corridor: Considerations for Potential Hybrid Models (October 21, 2013)**

  This spreadsheet presented two procurement/contract options for discussion purposes. Option 1 was for an Ohio/Kentucky joint administration with one integrated procurement and two contracts. Option 2 was for two separate state procurements with two state contracts.

  Considerations for each option included:

  - Pre-contracting issues such as allocation of costs, toll policy, funding, and financing structure
  - Procurement issues such as procurement structure, contracting entity, and management of utility relocation/installation
  - Project revenue issues such as allocation methodology for toll revenue, federal funds, and state funds
  - Property issues such as acquisition, eminent domain, ownership, and disposition at termination
  - Post project delivery issues such as management of operations, maintenance and toll facilities/operation, and capital repair/replacement
  - Key terms of overall structure
  - Legislative modifications for option implementation
  - Potential benefits of options
  - Project risks/issues

- **BSB Project: Procurement Options for the Existing Bridge (April 2014)**

  This report explored the extent of rehabilitation work that may be considered for the existing BSB, based upon its condition and the findings of completed reports. The report then considered the advantages and disadvantages of different procurement methods, taking into consideration the characteristics of the work to be undertaken. It was recommended that the rehabilitation work to the existing bridge be bundled into the P3 as a Design-Bid-Build arrangement. The maintenance responsibility for the existing bridge after substantial completion of the rehabilitation work was recommended to remain with Kentucky. It was also recommended

that Kentucky prepare a detailed design, and proposers be required to bid prices based on Kentucky-provided quantities rather than have each proposer prepare a rehabilitation design.

4. CURRENT STATE OF THE PROJECT

Substantial study and design work has been performed in the BSB project corridor since the approval of the FONSI in 2012, as evidenced by the list of studies and reports in previous sections. This section provides a status of project components through September 2021.

4.1 DESIGN

- Two sections of the BSB project in Ohio are moving forward in design with consultant teams expected to proceed in October 2021:
  - HAM-75-1.05 Linn to Findlay (PID 113361) with construction anticipated for 2025.
  - HAM-75-1.95 Findlay to north of the WHV (PID 114161) with construction anticipated for 2028.
- MSD is developing a new stormwater model for the BSB corridor.
- Concepts W and M for crossing the Ohio River are undergoing further analysis and comparison to Alternative I. This includes value engineering considerations to reduce costs and address local concerns that have been raised about the project. While each utilize the existing BSB and a new companion bridge to the west of the existing BSB, the use of each bridge and level of the double decked structures by interstate and local connections vary. These alternatives also vary in the potential for reuse of existing highway and ramp facilities.
- KYTC performed a BSB maintenance project in 2017 which included deck overlay with identified joint repair and steel work, as well as lighting replacement.
- The 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. The bridge's structural integrity was not compromised by the incident, though sustained heat 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.
- The BSB painting project will be completed in November 2021 thereby eliminating the need to include this work in any upgrade or maintenance to the existing bridge as part of the BSB project.

4.2 TRAFFIC

- Analysis of previous traffic studies, current traffic counts, and use of the OKI Travel Demand Model led to the establishment of a BSB project baseline traffic volume 160,000 vehicles per day (VPD).A current projection of 227,900 VPD to be used on near-term design work while the travel demand model is updated to revisit these projected forecasts.
- ODOT adopted standards for the use of TransModeler for analysis and forecasting efforts, and a model for the BSB corridor was developed using TransModeler for the analysis of Concepts W and M.
- OKI finalized the update to the regional travel demand model for year 2050.
- Certified traffic was prepared for the BSB corridor in Ohio for use in the HAM-75-1.05 and HAM-75-1.95 projects.

4.3 ENVIRONMENTAL

- Approximately 90 percent of right-of-way parcels have been acquired in Ohio for the BSB project based on Alternative I. Sites specifically listed in the FONSI include:
  - The dunhumby building has been demolished and a parking lot constructed for interim use.
  - ODOT has completed the financial mitigation required for the Queensgate ball field, but the City has not yet completed the reconfiguration of the site.
  - Property acquisition near the river at Longworth Hall and land owned by railroads is still to be finalized.
- Major utility relocation at the Duke Energy riverfront facility has been completed. Duke Energy has also remediated the site so that right-of-way required for the BSB project can be acquired with no regulated materials concerns.
- Relocation of the Duke Energy substation on Spring Grove just south of the WHV will be performed as part of the WHV Project, since relocation of associated tower structures will also be required across the Mill Creek Valley for the WHV project. ODOT is coordinating with the city and county for design and funding separate from the BSB project.
- ODOT continues to coordinate with the city/county for environmental issues related to the BSB project, most notably historic structures.
- The HAM-75-1.05 project scope includes an update to the environmental documents, as needed, from Linn Street through the HAM-75-1.95 project, including sound walls, aesthetics, and community engagement. This project also includes the reestablishment of the BSB Advisory Committee and Aesthetic Committee.

