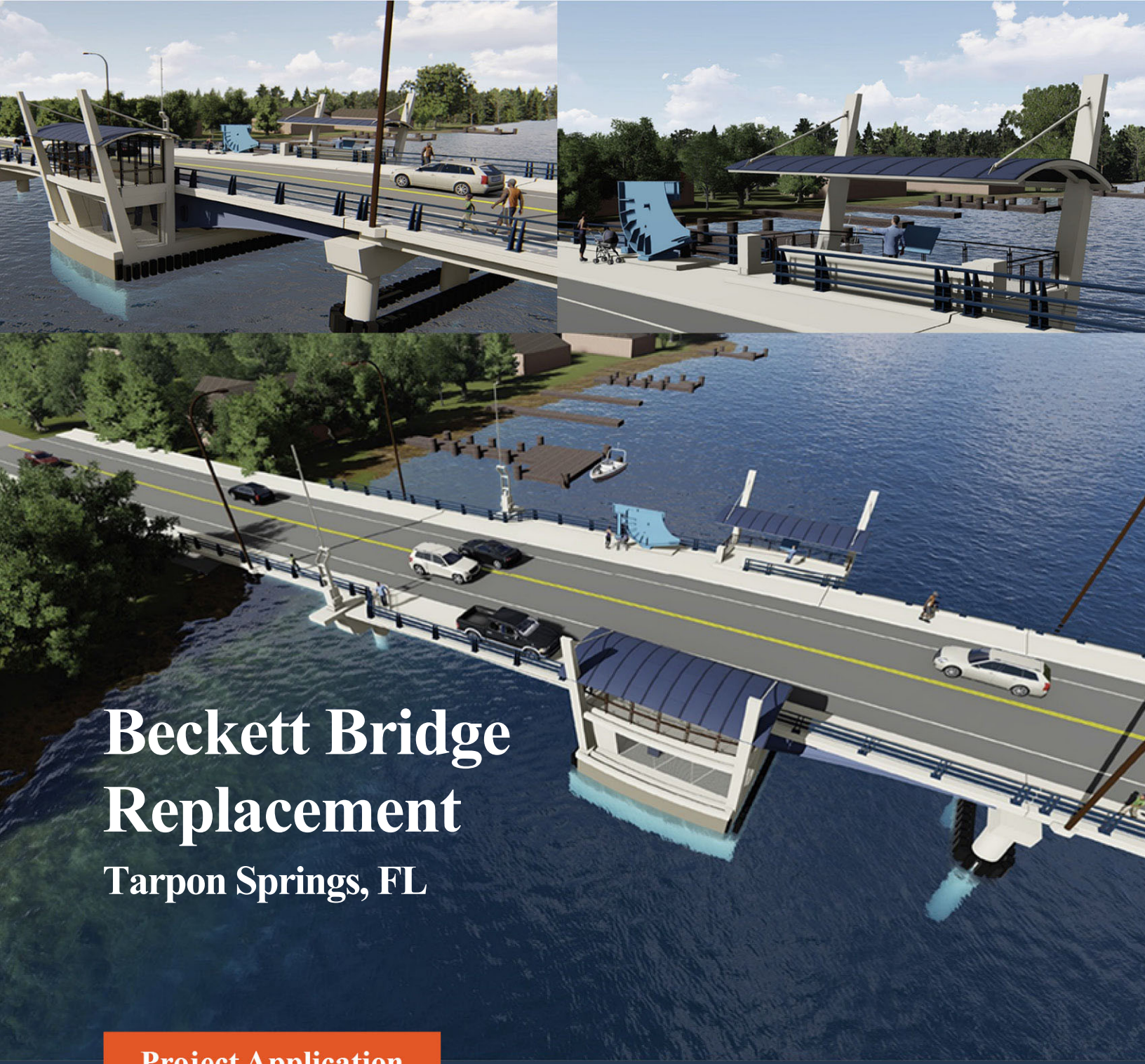

Beckett Bridge Replacement

Tarpon Springs, FL

Project Application

Bridge Investment Program (BIP) Grant Application

SEPTEMBER 2022

Contact

Pinellas County Board of County Commissioners

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F. Financial Documents

- Pinellas County Operations Commitment Letter
- Board of County Commissioners Approval of BIP Grant
- Pinellas County Capital Improvement Program – Project Budget Report

For additional project information visit Pinellas County, Florida - Beckett Bridge Replacement Project.

Project Application

Basic Project Information

Project Name: Beckett Bridge

Eligibility Criteria

Project Description (Replacement, Rehabilitation, Preservation, or Protection projects, including bridge bundling and NBIS culvert replacement and rehabilitation)	The proposed Beckett Bridge will replace an original 1924 timber structure that was reconstructed in 1956. The existing bridge foundations have a long history of vertical settlement and horizontal movement requiring major repairs due to a relic sinkhole. The bridge has been load-limited to 12 to 15 tons for 35 years, is structurally deficient and functionally obsolete, and has a substructure rating of poor. Beckett Bridge is the oldest movable bridge in Florida, and it requires constant monitoring and experiences regular closures due to its aging infrastructure. The bridge will be replaced in-kind with a single span bascule bridge with a historical marker and plaque denoting its history. Beckett Bridge was deemed eligible for listing in the National Register of Historic Places (NRHP) in 2013. This bascule-type movable bridge connects two neighborhoods in the community of Tarpon Springs, Florida, and it connects downtown Tarpon Springs to the beach. It also opens to allow boats in Whitcomb Bayou to access Anclote River and the Gulf of Mexico. The new bridge will allow full vehicular loads while adding pedestrian and bicycle infrastructure to accommodate all modes of transportation. The new structure will provide consistent and reliable access for the movement of all goods and services and direct access for emergency vehicles, including paramedics. This bridge connects people to downtown, several public beaches, healthcare, grocery stores, and schools. The bridge owner, Pinellas County, has invested preliminary engineering, permitting, and construction engineering to prepare this project for construction. The City of Tarpon Springs is funding the relocation of utilities for this project. More than $2.82 million have been invested by local parties to leverage this opportunity for Beckett Bridge Investment Program (BIP) funding prior to 2022. Beckett Bridge No. 154000 is listed on the National Bridge Inventory under 23 U.S.C. 144 (b). More information about the Project, its location, and Project partiers are located in the Supplemental Narrative.
BIP Request Amount (minimum grant award is $2.5 million)	Exact amount in year-of-expenditure dollars: $18.86 million

Total Project Cost (total project cost cannot exceed $100 million for Bridge Projects)	Estimate in year-of-expenditure dollars: $18.86 million (2024)
Applicant:	Pinellas County is a local government within the state of Florida.
Maintenance Commitment	Pinellas County has committed to maintaining the bridge throughout its lifetime and has provided a commitment letter included in **Appendix F.**
Bike and Pedestrian Accommodation required by 23 U.S.C. 217(e)	The Beckett Bridge Project satisfies the Bike and Pedestrian Accommodation required by 23 U.S.C. 217(e). Additionally, the project exceeds the minimum standard width for both sidewalks and bicycle accommodations.
Additional Project Information	
State(s) in which project is located	Florida
Does the project serve an urban or rural community?	The Beckett Bridge Project services the urban area of Tarpon Springs, Pinellas County, Florida. See Project Location Map.
List all Project Co-Applicants.	There are no co-applicants.
Identify the Lead Applicant (who will be also the applicant responsible for administration of BIP funds if application is selected and point of contact for the application.)	Pinellas County
Was an application for USDOT discretionary grant funding for this project previously submitted?	No
Is the project located (entirely or partially) in Federal or USDOT designated areas?	No

National Bridge Inventory Data

Identification	
Item 1 – State Code & Name	12 Florida
Item 8 – Structure Number	154000
Item 5A – Record Type	1 (Route on Structure)
Item 3 – County Code & Name	15 Pinellas
Item 6 – Feature Intersected	Minetta Branch
Item 7 – Facility Carried	N Springs Blvd
Item 16 – Latitude	28º8’60.0”N
Item 17 – Longitude	82º45’54.7”W
Classification	
Item 112 – NBIS Bridge Length	Y – meets NBI Length
Item 104 – Highway System of Inventory	Not on National Highway System (NHS)
Item 26 – Functional Classification	Urban Collector
Item 110 – Designated National Network	Not part of National Network
Item 21 – Maintenance Responsibility	Pinellas County
Item 22 – Owner	Pinellas County
Age and Service	
Item 27 – Year Built	1924 (Reconfigured in 1956)
Item 106 – Year Reconstructed	0
Item 42 – Type of Service	Highway-pedestrian (on structure); waterway (under structure)
Item 28A – Lanes on the Structure	2
Item 29 – Average Daily Traffic	3,100
Item 109 – Average Daily Truck Traffic	3%
Item 19 – Bypass, Detour Length	1.9 miles
Structure Type and Material	
Item 43 – Structure Type, Main Steel	Single-leaf rolling-lift bascule bridge

Condition	
Item 58 – Deck Condition	Good
Item 59 – Superstructure Condition	Satisfactory
Item 60 – Substructure Condition	Satisfactory (2019 Bridge Inspection Report), Poor (2021 Technical Memo revised rating)
Item 61 – Channel and Channel Protection	Minor damage
Item 62 – Culverts	Not Applicable
Geometric Data	
Item 49 – Structure Length	358.4 feet
Item 50 – Curd of Sidewalk Widths	Left: 2.15 ft; Right: 2.15 ft
Item 51 – Bridge Roadway Width, curb-to-curb	20.2 ft
Item 52 – Deck Width, out-to- out	28 ft
Item 32 – Approach Roadway Width	20.2 ft
Item 47 – Inventory Route, Total Horizontal Clearance	20.2 ft
Item 53 – Minimum Vertical Clearance over Bridge Roadway	99.99 ft
Item 54 – Minimum Vertical Underclearance	No feature, not a highway or railroad
Item 55 – Minimum Lateral Underclearance on Right	No feature, not a highway or railroad
Item 56 – Minimum Lateral Underclearance on Left	No feature, not a highway or railroad
Load Rating and Posting	
Item 70 – Bridge Posting	0>39.9% below. Load-rated since 1987 for 12-ton limits for single-unit trucks and 15-ton limits for combination trucks
Item 41 – Structure Open, Posted, or Closed to Traffic	Posted for load

Appraisal	
Item 113 – Scour Critical Bridges	3 SC - Unstable

Inspections	
Item 90 – Inspection Date	7/30/2019

Project Selection Criteria

Criteria #1: State of Good Repair

Beckett Bridge, originally built in 1924, and reconstructed in 1956, currently has an NBI Substructure Rating of 4 or **Poor Condition** (rating 0 to 9) and a bridge classification of **Structurally Deficient** (Technical Memorandum sealed June 2021), which modified the bridge rating from 6, Satisfactory to 4, Poor. The bridge is also considered **Functionally Obsolete**, primarily due to its narrow roadway width of 20 feet, which does not meet current geometric standards. The NBI Substructure Rating results in a Sufficiency Rating of 18.3 (range is 0-100) which is low for a functioning bridge. This rating describes the physical condition of piers, abutments, piles, fenders, and footings, including visible signs of distress such as cracking, section loss, settlement, misalignment, scour, collision damage, and corrosion. Beckett Bridge is currently **classified as being in poor condition.** This project contributes to the State of Good Repair criteria by replacing the structure completely to raise all NBI ratings to Excellent.

