



## Confirmation

Thank you for submitting your grant application package via Grants.gov. Your application is currently being processed by the Grants.gov system. Once your submission has been processed, Grants.gov will send email messages to advise you of the progress of your application through the system. Over the next 24 to 48 hours, you should receive two emails. The first will confirm receipt of your application by the Grants.gov system, and the second will indicate that the application has either been successfully validated by the system prior to transmission to the grantor agency or has been rejected due to errors.

Please do not hit the back button on your browser.

If your application is successfully validated and subsequently retrieved by the grantor agency from the Grants.gov system, you will receive an additional email. This email may be delivered several days or weeks from the date of submission, depending on when the grantor agency retrieves it.

You may also monitor the processing status of your submission within the Grants.gov system by clicking on the "Track My Application" link listed at the end of this form.

Note: Once the grantor agency has retrieved your application from Grants.gov, you will need to contact them directly for any subsequent status updates. Grants.gov does not participate in making any award decisions.

**IMPORTANT NOTICE:** If you do not receive a receipt confirmation and either a validation confirmation or a rejection email message within 48 hours, please contact us. The Grants.gov Contact Center can be reached by email at [support@grants.gov](mailto:support@grants.gov), or by telephone at 1-800-518-4726. Always include your Grants.gov tracking number in all correspondence. The tracking numbers issued by Grants.gov look like GRANTXXXXXXXXX.

If you have questions please contact the Grants.gov Contact Center: [support@grants.gov](mailto:support@grants.gov)  
1-800-518-4726 24 hours a day, 7 days a week. Closed on federal holidays.

The following application tracking information was generated by the system:

<b>Grants.gov Tracking Number:</b>	GRANT14082680
<b>UEI:</b>	FJEHNN9JALF8
<b>Submitter's Name:</b>	Karen McKeehan
<b>CFDA Number:</b>	20.933
<b>CFDA Description:</b>	National Infrastructure Investments
<b>Funding Opportunity Number:</b>	DTOS59-24-RA-RAISE
<b>Funding Opportunity Description:</b>	FY 2024 National Infrastructure Investments
<b>Agency Name:</b>	69A345 Office of the Under Secretary for Policy
<b>Application Name of this Submission:</b>	City of Knoxville
<b>Date/Time of Receipt:</b>	Feb 27, 2024 03:56:26 PM EST

TRACK MY APPLICATION – To check the status of this application, please click the link below:

[https://www.grants.gov/applicants/grant-applications/track-my-application?tracking\\_num=GRANT14082680](https://www.grants.gov/applicants/grant-applications/track-my-application?tracking_num=GRANT14082680)

It is suggested you Save and/or Print this response for your records.

This Workspace form is one of the forms you need to complete prior to submitting your Application Package. This form can be completed in its entirety offline using Adobe Reader. You can save your form by clicking the "Save" button and see any errors by clicking the "Check For Errors" button. In-progress and completed forms can be uploaded at any time to Grants.gov using the Workspace feature.

When you open a form, required fields are highlighted in yellow with a red border. Optional fields and completed fields are displayed in white. If you enter invalid or incomplete information in a field, you will receive an error message. Additional instructions and FAQs about the Application Package can be found in the Grants.gov Applicants tab.

**OPPORTUNITY & PACKAGE DETAILS:**

Opportunity Number:	DTOS59-24-RA-RAISE
Opportunity Title:	FY 2024 National Infrastructure Investments
Opportunity Package ID:	PKG00283966
CFDA Number:	20.933
CFDA Description:	National Infrastructure Investments
Competition ID:	RAISE-FY24
Competition Title:	FY24 RAISE Grants
Opening Date:	11/30/2023
Closing Date:	02/28/2024
Agency:	69A345 Office of the Under Secretary for Policy
Contact Information:	Andrea Jacobson RAISE Program Manager andrea.jacobson@dot.gov

**APPLICANT & WORKSPACE DETAILS:**

Workspace ID:	WS01258505
Application Filing Name:	City of Knoxville
UEI:	FJEHNN9JALF8
Organization:	CITY OF KNOXVILLE
Form Name:	Application for Federal Assistance (SF-424)
Form Version:	4.0
Requirement:	Mandatory
Download Date/Time:	Feb 27, 2024 03:52:50 PM EST
Form State:	No Errors

**FORM ACTIONS:**

**Application for Federal Assistance SF-424**

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------

* 3. Date Received: <input type="text"/> Completed by Grants.gov upon submission.	4. Applicant Identifier: <input type="text"/>
--------------------------------------------------------------------------------------	--------------------------------------------------

5a. Federal Entity Identifier: <input type="text"/> FJEHNN9JALF8	5b. Federal Award Identifier: <input type="text"/>
---------------------------------------------------------------------	-------------------------------------------------------

**State Use Only:**

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/> TN
-------------------------------------------------	----------------------------------------------------------

**8. APPLICANT INFORMATION:**

\* a. Legal Name:  City of Knoxville

* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text"/> 62-6000326	* c. UEI: <input type="text"/> FJEHNN9JALF8
--------------------------------------------------------------------------------------------	------------------------------------------------

**d. Address:**

\* Street1:  400 Main Street  
Street2:   
\* City:  Knoxville  
County/Parish:  Knox  
\* State:  TN: Tennessee  
Province:   
\* Country:  USA: UNITED STATES  
\* Zip / Postal Code:  37902-2405

**e. Organizational Unit:**

Department Name: <input type="text"/> Department of Engineering	Division Name: <input type="text"/> Transportation
--------------------------------------------------------------------	-------------------------------------------------------

**f. Name and contact information of person to be contacted on matters involving this application:**

Prefix:  \* First Name:  Karen  
Middle Name:   
\* Last Name:  McKeehan  
Suffix:

Title:  Transportation Engineering Chief

Organizational Affiliation:  
 City of Knoxville, Transportation Engineering Division

\* Telephone Number:  8652156125 Fax Number:  8652156109

\* Email:  kjmckeehan@knoxvilletn.gov



**Application for Federal Assistance SF-424**

**\* 9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

**\* 10. Name of Federal Agency:**

69A345 Office of the Under Secretary for Policy

**11. Catalog of Federal Domestic Assistance Number:**

20.933

CFDA Title:

National Infrastructure Investments

**\* 12. Funding Opportunity Number:**

DTOS59-24-RA-RAISE

\* Title:

FY 2024 National Infrastructure Investments

**13. Competition Identification Number:**

RAISE-FY24

Title:

FY24 RAISE Grants

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Add Attachment

Delete Attachment

View Attachment

**\* 15. Descriptive Title of Applicant's Project:**

City of Knoxville South Waterfront Bike and Pedestrian Bridge

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

**Application for Federal Assistance SF-424**

**16. Congressional Districts Of:**

\* a. Applicant

\* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="25,000,000.00"/>
* b. Applicant	<input type="text" value="15,000,000.00"/>
* c. State	<input type="text" value="20,000,000.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="60,000,000.00"/>

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

Yes  No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)**

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title:

\* Telephone Number:

Fax Number:

\* Email:

\* Signature of Authorized Representative:

\* Date Signed:

### APPLICATION FOR FEDERAL ASSISTANCE SF-424 - MANDATORY

**1.a. Type of Submission:**

- Application  
 Plan  
 Funding Request  
 Other

Other (specify):

**1.b. Frequency:**

- Annual  
 Quarterly  
 Other

Other (specify):

**1.d. Version:**

- Initial  Resubmission  Revision  Update

**2. Date Received:**

02/28/2024

**STATE USE ONLY:****3. Applicant Identifier:****5. Date Received by State:****4a. Federal Entity Identifier:**

FJEHNN9JALF8

**6. State Application Identifier:****4b. Federal Award Identifier:****1.c. Consolidated Application/Plan/Funding Request?**

- Yes  No

Explanation

**7. APPLICANT INFORMATION:****a. Legal Name:**

City of Knoxville

**b. Employer/Taxpayer Identification Number (EIN/TIN):**

62-6000326

**c. UEI:**

FJEHNN9JALF8

**d. Address:****Street1:**

400 Main Street

**Street2:**

City County Building

**City:**

Knoxville

**County / Parish:**

Knox

**State:**

TN: Tennessee

**Province:****Country:**

USA: UNITED STATES

**Zip / Postal Code:**

37902-2405

**e. Organizational Unit:****Department Name:**

Department of Engineering

**Division Name:**

Transportation

**f. Name and contact information of person to be contacted on matters involving this submission:****Prefix:****First Name:**

Karen

**Middle Name:****Last Name:**

McKeehan

**Suffix:**

Title: Transportation Engineering Chief

**Organizational Affiliation:**

City of Knoxville, Transportation Engineering Division

Telephone Number: 8652156125

Fax Number: 8652156109

Email: kjmckeehan@knoxvilletn.gov

**APPLICATION FOR FEDERAL ASSISTANCE SF-424 - MANDATORY**

**8a. TYPE OF APPLICANT:**

C: City or Township Government

Other (specify):

b. Additional Description:

**9. Name of Federal Agency:**

U.S. Department of Transportation

**10. Catalog of Federal Domestic Assistance Number:**

20.933

CFDA Title:

National Infrastructure Investments

**11. Descriptive Title of Applicant's Project:**

City of Knoxville South Waterfront Bike and Pedestrian Bridge

**12. Areas Affected by Funding:**

**13. CONGRESSIONAL DISTRICTS OF:**

a. Applicant:

TN-002

b. Program/Project:

TN-002

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

**14. FUNDING PERIOD:**

a. Start Date:

07/01/2024

b. End Date:

09/30/2031

**15. ESTIMATED FUNDING:**

a. Federal (\$):

25,000,000.00

b. Match (\$):

35,000,000.00

**16. IS SUBMISSION SUBJECT TO REVIEW BY STATE UNDER EXECUTIVE ORDER 12372 PROCESS?**

a. This submission was made available to the State under the Executive Order 12372 Process for review on:

b. Program is subject to E.O. 12372 but has not been selected by State for review.

c. Program is not covered by E.O. 12372.

**APPLICATION FOR FEDERAL ASSISTANCE SF-424 - MANDATORY**

17. Is The Applicant Delinquent On Any Federal Debt?

Yes  No

18. By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

\*\* I Agree

\*\* This list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:

First Name:

Middle Name:

Last Name:

Suffix:

Title:

Organizational Affiliation:

Telephone Number:

Fax Number:


Email:

Signature of Authorized Representative:

Date Signed:

Attach supporting documents as specified in agency instructions.

APPROVED AS TO FORM:

  
CHARLES W. SWANSON  
LAW DIRECTOR

**APPLICATION FOR FEDERAL ASSISTANCE SF-424 - MANDATORY**

**Consolidated Application/Plan/Funding Request Explanation:**

[Empty text area for explanation]

**APPLICATION FOR FEDERAL ASSISTANCE SF-424 - MANDATORY**

**Applicant Federal Debt Delinquency Explanation:**

[Empty text box for explanation]