4.4 FINANCIAL

- Funding for activities associated with tasks outlined in the Fifth Supplement to the Bi-State Agreement has been secured by ODOT and KYTC.
- Funding to complete design and contract plans for HAM-75-1.05 and HAM-75-1.95 projects has been secured by ODOT in 2021.
- Funding for construction of the HAM-75-1.05 project has been secured by ODOT for 2025.

5. SUMMARY - NEXT STEPS

Both states see an opportunity for the project to receive federal grant(s) if the federal Infrastructure Investment and Jobs Act is passed and are working diligently to put the project in the best position to be competitive. This includes addressing local concerns and exploring potential cost reductions. Without tolling, the project is positioned to move toward construction along an expedited time frame (see Section 5.2). Therefore, the BSMT is prepared to move forward with the BSB project throughout the corridor in Kentucky and in Ohio to approximately Ezzard Charles. This design effort will be coordinated with the two BSB corridor projects in Ohio (HAM-75-1.05 and HAM-75-1.95) and the WHV project, which are all expected to proceed with design in October 2021.

While all five aspects of project development are required for a successful project (Design, Traffic, Environmental, Financial, and Procurement), the immediate next steps of project development include Bi-State coordination, environmental, public outreach, and further design and analysis of value engineering concepts for preferred Alternative I (Concept W and Concept M).

5.1 BI-STATE COORDINATION

Kentucky and Ohio will work together to develop an agreement for the BSB projects design, construction, and future operation and maintenance. This agreement will address project scope, funding, financing, procurement delivery method, each state's respective obligations, and future operation and maintenance responsibilities. The agreement may also designate a single procurement entity to centralize decision-making for development and implementation.

The goals of the bi-state coordination will be to establish a governance structure with Kentucky and Ohio, agree on the selected alternative, agree on the most cost-effective project financing package, and to establish the legislation necessary to utilize the selected procurement and funding methods.

The governance structures being considered are a Bi-State Memorandum of Understanding, a Bi-State Compact Not Approved by Congress (CNAC), a Bi-State Compact Approved by Congress, or some other governing structure that will allow the most efficient and timely delivery of the Project. Financial considerations include:

- Capacity and potential for use of Ohio state funding, Kentucky state funding, federal funding (State distribution, TIFIA, INFRA Grant, etc.), and other funding for construction.
- Which Ohio state funded, Kentucky state funded, federal funded, and/or another funded delivery structure will allow for the expeditious delivery of the project.

5.2 ENVIRONMENTAL

The implementation of tolling would have required substantial additional analyses to determine the impacts of diversion traffic on the local street network, including in historic districts. Additional environmental analyses and targeted public outreach would have been required to determine if tolling would result in a disproportionately high and adverse impact to minority and low-income populations. Based on the results of these efforts, several additional mitigation measures may have been required. Finally, a Supplemental Environmental Assessment (SEA) would have been required to fully evaluate tolling the facility.

Since the BSMT has determined that tolling is not a feasible alternative at this time, ODOT and KYTC do not intend to update environmental studies with respect to tolling. Should tolling become a feasible option in the future, it is expected

that ODOT, KYTC, and FHWA will collaborate to establish the scope for the public engagement plan and any required environmental studies.

In a July 22, 2021 letter to FHWA ODOT and KYTC committed to completing the next NEPA re-evaluation in 2023 or sooner if significant changes to the project impacts are identified.

5.3 PUBLIC OUTREACH

The BSB Advisory Committee and BSB Aesthetic Committee will be reestablished as part of the HAM-75-1.05 project. These committees will be updated on the status of the overall project and will also be advised of the design and analysis work as it progresses. Updates to the project website and production of an E-Newsletter will also be utilized to provide project updates to the public. It is anticipated that the first meeting of the Advisory Committee will be held in the Spring of 2022.