Criteria #2: Safety

The existing Beckett Bridge is functionally obsolete and structurally deficient. Substandard lane widths, non-existent shoulders, and lack of adequate pedestrian facilities affect the safety of all movements across the bridge—locals, visitors, emergency services, and freight. This 98 year old bridge has exhibited some settlement as a result of a relict sinkhole near several piers and is currently load restricted. Vehicles crossing the bridge that exceed the current weight limit will likely cause further deterioration of the bridge structure. The existing 2-foot-wide sidewalks and lack of bicycle facilities also pose safety issues for non-vehicular trips.

Replacing the bridge will improve safety and provide a sense of security for travelers crossing the bridge by replacing the deficient structure, and constructing 6.5-foot-wide shoulders/bike lane, and 6.5-foot-wide sidewalks in both directions. Roadway/bridge lighting, Americans with Disabilities Act (ADA) accommodations, safety bridge barriers/railings, a non-slip movable bridge surface, and increased vertical clearance for navigation under the bridge will also improve safety. Currently, some emergency response vehicles are not able to use the load-rated bridge, so access and travel time reductions for response times will also improve safety for residents. Emergency vehicles currently can be delayed or prohibited from crossing the narrow bridge if there is a vehicular crash that blocks both lanes. The new wider bridge will allow emergency vehicles to travel over the bridge if there is a crash.

Criteria #3: Mobility and Economic Competitiveness

This project contributes to the Mobility and Economic Competitiveness criteria by providing a structurally sound and safe bridge that will improve the movement of people and goods. The bridge is currently load-restricted, and replacement will eliminate detours and reduce vehicles miles traveled by approximately 9,000. School buses will use this route after being detoured for 35 years to get children to school directly, saving time, reducing emissions, and reducing vehicle maintenance. Many emergency vehicles have been detouring this route since 1987; replacement will give them more direct access to emergency calls, both fire and medical, to create better outcomes for fire victims and cardiac arrest patients. The local Fire Chief estimates an approximately 8.5-minute reduction in response time with the bridge replacement. Freight mobility will be improved, which will enhance delivery for personal and commercial deliveries and provide more opportunities to split the traffic within the limited east–west corridors in the area. Mobility of boats traveling on the waterway will also improve with more dependable bridge operations and greater vertical clearance when the bridge is closed. Non-vehicular mobility will be substantially improved as the current bridge provides only very narrow sidewalks and no bicycle accommodations, and the proposed bridge includes 6.5-foot sidewalks on both sides of the bridge and undesignated bike lanes in both directions with full ADA accessibility.

Criteria #4: Climate Change, Resiliency, and the Environment

This project contributes to the Climate Change, Resiliency, and the Environment criteria by rebuilding the bridge with the latest materials at a higher vertical profile (9 feet), making it more resilient to climate change and rising tidal functions. The preferred and designed Beckett Bridge alternative was selected because it minimizes the take of property from residents and limits construction impacts on the adjacent community. The project demonstrates resilience and environmental stewardship by building the structure within the same footprint as the existing bridge, using a bridge design with low-maintenance elements and features, and reducing emissions by removing vehicle detours that have been in place for 35 years.

Criteria #5: Equity, Partnership, and Quality of Life

This project contributes to Equity, Partnership, and Quality of Life criteria by increasing the livability and quality of life for the residents on several levels. Equity and Partnership are demonstrated through the public outreach and communication regarding project alternatives analysis, historic preservation process, establishment of an aesthetics committee, and multiple public meetings and public county commission dialogues that occurred over multiple years. The preferred and designed Beckett Bridge alternative was selected because it takes no property from residents and limits the construction impacts on the adjacent community. The City of Tarpon Springs is partnering with Pinellas County to relocate water and sewer utilities. Quality of Life is supported by the improved response time and mobility of emergency response personnel to those needing fire or medical resources during critical moments. The City Fire Chief estimates an 8.5-minute response time savings with the bridge reconstruction. Additionally, 6.5-foot-wide sidewalks and bike shoulders improve

overall quality of life for the community. The proposed new bridge will include pedestrian overlooks and an educational display about the history of the bridge which includes salvaged parts of the original bridge. The new bridge will serve as a beautiful asset connecting two neighborhoods along the Whitcomb Bayou and providing connectivity to nearby parks, trails, and downtown Tarpon Springs.

Criteria #6: Innovation

This project contributes to the Innovation criteria by using the latest bridge materials, construction methods, and environmental protections to construct a bridge with a long service life that includes redundancy in the operating machinery for the bascule bridge section, a revised pier arrangement to avoid a relict sinkhole to minimize effects on movable bridge sections, innovative materials such as metallizing system and Exodermic deck, and integrating historic bridge elements into an educational display along the new bridge.

Project Costs

BIP Request Amount	Exact amount in year-of-expenditure dollars: $18.86 million
Estimated Total of Other Federal funding (excluding BIP Request)	Estimate in year-of-expenditure dollars: $0
Estimated Other Federal funding (excluding BIP) further detail	Program: Not applicable
Estimated non- Federal funding	Source: Pinellas Capital Improvement Program Amount: $1.885 million (match) $2.22 million CEI/Post Design Engineering $5.3 million Utilities Relocation (City of Tarpon Springs)
Future Eligible Project Cost (Sum of BIP request, Other Federal Funds, and non-Federal Funds, above.	Estimate in year-of-expenditure dollars: $27,550,000 ($18.86 million + $3.394 million CEI/Post Design Engineering +$5.3 million Utilities Relocation)
Previously incurred project costs (if applicable)	Estimate in year-of-expenditure dollars: $2.82 million
Total Project Cost (Sum of 'previous incurred' and 'future eligible')	Estimate in year-of-expenditure dollars: $30.37
If more than one bridge, will bridge bundling be used to deliver the Project?	Not applicable
If proposed project utilizes bundling, Cost of Unbundled Projects	Not applicable
Amount of Future Eligible Costs by Project Type	Not applicable

Benefit-Cost Analysis

Benefit Cost Analysis - The project is expected to generate $30.7 million in benefits. Additionally, it is expected to generate numerous benefits related to maintaining access to passenger vehicles and the expansion of access to multi-modal users, school buses, trucks, and emergency response vehicles. It will provide travel time savings, generate health benefits for

cyclists and pedestrians, increase survival rates from cardiac arrest due to improved emergency response times, and generate other benefits related to active transportation.

The benefit-cost analysis estimates a net present value of $14.8 million and a benefit-cost ratio of 1.9, demonstrating that the project is cost-effective and a worthwhile investment.

Project Readiness and Environmental Risk

Project Readiness and Environmental Risk– Submit the requested information in Section E.2.b.iii for the DOT to conduct a review of the project readiness and environmental risk criteria for the project and provide a summary. If project includes multiple bridges, indicate the information for each bridge included in the application and what impact would occur on the timeframes if the project were unbundled.

Other Federal Funding and Non-Federal Funding Secured	No
NEPA Status – Indicate if the determination will likely be the result of a Categorical Exclusion (CE), Environmental Assessment (EA), or Environmental Impact Statement (EIS)	Planned or Actual Start of NEPA Date: 2012 Planned or Actual Completion of NEPA Date: January 25, 2016 Final NEPA Determination or current status of NEPA process: Type 2 Categorical Exclusion
Is the project currently programmed in the: TIP STIP MPO Long Range Transportation Plan State Long Range Transportation Plan	**Yes** • TIP ID 001037A, programmed in fiscal years 2022, 2023, 2024 (page 236 of 279)
Is right-of-way acquisition necessary?	**Yes**
Right-of-way acquisition considerations.	0.1 acre permanent easement and 0.1 acre temporary construction easement. Pinellas County in process of acquisition.
Design Status	Planned or Actual Start of Preliminary Design Date: 2013 Planned or Actual Completion of Preliminary Design Date: 2016 Planned or Actual Start of Final Design Date: October 2016 Planned or Actual Completion of Final Design Date: December 2022

Anticipated Construction Start Date:	Date: **Winter 2022**
Anticipated Project Completion Date:	Date: **2026**

The summary on project readiness and environmental risk demonstrates:

Confident Delivery: Pinellas County anticipates no issues relating to the project's technical feasibility. The Beckett Bridge Project has completed 100 percent design plans, and final construction plans are scheduled to be submitted in December 2022. The overall construction period is 21 months. All necessary preconstruction activities will be completed to allow BIP funds to be obligated sufficiently in advance of the statutory deadline.

Complete, Stable and Committed: The Beckett Bridge Project's federal and non-federal sources are fully committed, and there is demonstrated funding available to cover contingency/cost increases. Pinellas County has committed $1,885,500 in non-federal funding through the FY 2023-25 Capital Improvement Program. The project is reflected in the proposed budget as being primarily funded by the Penny for Pinellas.

Low Risk: The Type 2 Categorical Exclusion, prepared in accordance with NEPA, was approved by the Federal Highway Administration (FHWA) on January 25, 2016. Pinellas County has recently submitted a Right-of-Way Reevaluation to FHWA for review and approval. The reevaluation documents minor changes in wetland impacts and ongoing acquisition of construction easements along the project corridor. The reevaluation was prepared to comply with NEPA requirements and is anticipated to be approved in 2023.

Project Priority Considerations

Beckett Bridge, originally built in 1924 and reconstructed in 1956, currently has an NBI Substructure Rating of 4 or Poor Condition (rating 0 to 9) and a bridge classification of Structurally Deficient (Technical Memorandum sealed June 2021), which modified the bridge rating from 6, Satisfactory to 4, Poor. The bridge is also considered Functionally Obsolete, primarily due to its narrow roadway width (20 feet), which does not meet current geometric standards. The NBI Substructure Rating results in a Sufficiency Rating of 18.3 (range is 0-100). This rating describes the physical condition of piers, abutments, piles, fenders, and footings and includes visible signs of distress such as cracking, section loss, settlement, misalignment, scour, collision damage, and corrosion. The bridge has fallen below fair condition and is currently in poor condition.

Final engineering design will be completed in 2023 and will be funded by applicant. This application is a request for construction funds for a single bridge replacement. A small amount (0.1 acre of temporary construction easements and 0.01 acre of permanent construction easements) of right-of-way acquisition is necessary to deliver this project as designed. A Type 2 CE has been completed, and the project is ready to proceed once funding is provided. Without BIP funding, construction of the project is unlikely to commence before September 30, 2025.