**FY 2024 RAISE Project Information Form - All Fields Required**

**\*\*DO NOT CHANGE FILE NAME, COPY/PASTE, OR PDF THIS DOCUMENT WHEN SUBMITTING TO AVOID PROCESSING ERRORS\*\***

Field Name	Response	Instructions
Project Name	South Knoxville Waterfront Bike and Pedestrian Bridge	Enter a <b>concise, descriptive title</b> for the project. This should be the same title used in the Grants.gov SF-424 submission and the application narrative.
Project Description	The South Knoxville Waterfront Bike and Pedestrian Bridge will provide a safe and accessible bridge across the Tennessee River for walking, biking, rolling, and other human-powered transportation options. The new bridge will connect South Knoxville, the University of Tennessee main campus, medical centers, and major concentrations of employment. The bridge landing ramps on each side of the river will link users to an existing network of greenways, trails, and streets.	Describe the project in plain English terms, using <b>no more than 100 words</b> . For example, "This project will fund construction activities for streetcar service from location X to location Y" or "the RAISE grant will redevelop Main street with Complete Streets enhancements, ADA accessible sidewalks, and dedicated bicycle paths from 10th street to 25th street." <b>Do not</b> describe the project's benefits, background, or alignment with the selection criteria in this description field.
RAISE Amount Requested	\$25,000,000	Enter the <b>total amount of RAISE funds requested</b> for this project in this application. <i>(See NOFO Section B.2 for minimum and maximum award size)</i>
Total Project Cost	\$60,000,000	Enter the <b>total cost of the project</b> . This should equal the sum of Total Federal Funding and Total Non-Federal Funding. <i>This value may not be less than the amount requested.</i>  <i>Total Project cost means future eligible costs. This cannot include any previously incurred costs.</i>
Total Federal Funding	\$25,000,000	This Total should match the Total on the SF-424 Item 1.8.g. Enter the <b>amount of funds committed to the project from ALL Federal sources including the proposed RAISE amount</b> . <i>This value may not be less than the amount requested.</i>  For applications designated as <b>urban</b> , Federal funding cannot exceed 80% of total project cost unless the project is located in a Historically Disadvantaged Community or an Area of Persistent Poverty as defined in the RAISE NOFO.  For applications designated as <b>rural</b> , there is no limit to the share of Federal funding.
Total Non-Federal Funding	\$35,000,000	Enter the <b>amount of funds committed to the project from non-Federal sources</b> .  For applications designated as <b>urban</b> , the total non-Federal funding amount must be greater than or equal to 20% of the total project cost, unless the project is located in a Historically Disadvantaged Community or an Area of Persistent Poverty as defined in the RAISE NOFO.  For applications designated as <b>rural</b> , there is no minimum non-Federal share requirement.
Capital or Planning	Capital	Identify the project as <b>capital</b> or <b>planning</b> .  The " <b>capital</b> " designation is for projects that requesting funding for the construction of surface transportation capital infrastructure. <i>(Right-of-way acquisition is capital. Projects that include pre-construction AND right-of-way acquisition, but do not include construction activities will be classified as capital).</i>  The " <b>planning</b> " designation is for projects that are requesting funding for planning, preparation, or design of eligible surface transportation capital projects.
2020 Census-designated Urban Area	Knoxville, TN	Select the Urban Area the project is located in using the drop down, or if the project is located outside an Urban Area please select "Not located in an Urban Area". Reference the "Urban or Rural Designation" tab in this file for assistance. For more information, see <a href="https://www.transportation.gov/RAISEgrants/urbanized-areas">https://www.transportation.gov/RAISEgrants/urbanized-areas</a> .  Note: The RAISE 2024 urban/rural designation applies the updated 2020 Census urban areas which is a change from prior years.
Urban/Rural	Urban	Identify whether the project is <b>located in a rural or urban area</b> , using the drop-down menu. For RAISE 2024, a project is designated as urban if it is located within (or on the boundary of) a Census-designated urban area that had a population greater than 200,000 in the 2020 Census. If a project is located outside a Census-designated urban area with a population greater than 200,000, it is designated as a rural project. Reference the "Urban or Rural Designation" tab in this file for assistance. For more information, see <a href="https://www.transportation.gov/RAISEgrants/urbanized-areas">https://www.transportation.gov/RAISEgrants/urbanized-areas</a> .  If the project is located in an urban AND a rural area, select the appropriate designation based on where the majority of the project funds will be spent (e.g. 51% of project costs spent in the urban area = Urban designation).  Note: The urban/rural designation is based on the <b>Urban Area</b> . It is <b>NOT</b> based on the city or county population count.
Project Location Zip Code	37920	<b>Identify the 5-digit zip code of the project location</b> . If the project is located in more than one zip codes, please identify the zip code in which the majority of the project is located. If the project is in a territory that does not have zip codes, leave this field blank.  <i>Project location zip code is NOT the applicant organization zip code.</i>
2020 Census County	TN - Knox County	<b>Identify the county (or county equivalent)</b> where the project is located in using the drop-down. If the project is located in more than one county, please identify the county in which the majority of the project is located.
Additional 2020 Census Counties		<b>Identify additional counties separated by a comma</b> . For instance, if the project additionally runs through Polk County and Butler County, please enter "Polk County, Butler County" in the cell. If the project is in a territory that does not have county designations, leave this field blank.
2020 Census Tract(s)	24, 9.01	<b>Identify the census tract(s) the project is located in</b> . For example, if the project is located in Census Tract 93.30, please enter "93.30" into the cell. The last zero may be missing from your response (e.g., 93.30 may display as 93.3). If the project is located in more than one census tract please identify all census tracts. For example, if the project is located in Census Tract 93.31, Census Tract 93.32, and Census Tract 94.03, please enter "93.31, 93.32, 94.03" into the cell.  Please visit the USDOT's Grant Project Location Verification Tool ( <a href="https://maps.dot.gov/BTS/GrantProjectLocationVerification/">https://maps.dot.gov/BTS/GrantProjectLocationVerification/</a> ) to identify census tract(s).
Project Located in an Area of Persistent Poverty?	Yes - Project is located in a Census Tract that meets the definition	<b>Identify if the project is located in an Area of Persistent Poverty</b> based on the definition in the NOFO. Please visit the USDOT's Grant Project Location Verification Tool ( <a href="https://maps.dot.gov/BTS/GrantProjectLocationVerification/">https://maps.dot.gov/BTS/GrantProjectLocationVerification/</a> ) to identify Areas of Persistent Poverty.
Project Located in a Historically Disadvantaged Community?	Yes - Project is located in a Census Tract that meets the definition	<b>Identify if the project is located in a Historically Disadvantaged Community</b> based on the definition in the NOFO. Please visit the USDOT's Grant Project Location Verification Tool ( <a href="https://maps.dot.gov/BTS/GrantProjectLocationVerification/">https://maps.dot.gov/BTS/GrantProjectLocationVerification/</a> ) to identify Historically Disadvantaged Communities.
Project Location Latitude	35 56 58.39 N	<b>Provide the project's latitude coordinates</b> . For projects that are not located at a single set of coordinates, please provide a centralized set of coordinates. Tools such as Google Maps, Google Earth ( <a href="https://earth.google.com/web">https://earth.google.com/web</a> ) or GEOJSON ( <a href="https://geojson.io/#map=2/0/2/0">https://geojson.io/#map=2/0/2/0</a> ) are recommended to identify the project's coordinates.
Project Location Longitude	83 55 24.50 W	<b>Please provide the project's longitude coordinates</b> . For projects that are not located at a single set of coordinates, please provide a centralized set of coordinates. Tools such as Google Maps, Google Earth ( <a href="https://earth.google.com/web">https://earth.google.com/web</a> ) or GEOJSON ( <a href="https://geojson.io/#map=2/0/2/0">https://geojson.io/#map=2/0/2/0</a> ) are recommended to identify the project's coordinates.
Project Type	Bicycle/Pedestrian - New Capacity	Identify the <b>Primary and Secondary project type</b> combination that most closely aligns with your project from the choices in the drop-down menu. See the "Project Types" tab in this file for further information and project type definitions.
Anticipated FY24 RAISE Project Start Date	10/30/2024	Enter the month/day/year you anticipate your project to start. This should only refer to the start of the RAISE funded "project" and not include any previously incurred activities or costs that will not be funded under the RAISE "project".
US DOT FY24 Discretionary Application?	Not Applicable	If the applicant has or will submit this <b>exact project to another FY 2024 USDOT discretionary grant program</b> , please list the name of the program(s).
US DOT FY23 Reconnecting Communities and Neighborhood Grant Program Identical Application Submission?		If this exact project was submitted in the <b>FY 2023 Reconnecting Communities and Neighborhoods Grant program</b> , select "Yes" from the drop-down menu.
US DOT FY23 Reconnecting Communities and Neighborhood Grant Program "Reconnecting Extra" Designation?		If your RAISE 2023 application was submitted in the <b>FY2023 Reconnecting Communities and Neighborhood Grant program AND you were notified you received the designation of "Reconnecting Extra"</b> , select "Yes" from the drop-down menu. If you are not sure, or this does not apply to you, please leave blank.
Previous Submission to TIGER/BUILD/RAISE	RAISE 2023	If this exact project was submitted in a <b>previous TIGER, BUILD, or RAISE</b> round, please list the name(s) of the round(s) (e.g. TIGER 2015, BUILD 2019, RAISE 2022, RAISE 2023).
Other Federal Agency Assistance?		If this project has applied for <b>another federal (non-USDOT) financial assistance or capacity-building program</b> , please list the name of the program(s).
Tribal Government?	No	Select "Yes" from the drop-down menu if the applicant is a <b>Federally recognized tribal government</b> .
Tribal Benefits?	Not Applicable	<b>If the applicant is not a Federally recognized tribal government</b> , is the project located on tribal land? And if not, does it have direct tribal benefits? Answer using the drop-down menu.
Project include a Project Labor Agreement or other workforce agreements?	No	Select Yes or No if your project includes a Project Labor Agreement or any other workforce agreements.
Private Corporation Involvement	No	Does this project involve (a) private entity(ies) that will receive a direct and predictable financial benefit if the project is selected for award? This includes, but is not limited to, private owners of infrastructure facilities being improved and private freight shippers or carriers directly benefitting from completion of the proposed project.
Private Corporation Name(s)	NA	<b>If this project directly involves or benefits a specific private corporation</b> , please list the corporation(s) separated by a comma.
TIFIA/RRIF?	No	Is the project currently, or does this project anticipate applying for Transportation Infrastructure Finance and Innovation Act (TIFIA) or Railroad Rehabilitation & Improvement Financing (RRIF) loans?  See ( <a href="https://www.transportation.gov/buildamerica/">https://www.transportation.gov/buildamerica/</a> ) for more details.
Department Financing Program?		If your application is unsuccessful, would you like to be contacted about the <b>Department's financing program</b> ?

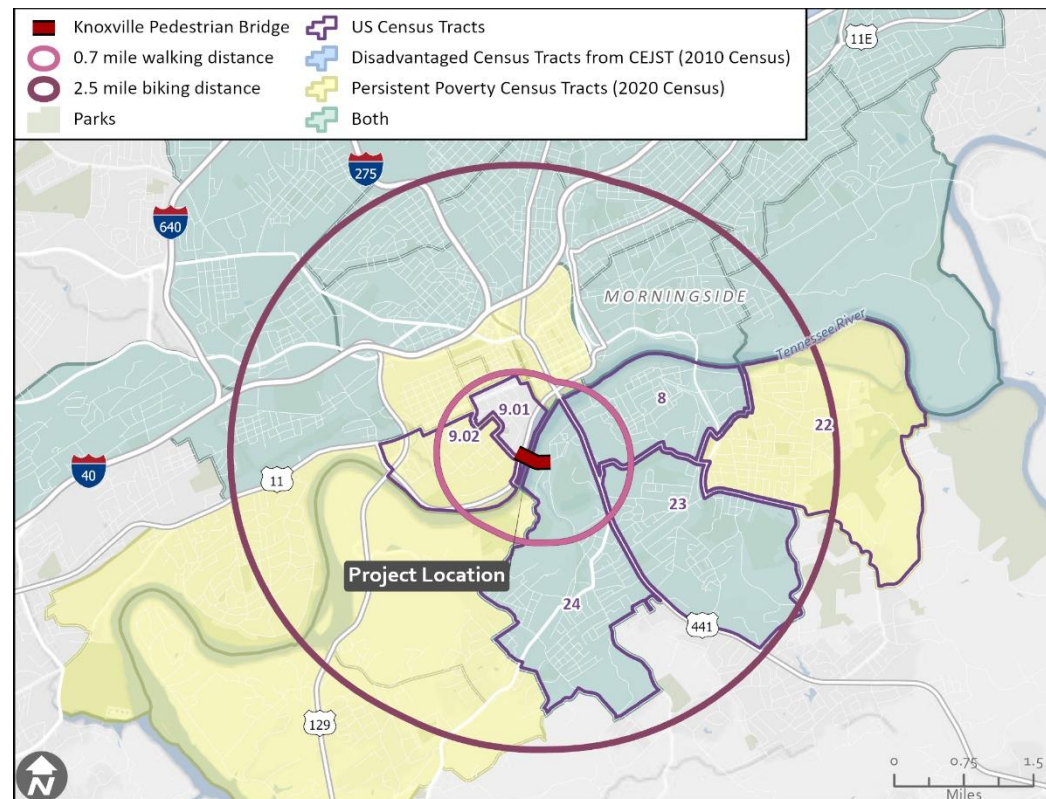


# PROJECT DESCRIPTION

The City of Knoxville requests \$25 million from RAISE Grant funds to build the **South Knoxville Waterfront Bike and Pedestrian Bridge** (bike-ped bridge). This bridge was initially identified as a priority in the South Knoxville Waterfront Vision and Action Plan. It will provide a river crossing for active transportation users with safe and protected access for walking, biking, rolling, and other non-motorized options. The bridge will connect south Knoxville waterfront communities to concentrations of employment, medical services, the main campus of the University of Tennessee, downtown Knoxville, and other important economic, social, and commercial centers. The bridge landing ramps on each side of the river will link users to 112.5 miles of greenways and additional transit routes facilitating affordable mobility choices to access daily destinations within walking and biking distance of the bridge. The project BCR is 4.72

The South Knoxville Waterfront redevelopment project started in 2006 to address historic isolation and underinvestment in communities on the south bank of the Tennessee River. The river is a natural barrier to connectivity between south Knoxville and the rest of the city. All four census tracts in the South Knoxville Waterfront (8, 22, 23, 24) are Areas of Persistent Poverty (APP), and three of the four census tracts are Historically Disadvantaged Communities (HDC) (8, 23, 24). This project will provide equitable access and affordable transportation options for residents of these communities.

There are four existing highway bridges crossing the river to south Knoxville. Gay Street, Chapman Highway/Henley Street, and James White Parkway lack safe and protected walking and biking facilities. Alcoa Highway Bridge has protected bike-ped facilities that only serve a single destination, the Cherokee Farm R & D Center. The primary north-south corridor connecting South Knoxville to the balance of the city is Chapman Highway/Henley Street bridge (US 441), a major arterial that is part of the National Highway System. Most active transportation users elect to avoid the existing bridges for non-motorized travel because of high traffic volumes, travel speeds, and lack of protected facilities resulting in more people driving and less active transportation use.



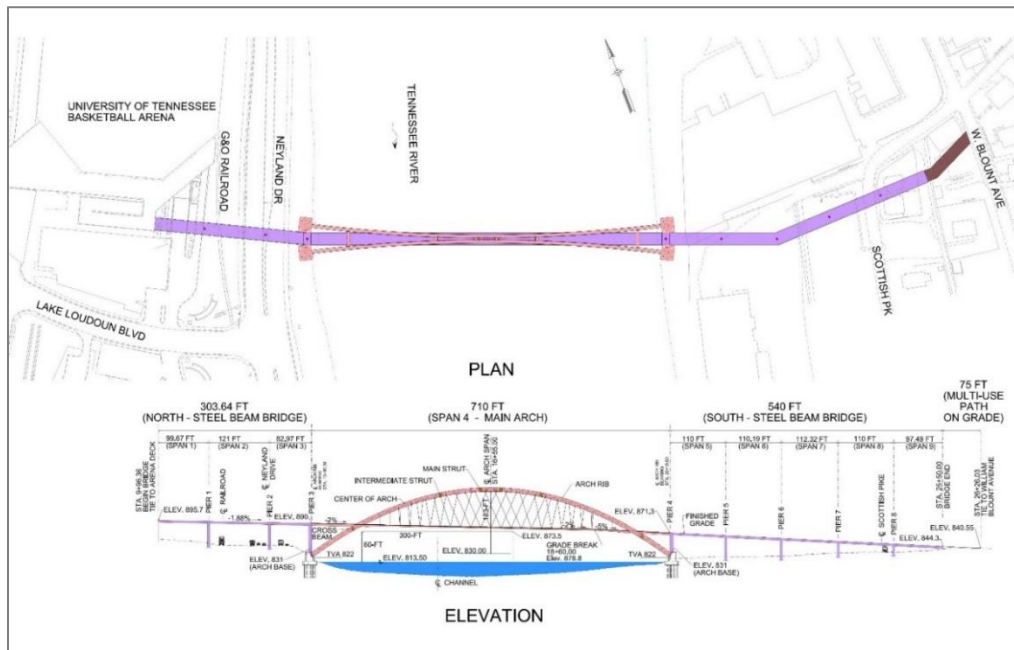


The South Knoxville Waterfront Action Plan was created through an extensive and ongoing public engagement process involving residents in the waterfront communities. Implementation of the plan began in the Up-River district and progressed to the Mid-River area across the river from the downtown core. Since the Plan was approved in 2006, the city has invested over \$70 million in strategic public improvements including Suttree Landing Park, Cityview Greenway extension, and Sevier Ave. Streetscapes project. These public improvements leveraged over \$500 million in private sector investments including neighborhood establishments such as Hi-Wire Brewing, Redbud Kitchen, and Fly By Night Cocktail Bar.

The bike - ped bridge will leverage new opportunities in the “Down-River” including workforce housing, higher density mixed use developments with retail and commercial uses, offices for entrepreneurial businesses, and residences in a range of price points. These developments will follow “transportation efficient land use and design” principles with smaller lots, complete streets, and options to walk or bike to your favorite coffee shop or go paddle boarding at various recreational quarries just south of the river.

## Detailed Statement of Work and Technical and Engineering Aspects of the Project

The proposed South Knoxville Waterfront bike-ped bridge will have a 710-foot-long main span arch over the Tennessee River with multiple shorter spans at the bridge ends. The bridge tie-in on the north side includes three spans of 99.67-feet, 121-feet, and 82.97-feet connecting to the University of Tennessee (UT) campus. The south end of the bridge includes five spans, three are 110-feet and two are 112.32-feet, and 97.49-feet. The southern touchdown connects near W. Blount Avenue in census tract 24. The bridge cross-section is 25-feet wide and will safely convey pedestrians, bicyclers, wheelchairs, scooters, and other human-powered transport across the Tennessee River without encountering any motorized vehicles. On the north bank of the Tennessee River, the bike and ped bridge will travel above Neyland Drive (SR-158) and the Gulf & Ohio Railroad (G&O) before touching down at the concourse between Thompson-Boling Arena and Pratt Pavilion at UT. The bridge will meet minimum clearance requirements over Neyland Drive, a principal arterial, the G & O Railroad, and maintain navigational clearance over the river. The south touchdown point is approximately 50-feet lower in elevation than the north end. The bridge and landing ramps will meet all applicable requirements of the Americans with Disabilities Act (ADA).