5.4 DESIGN AND ANALYSIS

The value engineering concepts for preferred Alternative I (Concept W and Concept M) will proceed with further study. Analysis will include traffic projections to year 2050 with the updated OKI TDM and development of TransModeler files for preferred Alternative I and both value engineering concepts. Additional refinement of the geometry will also progress in coordination with the traffic modeling. These design and traffic efforts will be used to determine the feasibility of each value engineering concept based on traffic operational characteristics, local connectivity, project footprint, and estimated cost. This work will also inform the needed modifications to the existing BSB and bridge type and design of the new river crossing.

A comparison matrix will be developed to reflect a wide range of issues. These may include highway-related traffic operations, local connectivity, local traffic operational impacts, overall footprint and property acquisition needs, environmental impacts, utility impacts, safety, cost, potential financing, constructability/phasing, MOT through construction, future maintenance and associated MOT, future incident management, and future event traffic control.

Based on the concept comparison matrix and stakeholder feedback, the states will accept or reject the value engineering concepts developed since the approval of the FONSI. Based on this decision, additional design, traffic, environmental, financial, and procurement tasks will be identified, as necessary, to move the project to implementation.

In a July 22, 2021 letter to FHWA, ODOT and KYTC committed to completing the final evaluation of the value engineering concepts in 2021 and 2022. Any future design, environmental re-evaluation, financial, and procurement activities will be based on the most current available traffic and adopted design parameters.

APPENDIX A: BSB TIMELINE OF STUDIES (2005 to 2021)

Study Type:	Design (D)	Traffic & Tolling (T)	Environmental (E)	Financial (F)	Procurement (P)

2005

- Feasibility and Constructability Study of the Replacement/Rehabilitation of the Brent Spence Bridge (May 2005) (D)

2006

- Planning Study Report (April 2006) (E)

2009

- Conceptual Alternatives Study (April 2009) (E)

2011

- Bridge Type Selection Report (March 2011) (D)
- Preferred Alternative Verification Report (PAVR) (May 2011) (E)
- Access Point Request (August 2011) (T)

2012

- Environmental Assessment (EA) (March 2012) (E)
- Finding of No Significant Impact (FONSI) (August 9, 2012) (E)
- DRAFT Report – BSB Project: Practical Design/Value Engineering Workshop Report (October 17-19, 2012) (D)
- BSB Corridor: Bi-State Agreements Findings and Recommendations (Prepared by Frost Brown Todd Attorneys, LLC) (December 12, 2012) (F)

2013

- BSB Corridor: Summary of RFI Submittals (January 16, 2013) (F)
- DRAFT Report – BSB Quantitative Value for Money Analysis: Traffic and Revenue Study Phase I (Prepared by Steer Davies Gleave) (January 2013) (F)
- DRAFT Report – BSB Corridor: Value for Money Analysis Technical Feasibility Review and Findings Memo (February 5, 2013) (F)
- BSB Project: Options Analysis (September 2013) (P)
- DRAFT Spreadsheet – BSB Corridor: Considerations for Potential Hybrid Models (October 21, 2013) (P)
- BSB Corridor: BSB Replacement/Rehabilitation Project Initial Financial Plan Exec. Summary (December 31, 2013) (F)

2014

- DRAFT Report – BSB Project: Draft Travel Survey Analysis (February 2014) (T)

- BSB Project: Employment and Population Forecasts (February 2014) (T)
- BSB Project: Preliminary Tolling Concept of Operations (February 2014) (T)
- BSB Project: Potential Cost Savings Estimate (February 2014) (D)
- BSB Project: Modeling and Traffic Impacts Analysis Technical Memorandum (March 17, 2014) (T)
- BSB Project: Procurement Options for the Existing Bridge (April 2014) (P)
- BSB Project: Evaluation of Toll Alternatives (May 2014) (T)
- DRAFT BSB Corridor: Traffic & Revenue Forecasting: Forecasted Traffic Diversion (November 25, 2014) (T)