Beckett Bridge Replacement

Tarpon Springs, FL

Supplemental Narrative

Bridge Investment Program (BIP)
Grant Application

SEPTEMBER 2022

Contact

Pinellas County Board of County Commissioners

Mona R. Gabriel, P.E., CCM
mgabriel@pinellascounty.org
(727)464-3763

Supplemental Narrative

Project Description, Location, and Parties

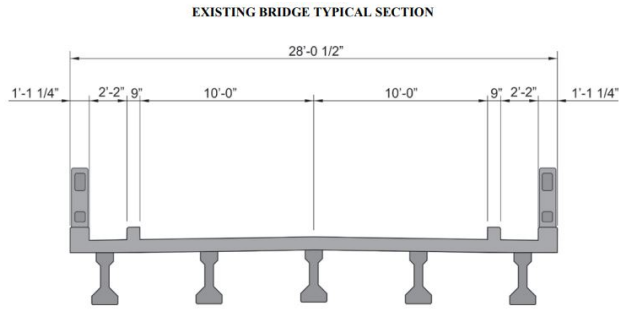
Project Description

The purpose of the Beckett Bridge Replacement Project is to provide for the safe and efficient movement of people and goods within the City of Tarpon Springs and between major arterials, including US 19, downtown Tarpon Springs, and destinations to the west of Whitcomb Bayou in Pinellas County, Florida. The project will also provide local and regional connectivity across Whitcomb Bayou, direct access to County emergency services, and a designated evacuation route (Tarpon Avenue) for about 5,400 local residents in this coastal community.

Figure 1. Beckett Bridge in 1965, facing Southwest

Beckett Bridge (Bridge No. 15400, **Figure 1**) carries Riverside Drive over Whitcomb Bayou in the City of Tarpon Springs and is classified as an urban collector and is an extension of Tarpon Avenue, which is a designated evacuation route. Pinellas County owns and operates the narrow two-lane, single-leaf rolling-lift bascule bridge that was originally constructed in 1924 as a timber bridge with a steel movable span. Boats docked in Whitcomb Bayou must pass under the bridge to connect to the Anclote River and eventually to the Gulf of Mexico. The fixed-timber approach spans were replaced with concrete approach spans in 1956.

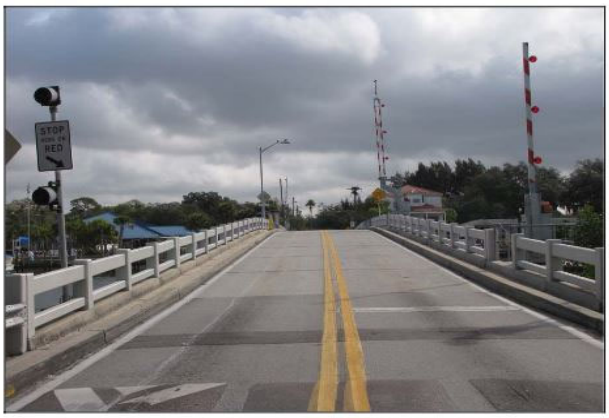
Figure 2. Existing Bridge Typical Section



In 2013, FHWA and the Florida State Historic Preservation Officer (SHPO) concurred that Beckett Bridge was eligible for listing in the NRHP under criteria A (for local and state development) and C (for engineering). The bridge was constructed in 1924, and although it was rehabilitated in 1956, it retains its integrity as a Scherzer rolling-lift, single-leaf bascule bridge. Per 36 CFR Part 800.5, the project was evaluated and determined to have an adverse effect on the significant historic bridge. In 2015, FHWA, SHPO, Pinellas County, and the Florida Department of Transportation (FDOT) signed a Memorandum of Agreement (MOA) that the bridge could be replaced contingent on a number of stipulations listed in the MOA related to design and construction of the project, documentation of the Beckett Bridge, salvage and reuse of existing bridge elements, public education, archaeological monitoring/discoveries, professional qualifications, and several administrative conditions.

The bridge currently provides approximately 6 feet of vertical clearance at the fenders for boats navigating under the bridge in the closed position, and 25 feet of horizontal clearance between the

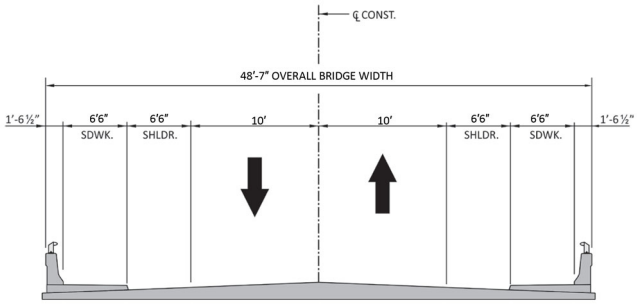
Figure 3. Existing Bridge



fenders. When the bridge opens, the leaf rolls away from the channel and rotates to a 49-degree angle. The angle of opening is limited by physical constraints present in the geometric configuration of the counterweight, bascule pier, and approach span. It is not known if these limitations are the result of original construction or subsequent reconstruction and/or repair. However, in this position, the bridge provides vertical clearance only between the west fender and the tip of the span of approximately 14 feet. The rest of the channel is obstructed by the bascule span.

The existing typical section (**Figure 2** and **3**) consists of one, 10-foot-wide travel lane in each direction, and 2-foot, 2-inch-wide sidewalks separated by a curb on each side of the bridge. The overall width of the existing bridge is 28 feet, ½ inch. Separate bicycle lanes are not provided.

Figure 4. Proposed Bridge Typical Section



The project will replace the existing two-lane, low-level single-leaf, rolling-lift bridge with a new two-lane, low-level single-leaf, rolling-lift bridge of similar design. The proposed bridge will provide 8 feet, 7 inches of vertical clearance over the centerline of the navigation channel in the closed position. The maximum vertical clearance will be 9 feet, 8 inches at the east fender. The horizontal clearance between the fenders will be 30 feet. Unlimited vertical clearance will be provided in the open position for the width of the channel between the fenders. The new bridge will be constructed within the same alignment as the existing bridge, and will be approximately 19 feet wider than the existing bridge requiring only 0.1 acre of additional permanent construction easement.

The proposed typical section for the new bridge will have a total width of 48.58 feet, as shown in **Figure 4**. The typical section includes two, 10-foot-wide travel lanes with 6.5-foot shoulders that can function as undesignated bicycle lanes. Sidewalks that are 6.5 feet wide are proposed on each side of the bridge.

The maximum vertical grade on the bridge is 5 percent, which meets ADA requirements. Roadway reconstruction includes re-grading the roadway to meet new bridge approach elevations, new sidewalks, ADA sidewalk ramps, and drainage improvements between Chesapeake Drive on the west to Pampas Avenue on the east. The approach roadway will be close enough to the existing grades at the driveways to the Bayshore Mobile Home Park, the Tarpon Springs Yacht Club, and Venetian Court to allow connection of these driveways with minimal re-grading.

Residential property driveways along Riverside Drive will still be accessible. The proposed roadway profile will be approximately 2 feet higher than the existing roadway at the west end of the bridge and approximately 4 feet higher at east end.

The roadway section on each side of the bridge will have two, 10-foot-wide through lanes, one in each direction, and 5.5-foot-wide outside shoulders that can function as undesignated bicycle

lanes. Because of the limited right-of-way, a 6-foot-wide sidewalk is proposed only on the north side of the roadway. No sidewalks are proposed on the south side of the roadway, adjacent to the Bayshore Mobile Home Park.

Transportation Challenges

Substandard roadway safety features and structural deficiencies. The existing bridge has reduced capacity due to ongoing deterioration and is classified as structurally deficient and functionally obsolete. The bridge is founded on karst subsurface conditions with a portion of the bridge, including the bascule span and one approach span, located over a relict sinkhole. The foundations have a long history of vertical settlement and horizontal movement requiring major repairs. The continued settlement and movement require frequent monitoring, surveying inspections, and maintenance. Recent reevaluation (June 2021) of the bridge condition resulted in the NBI rating substructure rating dropping from 6 (satisfactory condition) to 4 (poor condition) on a scale from 0 to 9. The existing bridge has an overall Structure Inventory and Appraisal Sufficiency Rating of 18.1 out of 100. The bridge is considered functionally obsolete, based primarily on its substandard clear roadway width of 20 feet and substandard roadway safety features. The existing typical section consists of one, 10-foot-wide travel lane in each direction and 2-foot, 2-inch-wide sidewalks (**Figure 6**) separated by a curb on both sides of the bridge. The bridge has no shoulders.

Figure 5. Bascule Span, Facing South

Figure 6. Existing sidewalks on the bridge

Minimum required lane and shoulder widths prescribed by the American Association of State Highway and Transportation Officials are not met. The sidewalks on the bridge are narrow and do not meet current accessibility requirements established by the ADA. The bridge railings do not meet current standards for pedestrian safety or geometric and crash testing safety standards for vehicles. Approach guardrails and transitions and end treatments also do not meet current safety standards.

The existing vertical clearance at the fenders is 6 feet. The tip of the bascule leaf overhangs the fender with the leaf fully raised and does not provide unlimited vertical clearance between the fenders. The existing horizontal clearance between the fenders is 25 feet as shown in **Figure 5**.

The bridge has a substandard load-carrying capacity that requires weight restrictions. The bridge is currently posted for legal loads limited to 12-ton single-unit trucks and 15-ton combination trucks. This restriction includes school buses and emergency rescue vehicles. Repairs in 1979 and

1988 installed crutch bents due to settlement and lateral stability concerns. Repairs in 2011 were performed to correct issues with the operating machinery and bascule leaf alignment.

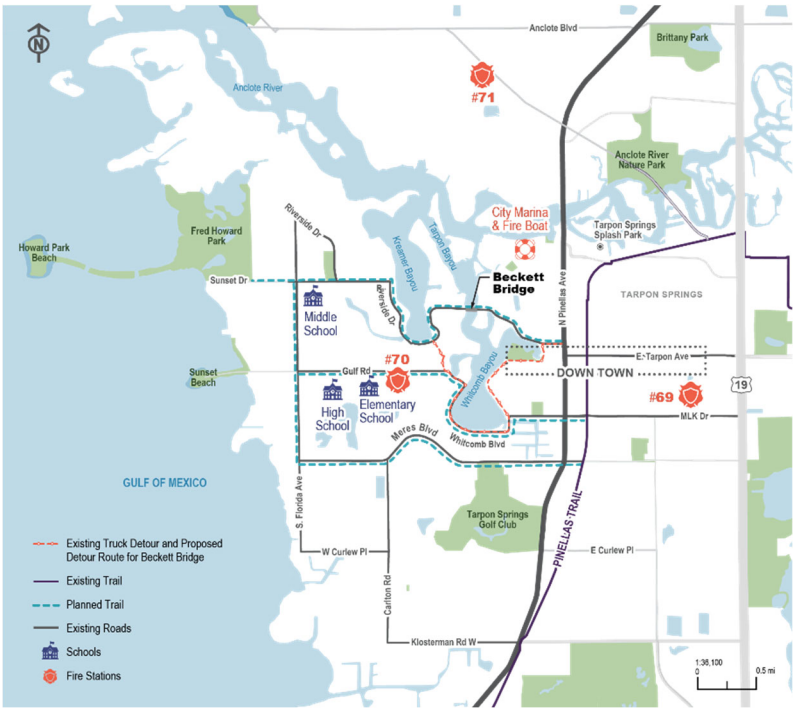
As noted previously, the existing bridge has substandard sidewalks (2 feet, 2 inches wide) and no shoulders or bicycle lanes. No officially designated county or regional trails cross the Beckett Bridge. However, the Pinellas Trail Loop, a 65-mile-long regional trail, extending from St. Petersburg to Tarpon Springs is located less than a mile east of the project. The Pinellas County Trailways Plan (included in Appendix D), included in the Pinellas County Metropolitan Planning Organization (MPO) 2035 Long-Range Transportation Plan, identifies the proposed Howard Park Trail, which will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge.