Current designs for this project have progressed to 35 percent plans. The City of Knoxville committed \$475,000 in 2023 to move the bridge design forward. Plans have established a bridge deck profile grade of 2 % down from the north landing to a point just south of the navigable river channel. South of the main river channel, the deck transitions to a 5% downgrade until it reaches the touchdown point near the south side of the river. In addition, the span arrangements are positioned to avoid locating any bridge foundations within the railroad right-of-way and avoid conflicts with utilities on the north side of the river. No bridge piers will be located in the river to avoid environmentally sensitive areas.

### Transportation Challenges Driving this Project

The bike – ped bridge addresses the following significant transportation challenges affecting south Knoxville waterfront residents that constrain equitable access for APP and HDC neighborhoods.

- Safety** – The lack of safe and protected multimodal facilities on existing bridges crossing the river limits the use of affordable active transportation options. The only option to driving is to walk or bike on existing heavily traveled highways with traffic counts in excess of 32,500 vehicles per day (VPD).<sup>1</sup> Without safe access across the river APP and HDC residents have limited opportunities to reach jobs, health care, education and training, and other daily destinations. Chapman Hwy and Cumberland Ave are key connections for vehicular traffic from south Knoxville to the rest of the city. There were 5 fatalities (3 involving pedestrians) on Chapman Hwy from 2019 – 2023. These two corridors have a crash rate of 9.593 per million vehicle miles compared to a statewide crash rate 3.223 crashes for similar roadway facilities.



<sup>1</sup> TDOT AADT Maps, 2023

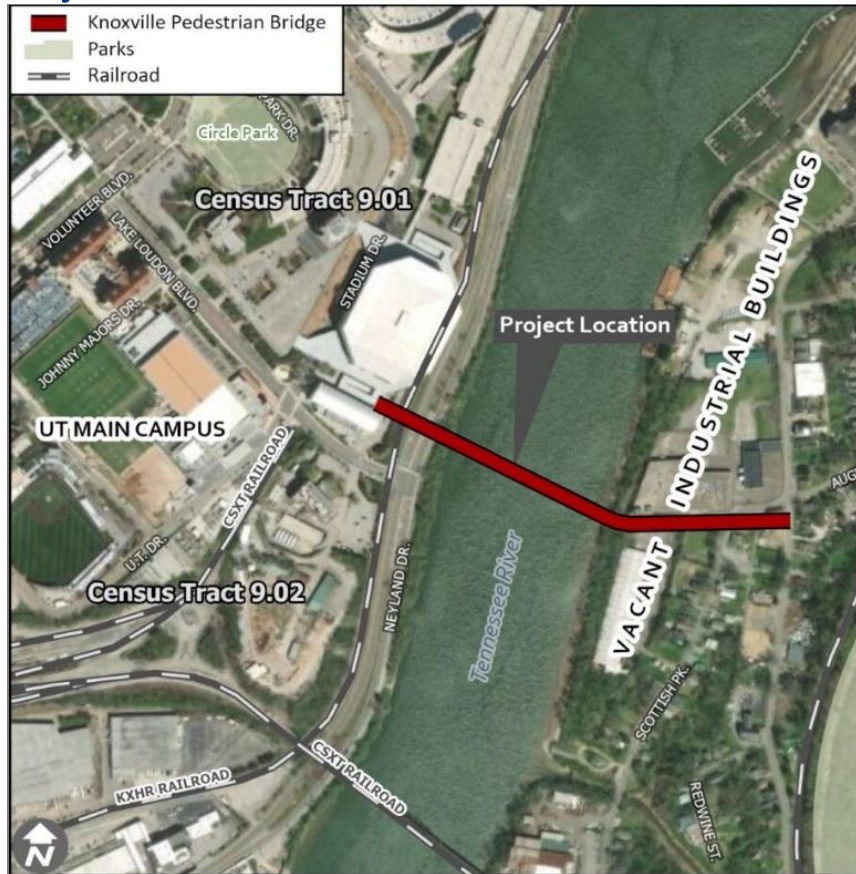


- **Environmental Sustainability** – Motorized vehicular travel time and distance using existing road corridors increases transportation related pollution leading to poorer air quality affecting nearby APP and HDC neighborhoods. As Knoxville’s population increases, vehicle miles traveled (VMT) and vehicle hours traveled (VHT) will continue to contribute to higher levels of pollutants and GHG. Active transportation can play a vital role in reducing emissions and improving equitable access for disadvantaged residents.
  - **Quality of Life** – Without access to safe, protected, and affordable active transportation choices, APP and HDC residents face a significant barrier to healthcare, well-paying job opportunities, recreation for improved health and wellness, and essential services. This impedes the community’s ability to proactively address racial equity and barriers to opportunity, including automobile dependence as a form of barrier.
  - **Mobility and Community Connectivity** – The river and south Knoxville’s challenging topography create natural barriers limiting mobility and connectivity to and from this area. These barriers isolate underserved communities in south waterfront neighborhoods and impact their equitable access to daily destinations and services. The bike – ped bridge will benefit more than the four south Knoxville waterfront census tracts focused on in this application. Knoxville has submitted a “Reconnecting Communities Grant” application to USDOT to create new multimodal transportation paths connecting underserved communities north of the river that were part of previous urban renewal projects. When the bridge is completed, families from Morningside, Mountain View and Willow Street urban renewal areas can use the bike – ped bridge and free KAT trollies to access outdoor recreation areas, educational opportunities, and arts and historic centers in south Knoxville.
  - **Economic Competitiveness and Opportunity** – Attracting private capital to support redevelopment is a competitive business. Transportation connections are essential to economic development. Although economic growth has been constrained because of limited affordable mobility options, improved active transportation facilities create new potential for economic prosperity for residents, new businesses, and opportunities to attract employees from waterfront neighborhoods as well as other workforce catchment areas.
- Constructing a new bridge solely for active transportation users removes barriers to equitable access for APP and HDC residents north and south of the river. This safe and protected connection will increase access to significant employers, downtown, the UT campus, three medical centers, and other businesses within walking and biking distance of the bridge. The bridge will facilitate modal diversion enabling pedestrians and bicyclists to avoid congested, unprotected highways and travel on a protected bridge across the river benefiting quality of life, safety, mobility, and economic opportunity.

## Project History

South Knoxville’s waterfront communities are located in the foothills of the southern Appalachian Mountains, where land suitable for economic development is limited. The Tennessee River, a natural barrier to south waterfront neighborhoods, helped to drive commerce and industry in Knoxville for generations. Raw materials and finished goods traveled on this waterway, and the marble covering some of the most iconic historic buildings in Washington D.C. and New York City was quarried just south of this river and hauled on the river for part of the journey to its final destination.

## Project Location



This bridge was initially envisioned 18 years ago in the South Knoxville Waterfront Vision Plan. Based on the experience from earlier phases of the vision implementation, improved accessibility provided by this bridge will leverage public and private investments needed to redevelop the Down-River area. Revitalization of these waterfront neighborhoods will address dilapidated and vacant industrial structures along the river that obstruct access to the waterfront. Successful revitalization will attract new businesses and job opportunities that are walkable for local residents. Vulnerable APP and NDC neighborhoods will benefit from equitable access to quality jobs, training, essential services, and opportunities for a better future. Ultimately the bridge will help to leverage public and private partnerships to build mixed use developments that will benefit from transportation efficient design while preserving existing affordable single-family housing where people can live, work, and play sustainably.

# PROJECT BUDGET

## Project Budget

The estimated cost of the bridge is \$60,000,000. The cost estimate is based on 35 percent design and was completed January 24, 2024, by Modjeski & Masters (<https://www.modjeski.com>) and CDM Smith (<https://www.cdmsmith.com>). The estimate benefits from Modjeski & Masters prior experience designing and constructing similar bridges including the I-74 Mississippi River Arch Bridges.

The City of Knoxville is requesting \$25,000,000 in RAISE Grant funds for this project. Tennessee Department of Transportation

(TDOT) is providing \$20 million in non-federal funding for the project through a Direct Appropriation Grant from the State of Tennessee budget that is now available to the City.<sup>1</sup> The City of Knoxville and Knoxville’s Community Development Corporation (KCDC) have committed \$15 million in tax increment financing (TIF) to complete the funding package for this project. All of the required governmental approvals for the TIF are complete and have been approved by the City of Knoxville and KCDC. Copies of the resolutions are included in the Funding Commitment Documentation Section of the application.

## Project Funding (Table 1)

Funding Source	Funding Amount
RAISE Funds:	\$25,000,000
Other Federal Funds	\$0
Non-Federal Funds-TDOT	\$20,000,000
Non-Federal Funds- Knoxville Community Development Corporation (KCDC)	\$15,000,000
<b>Total:</b>	<b>\$60,000,000</b>

## Future Eligible Project Costs

Major Construction Activity	Future Eligible Project Cost
NEPA & PE	\$0
ROW (Acquisition & Services)	\$925,000
Final Design	\$4,100,000
Construction	\$40,361,700
Utility Relocation	\$1,500,000
CEI/Design Review	\$3,229,000
Contingency (10%)	\$4,037,000
Project Financial Costs	\$5,847,300
<b>Total</b>	<b>\$60,000,000</b>



Augusta Quarry, KUW



Redevelopment of former hospital site



Renovated commercial building

<sup>1</sup> Copy of this Letter of Agreement between TDOT and the City of Knoxville is attached to the Funding Commitments section of this application.

## Total Project Cost by Funding Source, Type, and Source of Funds

(Information on type of funding is contained below this table)

Major Construction Activity	Total Eligible Budget	RAISE		Other Federal	Non-Federal-TDOT(a)		Non-Federal KCDC(b)	
		Dollars	Percent	Dollars (%)	Dollars	Percent	Dollars	Percent
ROW (Acquisition & Services)	\$925,000	\$0	0%	\$0 (NA)	\$0	0%	\$925,000	100 %
Final Design	\$4,100,000	\$0	0%	\$0 (NA)	\$0	0 %	\$4,100,000	100 %
Construction	\$40,361,700	\$21,000,000	52%	\$0 (NA)	\$15,456,850	38%	\$3,904,850	10 %
Utility Relocation	\$1,500,000	\$0	0%	\$0 (NA)	\$0	0 %	\$1,500,000	100 %
CEI/Design Review	\$3,229,000	\$2,000,000	62%	\$0 (NA)	\$614,500	19 %	\$614,500	19 %
Contingency	\$4,037,000	\$2,000,000	50%	\$0 (NA)	\$1,018,500	25%	\$1,018,500	25%
Project Financial Costs Inflated @ 3.8% over 3-years	\$5,847,300	\$0	0%	\$0 (NA)	2,910,150	50%	\$2,937,150	50%
<b>Total</b>	<b>\$60,000,000</b>	<b>\$25,000,000</b>	<b>42%</b>	<b>\$0 (NA)</b>	<b>\$20,000,000</b>	<b>33%</b>	<b>\$15,000,000</b>	<b>25%</b>

(a) TDOT Funding Type – Letter of Agreement Direct Appropriation Grant, Commitment Date 10-20-2023, Funding Source – State of Tennessee budget appropriation for fiscal year beginning 7-1-2023, Appropriation amount - \$20,000,000, to be used for Knoxville Pedestrian Bridge, South Waterfront Redevelopment Area.

(b) Knoxville's Community Development Corporation (KCDC) Funding Type – Tax Increment Finance (TIF) Commitment, KCDC Board of Commissioners Resolution to provide TIF financing in an aggregate amount not to exceed \$15,000,000. KCDC Board resolution approved 1-25-2024. City of Knoxville Resolution approving amendment to South Knoxville Waterfront Redevelopment Plan approved 10-15-2023. Copies of both resolutions are attached in the Funding Commitment Documents section of this application.

## Project Costs per Census Tract Assumptions

The length of the project in each census tract was used to establish the percent of design, CEI, and construction costs for each census tract in which the project is located:

- Total project length = 1,629 feet
- Project length north of the river = 659 feet (40% of total length)
- Project length south of the river = 970 feet (60% of total)
- All utility relocations are north of the river, adjacent to Neyland Drive
- All ROW costs are south of the river



This project is located within census tracts 9.01 and 24. Census tract 24, where the majority of the project improvement will be located, is an Area of Persistent Poverty and Historically Disadvantaged Community. Census tract 9.01 is “Not Identified” because this census tract has a population of less than 2,000 and the income and employment data are suppressed.

## Sources, Uses and Availability of Funding

**The Federal cost share for this project is 42 percent.** Non-federal funds in the amount of \$35 million have been committed to this project by their respective governing body (State of Tennessee Budget, approved by the Tennessee Legislative Body and City of Knoxville, approved by the Knoxville City Council and Knoxville’s Community Development Corporation, approved by their Board of Commissioners). The non-federal funds committed for this project are available to the project at this time. TDOT’s standard grant conditions are included and have been acknowledged and accepted by the Mayor of Knoxville, Indya Kincannon. These conditions will not impede completion of the project. Funding commitments for these sources are included in the Funding Commitment section of the application. A copy of the TIP pages for this project is also included in the funding commitment section.

### 2020 Census Tracts (Table 2a)

2020 Census Tract(s)	Project Costs per Census Tract
24 – APP & HDC	\$36,000,000
9.01 – Not Identified	\$24,000,000
<b>Total Project Cost</b>	<b>\$60,000,000</b>

*Note: Census Tracts 2020 Census, Grant Project Location Verification mapping tool for Knoxville, TN*

### 2010 Census Tracts (Table 2b)

2010 Census Tract(s)	Project Costs per Census Tract
24 – APP & HDC	\$36,000,000
9.01 – Not Identified	\$24,000,000
<b>Total Project Cost</b>	<b>\$60,000,000</b>

*Note: Disadvantaged Census Tracts from CEJST (2010 Census), Grant Project Location Verification mapping tool for Knoxville, TN*

### 2020 Census Designated Urban Areas with Population of More Than 200,000 (Table 2c)

Rural/Urban	Project Costs
<b>Urban</b> (2020 Census-designated urban area with a population greater than 200,000)	Knoxville, TN Urban Area CT 45640 \$60,000,000
<b>Rural</b> (Located outside of a 2020 Census-designated urban area with a population greater than 200,000)	\$0.00
<b>Total Project Cost</b>	<b>\$60,000,000</b>

*Note: Census Designated Urban areas Populations more than 200,000 (2020 Census), Grant Project Location Verification mapping tool for Knoxville, TN*



## Contingency Amount

A 10 percent contingency is included in the budget to cover unexpected cost increases. The City of Knoxville will cover cost overruns that exceed the project contingency budgeted

## Level of Design

Design for this project is 35 percent complete.

## Cost Estimates

The bridge cost estimate was completed on January 24, 2024, by Modjeski & Masters and CDM Smith.

## Cost Share, Non-Federal Funding Match

The federal cost share is **42 percent**. Non-Federal matching funds include \$20 million from TDOT and \$15 million from the City of Knoxville and KCDC.





February 23, 2024

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue SE  
Washington, D.C. 20509

Dear Secretary Buttigieg:

Thank you for the time you spent with the U.S. Conference of Mayors in January. In particular, I truly appreciated the roundtable discussion on the Safe Streets for All initiative and all of the support from your staff.