2015

- BSB Corridor: Preliminary Environmental Justice Analysis (February 4, 2015) (E)
- FHWA Re-evaluation of the Brent Spence Bridge Replacement/Rehabilitation Project (February 11, 2015) (E)
- DRAFT Report – BSB Project Cost Savings Study (Prepared by Parsons Brinckerhoff) (March 18, 2015) (D)
- Whiz Bang Concept (Developed 2015) (D)
- BSB Corridor: I-71 Re-Routing Traffic Modeling Memorandum (November 18, 2015) (T)
- BSB Corridor: Intersection Traffic Operational Evaluation Approach (December 28, 2015) (T)
- BSB Project: Path Forward (December 2015) (F)

2017

- BSB Corridor: Technical Report - Draft Corridor Drainage Study (November 1, 2017) (D)
- KYTC BSB Strategic Corridor Study (Prepared by Stantec) (2017) (D)

2018

- FHWA Re-evaluation of the Brent Spence Bridge Replacement/Rehabilitation Project (March 15, 2018) (E)

2019

- BSB Project: Traffic Counts, Modeling and Forecast Review (December 2019) (T)
- Performance-Based Design Workshop (December 2019) (D)

2020

- BSB Project: TransModeler Calibration and Results (May 2020) (T)
- BSB Project: Analysis of Design Concepts (May 2020) (D)
- Brent Spence Bridge Traffic and Concept Analysis (May 2020) (D)

2021

- Certified Traffic Report – HAM-75 Linn St to Hopple St & Western Hills Viaduct Interchange (June 2021) and Appendix A (Traffic Plates) (September 2021) (T)

APPENDIX B: BSB TIMELINE OF BI-STATE AGREEMENTS

AGREEMENT BETWEEN STATE OF OHIO AND COMMONWEALTH OF KENTUCKY FOR THE REPLACEMENT OF THE BRENT SPENCE BRIDGE CARRYING IR 71/75 OVER THE OHIO RIVER BETWEEN COVINGTON, KENTUCKY AND CINCINNATI, OHIO

October 14, 2004 – 2004 Agreement (Ohio Agreement No. 20541 – PID 75119 and 89066)

- Begin preliminary engineering for replacement of the BSB
- KYTC established as lead state agency
- KYTC responsible for contracting with a qualified engineering consultant to perform Engineering Feasibility Study
- *All obligations of Agreement No. 20541 have been completed*

November 23, 2004 – First Supplemental Agreement (Agreement No. 20541-A)

- ODOT established as lead state agency for environmental and preliminary design phases
- KYTC and ODOT agree to jointly manage consultant selection
- *All obligations of Agreement No. 20541-A have been completed*

December 11, 2008 – Second Supplemental Agreement (Agreement No. 20541-B)

- Restructured financial participation of each state for project development
- *All obligations under Agreement No. 20541-B have been completed*

December 12, 2012 – Third Supplemental Agreement (Agreement No. 20541-C)

- Ended environmental and preliminary design phases with approval of the FONSI on August 9, 2012
- Identified a recommended preferred alternative (Alternative I) for the project
- Established Bi-State Management Team (BSMT) with the authority to oversee the project and to:
    - Evaluate project procurement options – *Completed in October 2013 with the release of the BSB Project Options Analysis*
    - Prepare initial project financial plan – *Completed in December 2013 with the release of the BSB Project Interim Financial Plan*
    - Assess the need for procuring additional professional services – *ongoing (ODOT currently contracted with a consultant)*
    - Maintain a project website – *Website completed and maintenance ongoing*
    - Manage public relations - *ongoing*

August 30, 2014 – Fourth Supplemental Agreement (Agreement No. 20541-D)

- Obligated the BSMT to procure additional professional services to:
    - Update or amend the project environmental document
    - Assist in preparation and processing of applications through FHWA with respect to funding
    - Assist in development of bi-state development agreement
    - Develop an initial financial plan and procurement methodology
- *All obligations under Agreement No. 20541-D started but not all completed*

April 29, 2021 – Fifth Supplemental Agreement (Agreement No. 20541-E)

- KYTC and ODOT agree to continue utilizing the BSMT:
    - Agrees that ODOT will continue as the lead contracting agency
    - Shall consider current policies of their respective states when making non-binding recommendations and taking actions to advance the expeditious and cost-effective development and delivery of the project
    - Will Incorporate performance-based project development concepts in the project
- Identifies scope of work to prepare BSB companion bridge project for funding opportunities
- Outlines financial participation of each state for project development
- *All obligations under Agreement No. 20541-E started but not all completed*