(FDOT has collected annual historical traffic volumes for Riverside Drive, including Beckett Bridge, since 2011. The current 2021 annual traffic volume is recorded as 6,000 vehicles with a truck percentage of 3.9 percent. Historically over the past ten years, records indicate that vehicular traffic has fluctuated nominally, aligning with the built-out nature of the surrounding residential land uses along Riverside Drive. Correction of structural deficiencies that affect the load capacity of the existing bridge could result in higher truck traffic in the future.

Six public schools are located within 3 miles of Beckett Bridge. However, because Beckett Bridge is currently load posted for 2 tons, school buses, which weigh on average 12-15 tons, are not permitted to cross the bridge. Accordingly, an alternate, longer route for school buses is required.

Location

Figure 7. Project Location



The project is located at Beckett Bridge (Bridge no. 154000) in Tarpon Springs, Pinellas County, Florida, 28º8'60.0"N, 82º45'54.6"W.

The project originally extended approximately 0.3 miles along Riverside Drive from Chesapeake Drive across Whitcomb Bayou to Forest Avenue. The construction limits extend from Chesapeake Drive to Pampas Avenue. The existing two-lane bridge connects areas west and north of the Bayou to downtown Tarpon Springs. Riverside Drive/North Spring Boulevard is an extension of Tarpon Avenue and is a designated evacuation route.

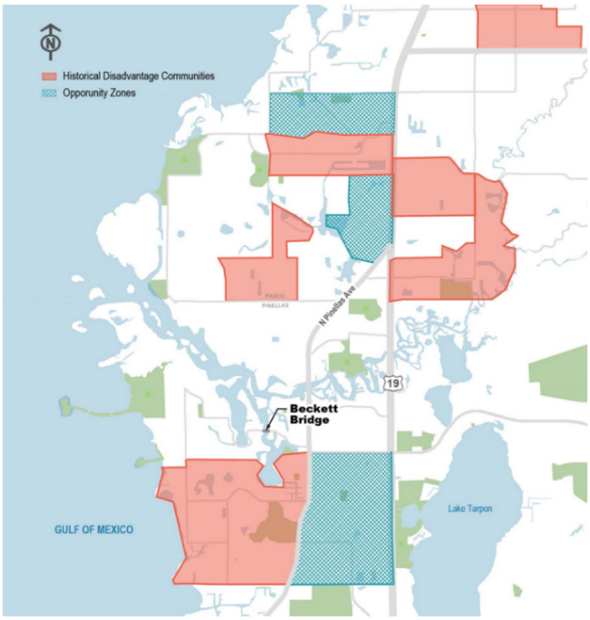
No officially designated county or regional trails cross the Beckett Bridge. However, the Pinellas Trail Loop, a 65-mile-long regional trail, extending from St. Petersburg to Tarpon Springs is located less than a mile east of the project. The Pinellas County Trailways Plan identifies three future recreational bicycle/pedestrian trail ls that will connect to the Pinellas Trail and continue west. These trails are not currently funded but are included in the Planned Cost Feasible Trailways Projects. The locations of these trails are shown in **Figure 7**. The bridge is located on a popular

route for access to Fred Howard Park, with a Pinellas County Park located approximately 3.1 miles west on the Gulf of Mexico. The proposed Howard Park Trail will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge. The Whitcomb Bayou Trail and Meres Trails will also connect to the Pinellas Trail and extend west. Both trails provide alternate routes to Howard Park that do not include crossing the Beckett Bridge. Both trails are located along potential detour routes during construction.

Figure 8. Transit Routes in the Project Area

There is no public transit within the project limits (see **Figure 8**). The closest transit stops are on Pinellas Suncoast Transit Authority Route 66L along Pinellas Avenue North at Orange Street and Cypress Street, approximately 0.5 miles from the bridge.

Figure 9. Historically Disadvantaged Communities and Opportunity Zones



The project is not located in a 2010 Census-designated Urbanized Area or a federally designated community development zone as shown in **Figure 9**; however, it is located approximately 0.45-miles northwest of an Opportunity Zone (census tract 274.02) and approximately 0.3 miles north of a Historically Disadvantaged Community (census tract 275.02) (see **Figure 9**). The Historically Disadvantaged Community is identified as such because it exceeds the 50th percentile for the following four indicators: transportation access, health, economy, and equity.

Project Parties

Pinellas County is the lead applicant for this project. The County is coordinating with various entities to successfully implement this project. Prior to construction, the City of Tarpon Springs will relocate existing water and sewer lines that currently cross under the bridge infrastructure to an area outside the project construction zone.

Pinellas County has extensive experience receiving and managing federal grants. Pinellas County was the recipient of several Highway Planning and Construction Funds in FY 2021 and 2022 as listed in Table 1 below. Pinellas County departments include functions ranging from airport to solid waste, animal services to emergency medical services, and parks to public works. With a 2022 budget of $1.9B, transparent and accessible processes are the standard for implementation of a fiscally responsible budget that meets the approved annual budget and community programs and services.

Table 1. Other Highway Planning and Construction Project Funding for 2021 & 2022

Federal / State Agency, Pass-Through Entity/Program Title	Grant / Contract Number	Actual Expenditures 10/01/20-05/31/21	Estimated		
			Expenditures (Reimbursable Expenditures Only) 06/01/21-09/30/21	Expenditures as of 09/30/21	Amount Provided to Subrecipients as of 09/30/21
Passed through FDOT FY ending May 31, 2021					
Highway Planning and Construction	424564 4 68 01 G1494	137,477	-	137,477	
Highway Planning and Construction	424564 7 58 01	-	371,843	371,843	
Highway Planning and Construction	437736 2 38 01G1J83	160,368	150,000	310,368	
Highway Planning and Construction	438022 1 58 01/02 G1F28	469,099	469,099	938,198	
TOTAL		**766,944**	**990,942**	**1,757,885**	
Passed through FDOT FY ending June 30, 2022					
Highway Planning and Construction	437736 2 38 01G1J83		42,000	42,000	
TOTAL			**42,000**	**42,000**	

Project Budget

Table 2. Project Budget

➲ **BIP Request Amount:**	**$18.86 M**
➲ **State, Regional or Other Federal Funding:**	**$0 M**
➲ **Non-Federal Funding:**	**$11.51 M**
➲ **Total Construction Cost:**	**$30.37 M**

The total project costs (preliminary engineering, permitting, utility relocations, right-of-way acquisition, and construction) for replacing Beckett Bridge are $30.37 million. Pinellas County has already finalized the engineering design plans and permitting and will procure the construction through a low-bid procurement method. The County is seeking $18.86 million of FY22 BIP funds to support the construction phase funding, including construction contingency. Pinellas County

will fund construction engineering, and inspection services as well as post-design engineering services for the Beckett Bridge Project to improve mobility and reliability for the region.

Table 3. Total Project Costs

Project Phase	FEDERAL FUNDS		NON-FEDERAL FUNDS		Total	Status
	2022 BIP	Other	Pinellas County	City of Tarpon Springs		
Preliminary Engineering & Final Design	$0	$0	$2.82M	$0	$2.82M	Final Plans 2022
Utilities Relocation (Water & Sewer)	$0	$0	$0	$5.3M	$5.3M	In Progress (2020-2024)
Construction	$18.86M	$0	$0	$0	$18.86M*	2024-2026
CEI/Post Design	$0	$0	$3.39M		$3.39	County CIP Funds
Total: Project Cost	$18.86M	$0	$6.21M	$5.3M	$30.37M	

(*) Construction cost includes contingency & right-of-way costs

Project Outcome Criteria

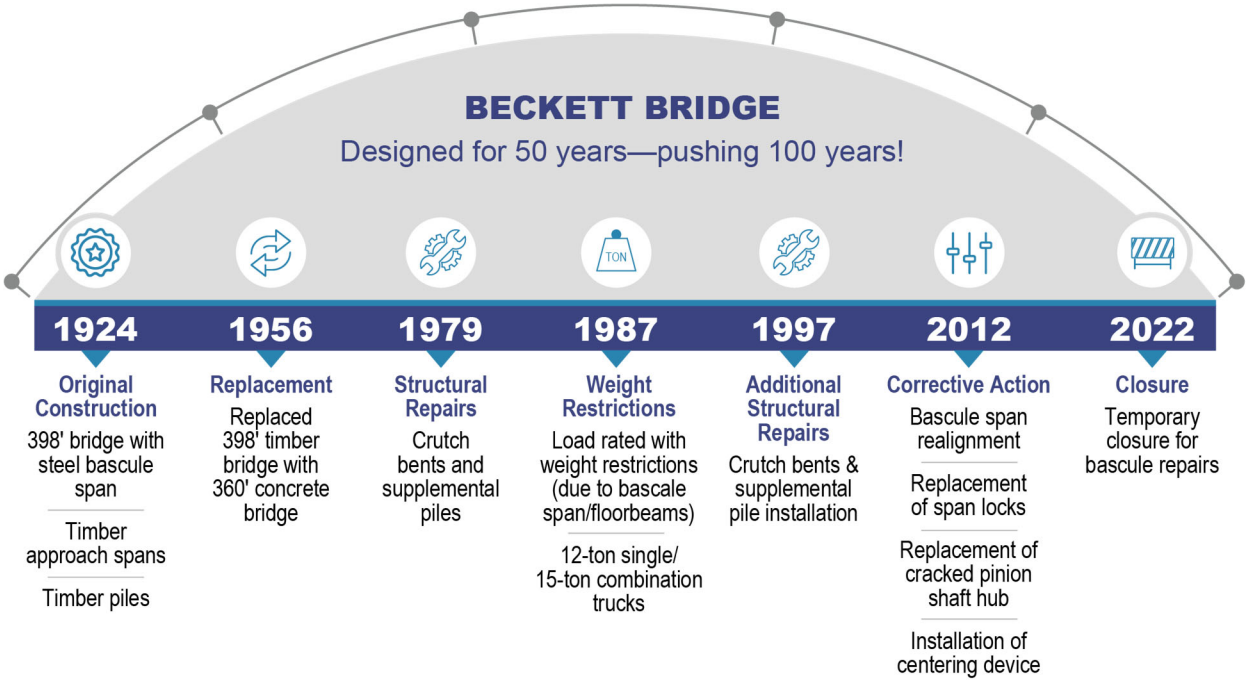
CRITERIA #1 | State of Good Repair

The Beckett Bridge currently has an NBI Substructure Rating of 4 or **Poor Condition** (rating 0 to 9) and a bridge classification of Structurally Deficient (Technical Memorandum sealed June 2021), which modified the bridge rating from 6, Satisfactory to 4, Poor. The bridge is also considered functionally obsolete, primarily due to its narrow roadway width of 20 feet, which does not meet current geometric standards. The NBI Substructure Rating results in a Sufficiency Rating of 18.3 (range is 0-100). This rating describes the physical condition of piers, abutments, piles, fenders, and footings and includes visible signs of distress such as cracking, section loss, settlement, misalignment, scour, collision damage, and corrosion. An NBI Substructure Rating of 4 is warranted for the following reasons:

- Foundation design and details (i.e., pile axial capacity and tip elevations), including the structural condition of the 95-year-old-plus timber piles below the bascule piers, is unknown.
- Existing pile foundations are unreliable with a long history of vertical settlement and horizontal movement and questionable load-carrying capacity and lateral stability, despite implementation of weight restrictions in 1987, addition of supplemental piles at the bascule pier, and addition of crutch bents at Bent 6/Rest Pier and Bent 7 in 1997.
- The bridge is founded on karst subsurface conditions with significant variation, ever-changing conditions from ongoing degradation of the weathered limestone and calcareous clay, and subsurface features consistent with a **relict sinkhole**.
- Although scour at Beckett Bridge is minimal, the bridge is designated as scour critical due

to potential for foundation instability following a design scour event. This designation considers the unknown foundations.

Figure 10. Summary of Repairs to the Bridge Over Almost 100 years



The bridge was originally constructed in 1924, with an overall length of 398 feet, including a steel bascule span, timber approach spans, with 15 bridge spans to the west and 9 bridge spans to the east, all supported on timber piles. In 1956, the bridge was reconfigured to an overall length of 360 feet by replacing the timber approach spans with concrete spans, including five spans to the west and four to the east of the steel bascule span. The steel bascule span has been in service for more than 95 years, and the approach spans have been in service for more than 65 years, for a period that far exceeds the 50-year design life. The bridge has been load-rated with weight restrictions since 1987 with signs posted for 12-ton limits for single-unit trucks and 15-ton limits for combination trucks. Components governing the load rating include the bascule span steel open-grid deck and floor beams. The driven pile foundations have a long history of vertical settlement and horizontal movement and required structural repairs in 1979, major repairs including installation of crutch bents and supplemental piles in 1997, and numerous additional periodic repairs and adjustments subsequent to the crutch bent and supplemental pile installation including a major repair in 2012. The continued settlement and movement require frequent monitoring, surveying, inspections, and maintenance. The bridge was most recently closed due to repairs to the bascule steel span during the month of July 2022. See **Figure 10** for a summary of repairs to the bridge over almost 100 years.

Periodic surveys of the bridge have revealed the following history of foundation settlement:

- After the addition of crutch bents to Bent 6/Rest Pier, Bascule Pier, and Bent 7 in June 1997, survey indicated initial stable conditions with no settlement through May 1998.
- Between May 1998 and January 2009, surveys indicated vertical settlement of ¼ inch at the Bent 6/Rest Pier, ½ inch at the bascule pier, and 5/8 inch of vertical settlement at Bent 7.

- Corrective actions in 2012 addressed additional vertical settlement and horizontal movement, including bascule span realignment, replacement of span locks, replacement of a cracked pinion shaft hub, installation of a centering device, and limited grinding of the concrete deck and curbs.
- Foundations have remained *relatively* stable since 2012, while monitoring continues.

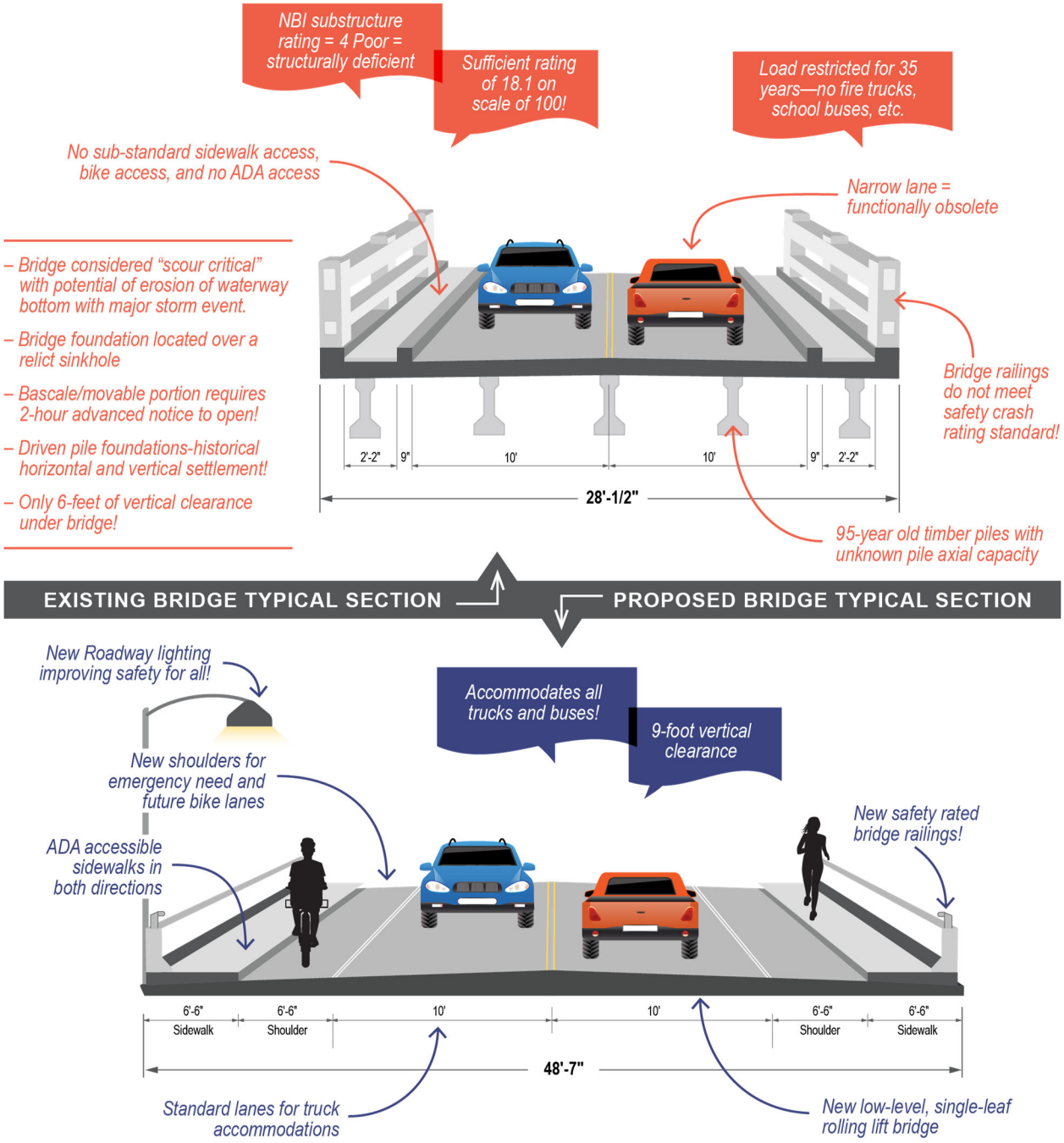
The community of Tarpon Springs in Pinellas County has many natural constraints, including waterways and bayous. Beckett Bridge plays a major role in connecting the movement of people and goods to the daily needs of work, school, groceries, and emergency services. Additionally, this bridge connects the greater region to Howard Park and Sunset Beach along the Gulf of Mexico. Without this connection, travelers detour along narrow residential streets (see detour route in **Figure 7**) causing undue burden and delay on infrastructure and motorists. As this bridge was designed for a 50-year life in 1924, there are ongoing concerns around safety, reliability, and closure.

The proposed replacement bridge will meet all the current standards (as denoted in **Figure 11**) and incorporate best practices to eliminate the current safety deficiencies and create reliable infrastructure to serve the community needs while preserving the environment. The proposed bridge is a two-lane, low-level, single-leaf, rolling-lift bridge of similar geometric design with approximately 9 feet of vertical clearance at the fenders.

The Beckett Bridge serves the local community for daily needs and the regional community for recreational needs and services. Accordingly, the person trips traversing this bridge are based on historical use. Approximately 6,000 vehicles per day cross the load-restricted bridge. The new bridge will not have load restrictions, so it is likely that larger vehicles, including fire trucks, garbage trucks, and school buses, will use it to avoid the longer route around the bayou. Improved pedestrian and bicycle facilities on the new bridge will provide additional access for non-motorized travel and provide safe movement of people and goods through the area.

Maintenance, operation, and monitoring of this 98-year-old structure continue to increase annually to keep the bridge functioning. Bridge replacement is estimated to reduce the need for annual maintenance and repairs budget by more than 50 percent, from $300,000 to $140,000 (year 2022 dollars) following construction. Pinellas County is currently implementing a County-wide asset management program to improve bridge maintenance, operation, and monitoring. This program will organize the historical documentation, maintenance records, and plans in one central location for more effective bridge maintenance and recordkeeping to track inspections, repairs, and monitoring. Impacts to the community from bridge closures include longer travel times, increased fuel costs/emissions, increased traffic/noise through adjacent neighborhoods, increased emergency response, and increased congestion at the intersection of Tarpon Avenue and Pinellas Avenue.

Figure 11. Key Bridge Design Enhancements Proposed



CRITERIA #2 | Safety

As discussed previously, the existing bridge is functionally obsolete. Substandard lane widths, non-existent shoulders, and lack of adequate pedestrian facilities affect the safety of all movements across the bridge—locals, visitors, emergency services, and freight. Existing curvature of the narrow roadways approaching the bridge encourages lower speeds through this residential area, where the speed limit is posted at 20 miles per hour. These conditions support safer movements, reducing the severity of crashes on and around the bridge. A review of crash data collected between March 2017 and September 2021 indicates no reported crashes on

the bridge. However, five crashes were reported in this period within 500 feet of the existing bridge. The crashes involved lane departure, distracted driving, teen/aging drivers, speeding, and a bicyclist. As indicated in **Table 4**, there were no fatalities, but one crash resulted in possible injury.