As we move forward with infrastructure improvements in Knoxville, we are prioritizing pedestrian and bicycle safety. As part of these efforts, the City of Knoxville is requesting \$25 million in FY 2024 RAISE Grant funds to construct the **South Knoxville Waterfront Bike and Pedestrian Bridge** over the Tennessee River.

This is the second year we have applied for the program, but an important update is the strong commitment of \$20 million from the State of Tennessee and the full support from the TN Department of Transportation. In our previous application, the full scope of the state support had not been finalized. We have also incorporated all of the valuable feedback from your team.

This project will transform connectivity between a redevelopment area and other areas of the City of Knoxville. This plan has been on the table for almost 20 years, and we are ready to get started. It will be extremely challenging to complete without the support of the RAISE program.

This project is part of the community-driven South Knoxville Waterfront Vision Plan and has widespread support from neighborhoods, the University of Tennessee, the City, the County and the State.

This bridge will connect South Knoxville Waterfront communities to the flagship campus of the University of Tennessee, significant employers, and downtown Knoxville job opportunities. This project will impact areas designated as a Historically Disadvantaged Community (HDC), Areas of Persistent Poverty (APP), and Justice 40 communities and will open up access to our 1,000-acre Urban Wilderness outdoor activities in South Knoxville.

The City of Knoxville has invested over \$70 in strategic projects within South Knoxville Waterfront Communities for affordable housing, greenways and waterfront parks, construction of complete streets, business loans, and our new workforce housing program. These public improvements have leveraged over \$500 million in private investment. This bridge is needed to move into the next phase of redevelopment.

Currently, the primary highway and bridge from South Knoxville over the river are part of the National Highway System (NHS), a 5-lane major arterial with a center turn lane. There are no existing protected bike and walking facilities on this highway. This project will provide important safe access for students, our workforce, and families.

Our application addresses how this project meets the requirements of the RAISE grant and the benefits it will provide to vulnerable communities as it helps to improve multimodal transportation access for our city.

Our cost estimate, updated in January of this year, is \$60 million and based on 35% design. The Federal share is 42% of the project cost. The remaining 58% of the project funding will be provided through a \$20 million from the Tennessee Department of Transportation and the City of Knoxville. Knoxville's Community Development Corporation has committed \$15 million in tax increment financing to complete the funding package. We have included a 10% contingency in the project budget and while we do not anticipate the cost exceeding this contingency at this time, if the project contingency budget is exceeded, the City of Knoxville will be responsible for the balance of funds.

We appreciate all of the efforts that this Administration is taking to update and improve infrastructure throughout our communities through the RAISE grants and more.

Please consider this an open invitation to visit Knoxville and learn about the exciting investments being made across our City, with your help. Please let me know if I can provide any additional information or answer any questions.

Regards,



Indya Kincannon  
Mayor

## Federal Wage Rate Certification

City of Knoxville, Tennessee certifies that it will comply with the requirements of subchapter IV of chapter 31 of title 40, United States Code (Federal wage rate requirements), as required by the Recovery Act.

FY 2024 RAISE Discretionary Grant Application  
**South Knoxville Waterfront Bike and Pedestrian Bridge**

FEDERAL WAGE RATE CERTIFICATION

The undersigned agrees to comply with the requirements of Subchapter IV of Chapter 31 of title 40, United States Code regarding Federal wage rate requirements, as required by the Consolidated and Further Continuing Appropriations Act, 2019.



Indya Kincannon  
Mayor  
City of Knoxville, Tennessee

February 28, 2024

APPROVED AS TO FORM:



CHARLES W. SWANSON  
LAW DIRECTOR



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**COMMISSIONER'S OFFICE**  
SUITE 700, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-1402  
(615) 741-2848

**BUTCH ELEY**  
DEPUTY GOVERNOR &  
COMMISSIONER OF TRANSPORTATION

**BILL LEE**  
GOVERNOR

**LETTER OF AGREEMENT:  
DIRECT APPROPRIATION GRANT  
FOR GOVERNMENTAL ENTITIES**

Date: 10/20/2023

To: Indya Kincannon, Mayor  
City of Knoxville  
P.O. Box 1631  
Knoxville, TN 37901

From: Howard H. Eley, Commissioner

The State's budget for the fiscal year beginning July 1, 2023, includes a direct appropriation grant payable to your organization.

This appropriation is in addition to any other funding or appropriation provided to you by the State of Tennessee. Section 54, Item 1-142, of the 2023 Appropriations Act reads as follows:

**Section 54. Other Additions to budget.** In addition to the amounts appropriated in Sections 1 and 4 of this act, the following amounts are appropriated, and the Commissioner of Finance and Administration is authorized to allocate the appropriations to the appropriate organizational units and to adjust federal aid and other departmental revenues and position authorizations accordingly. Full-time (FT) and part-time (PT) position authorizations are estimated in the text of the following line items.

**Item 1. General Fund and Education Fund Appropriations.** The following appropriations are from the general fund and education fund, as applicable.

	<u>Recurring</u>	<u>Non-</u>
<u>Recurring</u>		
142. Transportation-General Fund Subsidy- Knoxville Pedestrian Bridge	0	
20,000,000		

If you choose to accept this award:



1. Sign this agreement (include your taxpayer identification number and a daytime phone number) in the space provided as your acceptance of the following terms and conditions:
  - a) If you fail to fulfill your obligations under this agreement, the State shall have the right to seek restitution, pursuant to the laws of the State of Tennessee, from you for payments made to you under this agreement.
  - b) Your records and documents, insofar as they relate to the performance of your obligations or to payments received under this agreement, shall be maintained in a manner consistent with the accounting procedures of the Comptroller of the Treasury, pursuant to T.C.A. 4-3-304 and applicable rules and regulations thereunder.
  - c) The funds received shall be placed in an interest bearing account until such time as they are needed for the purposes set out in the Appropriations Act. In the event that any portion of the funds is not expended, the unexpended portion plus any accrued interest shall be returned to the State.
  - d) You must complete the attached Substitute W-9 Form and return it with this signed Letter of Agreement. You are responsible for and assume the liability for failure to provide the correct taxpayer identification number for IRS purposes.
2. Return to the State agency head the following materials together:
  - a) This signed Letter of Agreement; and
  - b) Substitute W-9 Form.

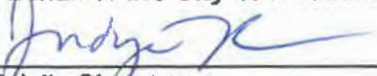
We encourage you to return these materials as soon as possible. The State is prepared to process this agreement and issue payment in a timely fashion, upon receipt of these materials.

If you should have any questions or comments or need any assistance responding to this request, please contact **Kimery Grant** at [Kimery.grant@tn.gov](mailto:Kimery.grant@tn.gov) or (615)741-5323.

Please retain a copy of this letter for your records. Payment status and accounting inquiries may be directed to the following staff of this department:

Jennifer Herstek, Director of Finance (615)741-8984 or [jennifer.herstek@tn.gov](mailto:jennifer.herstek@tn.gov).

On behalf of *the City of Knoxville*, I hereby agree to the aforementioned terms and conditions.

  
 \_\_\_\_\_  
 Official's Signature


10/24/2023  
 \_\_\_\_\_  
 Date

Indya Kincannon  
 \_\_\_\_\_  
 Official's Name (please print)

Mayor  
 \_\_\_\_\_  
 Official's Title or Position

865-215-3643  
 \_\_\_\_\_  
 Daytime Contact Phone Number

62-6000326  
 \_\_\_\_\_  
 Federal Taxpayer Identification Number

APPROVED AS TO FORM:  
  
 \_\_\_\_\_  
 CHARLES W. SWANSON  
 LAW DIRECTOR

**SUBSTITUTE W-9 FORM**  
**REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION**

**1. Please complete general information:**

Taxpayer Name City of Knoxville Phone Number 865-215-3384  
Business Name (if applicable) City of Knoxville  
Address 400 W. Main St., Suite 685  
City Knoxville State TN ZIP Code 37902

**2. Circle the most appropriate category below: (please circle only one)**

- 1) Individual (not an actual business)
- 2) Joint account (two or more individuals)
- 3) Custodian account of a minor
- 4) a. Revocable savings trust (grantor is also trustee)  
b. So-called trust account that is not a legal or valid trust under state law
- 5) Sole proprietorship (using a social security number for the taxpayer ID)
- 6) Sole proprietorship (using a federal employer identification number for taxpayer ID)
- 7) A valid trust, estate, or pension trust
- 8) Corporation
- 9) Association, club, religious, charitable, educational, or other non-profit organization (for entities that are exempt from federal tax, use category 13 below)
- 10) Partnership
- 11) A broker or registered nominee
- 12) Account with the US Department of Agriculture in the name of a public entity that receives agricultural program payments
- 13) Government agencies and organizations that are tax-exempt under Internal Revenue Service guidelines (i.e., IRC 501(c)3 entities)

**3. Fill in your taxpayer identification number below: (please complete only one)**

1) If you circled number 1-5 above, fill in your Social Security Number.

\_\_\_\_\_

2) If you circled number 6-13 above, fill in your Federal Employer Identification Number (EIN).

62-6000326

**4. Sign and date the form:**

Certification - Under penalties of perjury, I certify that the number shown on this form is my correct taxpayer identification number. If I circled category 13 above, I also certify that my agency or organization is tax-exempt per Internal Revenue Service guidelines and not subject to backup withholding.

Signature [Signature] Date 10/23/23  
Title (if applicable) CEO, City of Knoxville



Benjamin M. Bentley, Executive Director/CEO

901 Broadway, N.E. • Knoxville, TN 37917  
865.403.1100 • Fax 865.403.1117  
800.848.0298 (Tennessee Relay Center)  
www.kcdc.org

February 21, 2024

The Honorable Pete Buttigieg  
U. S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

Knoxville's Community Development Corporation (KCDC) is thrilled to support the City of Knoxville's application to the United States Department of Transportation for the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant. This request of \$25 million is the final funding needed to complete a pedestrian and bicycle bridge across the Tennessee River, connecting the low and moderate income neighborhoods of South Knoxville with employment, education, and workforce development opportunities at the University of Tennessee; the Fort Sanders Medical District; and Downtown Knoxville.

**As a local contribution, Knoxville's Community Development Corporation (KCDC) is committing \$15 million in tax increment finance (TIF) to fully fund this project.** All governmental approvals for this financing are complete and the approved City of Knoxville and KCDC resolutions are included in this application. This local funding will supplement the RAISE Grant of \$25 Million and the State of Tennessee's direct appropriation of \$20 Million.

Reconnecting historically underserved people and neighborhoods with opportunity, while laying the foundation for new development patterns rooted in resilience, connectivity, and sustainability – this is the type of infrastructure project that will create a more equitable Knoxville for decades to come.

Sincerely,

A handwritten signature in blue ink that reads "Ben M Bentley".

Benjamin M Bentley  
CEO of KCDC  
Secretary of the Board



# eSTIP Project Report



<b>ID</b>	<b><u>PIN #</u></b>	<b><u>Length in Miles</u></b>	<b><u>Lead Agency</u></b>
23-2023-305			Various

**County:**

<b><u>Route</u></b>	<b><u>Total Project Cost</u></b>
-	\$38,291,203.00

**Project Name:**  
 STBG/STBG Transportation Alternatives (STBG-TA) Bike/Pedestrian Grouping

**Termini**

**Project Description**  
 This grouping will be used to fund greenways, sidewalks, bike/pedestrian amenities, streetscaping, and to fund STBG - Transportation Alternatives projects, which provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects throughout the Knoxville TPO area.

<b><u>Long Range Plan #</u></b>	<b><u>Conformity Status</u></b>
17-911	Exempt

FY	Phase	Fund Code	Total Funds	Federal Funds	State Funds	Local Funds
2023	PE-N	L-STBG	\$300,000	\$240,000	\$0	\$60,000
2023	PE-D	L-STBG	\$282,000	\$225,600	\$0	\$56,400
2023	ROW	L-STBG	\$2,800,000	\$2,240,000	\$0	\$560,000
2023	CONST	S-STBG-TA	\$5,216,320	\$4,173,056	\$0	\$1,043,264
2023	STUDY	HIP	\$625,000	\$500,000	\$0	\$125,000
2024	PE-D	HIP	\$3,750,000	\$3,000,000	\$0	\$750,000
2024	PE-D	L-STBG-TA	\$590,000	\$472,000	\$0	\$118,000
2024	PE-D	L-STBG	\$309,190	\$247,352	\$0	\$61,838
2024	ROW	CRP	\$2,080,000	\$1,664,000	\$0	\$416,000
2024	ROW	L-STBG	\$1,030,000	\$824,000	\$0	\$206,000
2024	CONST	L-STBG-TA	\$3,625,000	\$2,900,000	\$0	\$725,000
2024	CONST	CRP	\$1,113,000	\$890,400	\$0	\$222,600
2024	CONST	MMAG	\$1,000,000	\$0	\$950,000	\$50,000
2025	ROW	L-STBG-TA	\$1,300,000	\$1,040,000	\$0	\$260,000
2025	CONST	S-STBG-TA	\$1,302,693	\$1,042,154	\$0	\$260,539
2025	CONST	L-STBG-TA	\$2,000,000	\$1,600,000	\$0	\$400,000
2025	CONST	L-STBG	\$2,431,000	\$1,944,800	\$0	\$486,200

## eSTIP Project Report



2026	CONST	L-STBG-TA	\$2,500,000	\$2,000,000	\$0	\$500,000
2026	CONST	CRP	\$2,375,000	\$1,900,000	\$0	\$475,000
2026	CONST	MMAG	\$762,000	\$0	\$723,900	\$38,100
2026	CONST	L-STBG	\$2,900,000	\$2,320,000	\$0	\$580,000
<b>Total</b>			<b>\$38,291,203</b>	<b>\$29,223,362</b>	<b>\$1,673,900</b>	<b>\$7,393,941</b>

**Comments:**

Corrected Modification # 102: Modify grouping to add previous individually listed projects (TIP ID 23-2017-048, 23-2017-011, 23-2017-049, 23-2017-009, 23-2017-006) to grouping. Modification also updates project schedules, programs phases previously anticipated to be obligated from the previous TIP and programs congressionally directed funding for Demo ID TN285 (Blount County Greenway Ph. 1) and TN 286 (Knoxville South Waterfront Ped./Bike Bridge).

This modification adds \$22,577,190 (\$7,057,752 federal L-STBG/\$5,040,000 federal L-STBG-TA/\$3,500,000 federal HIP/\$1,664,000 federal CRP/\$950,000 state MMAG/\$4,365,438 local) to the grouping and TIP. The total grouping cost is increased to \$38,291,203.

Correction to correct typo in federal funds added (original modification listed federal additions of \$7,557,752 federal L-STBG and \$3,000,000 federal HIP).

Bike & Pedestrian Grouping						
Grantee	Project Name	TDOT PIN	Fund Type	FY	Phase	Federal Funds
Blount County	Blount County Greenway Trail - Ph. 1 (Demo ID: TN285)	127121.00	HIP	2024	CON	\$3,000,000
City of Clinton	Pedestrian Improvements Ph. 3	130923.00	S-STBG-TA	2025	CON	\$1,042,154
	Pedestrian Improvements Ph. 1 & 2	128165.00	S-STBG-TA	2023	CON	\$2,307,907
City of Knoxville	East Knox Greenway - Phase 1	128777.00	L-STBG	2024	PE-D	\$247,352
			CRP	2024	ROW	\$400,000
			L-STBG	2025	CON	\$1,944,800
	South Waterfront Greenway - East of Suttree	127815.00	L-STBG	2023	PE-D	\$73,600
			L-STBG-TA	2025	ROW	\$1,040,000
	First Creek Greenway - Broadway Streetscape	125623.00	L-STBG	2023	PE-D	\$80,000
			L-STBG	2023	ROW	\$640,000
			L-STBG-TA	2024	CON	\$2,400,000
	Fort Sanders Neighborhood to Tyson Park Connection	129971.00	L-STBG	2023	PE-N	\$160,000
			L-STBG-TA	2024	PE-D	\$472,000
			L-STBG	2024	ROW	\$824,000
			L-STBG-TA	2026	CON	\$2,000,000
	South Knoxville Bridge Greenway	132924.00	CRP	2026	CON	\$1,900,000
			CRP	2024	CON	\$890,400
Knoxville South Waterfront Pedestrian/Bicycle Bridge (Demo ID: TN286)	-	L-STBG-TA	2024	CON	\$500,000	
		HIP	2023	Study/PEL	\$500,000	
Northwest Greenway Connector - Ph. 2	126641.00	S-STBG-TA	2023	CON	\$1,865,149	
City of Maryville	Maryville to Townsend Greenway - Ph. 1 (Brown Creek)	130845.00	L-STBG	2023	PE-N	\$80,000
			L-STBG	2023	PE-D	\$72,000
			CRP	2024	ROW	\$1,264,000
			L-STBG-TA	2025	CON	\$1,600,000
City of Oak Ridge	Oak Ridge Rails to Trails - Ph. 1	125624.00	L-STBG	2023	ROW	\$1,600,000
			L-STBG	2026	CON	\$2,320,000
<b>Total Federal Funds</b>						<b>\$29,223,362</b>
<b>Total Federal S-STBG-TA Funds</b>						<b>\$5,215,210</b>
<b>Total Federal L-STBG-TA Funds</b>						<b>\$8,012,000</b>
<b>Total Federal L-STBG Funds</b>						<b>\$8,041,752</b>
<b>Total Federal HIP Funds</b>						<b>\$3,500,000</b>
<b>Total Federal CRP Funds</b>						<b>\$4,454,400</b>

# MERIT CRITERIA

## Safety Merit Criteria

Safety is a primary purpose of this project.

**The Transportation Problem:** The Tennessee River is a natural barrier between south Knoxville waterfront communities and the rest of the city. The lack of safe and protected bridges for active transportation users crossing the river limits affordable transportation options for residents. For most active transportation users, the traffic volumes, travel speeds, and lack of protected facilities eliminate this option from consideration resulting in more people in motorized vehicles on the highways and less equitable access to opportunities for APP and HDC residents.

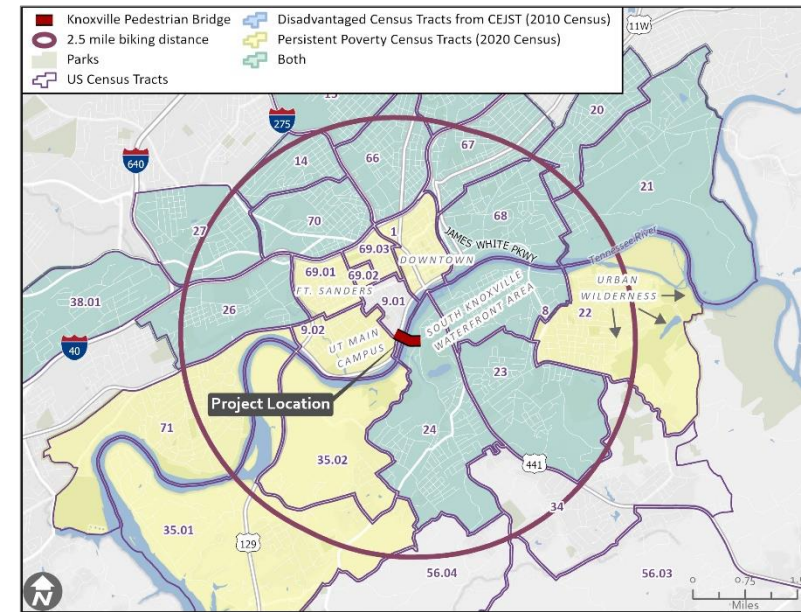
### Protect non-motorized travelers from safety risks.

**The Data:** The river is a barrier between neighborhoods to the south and the economic, social, and commercial centers north of the river. Four existing highway bridges cross the Tennessee River to south Knoxville providing vehicular access. Gay Street Bridge has a 4-foot sidewalk for pedestrians while cyclists use vehicular lanes; there are protected walking and biking facilities on Alcoa Hwy Bridge that only provide access to Cherokee Farms R & D Center; James White Parkway does not have bike or pedestrian facilities, though some active transportation facilities are planned for the future. Chapman Hwy/Henley St. Bridge is the primary highway connecting south Knoxville over the river to Knoxville lacks protected and safe pedestrian and bike facilities.

The Knoxville Regional Roadway Safety Action Plan identified Knoxville's High Injury Network, dangerous roads with the largest number of crashes.<sup>1</sup> Eighty-seven percent of crashes involving walking or biking on major arterials occurred on six streets, and two of those streets, Chapman Hwy and Cumberland Ave., are essential north-south, east-west highway connections for south Knoxville.<sup>2</sup> The lack of safe active transportation infrastructure on those two

corridors prevent many south waterfront residents from using affordable non-motorized travel options. In census tract 24 where this project is primarily located, twenty-five percent of residents live below the poverty level.<sup>3</sup>

### APP & HDC Census Tracts in Vicinity of Project Location



The new bridge allows people to walk or bike to the north side of the river where there are concentrations of employment in Fort Sanders and downtown; transit routes to additional destinations; jobs and educational options on the University of Tennessee campus; and three major medical centers.<sup>4</sup> Persistent Poverty and Historically Disadvantaged communities north of the river need

<sup>1</sup> Regional Roadway Safety Action Plan, Knoxville Regional TPO, June 28, 2023

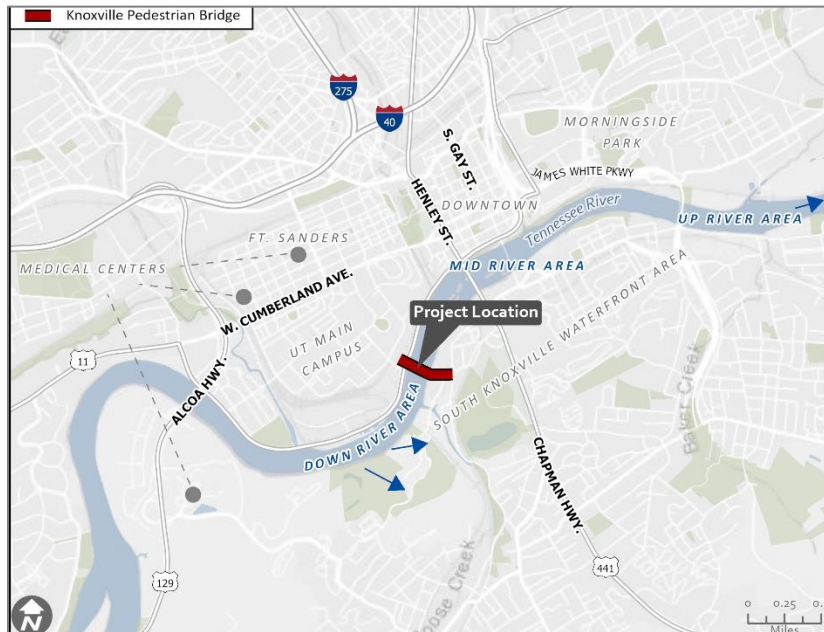
<sup>2</sup> "Pedestrian and Bicyclist Crash Facts, Knoxville's High-Crash Streets

<sup>3</sup> U.S. Census Bureau, American Community Survey 5-year estimates, Table S1701

<sup>4</sup> East Tennessee Childrens Hospital Fort Sanders Regional Hospital, and University of Tennessee Medical Center

low-cost transportation choices to reach the Urban Wilderness, Ijams Nature Center, and greenway and parks south of the river which limits their equitable access to recreational and health opportunities.

### Down River and University Map



APP and HDC residents in Knoxville surveyed about transportation needs for the Regional Mobility Plan 2045 said they need more active transportation options. Knoxville's Regional Mobility Plan asked participants to rank the projects most needed in the region. Sidewalks, greenways, and bicycle lanes were prioritized as the second highest transportation priority.<sup>5</sup>

### *Reduce fatalities and/or serious injuries in underserved communities.*

**The Data:** Chapman Highway/Henley St. Bridge (U.S. 441) is part of the National Highway System and is the primary north south corridor linking South Knoxville to the rest of the city north of the river. The highway is a 5-lane major arterial with a center-turn lane. Chapman Hwy/Henley St. bridge lack protected biking or walking facilities. Based on TDOT crash data for 2019 – 2023, there were five fatalities on the 1.33-mile segment of Chapman Hwy from Moody Ave to the south bank of the Tennessee River during this period. Three of those fatalities involved pedestrians.<sup>6</sup> Unfortunately, on January 2, 2024, the first roadway fatality of the year occurred on this same roadway segment involving a pedestrian. A recent safety study conducted by TDOT documents a crash rate of 8.784 crashes per million vehicle miles (MVM) on this highway compared to a statewide average crash rate of 3.223 crashes per MVM for similar roadway facilities.<sup>7</sup>

The crash analysis extended the limits to include the road segment from Henley Street at the south bank of the river north to Cumberland Avenue, which increased the total segment length to 1.8 miles. With the additional 2019 – 2023 historical crashes on the Henley Street Bridge and in the downtown area on Henley Street, the Chapman Highway crash rate increased from 8.784 to 9.593 crashes per MVM including the additional length. Cumberland Avenue (US 11) is an east-west corridor providing access north of the river to the UT campus and other destinations. A crash rate of 4.781 crashes per MVM was calculated using the 2019 - 2023 crash data for Cumberland Ave. This road experiences approximately 1.5 times more crashes than other arterials in Tennessee based on the statewide average crash rate of 3.223 crashes per MVM.

<sup>5</sup> Knoxville Regional TPO Transportation Improvement Program Fiscal Year 2020 – 2023, Executive Summary, pg. 6

<sup>6</sup> Tennessee Department of Transportation, Enhanced Roadway Information Management System (ETRIMS) crash data base 2023.

<sup>7</sup> Tennessee Department of Transportation Chapman Highway Safety Study, 2023, included three years of crash data 8/1/2019 – 7/31/2022)

Crash Data

Severity of Crash Totals*						
2019-2023	Fatal	Suspected Serious Injury	Minor Injury	Property Damage Only	Grand Total	
Chapman Hwy	5	15	145	596	761	
Cumberland Ave			18	63	81	
Grand Total	5	15	163	659	842	
Report Crash Totals*						
Road Name	2019	2020**	2021	2022	2023	Grand Total
Chapman Hwy	166	128	176	166	125	761
Cumberland Ave	18	15	22	18	8	81
Grand Total	184	143	198	184	133	842
Summary						
Road Name	Grand Total	2021 AADT	Length (miles)	Crash Rate	Statewide	TDOT Study
Chapman Hwy	761	24,149	1.80	9.593	3.223	8.784
Cumberland Ave	81	12,377	0.75	4.781	3.223	

\* Source: Tennessee Department of Transportation E-TRIMS Database.

\*\* Note: Covid event in 2020 and 2021.

**The Solution:** This project will protect non-motorized travelers from safety risks specifically reducing risks for active transportation users in APP and HDC communities by constructing a bike-ped bridge separating non-motorized travelers from vehicles and providing connections at bridge landings to greenways and trails, transit buses, and other protected transportation facilities. The persistent poverty and historically disadvantaged census tracts in the south waterfront area will benefit from safe and affordable transportation choices providing them more opportunities to access

well-paying jobs, better connections to employment training and education, and access to cultural and social events. Construction of this bridge will reduce fatalities and serious injuries in underserved communities with the goal of bringing them below the statewide averages and eventually to zero by providing a safe and protected river crossing exclusively for active transportation users eliminating challenges facing bikers and pedestrians that encounter heavy traffic, high travel speeds, and potential for serious injury or fatalities when they interact with cars and trucks.

Environmental Sustainability

Environmental sustainability is a primary purpose of this project.

**The Transportation Problem:** Reducing transportation related air pollution and GHG emissions particularly in disadvantaged communities in the south waterfront area is an important goal for Knoxville. As the city’s population continues to grow, VMT and

VHT could increase, contributing to higher levels of pollutants and GHG. Actions that improve active transportation options are needed to reduce transportation emissions and achieve the city’s emission reduction goals.



**Reduce transportation-related air pollution and greenhouse gas emissions in disadvantaged communities.**

**The Data:** Transportation emissions make up almost 59 percent of Knoxville’s emissions profile.”<sup>8</sup> For the past 15 years Knoxville has successfully pursued actions to create a greener, more sustainable city where the community, the environment, and the economy can thrive. In 2008 Knoxville established a goal to reduce greenhouse gas emissions 20% by 2020 relative to 2005 levels for municipal operations and the broader community. Based on the city’s air quality monitoring data, this goal was reached and exceeded prior to 2020. The city has established additional emission reduction goals to reduce emissions 80% by 2050.<sup>9</sup> Priority Climate Strategies adopted by the Mayor’s Climate Council include improved bike and pedestrian facilities to enhance equitable access, convenience, and

safety significantly increasing the number of active transportation trips taken. The bike-ped bridge is the cornerstone of this strategy.

Although reductions in GHG emissions benefits all Knoxville residents, it is particularly impactful for APP and HDC communities in the south waterfront area. Data from the Climate and Economic Justice Screening Tool (CEJST) documents legacy pollution and health related burdens in APP and HDC census tracts 8, 23, and 24 in the south waterfront area. Based on travel demand analysis, active transportation trips including the bridge were quantified and monetized by type (NOX, PM2.5, SOX, and CO2). Historically declining grams per-VMT emission factors (EPA) were extrapolated for future years, expecting a continued decline. These factors and costs were applied to annual VMT changes. First and last year emission factors and costs are summarized by emission types in the table below. CO2 values were discounted at the lower 3% rate.

**Emission Factors and Costs (2021\$)**

Emissions	Grams/VMT		2021\$/Metric Ton		2021\$/VMT	
	2027	2056	2027	2056	2027	2056
NOX	0.081	0.003	\$17,900	\$18,900	\$0.0014	\$0.0001
PM2.5	0.008	0.005	\$865,600	\$907,600	\$0.0069	\$0.0045
SOX	0.002	0.000	\$48,700	\$51,300	\$0.0001	\$0.0000
<i>Non-CO2 Subtotal</i>					<i>\$0.0084</i>	<i>\$0.0046</i>
CO2	208.6	24.8	\$61	\$88	\$0.0127	\$0.0034

The Climate Council, appointed by the Knoxville Mayor in 2020, is composed of 65 community leaders and technical experts tasked with identifying the best strategies to achieve the City’s goal of reducing community GHG emissions 80% by 2050. The top strategy prioritized by the Climate Council for addressing transportation emissions was improved facilities for walking, biking, and transit.