Table 4. Beckett Bridge Crash Summary

						Strategic Highway Safety Plan						
	Total Crashes	Total Fatals	Total Injuries	Ped	Bike	Crash Type	Speeding/ Agr. Driving	Lane Departure	At Intersection	Distracted Driving	Teen Driver	Aging Driver
N Spring Blvd @ Pampas Ave	2	0	0	0	0	-	-	-	-	-	1	1
Riverside Dr @ Chesapeake Dr	2	0	1	0	1	Head On	1	1	1	1	-	-
N Spring Blvd @ Venetian Ct	1	0	0	0	0	-	-	1	-	-	1	-

Beckett Bridge design includes a variety of safety features that will directly and indirectly improve the quality of life and safety for the community.

- **Increased access and ADA accommodation.** The proposed bridge includes 6.5-foot-wide sidewalks and 6.5-foot-wide shoulders that can function as undesignated bicycle lanes on both sides of the bridge. The updated facilities will provide a dedicated space for pedestrians and bicyclists and provide the opportunity for school children to connect to nearby schools. (See proximity to school locations in **Figure 7**.)
- **Safety shoulders.** New shoulders will allow emergency vehicles to pass during emergency situations.
- **Increased vertical clearance.** Increasing the vertical clearance from 6 feet to 9.25 feet will allow more vessels to navigate the bridge in the closed position, reducing the number of bridge openings and vehicle queuing.
- **Bridge railing upgrades.** Standard crash rated safety bridge railings will be constructed to improve safety for any vehicle lane departures and improve crash survivability.
- **Lighting.** New bridge lighting installed will provide illumination for the roadway, bike shoulders, and sidewalks, improving safety and security for all travel along the bridge and approaches.
- **Non-slip bridge surface.** The bridge deck will include a solid concrete riding surface instead of the existing open-steel grating, which is undesirable for cyclists and can be slippery in wet weather conditions.
- **Improved pedestrian safety.** Due to right-of-way constraints along Spring Boulevard and Riverside Drive approaching the bridge, the design includes implementation of two rectangular rapid-flashing beacon-type pedestrian crossings at Chesapeake Drive and Venetian Court. These improvements include high-visibility crosswalk striping, two-way reflective signage, and push button-activated yellow flashing beacons. This type of infrastructure is noted as an FHWA Proven Safety Countermeasure to improve pedestrian safety by reducing severe crashes.
- **Improved medical response.** The existing load limits on Beckett Bridge restrict fire and medical emergency access. The new bridge will allow all vehicles, including emergency vehicles, to respond on the most direct route, reducing travel times while increasing survivability and quality of life. The City of Tarpon Springs Fire Rescue has three stations,

each with unique specialty equipment and operators. The need for any of the three stations to respond quickly is critical when seconds matter in life-saving situations. Because the bridge is posted with weight restrictions, fire trucks detour around Whitcomb Bayou, adding an estimated 8.5 minutes to a single trip's response time. These precious minutes during a cardiac arrest or critical emergency represent a substantial amount of time in such life-and-death situations.

- **Regional trail connectivity.** The availability of and improvement to bicycle/pedestrian facilities on the Beckett Bridge will improve regional quality of life by connecting Riverside Drive with future trail projects leading west to Howard Park and connecting east to the existing Pinellas Trail. **Figure 7** shows the regional connectivity of Pinellas Trail to Tarpon Springs at the north end of the County.

CRITERIA #3 | Mobility and Economic Competitiveness

This project contributes to the Mobility and Economic Competitiveness criteria by providing a structurally sound and safe bridge to improve the movement of people and goods. Detours associated with the load restrictions on the existing bridge will be eliminated for some vehicles, including school buses and emergency vehicles. Redundancy of mechanical and electrical equipment proposed for the new bridge will also reduce bridge closures for repairs or maintenance. Based on latest bridge report and inspection, the service life of the existing bridge will end in 2025. Beckett Bridge serves as a major connection for the community of Tarpon Springs, Pinellas County, and the greater region and provides access, multimodal connectivity, and quality of life to residents, visitors, and businesses.

Existing/future traffic and detours. Replacement of Beckett Bridge will improve the movement of people and goods by eliminating a detour for some vehicles. Based on a Design Traffic Technical Memorandum dated October 2012, traffic volumes on Beckett Bridge are expected to increase approximately 26 percent from 2012 to 2038. The annual average daily traffic (AADT) volume in 2012 was 7,700. By 2038, the AADT is predicted to increase approximately 26 percent to 9,700. The 2012 PM peak hour volumes were 429 in the westbound direction and 303 in the eastbound direction. In 2038, the westbound and eastbound PM peak hour volumes are both expected to increase 26 percent to 540 and 382, respectively. The new two-lane bridge will provide adequate capacity for anticipated future traffic growth. Based on annual FDOT traffic data, the 2021 traffic volume over Beckett Bridge was 6,000 vehicles (AADT). The annual traffic since 2012 shows a steady yet marginal increase in traffic volumes that further supports the 2012 conclusion that the new bridge will provide adequate capacity for future volumes.

The distance from the west side of Beckett Bridge to N. Pinellas Avenue is approximately 0.6 miles. If the bridge is closed, the distance for a detour around Whitcomb Bayou to the same location on N. Pinellas Avenue is 2.15 miles, an additional 1.5 miles. If the bridge falls into further disrepair and is closed permanently, approximately 14,550 additional vehicle miles will be traveled per day in 2038 as a result of the detour. This increase in vehicle miles traveled results in lost time, increased costs associated with delay, and increased tailpipe and greenhouse gas emissions. See **Figure 7**.

Freight movement. The project will increase mobility for freight by providing a structurally sound connection to existing freight routes.

With the replacement bridge, the existing speed limit of 20 miles per hour through the project area can be increased, thereby improving access to nearby truck routes. Freight access is currently limited due to the posted legal load on the bridge (12-ton Single-Unit Trucks and 15-ton Combination Trucks), the speed limit, and existing speed bumps. The Northwest Tarpon Springs

Industrial Area is a potential Regional Freight Activity Center located north of the Spring Boulevard/Riverside Drive and west of Alternate US 19 at Anclote Boulevard and Anclote Road (see **Figure 12**).

Freight Activity Centers are major generators of truck trips, which include long-haul trips extending beyond the region. Alternate US 19 (SR 595), Anclote Boulevard, Anclote Road, Live Oak Street, and Tarpon Avenue are all unrestricted truck routes. The detour around Beckett Bridge adds approximately 1.5 miles to truck routes. Replacing Beckett Bridge will allow freight to use the bridge, which will improve the movement of goods and decrease delay and costs associated with the detour.

Figure 12. Proposed Freight Activity Area Map

School transportation. Replacement of the existing bridge will improve access to community resources. School buses and large emergency vehicles are currently prohibited from crossing the bridge because of load restrictions. Six public schools are located within 3 miles of Beckett Bridge. Approximately 18 to 20 school buses per day could be re-routed to travel along Spring Boulevard/Riverside Drive and cross the new Beckett Bridge. Pinellas County Schools estimate the cost of school buses at $1.73 per mile. A 1.5-mile detour taken by 20 school buses twice a day costs about $104 per day during the school year or $18,720 per school year (based on a 180-day school year). The replacement bridge will result in cost savings for operation and maintenance of school buses in the community.

Multimodal Mobility. The proposed bridge includes the construction of 6.5-foot-wide sidewalks and 6.5-foot-wide bike shoulders in each direction to encourage multimodal opportunities with better than standard width facilities to improve safety. Sidewalks include ADA connectivity to adjacent neighborhoods with upgraded ramps for an "all ages and abilities" corridor. High-visibility crosswalks and rectangular rapid-flashing beacons will be installed at intersection just east and west of bridge to connect to neighborhoods. In the future, Pinellas Trail, a 65-mile regional trail, will connect to Beckett Bridge, allowing multimodal connectivity west to Howard Park and east to downtown Tarpon Springs.

CRITERIA #4: Climate Change, Resiliency, and the Environment

This project contributes to the Climate Change, Resiliency, and the Environment criteria by reducing tailpipe emissions associated with idling during a bridge opening and improving the resiliency of the bridge to waves in the event of a coastal storm. Construction of a new bridge also reduces disproportionate impacts to a Historically Disadvantaged Community (Census Tract 275.02), located approximately 0.3-miles south of the project area on the south side of Whitcomb Bayou.

Reduction in air pollution and greenhouse gases: The project will reduce air pollution and greenhouse gas emissions by reducing congestion during bridge openings. The new bridge will provide a maximum of 9 feet, 8 inches of vertical clearance in the closed position and unlimited vertical clearance in the open position. The existing vertical clearance in the closed position is limited to 6 feet. Between 2009 and 2012, the bridge opened between 10 and 21 times per year for marine vessels. The increased vertical clearance in the closed position is anticipated to reduce the number of bridge openings, which in turn, will reduce the number of vehicles stopped on the bridge for openings and associated idling, oil, grease, and emissions. Additionally, the elimination of the 1.5-mile detour for some vehicles will reduce air pollutant and greenhouse gas emissions by providing a more direct route and reducing the number of vehicle miles traveled.

Improve resiliency of at-risk infrastructure. Wave vulnerability during a storm event could affect the reliability of the existing bridge for evacuation. Riverside Drive is considered a collector street and an extension of Tarpon Avenue, which is a designated emergency evacuation route. The new Beckett Bridge is designed to survive a 100-year storm event and resist wave forces at the Extreme Event Limit State with a performance level of "Repairable Damage." The storm surge elevation at the bridge is anticipated to be approximately 11.5 feet; the existing bridge low member elevations are below the storm surge elevation. Wave heights at the bridge during a coastal storm event are not anticipated to be large. However, structural components of the existing bridge make it susceptible to damage from waves.

Historically Disadvantaged Community. The closest Historically Disadvantaged Community (Census Tract 275.02) is located approximately 0.3-miles south of the project area, on the south side of Whitcomb Bayou. Emergency vehicles, freight, school buses, and other vehicles required to avoid the load-restricted bridge have to travel through this community to detour around the bridge to get to key destinations on the east or west sides of the bridge. This results in a disproportionate amount of detoured traffic and associated emissions and noise.

Federally and/or state-listed plant and animal species. One state-listed plant species and 27 federally and state-listed animal species were identified as having the potential to occur in the project area. Pinellas County has committed to avoid adverse impacts to these species and impact determination for each identified species is listed in Appendix D.

CRITERIA #5: Equity, Partnership, and Quality of Life

This project contributes to the Equity, Partnership, and Quality of Life criteria by engaging with and listening to the community to develop a project that enhances the quality of life by improving active transportation facilities and travel times for school buses and emergency response vehicles.

Community Engagement. An extensive, project-specific community engagement process was implemented during the Project Development and Environment (PD&E) study to provide affected communities, including the nearby Historically Disadvantaged Community, an opportunity to be involved in the decision-making process. A large stakeholder mailing list, including property owners, local government staff and officials, agency representatives, special interest groups, and other interested parties was maintained and updated throughout the study. Opportunities for community stakeholder and agency input were provided throughout the duration of the study.