The Climate Council has established an Equity Working Group to review and select priority strategies to advance equity outcomes. This group screens strategies by considering subject matter expertise, lived experiences, and community surveys. The Equity Working Group rankings are used by the Office of Sustainability to identify focus areas for emission reduction priorities.<sup>10</sup>

<sup>8</sup> “City of Knoxville 2021 Energy & Sustainability Work Plan”, adopted by the Knoxville Climate Council and Knoxville’s City Council, 2021.

<sup>9</sup> “Mayor’s Climate Council Emission Reduction Goals Priority Climate Strategies for Transportation”, Feb. 2024 City of Knoxville website.

<sup>10</sup> “Knoxville TN 2021 Energy and Sustainability Work Plan”, 2021.

### *Reduce Vehicle Miles Traveled (VMT) through modal shift to active transportation.*

**The Data:** Based on a Vissim model developed to evaluate traffic operations with and without the proposed bike-ped bridge, the active transportation bridge would result in a mode shift reducing the number of daily vehicles on Chapman Highway by 4,033 cars and reducing wear and tear on these roads. Utilizing a 1.5-percent annual growth rate and new housing developments, the 16 percent reduction in average daily traffic volume is equal to 11 years in added capacity to the road without having to add lanes. If the active transportation bridge is constructed, then traffic volumes and the potential for crashes will also be reduced on Henley St. and Cumberland Ave. creating a safer environment for these roads. This will help to advance a key transportation priority for Knoxville to reduce GHG and enhance community benefits identified in the Energy and Sustainability Plan update.<sup>11</sup>



*South Waterfront Greenway*

### *Implement transportation-efficient land use and design.*

**The Data:** Historically south Knoxville was the industrial heart of the city, the south waterfront along the Tennessee River was lined with manufacturing facilities and businesses blocking public access

to the river. Over time these production operations evolved leaving vacant and dilapidated buildings on the river. Access to an exquisite natural resource was restricted by no trespassing signs and fences around businesses that were closed or rapidly declining.

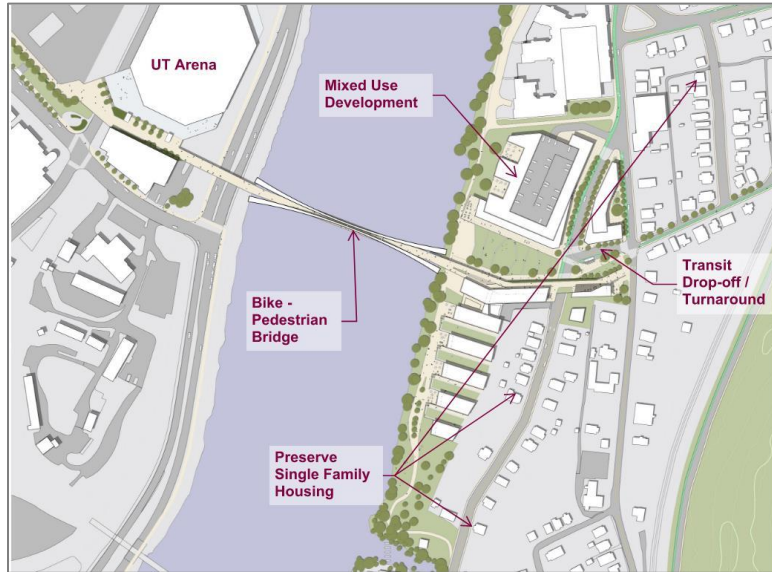
This project is the cornerstone for Down-River area revitalization. The bike-ped bridge increases accessibility for APP and HDC residents enabling them to affordably connect to job opportunities, education and training, health care, additional transit routes, and special places in Knoxville including museums, the new baseball complex, and the river. By integrating development options and densities with multimodal connections that support non-motorized mobility as well as vehicle use, Down-River becomes the place envisioned in the waterfront vision plan, where people choose to live, work, and play.

Knoxville has adopted a form-based code and created the South Waterfront Zoning District to foster mixed use, pedestrian friendly development in this area. Old Sevier and Scottish Pike neighborhoods will conserve the small-town neighborhood environment, preserving existing affordable single-family homes. Large-scale assembly of residential properties or commercial buildings is prohibited in the code. Down-River plans combine building renovation, renewal, and in some cases demolition. Construction is a carbon intensive activity; however, revitalization of this area will focus on adaptive reuse and renovation of existing buildings, when possible, creating a positive carbon minimization strategy.

The new street network and existing roads will access transit, multi-use paths, and the river ensuring everyone has access. Larger mixed-use buildings with greater densities may house early childhood centers, commercial and retail uses, and restaurants and bars on the ground floor with mixed income residential on the upper floors.

<sup>11</sup> "City of Knoxville 2021 Energy and Sustainability Work Plan", page 8 Transportation Priorities

## South Waterfront Connectivity Framework



Rendering by Sanders Pace Architects

**The Solution:** The bike-ped bridge will help to reduce transportation related air pollution and greenhouse gas emissions in disadvantaged communities by constructing a bridge for non-motorized travelers crossing the river resulting in reduced VMT and pollutant emissions. This will also help the City achieve their goal of reducing GHG emission. Constructing the bridge will reduce VMT through modal shift by reducing daily vehicles on Chapman Highway by 4,033 cars. Traffic on Henley St. and Cumberland Ave. will be reduced as well with the construction of this bridge. As more people utilize safe, non-motorized transportation available with the new bridge additional improvements in air quality and reduction in GHG will be realized.

### *Project will be consistent with Federal Flood Risk Management Standard*

The bridge will comply with the Federal Flood Risk Management Standard established with EO 11988, 13690, and 14030.

## Quality of Life

Improving the quality of life for South Knoxville Waterfront Communities is a central goal of this project.

**The Transportation Problem:** The use of active transportation to reach daily destinations isn't an option for residents and APP and HDC communities in the south waterfront. Typical daily destinations are not available in the neighborhood and without safe bike and ped facilities on existing bridges there are few affordable options to access needed services and care. As a result, equitable

### *Improve affordable transportation choices increase active transportation use*

**The Data:** Standing on the north bank of the Tennessee River looking toward the Down-River area, the isolation, lack of investment, and decline in an area where there were once jobs walkable to nearby neighborhoods, is obvious. This project will eliminate a barrier restricting the use of affordable and connected

access is very difficult. APP and HDC residents face real challenges reaching destinations north of the river including major employment centers, medical services, and opportunities at the University. The lack of low-cost transportation options reduces the community's ability to proactively address racial equity and barriers to opportunity, including automobile dependence as a form of barrier.

active transportation in this area. The bike-ped bridge will link people in underserved communities to more than 112.5 miles of greenways, affordable housing options, competitively priced retail and full-service grocery stores, and retail transit partners that provide free bus tickets to transit riders. Once the bridge is completed, walking time from Hawthorne Ave @ W. Blount Ave. a central Down-River location to Humanities Plaza on the UT campus is



reduced by 22 minutes from 36 minutes to 14 minutes.<sup>12</sup> With the bridge in place active transportation becomes a desirable option for reaching a range of destinations north and south of the river.

The bridge will link communities north and south of the river to markets, churches, parks and greenways, and opportunities for almost every type of outdoor adventure you can imagine. From the north bridge landing residents, students, and visitors can access the free KAT trolley and quickly reach University Commons west of campus creating easy and quick access to a full-service grocery store. This project gives 46,000 UT students and employees the opportunity to experience nature within 15 minutes of campus, just a quick walk or bike ride across the new bridge.

South Knoxville is becoming a world class destination for outdoor recreation and nature experiences. This project connects the Down-River area to safe and connected active transportation options and new walkable neighborhoods with affordable housing in a range of price points. Dilapidated industrial buildings will be replaced with mixed use buildings and existing single-family housing will be integrated into well-planned redevelopment areas where people can walk or bike the South Knoxville Riverfront Greenway, grab a snack and a beer at a local restaurant, and watch the lights of Neyland Stadium after a nighttime football game within walking distance of their front porch.

**Reduce transportation and housing cost burdens.**

**The Data:** Housing and neighborhood preferences are changing as more people want to live and work where they can walk to more destinations and drive less frequently. This project will significantly improve connectivity and increase the use of active transportation particularly for shorter trips resulting in reduced transportation costs. The new bridge connects south waterfront residents to a growing network of existing and planned greenways, KAT transit services, and EV charging stations. A transit drop-off and turn around between

the south bridge landing and a proposed mixed-use building will expand multi-modal travel options.

Many people in south waterfront neighborhoods live below the poverty level and low-cost mobility options are essential to their quality of life.<sup>13</sup> The bridge will give residents safe access to affordable mobility options reducing transportation costs so APP and HDC residents have more money for other needs. Transportation costs are considered affordable if they are 15 percent or less of household income. For the typical regional household in the south waterfront area, total annual driving costs are estimated to be \$12,047 including automobile ownership and annual gas costs.<sup>14</sup> This bridge will make a real difference in reducing cost burdens by enabling residents to walk or bike more frequently for shorter trips.

Census Tract	% of Households Below Poverty Level
8	39.7%
22	13.3%
23	17.4%
24	28.9%

*U.S. Census Bureau, American Community Survey, 2022*

Almost 16,000 people live in the 4 south waterfront census tracts, 9 percent of those residents live in zero vehicle households and another 40 percent have access to only one car.<sup>15</sup> In many cases these residents depend on transit that may not align with their schedule or on more expensive ride-sharing options including taxis. The bike-ped bridge gives people who live here valuable choices to improve their quality of life and future opportunities.

Revitalizing south waterfront communities is the primary goal of the South Waterfront Vision and Action Plan; however, implementation of the plan will not be realized without affordable transportation and housing for APP and HDC communities. The bike-ped bridge is pivotal to the success of the plan and the private investment

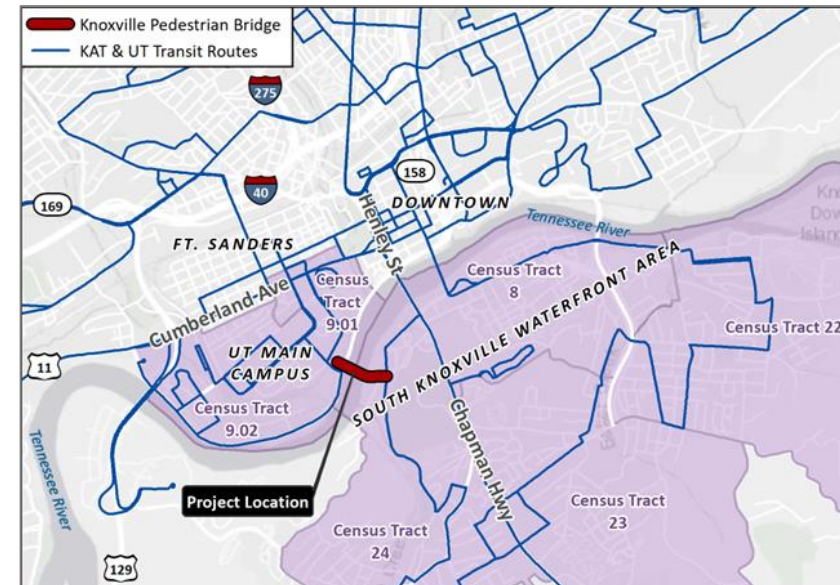
<sup>12</sup> Measured distance from point to point with and without the bike-ped bridge, CDM Smith, 2024  
<sup>13</sup> U.S. Census Bureau, EDA Census Poverty Status Viewer, 2017 – 2021 ACS 5-Year Estimates  
<sup>14</sup> “Housing and Transportation Affordability Index” Knoxville, TN, Center for Neighborhood Technology, 2023.  
<sup>15</sup> U.S. Census Bureau, American Community Survey, 2022, Table IDs DP05 and B08201

necessary to create places where people choose to live, work, and play in the future. Affordable housing incentives have leveraged development of 328 new affordable housing units here in the past four years. Families with incomes below 60 percent of the area median income now live in quality affordable housing. Once the bridge is completed, they will be able to walk and bike to daily destinations north and south of the river. Additional affordable housing has been created utilizing the City's workforce housing program. Developers of market rate housing seeking a public subsidy to support their project must reserve 10 percent of the total number of units for families with incomes below 80 percent of area median income. The Livano development located one block from the bike-ped bridge will provide 32 affordable apartments through this program.. Connections to low-cost transportation options enable households to access opportunities that improve their quality of life.

***The Solution:*** Construction of the bridge will increase affordable transportation choices by improving active transportation facilities making it a more desirable and safe option to reach daily destinations and improving connections that will help to attract private investments to the area. The bridge will reduce transportation and housing cost burdens by increasing affordable connectivity, walkability, and leveraging more transportation-efficient land use

and design in the Down-River area including higher density mixed uses and preservation of existing single-family homes on smaller lots reflecting transportation-efficient design.

### Transit Routes



## Mobility and Community Connectivity

Mobility and connectivity are an essential purpose of this project.

***The Transportation Problem:*** Connections are limited between south Knoxville waterfront communities and the economic, social, and commercial centers of Knoxville north of the river. Existing bridges lack safe and protected facilities for active transportation users. As a result many APP and HDC residents do not have equitable access to job opportunities, major medical centers, and other daily destinations. This gap in the non-motorized transportation network requires additional on-road travel for longer distances for residents with an available vehicle and use of more

expensive taxis or ridesharing for those without access to a personal car.

### Improve System-wide Connectivity

***The Data:*** The bridge improves connectivity north and south of the river expanding active transportation options to connect to greenways, shared e-bike stations, KAT transit, and UT's "T" transit system. The City will install micro mobility corrals at the bridge landings south of the river and expand bridge micro-mobility

services at the bridge as demand warrants. UT's 2023 Master Plan includes a network of gateways to strengthen connectivity between the campus, the river, downtown, and improve connectivity neighborhoods north and south of the river.

### *Implement Plans based on Community Participation*

**The Data:** Since 2006, south waterfront residents, city officials, and other stakeholders have met regularly to talk about the South Waterfront Redevelopment Plan. Feedback from engagement activities have improved proposed transportation connections creating better equitable access and opportunities for APP and HDC waterfront residents.

Keeping people committed to this plan and its implementation over the life of this process depends on outstanding community involvement. Public engagement will remain a priority throughout the life of this project. Over 250 people participated in the last Neighborhood Open House and a community workshop was held on February 22, 2024. In addition to local residents and city officials; KAT, UT, and the project team members were available to talk with residents and community groups about questions and ideas.

### *Remove Physical Barriers, connect Communities to direct, affordable transportation options.*

**The Data:** Construction of the bike-ped bridge will eliminate a physical barrier to affordable transportation options. The river is a barrier to active transportation options because existing bridges lack safety features for bike and pedestrian users. The primary connecting highway has a crash rate 3 times the statewide average for similar roadway facilities. The high crash rates and number of fatalities on Chapman Highway/Henley Street deters many non-motorized travelers from using this corridor for walking or biking to and from the south waterfront. AADT for Chapman Highway at the Henley St. bridge in 2023 was 32,532 vpd, an additional barrier to active transportation use. Once the bike-ped bridge is completed, this barrier to affordable transportation options will be eliminated

giving APP and NDC communities a safe low-cost mobility option. The City continues to build additional greenways and current plans will construct an additional 24 miles of trails and greenways. With the bike-ped bridge in place and the greenway network continuing to expand, APP and HDC residents have access to a growing array of destinations they can affordably reach.