A project-specific web page was established on the Pinellas County website to provide updated information about the project and upcoming public meetings to stakeholders. Comments could be submitted via email or via the contact page on the website. Two large public meetings, the Alternatives Public Workshop (January 23, 2013) and the Public Hearing (February 26, 2014)

were held. All public comments were considered during the development of alternatives during the study.

Outreach and engagement activities included numerous meetings and presentations to local governments and local community organizations, including the Pinellas County Board of County Commissioners, the City of Tarpon Springs, the Pinellas County MPO, the Tarpon Springs Yacht Club Board, Tarpon Springs Chamber of Commerce, Tarpon Springs Rotary Club, and the Tarpon Springs Historical Society. A cultural resource committee was also established to address historic resource issues during the study. This committee included representatives from Pinellas County, FDOT, FHWA, the SHPO, the City of Tarpon Springs, and the Tarpon Springs Area Historic Society. The cultural resource committee held three meetings between October 2012 and April 2014.

An aesthetics committee was established during the design phase of the project. The committee included representatives from Pinellas County, the SHPO, FDOT, the U.S. Coast Guard (USCG), Tarpon Springs Area Historic Society, Tarpon Springs Yacht Club, the City of Tarpon Springs, and the local community at large. The committee held meetings on December 7, 2016, March 1, 2017, May 10, 2017, and March 22, 2018. In coordination with the project team, the committee's tasks included participating in the development of a site-specific, context-sensitive aesthetic design for the proposed new bridge and developing a design to display significant elements salvaged from the old bridge that cannot be reused.

A public meeting is planned to update the local residents and other stakeholders after a contractor is selected for construction.

Non-vehicular facilities. The typical existing bridge section provides one, 10-foot-wide travel lane in each direction and 2-foot, 2-inch-wide sidewalks separated by a curb on both sides of the bridge. There are no bicycle lanes or shoulders on the bridge. To avoid detouring around the bridge, bicyclists have been observed using narrow travel lanes and sidewalks, interweaving with vehicles and pedestrians. Feedback from the community included concerns about the substandard existing pedestrian and bicycle facilities on the bridge and the need to provide improved, safer facilities for non-vehicular active transportation across the bridge. The proposed typical section for the new, wider bridge includes 6.5-foot-wide sidewalks and 6.5-foot-wide shoulders on each side of the bridge. The new shoulders will function as undesignated bicycle lanes for cyclists. These improvements will enhance mobility in the community with minimal impacts to adjacent property owners. Because of the limited right-of-way west of the bridge, a 6-foot-wide sidewalk is proposed only on the north side of the roadway, which will connect to the existing sidewalk. East of the bridge, the approach roadway section consists of two, 10-foot-wide through lanes (one in each direction), variable width outside shoulders that can function as undesignated bicycle lanes, and 6-foot-wide sidewalks on each side of the roadway.

The enhanced bicycle and pedestrian facilities on the new bridge will provide an important connection to Howard Park located west of the bridge on the Gulf of Mexico. The 155-acre Howard Park welcomes approximately 2 million visitors each year. The proposed Howard Park Trail is identified in the Pinellas County Trailways Plan, which is included in the Pinellas County MPO 2035 Long-Range Transportation Plan. The trail will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge. The Pinellas Trail Loop is a 65-mile regional trail that extends from St. Petersburg to Tarpon Springs and is located just east of the project.

Improved travel time for community resources. Replacement of the existing bridge will have a positive effect on access to community resources. Community services located within approximately 1.5 miles of the project include two fire stations, one police station, one hospital,

five religious institutions, and five schools. In addition, the Pinellas County Health Department operates a health center in the City of Tarpon Springs, approximately 1.2 miles from the Beckett Bridge. As noted above, because of the existing load restrictions, school buses and large emergency vehicles are prohibited from crossing the bridge. School bus traffic will be re-routed to travel along Spring Boulevard/Riverside Drive and cross the Beckett Bridge when the bridge is replaced. Approximately 15 to 20 school buses per day could potentially use the bridge. The detour results in additional time and costs for buses that service schools in the project area. The proposed replacement bridge will save time and money for the operation of school buses in the community and will improve emergency response times for the community.

CRITERIA #6: Innovation

Design for the new Beckett Bridge used current best practices for bridge construction to replace this almost 100-year-old structure. The design incorporates thoughtful and sustainable elements to create a consistent and long-term service life in addition to preserving the historical heritage, including:

- **Redundancy in operating machinery.** Mechanical equipment supporting the bascule bridge has been designed to include redundant elements so backup systems reduce bridge closures/maintenance.
- **Mirror of pier arrangement.** The current bascule pier is located above a relict sinkhole; therefore, the proposed design mirrored the bascule design to locate the bascule pier away from the sinkhole. This new design will avoid the current ongoing settlement of the pier that has impacted operations of the movable span and, in many cases, rendered the span inoperable until expensive repairs can be completed. Additionally, this design increases the navigable clearance of the bridge for vessels without opening the movable span.
- **Innovative Historical Preservation.** The project includes a monument and viewing deck fabricated from the sections of the existing historic bridge.

Benefit-Cost Analysis

Costs

The capital cost for this Project is expected to be $20.4 million in undiscounted 2020 dollars through 2025.[1] At a seven percent real discount rate, these costs are $16.0 million. **Table** 5. shows how these costs are allocated across time and major expense category.

Table 5. Project Costs by Category and Year, in Undiscounted Millions of 2020 Dollars

Cost Category	2021 & Prior	2022	2023	2024	2025	Total
Planning and Design	$0.9	$0.9				
Construction			$6.4	$6.2	$6.1	
Total	$0.9	$0.9	$6.4	$6.2	$6.1	$20.4
Total, Discounted 7%	$0.9	$0.8	$5.2	$4.7	$4.3	$16.0

[1] Note that these costs differ from those reported in the Project Narrative due to the use of 2019 dollars rather than year-of-expenditure dollars.

In addition to capital costs, the Build Case has different assumed operations and maintenance costs. According to Pinellas County, the current O&M costs of the No-Build bridge are $0.3 million in undiscounted 2020 dollars, while the expected O&M for the Build Case is $0.14 million in undiscounted 2020 dollars. However, because the No-Build Case assumes the bridge will not be functional post-2025, the O&M assumptions in the No-Build case are modeled at $0 for the entirety of the 30-year benefit analysis period which begins in 2026. Thus, the total O&M costs of the No-Build are a disbenefit of -$4.2 million in undiscounted 2020 dollars, or -$1.2 million in discounted terms.

Benefits

In 2020 dollars, the Project is expected to generate $30.7 million in discounted benefits using a seven percent discount rate. The project primarily derives benefits from the inclusion of emergency vehicle access on the new Beckett bridge, which is not available in the No-Build case. Travel time savings for auto drivers and health and active transportation benefits also add value to the Build case. This leads to an overall project Net Present Value of $14.8 million and a Benefit Cost Ratio (BCR) of 1.9[2].

Table 6. Project Impacts and Benefits Summary, Monetary Values in Millions of 2020 Dollars

Current Status/Baseline & Problem to be Addressed	Change to Baseline/ Alternatives	Type of Impact	Population Affected by Impact	Economic Benefit	Summary of Results (at 7% discount rate)	Page Reference in BCA Appendix
Large Emergency Service Vehicles Cannot Access the Beckett Bridge to respond to calls	New bridge will provide access to all emergency service vehicles, speeding up response times to critical events	A reduction in mortality in cardiac arrest incidents due to faster emergency service response time	Approximately 25% of Tarpon Springs population	Mortality Reduction	$23.7	Pg. 9
Motorized vehicles will not be able to use the Beckett bridge for east-west travel, adding to congestion on other roadways	New bridge will provide improved access and congestion management	Travel time delay would increase in the No-Build Case	Drivers in the Build Case	Travel Time Savings	$4.4	Pg. 11
Pedestrians and cyclists have inadequate access	Improved pedestrians and cyclists access		Bike/Ped users in the Build Case	Active Transportation Improvements, Health Improvement from Walking and Cycling	$3.0	Pg. 9

[2] Per USDOT guidance, operations and maintenance costs are included in the numerator along with other project benefits when calculating the benefit-cost ratio.

Current Status/Baseline & Problem to be Addressed	Change to Baseline/ Alternatives	Type of Impact	Population Affected by Impact	Economic Benefit	Summary of Results (at 7% discount rate)	Page Reference in BCA Appendix
The current bridge has a useful life period that is projected to be met in the next 10 years	New bridge has a projected useful life of 75 years, outpacing the No-Build and analysis periods	Residual value of the Build case results in monetized benefits at the end of the analysis period	Pinellas County	Residual Value	$0.8	Pg. 12

The overall Project impacts can be seen in **Table 7.**, which shows the magnitude of change and direction of the various impact categories.

Table 7. Project Impacts for Project, Cumulative 2026-2055

Category	Unit	Quantity	Change
Vehicle-Hours Traveled	VHT	919,384	▼
Avoided Cardiac Arrest Deaths	#	7	▲
Added Cyclists	#	657,000	▲
Added Pedestrians	#	1,095,000	▲

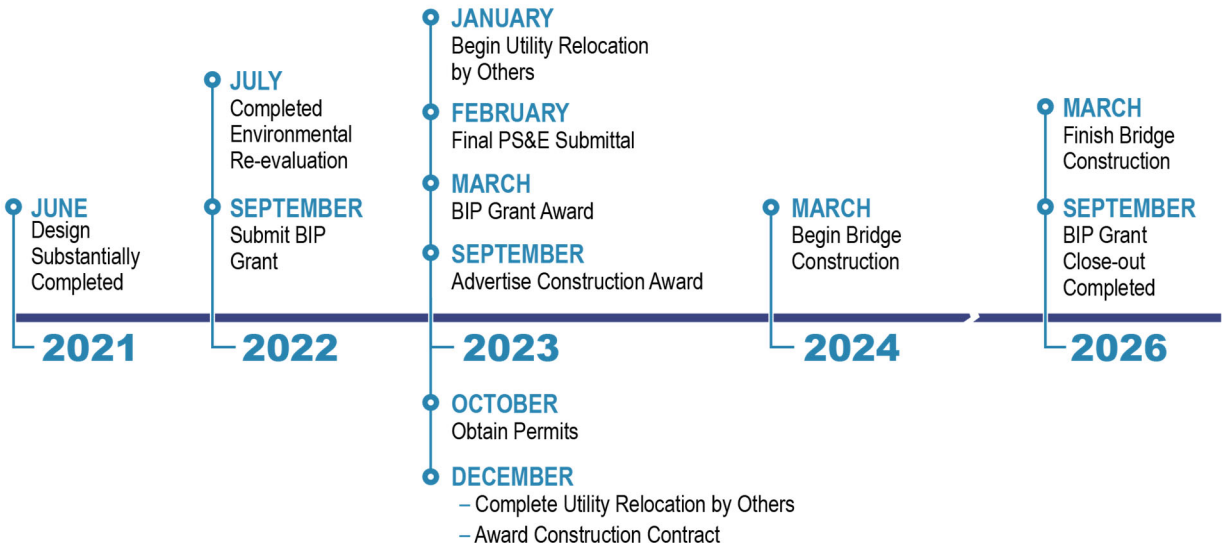
The Project would provide access to school buses and commercial vehicles that are restricted from using the existing bridge, which has time savings, vehicle operating costs, and emissions benefits from more direct connections. The new bascule bridge will have a higher and wider clearance for boats, which is expected to reduce the number of bridge openings, reducing travel delays and reliability for road users and minimizing operating costs. Finally, the new facility will meet design standards and more sustainable materials, alleviating worker safety and environmental concerns of the existing bridge. While these benefits are not easily quantifiable, they do provide real advantages and improvements that will be experienced by individuals and businesses in the region.