### *Transportation features Increasing Access for Non-Motorized Travelers*

**The Data:** Knoxville developed a Complete Streets policy in 2014 for public and private street design and construction. This policy will be integrated into the Down River revitalization. Surrounding roadway networks will be improved to accommodate a range of users, making access to the bridge more convenient for residents. Transit circles on the north and south side bridge landing will facilitate synergies between transit and active transportation to increase multi-modal travel options.

During the project construction phase, the City of Knoxville and UT will evaluate opportunities for additional non-motorized transportation enhancements to integrate walking, biking, and transit to improve connectivity. These activities can also foster additional modal diversion improving environmental sustainability and helping APP and HDC neighborhoods north and south of the new bridge. Integrating transit and active transportation options where possible will make it more convenient for residents to use greenways, transit, e-bikes and other mobility devices along with the bridge to reach desired destinations and keep their car parked.

**The Solution:** Construction of the bike-ped bridge removes a physical barrier for active transportation making it possible for users to safely cross the river and reach more destinations that are important to them. The bridge improves systemwide connectivity for non-motorized travelers creating more time efficient and safer connections to a range of active transportation options. The bridge will provide increased access for non-motorized users facilitating synergies between transit and active transportation choices including opportunities to connect transit stops at the bridge landings. The

bridge links APP and HDC residents to low-cost travel choices including the greenway network with over 112 miles of existing trails and greenways, KAT Transit, and shared e-bikes and e-scooter

stations. By making access to the bridge and active transportation options more convenient and safer the use of active transportation will increase, improving health, the environment, and quality of life.

## Economic Competitiveness and Opportunity

Increasing economic competitiveness, private investment, and individual prosperity is an essential purpose of this project

***The Transportation Problem:*** Tourism is an increasingly important part of the Knoxville and south waterfront economy. Without safe and desirable active transportation connections across the river linking to greenways and other biking and walking options to access tourist destinations, visitors and residents have only one option, drive and generate more VMT and emissions. Without connections between significant market areas like UT, downtown, and visitor lodging options, long term economic growth and investment in the south waterfront will be constrained limiting opportunities for local economic development, jobs, and wealth building south of the river.

### *Facilitate Tourism Opportunities*

***The Data:*** Tourism generated \$1.8 billion in economic impacts in Knoxville in 2022 supporting over 14,000 direct jobs.<sup>16</sup> It is an increasingly important part of the south Knoxville economy as well thanks to south waterfront redevelopment, the Knoxville Urban Wilderness (KUW), and other tourism assets south of the river. The bike-ped bridge will significantly improve non-motorized access for visitors and residents to outdoor assets and unique businesses in south Knoxville. KUW is one of the country's most expansive and centrally located outdoor adventure areas with 50 hiking trails, biking, walking and paddling within an area of over 1,000-acres. An economic benefits study of KUW prepared by UT determined the Wilderness generates \$24.9 million in visitor spending annually.<sup>17</sup>

Mountain biking festivals, classes at Ijams Nature Center, and riverfront greenways attract a growing number of tourists to south Knoxville, leveraging new economic opportunities and business ventures in the area. The USA Cycling Professional Road National Championships has been held here for 7-years generating over \$35.5 million in regional economic impacts. With the bike-ped bridge in place it will be easier for residents and visitors to use active transportation to reach activities and events, and support new businesses in the area.

### *Promote long-term economic growth.*

***The Data:*** What if 36,304 students and 10,294 employees on the campus of the University of Tennessee could safely access world-class hiking and biking facilities, paddleboarding on a warm spring day, or native plant workshops at the Augusta Quarry Park within a 15-minute walk from the center of campus. That will be a reality once the bridge is completed. Areas where the waterfront plan has already been implemented have experienced significant economic growth from new housing construction, new retail and restaurants, and adaptive reuse of industrial buildings. The bridge will leverage development opportunities in the Down-River area where active transportation connections and walkable neighborhoods will attract UT students, tourists, and residents to enjoy the riverfront and world-class outdoor activities. Since the adoption of the vision plan there has been \$70 million of public investment leveraging \$500

<sup>16</sup> Economic Impact of Travel on Tennessee 2022, Knox County 2022 Snapshot.

<sup>17</sup> "Economic Benefits of Trail Use at the Knoxville Urban Wilderness", University of Tennessee Center for Energy, Transportation, & Environmental Policy, Alecia Evans, Eugene Fitzhugh, Douglas Gregory, and Charles Sims, November 2023.



million in private investment in the south waterfront. Connecting UT to the south waterfront area will strengthen future growth and revitalization of these communities.

With the bridge in place, more people will be attracted to the Down-River area (census tract 24), APP and HDC neighborhoods that once faced “historic underinvestment” will attract private capital and

experience growth in property values.<sup>18</sup> The table below shows the Knox County Tax Assessor’s appraised value for vacant property (parcels) and buildings and improvements in 2000, 2010, and 2023 for the four South Knoxville Waterfront census tracts.<sup>19</sup> The Assessor’s appraised value for improved properties in these 4 census tracts increased by \$840,000,000 from 2000 to 2023.

Census Tract	Total Appraised Value - Parcels			Total Appraised Value Buildings and Improvements		
	2000	2010	2023	2000	2010	2023
8	\$14,132,300	\$25,924,100	\$74,992,600	\$67,375,800	\$122,611,500	\$338,772,200
22	\$16,158,800	\$32,956,800	\$34,526,500	\$58,960,300	\$94,587,000	\$244,433,300
23	\$17,843,400	\$31,612,900	\$46,380,400	\$65,624,200	\$99,036,300	\$237,896,500
24	\$21,587,700	\$45,864,400	\$68,030,600	\$53,986,200	\$108,457,100	\$264,781,400
<b>TOTAL</b>	<b>\$69,722,200</b>	<b>\$136,358,200</b>	<b>\$223,930,100</b>	<b>\$245,946,500</b>	<b>\$424,691,900</b>	<b>\$1,085,883,400</b>

Source: Knox County Tax Roll Snapshots; Compiled by: Knoxville-Knox County Planning; 1/31/2024

The increase in appraised value of buildings and improvements includes new developments and renovation of older buildings to accommodate new uses as well as increases in the value of single-family homes. Two single family residences in census tract 22 were pulled randomly to review, one property was appraised at \$81,000 in 2020 and increased to \$187,700 by 2023. A second residence valued at \$90,700 in 2020 is now appraised at \$217,500.<sup>20</sup>

**Promote greater public and private investments in land use productivity to support equitable development.**

**The Data:** The bridge project will create a safe and accessible pedestrian connection between UT and south waterfront businesses and residents.<sup>21</sup> In addition to the 46,500 students and staff at the University, more than 23,720 employees north of the river are within walking or biking distance of the bike ped bridge and the

south waterfront.<sup>22</sup> The bike-ped bridge makes neighborhoods and businesses north and south of the river more accessible by connecting to more “walker-friendly” environments including more trails and mixed use live-work-play places. Over \$500 million in private funding has been invested in south waterfront development already. UT recognizes the importance of building safe and accessible bike and pedestrian connections between campus, the river, and the south waterfront neighborhoods.<sup>23</sup>

The development patterns around the bike-ped bridge will utilize transportation efficient land use and design with compact and walkable neighborhoods, open spaces, and complete streets to encourage affordable active transportation and equitable access for APP and HDC neighborhoods. Housing in a range of price points is a priority and the City and its public and private partners have

<sup>18</sup> “Knoxville’s South Waterfront Redevelopment Area: A 20-year Plan for Revitalization and Preservation of the South Riverfront” prepared by the City of Knoxville, January 2022, p. 2.

<sup>19</sup> Knox County Assessor, Tax Rolls for census tracts 8, 22, 23, and 24, data compiled by Knoxville-Knox County Planning, 1/31/2024.

<sup>20</sup> Knox County Assessor appraisal data, properties from census tract 22, Jan 1, 2023.

<sup>21</sup> UTK Fact Book, Institutional Research and Strategic Analysis, 2023

<sup>22</sup> “Major Employers in Knoxville Area”, Knoxville Chamber of Commerce, 2023.

<sup>23</sup> “The University of Tennessee Knoxville Master Plan 2023.”

invested more than \$50 million in the past 5-years to build new affordable housing.

Knoxville has adopted a form-based code and created form districts to foster mixed use, pedestrian friendly neighborhoods. Existing affordable single-family housing in the Down-River vicinity will be preserved to maintain the small-town neighborhood feel of this area. New housing and commercial options will be walkable and bikeable with connections to transit stops, greenways, parks, and public access to the river. Higher density mixed use buildings will feature live-work options along with spaces for small businesses, mixed income residential, business incubators, and art studios.

***The Solution:*** Construction of the bike-ped bridge will facilitate additional tourism connections in south Knoxville linking downtown, UT, and lodging concentrations to outdoor assets in South Knoxville. The bridge will leverage long-term economic growth by attracting private capital to invest in market-rate and affordable housing and commercial spaces, encouraging new small businesses to locate here, and connecting affordable housing and low-cost transportation options to daily destinations providing more equitable access to APP and HDC residents. Walkable connectivity to the south waterfront will drive additional public and private investment and an ongoing partnership between the City, the University of Tennessee, and other partners will ultimately make this project and plan an outstanding success.

## State of Good Repair

Essential purpose of this project to protect active transportation users and the project investment.

***The Transportation Problem:*** Chapman Highway was originally built in 1930 and lacks safe, protected active transportation infrastructure. Without active transportation options, there will be more vehicles on this corridor, increased emissions, and eventually increased vehicular traffic will require construction of additional traffic lanes and maintenance expenses on this highway.

### *Reduce construction and maintenance burdens*

***The Data:*** Careful consideration of design choices and materials for the bridge will reduce construction and maintenance burdens. The bridge will be constructed using weathering steel, a corrosion-resistant type of steel which forms a protective patina preventing damaging corrosion from occurring and eliminating the need for painting and coatings. The hangers for the main span arch bridge will be made of galvanized bridge strand that does not require an additional coating. With proper detailing, this bridge structure will not need to be painted at the time of fabrication or at any time during its service life. This eliminates the use of expensive hazardous painting and cleaning products normally used throughout a bridge's useful life. To alleviate long-term maintenance concerns,

the main components of this arch span bridge and the beams of the smaller end span sections will also use weathering steel reducing the cost of ongoing maintenance and repairs. The unique design of the network cable technology on a true arch reduces the amount of steel needed to carry the loads while improving the bridge's ability to sustain damage to any hanger or connection. This unique design reduces construction and maintenance burdens and the bridge's carbon footprint.

### *Address current transportation system vulnerabilities for underserved communities*

Without options for low-cost transportation choices, vulnerable residents do not have equitable access to better job opportunities, essential services, connection to full-service grocery stores, or access to major medical facilities. Maintaining this bridge will be essential to the underserved communities who will rely on it. To facilitate the ease of bridge inspection, the main span arch is designed in box sections and the size has been developed based on aesthetics, efficiency, and ease of inspection using a width and depth

of the box permitting inspectors to traverse through the interior of the arch ribs without the need for rope climbing access or large on-deck equipment.

The bike-ped bridge will be owned and maintained by the City of Knoxville. The city follows TDOT's bridge inspection protocol complying with the National Bridge Inspection Standards (NBIS). This is a significant bridge so the City will request TDOT to add this bridge to their bi-annual maintenance and inspection cycle.

***The Solution:*** The design and material choices selected for the bridge reduce construction and maintenance burdens for the bridge. In addition, the design for the project minimizes the number of joints on the bridge providing a structure that can handle thermal effects with its design. The main span arch has a resilient layout consisting of a continuous section of deck running the full 710-ft. length without a joint. This addresses a transportation system vulnerability. Ensuring outstanding maintenance of the bridge is essential for active transportation users and the disadvantaged communities who will rely on it.

## Partnership and Collaboration

Remains a cornerstone of this project and essential element of project success.

### *Engage residents and community organizations throughout the project lifecycle.*

The South Knoxville Waterfront Bike and Pedestrian Bridge was conceived during a community visioning process to revitalize south waterfront communities from isolated and underserved areas of the city to a regional and even national asset for local residents and visitors. Equity is at the core of this process, and it is a fundamental value of the City and its project partners. Decision making for this project and the waterfront plan is deeply rooted in active public involvement, engaging residents and community organizations to include equity considerations for underserved communities. The bridge has been a part of this plan since 2006 and residents will continue to be involved in this project as the bridge design and construction progresses. Many public and private partners are working together to advance this plan and build the bridge including residents and community organizations in the south Knoxville waterfront communities, the City of Knoxville, University of Tennessee, Tennessee Department of Transportation, Knoxville's Community Development Corporation, Knoxville Area Urban League, Appalachian Mountain Bike Club, and BikeWalk Knoxville.

The City has used a number of public involvement tools during this collaborative partnership to obtain meaningful feedback from residents who live in the south waterfront, and they have taken additional steps to ensure that APP and HDC communities are fully engaged. Some of these tools are included in USDOT's Promising Practices for Meaningful Public Involvement Guide including Open Houses with interactive displays and VR headsets; drop-ins where people can learn about the project, ask questions and make comments, and view project renderings and maps; and Focus Groups or small group discussions to give the project team and community residents a more in-depth opportunity to talk about what they hope for from the project and any concerns.

A project Open House held in the community several months ago was attended by 250 people. A Community Workshop was held on February 22, 2024, in census tract 8 to provide a bike-ped bridge update for residents and discuss next steps with officials and team members. Additional public engagement activities and opportunities for community input will continue throughout this project so residents always have a way to share ideas or get current information about the project.

Plans for the right-of-way (ROW) were developed to maintain community cohesion and minimal disruption to local street patterns.

Most of the right-of-way acquisitions (ROW) for the bridge was acquired from 3 vacant industrial tracts. The remaining parcels include 1 vacant residential lot, 2 vacant commercial lots used for parking, 2 rental residential properties, and a small business that will be relocated..



### *Coordinate with other types of projects.*

The main campus of the University of Tennessee (UT) is across the river from the South Knoxville Waterfront. UT is an important partner in the bridge project and the revitalization of the waterfront area. The University’s 2023 campus master plan reflects their commitment to “improve connections from the campus to the community, downtown, and the river”.<sup>24</sup> UT is developing a greenway on campus that connects near the bike-ped bridge and there is a transit stop for the KAT and “T” transit systems at the end of the north bridge landing. The University is working in partnership with the City and Knoxville’s Community Development Corporation (KCDC) to acquire a Down-River property and will donate a portion of the tract for bridge right-of-way. The remainder of the parcel will be used for future development that aligns with the form-based code. There are several new affordable housing developments in the south waterfront and additional affordable housing is planned for the Down-River communities.

Projects for mixed use development may provide spaces for small businesses, entrepreneurial incubator spaces for innovative technologies, and office space that might accommodate “office hoteling”, art studios, and other economic developments. The opportunity to create collaborative learning and study centers connected to amazing natural areas creates cohesive connections to the many assets that make the South Knoxville Waterfront a special place.