Project Readiness and Environmental Risk

Schedule and Project Approvals

Pinellas County is the owner and direct recipient of funds for the Beckett Bridge reconstruction project. With leadership from one agency that has a proven track record of delivering bridge projects, the project team understands how to deliver this project on budget and on-time, meeting the requirements of the grant and the expectations of the residents. **Figure 13** outlines the schedule milestones of this BIP project. All preconstruction activities will be completed to allow grant funds to be obligated sufficiently in advance of the statutory deadline (September 2025) for FY2022 BIP funds.

Figure 13. Schedule and Project Approvals



Environmental Risk

The Beckett Bridge Project's environmental risk is low. Pinellas County prepared a Type 2 CE environmental document pursuant to NEPA. FHWA approved the CE on January 25, 2016. The County has recently submitted a Right-of-Way Reevaluation to FHWA. The reevaluation is required because more than one year has passed since the CE was approved. It is anticipated that the reevaluation will be approved in 2023. A summary of technical findings from the original CE is provided below:

- Replacement of the bridge will have a positive impact on access to community resources because school buses and large emergency vehicles that currently prohibited from crossing the bridge will be able to cross.
- The Beckett Bridge is eligible for listing in the NRHP; ample evidence was provided to support that a new movable bridge would be preferable to rehabilitation. Pinellas County, FHWA, FDOT, and the SHPO signed an MOA that includes a Historic American Engineering Record document of the bridge and mitigation measures.
- The project will impact approximately 0.01 acres of mangrove swamp and 0.02 acres of oyster bars. The project received the Southwest Florida Water Management District (SWFWMD) General Permit, so no mitigation is required.
- The project may affect, but is not likely to adversely affect, federally or state-listed species.
- Construction will require the complete closure of the bridge for about 8 months. The total time needed for construction is approximately 22 months.

The approved CE can be found in **Appendix D**.

Commitment Compliance

Table 8 lists Pinellas County's commitments before, during, and after construction of Beckett Bridge and the current status of those commitments.

Table 8. Commitment Compliance

Commitment	Status
Pinellas County will comply with the Section 106 MOA developed during the PD&E study and signed by the FHWA, SHPO, Pinellas County, and FDOT.	In compliance with the Section 106 MOA, an aesthetics committee was established during the design phase, and a series of meetings was held to develop a site-specific, context-sensitive aesthetic design for the proposed new bridge. **Commitment fulfilled.**
To minimize impacts to navigation and to comply with USCG requirements, the contractor will be required to coordinate any full or partial closures of the channel to marine traffic during construction with the USCG in Miami, Florida (telephone 305.415.6744) at least 60 days prior to the planned closing.	Commitment remains.
Pinellas County is committed to working with local government officials and community representatives to solicit input for the design of bridge aesthetic elements and landscaping. An advisory committee will be established during the design phase of the project, which will include community and local government representatives. This committee is also required by the Section 106 MOA for this project.	**Commitment fulfilled.**
As documented in a letter to NMFS and USFWS dated June 17, 2015, the County commits to prohibiting blasting for demolition of the existing bridge.	During the 2019 Endangered Species Act Section 7 coordination with NMFS and USFWS, the County continued to commit to prohibiting blasting during project construction. This commitment remains.
Pinellas County, in coordination with FDOT, intends to request that NMFS and USFWS reinitiate "informal" consultation for the project's effects on listed species during the final design phase of the project and in conjunction with the project's permitting process. Consultation will be concluded before the project is advanced to the construction phase.	Coordination with the NMFS and USFWS under Section 7 of the Endangered Species Act of 1973, as amended, occurred during project design and permitting in 2019. No changes to the project's design have occurred since the 2019 coordination with the regulatory agencies regarding protected species and habitat; therefore, there are no changes to the effect determinations for federally listed species reviewed that study. However, two federally listed species, the rufa red knot (*Calidris canutus rufa*) and giant manta ray (*Manta birostris*), were not addressed in the previous Section 7 coordination. On July 21, 2022, FHWA coordinated with USFWS and NMFS. As a result of the Section 7 coordination conducted in 2019 and 2022, **this commitment is fulfilled.**
NMFS requested continued coordination at the conclusion of the PD&E study and during the design phase when more detailed compensatory mitigation proposals are developed. Accordingly, Pinellas County will coordinate potential wetland and Essential Fish Habitat impacts and proposed mitigation with NMFS during the design phase of the project.	Pinellas County conducted additional coordination with NMFS during the design phase in 2019 and as part of the reevaluation in 2022. As a result of this coordination**, this commitment is fulfilled.**
Pinellas County will comply with USFWS- and FWC-approved standard manatee construction conditions during all in-water work/construction phases of the	The coordination with USFWS in 2019 and 2022 reiterated the County's commitment to implement the standard manatee construction conditions during

Commitment	Status
project. In addition, the County will coordinate with both agencies concerning site-specific manatee protection measures to be implemented during construction.	project construction. Coordination also occurred with FWC during application for the Environmental Resource Permit (ERP) for the project. The County remains committed to requiring the contractor to implement the latest version of FWC's Standard Manatee Conditions for In-Water Work. This commitment remains.
As requested by FWC, Pinellas County will coordinate wetland impacts with the appropriate resource agencies and propose mitigation to offset any adverse impacts to listed species habitat, if warranted.	As determined during the 2019 and 2022 coordination with NMFS and USFWS, compensatory mitigation for the 0.01 acres of mangrove impact is not required due to the minimal nature of the impact. **This commitment is fulfilled.**
If an active bald eagle nest is identified within the 660-foot buffer zone around the construction area, mitigation measures will be implemented to avoid disturbing the species, which may include control of the timing and location of construction activities and the establishment of a buffer zone around active nesting sites.	No bald eagle nest was observed or reported within 660 feet of the project during the 2021-2022 nesting season. The County will continue to monitor for potential bald eagle nesting prior to and during construction. This commitment remains.
Pinellas County will coordinate with FWC for the removal of the osprey nests on a utility pole in the construction area during the design and permitting phases of the project.	A June 17, 2017, site review revealed the presence of an active osprey nest on an abandoned utility pole near the southeast quadrant of the bridge. As of April 2022, the nest was still present. FWC no longer issues permits for osprey nest removal; however, osprey nests, eggs, and young are protected by the Migratory Bird Treaty Act (MBTA). A federal permit under the MBTA is required to remove an active nest (i.e., containing eggs or flightless young), but no state or federal permit is required to remove an inactive nest. This commitment is hereby revised to state that Pinellas County will remove the nest while it is inactive, i.e., during the non-nesting season, prior to construction.

Permit Status

Table 9. Permitting

A. Federal Permit(s):

Name	Descriptor	Status	Date
Department of the Army Section 404 Permit	Authorization to use Nationwide Permit (NWP) 14 (No. SAJ-2010-03567) issued October 26, 2018 by U.S. Army Corps of Engineers	NWP 14 (No. SAJ-2010-03567) expired March 18, 2022. A new application for authorization to use re-issued NWP 14 is in process.	Permit Reauthorization resubmitted
USCG Bridge Permit	Bridge Permit (No. 6-19-7) issued August 19, 2019 by USCG	Bridge Permit (No. 6-19-7) void if construction (including contract letting, utility relocation, stormwater improvements, etc.) does not begin	Permit issued 8/19/2019

		within 3 years of permit issuance (August 19, 2022). An extension is required if work is not completed within 5 years, prior to August 19, 2024.	

B. State Permit(s):

Name	Descriptor	Status	Date
Environmental Resource Permit (ERP/SWFWMD)	Authorization to use General ERP (No. 47042798.001) issued November 8, 2021 by Southwest Florida Water Management District	General ERP expires October 12, 2023. A new application is in process.	Permit issued 11/8/2021
National Pollutant Discharge Elimination System Permit	Construction contractor to obtain	To be submitted by the bridge contractor once awarded.	

C. Local Permit:

Name	Descriptor	Status	Date
Tree Permit, City of Tarpon Springs Section 335.02(4), F.S.	Section 133.06 Permit Conditions, trees removed shall be replaced inch for inch on property in which the tree(s) is/were removed. If this cannot be accomplished, fees in lieu of replacements shall be placed in a fund established as the City Tree Bank. Replacement trees shall meet or exceed the standards set out in Section 134.03.	The City of Tarpon Springs has agreed to issue one all-inclusive permit to Pinellas County for removal of all trees on private property within the City limits required to complete the proposed construction.	Bridge contractor to request

Final Design and Construction Schedule

Engineering Design Plans are 100 percent complete and are dated June 2021. Final Sealed Design Plans are expected in early 2023. The Construction Schedule (shown below) estimates 18 to 24 months of bridge construction including adjacent roadway connections and upgrades to pedestrian facilities.

Technical Feasibility

Beckett Bridge engineering design plans will be completed in early 2023, and a Right-of-Way reevaluation has recently been submitted to FHWA for approval. Utilities currently on the bridge are being relocated prior to bridge reconstruction. All SHPO requirements have been met, and traffic control detours designated. All technical documents can be found in **Appendix E.**

- Only minimal right-of-way is required for construction easements.
- Full closure of the bridge planned and expected by public for traffic detour.
- 100 percent Engineering Plans have been completed; sealed plans are expected in December 2022.

Financial Completeness Assessment

Pinellas County is financially ready to partner with BIP funds to complete the reconstruction of Beckett Bridge. Pinellas County has invested millions of dollars on preliminary engineering, environmental assessments and permitting, bridge design reports, traffic engineering assessments, and final engineering construction documents. Additionally, the City of Tarpon Springs has invested in engineering design for the relocation of water and sewer infrastructure to be relocated outside the bridge construction zone and will fund the construction of the utility relocation in 2023.

Pinellas County has secured the bridge matching funds of $3.39 million within the Capital Improvement Program for FY2023. Pinellas County is committed to also funding all associated permitting and final engineering design documents.