<sup>24</sup> The University of Tennessee 2023 Master Plan, June 2023.



## Innovation

### *Innovative Technologies and Materials*

The Knoxville bridge being designed for this project will be a **one-of-a-kind structure, with the first use of network cable technology on a true arch**. The network cable technology utilizes an arrangement of multiple crossing cables between the arch ribs and the walkway providing not only a unique aesthetic, but dramatically reducing the amount of steel needed to carry the loads while improving the bridge's ability to sustain damage to any hanger or connection. Past applications of network technology have been limited to tied arches, which utilize a large steel tension tie to counteract the thrust of the arch members.

This tension tie is often a bulky steel member which is failure critical and requires significant efforts in design and inspection to ensure the structure remains sufficiently robust throughout its service life. The proposed network true arch system for the Knoxville bridge provides the benefits of the network hanger arrangement, but without requiring a nonredundant steel tension tie. Instead, the outward thrust of the arches is resisted by the foundations, which carry this load. The 710-foot-long clear span arch over the river does not have any piers in the water eliminating impacts on the environment.

Most steel structures are painted to help prevent corrosion of the steel over time. The

bike-ped bridge will utilize weathering steel, a corrosion-resistant type of steel which forms a protective patina that prevents damaging corrosion from occurring without the need for painting. The hangers for the main span arch bridge will be made of galvanized strand which also does not require an additional coating.



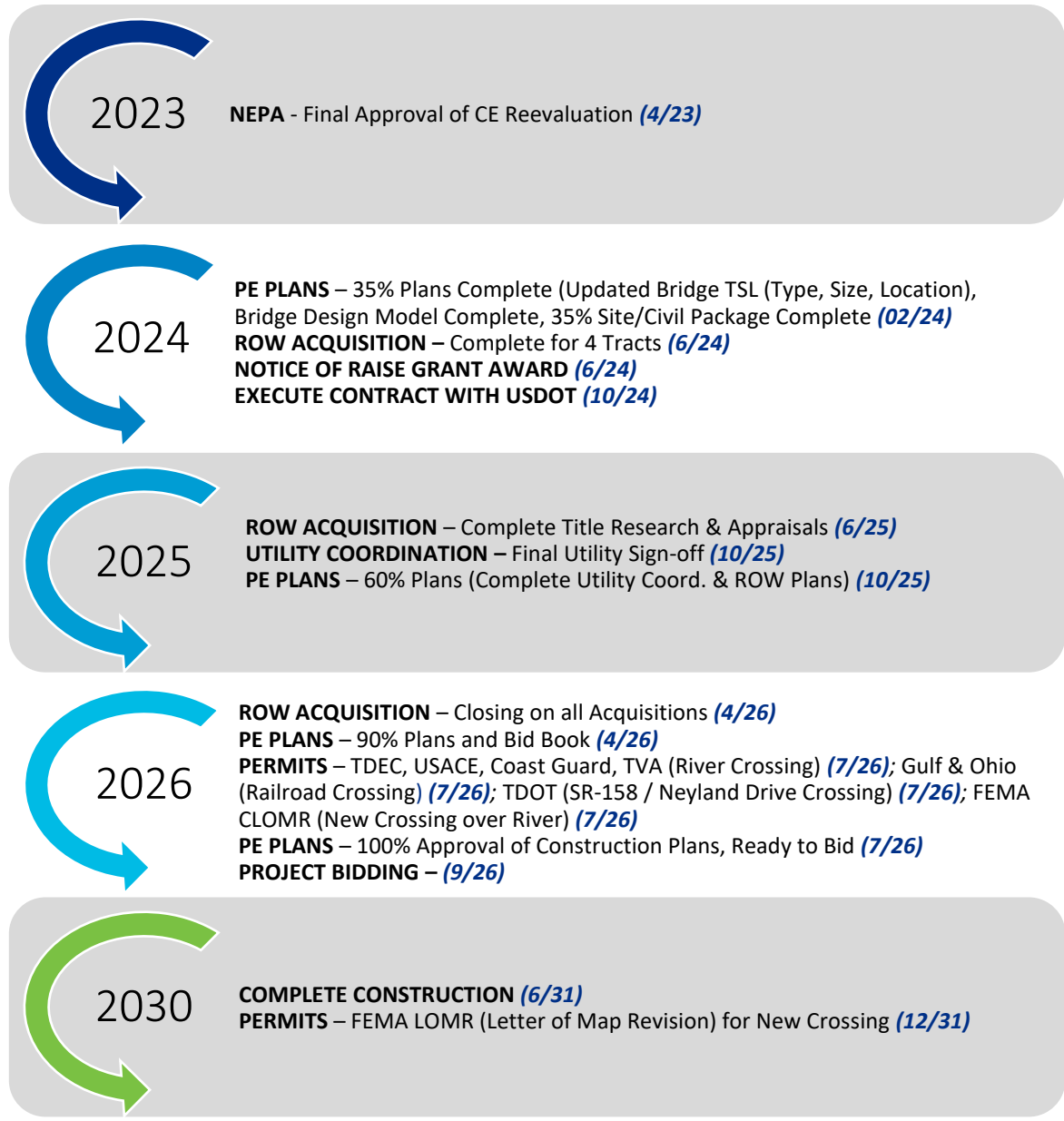
*South Knoxville Waterfront Bike and Pedestrian Bridge, bridge rendering prepared by Modjeski & Masters*

The bridge will benefit from the use of innovative materials. A concrete deck will be used for the walking/biking surface, while concrete decks are nothing new, significant advances in materials and construction techniques have improved the performance of the deck. The bridge deck service life will be the same as the rest of the structure, **no re-decking operations would be needed throughout the bridge's service life**. This will be achieved by using state-of-the-art additives like non-metallic fibers in concrete, mix designs, curing protocols, and non-metallic reinforcing bars. These efforts will make significant strides towards the goal of having a deck system that will not need to be replaced over the service life of the structure.

# PROJECT READINESS

## Project Schedule

The project schedule includes the major project activity milestones. NEPA is complete, 35% design is complete, and four ROW acquisitions are complete. Based on the project status, we would anticipate proceeding to contract obligation within four months of grant award. Once the RAISE funds are obligated and the contract is executed, construction will begin within 26 months, and construction will be completed, and all project funds expended for the project 54 months following the start of construction.



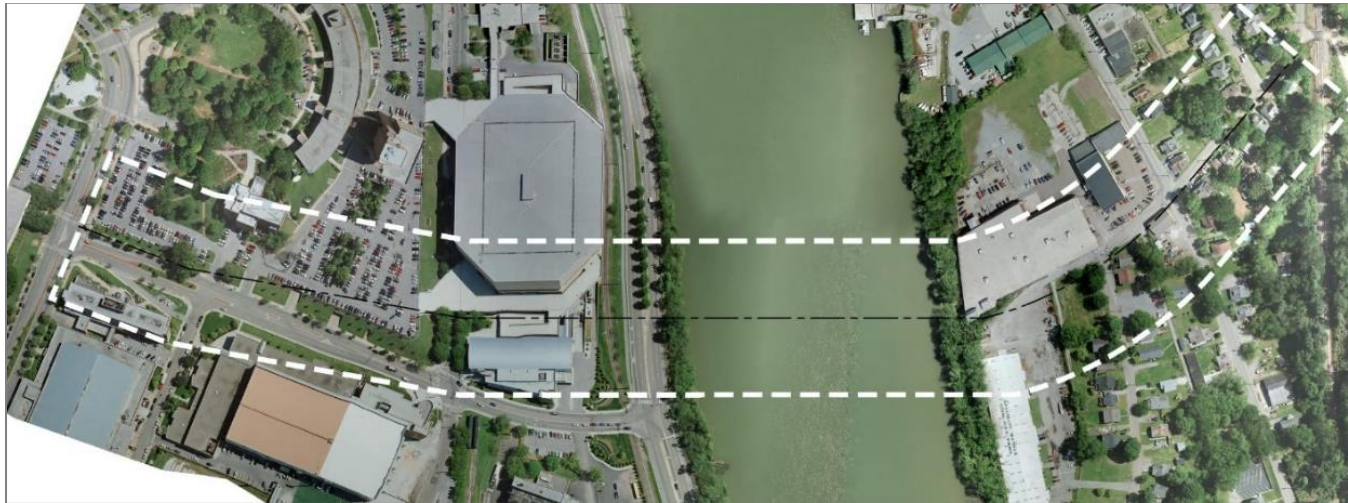
## Environmental Risk

The NEPA process for this project has been completed. The City of Knoxville secured a Tennessee Department of Transportation (TDOT) D-List Categorical Exclusion (CE) for the South Knoxville Waterfront Bike and Pedestrian Bridge project that was approved by TDOT on 10/24/2014. *(See attached Supporting Documents.pdf for copies of 2014 Project D-List CE, 2018 Reevaluation, and TDOT email regarding 2023 Reevaluation.)* The CE boundary established for the project is shown below. The CE approval is premised on the understanding that no bridge piers will be constructed in the river. In addition, design issues such as pier placement, laydown areas, and haul road access to the bridge site will be carefully evaluated with respect to Section 106 compliance included with the approved CE.

The approved CE was coordinated with input from the Tennessee Department of Environment and Conservation (TDEC), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), Tennessee Wildlife Resource Agency (TWRA), and the State Historic Preservation Office (SHPO). The fundamental design concept for the long-span arch bridge in this project includes a clear

span over the river with foundations on each bank. The design eliminates many environmental impacts and costs that might otherwise occur if foundations were built in the river.

In 2017, the city began a re-evaluation of the environmental document. On 2/12/2018 TDOT advised the City the D-List CE remained valid for this project. On March 2, 2023, TDOT's Environmental Division notified the City of Knoxville that a re-evaluation of the project was not necessary, as there had been no significant changes to the project design or scope of the project. Per TDOT's Environmental Division, "re-evaluations need to be completed when there have been significant changes to the project design or scope". The City's notified TDOT's Environmental Division that project plans had not changed since the prior NEPA re-evaluation document was completed. The City was advised "the length of time the NEPA document would remain valid depended on whether or not any significant changes were made to the project design or scope". Based upon this guidance from TDOT, the NEPA process for this project is complete at this time as no significant changes to the project design or scope are planned.



*Knoxville Bike and Pedestrian Bridge CE Project Boundary*



## Required Permits and Approvals

Documents prepared for the NEPA analysis included: cultural and natural resources, community impacts, environmental justice, hazardous materials evaluation, and consideration of impacts to park land. Once the final bridge design is completed, the City of Knoxville will review building permits, stormwater impacts, and site plan compliance with local planning ordinances. A list of other permits and approvals are identified below. The time required to submit and secure the approvals and permits are included in the project schedule.

1. National Pollutant Discharge Elimination System Permit
2. Construction General Permit (CGP) with Storm Water Pollution Prevention Plan (SWPPP) from TDEC
3. ARAP Permit may be required from Tennessee Department of Environment and Conservation (TDEC)
4. Local Government Permit for construction on and above TDOT right-of-way
5. Air rights permit for crossing TDOT right-of way
6. United States Army Corp of Engineers (USACE) Permit
7. Review and approval by the Tennessee Valley Authority (TVA) for 26A permit for shoreline construction
8. Review and permit from the Coast Guard to confirm required clearances over the navigable channel of the Tennessee River
9. Review and permit from Gulf and Ohio Railroad to confirm required clearance over their railroad tracks.
10. Review Floodplain with City of Knoxville to verify no rise impact
11. Submittal of Conditional Letter of Map Revision (CLOMR) to FEMA for new bridge crossing over the Tennessee River
12. The Project is included in the 2023 – 2026 Transportation Improvement Program (TIP)
13. Design review and approval from the TDOT, the University of Tennessee, and the City of Knoxville

## Right-of-Way Acquisition

No right-of-way acquisitions will be required for the bridge landing on the north side of the Tennessee River. An air rights easement will be secured over the Gulf and Ohio short line railroad, Neyland Drive owned by TDOT, and a section of greenspace owned by the University of Tennessee.

### South Knoxville Waterfront Bike and Pedestrian Bridge R.O.W. South Landing

Map Parcel #	Description	Address
1	Acquired	2323 W. Blount Ave.
2	TVA Easement	
3	Commercial (partial take)	Scottish Pike
4	Commercial parcel – in negotiation with KCDC	2547 Scottish Pike
5	Vacant residential lot	Scottish Pike
6	Residential property	2500 Scottish Pike
7	Residential property	2504 Scottish Pike
8	Acquired	2512 Scottish Pike
9	Small business property	2501 Blount Ave.
10	Vacant parcel, parking for parcel 9 business	2505 Blount Ave.
11	Vacant parcel, parking for parcel 9 business	2509 Blount Ave.

There are eleven parcels on the south side of the river requiring acquisition of partial tracts or the entire parcel for project right-of-way (ROW). The cost shown for property acquisition in the project budget includes only property required for project ROW. Knoxville Community Development Corporation (KCDC) has acquired two parcels and two additional parcels are under contract. Acquired property not utilized for ROW will be held for future

development in accordance with the waterfront plan. All property acquisitions will follow 49 CFR part 24, 23 CFR part 710 and other applicable legal requirements. Properties acquired by KCDC are held by the Greater TN Housing Assistance Corporation, a wholly owned subsidiary controlled by KCDC.

## Project Public Engagement

Public engagement activities for this project were initiated in October 2011 and have continued through NEPA and planning for the project. The City of Knoxville remains committed to engaging the public as the project progresses to completion, particularly residents of Persistent Poverty and Historically Disadvantaged Communities in the South Waterfront neighborhoods.

## State and Local Approvals

This project is programmed in the 2023 – 2027 Knoxville TPO Transportation Improvement Program. A copy of the TIP for this project is attached in the Funding Commitment section.

## Federal Transportation Requirements Affecting State and Local Planning

This project is programmed in the 2023- 2027 TIP within the Bike and Pedestrian Grouping.

## Assessment of Project Risks and Mitigation Strategies

In 2006, the South Knoxville Waterfront Redevelopment Plan was adopted to improve the South Knoxville waterfront. People have invested thousands of hours discussing the vision and action plan in public meetings, collaborations between organizations, and public and private partnerships. The public sector has invested more than \$70 million in strategic projects helping to leverage over \$500 million in private investment with more planned in the near future.

The NEPA process for this project has been completed. The project has completed 35 percent designs and a detailed value

engineering process has helped to reduce costs utilizing innovative design and materials. The cost estimate for the project was completed in January 2024.

Two parcels required for the project right-of-way have been acquired, a third parcel is under contract. Air rights will be acquired from four entities Tennessee Valley Authority, UT, TDOT, and Gulf and Ohio Railroad. KCDC, will lead the acquisition of three parcels, the air right easements, and will oversee the Aslan Foundation who will acquire the remaining parcels following all applicable regulations.

Although completion of these project milestones reduces project risks, the city and their design team continued to assess potential project challenges. A 10 percent construction contingency has been included in the budget to address unforeseen cost increases. The schedule for design and construction will accommodate limited delays if intermittent shortages occur.

## Technical Capacity Assessment

The City of Knoxville's Engineering Department has managed numerous federally funded transportation and development projects following the Local Government Guidelines from Tennessee Department of Transportation (TDOT) as well as federal requirements governing federal discretionary grant programs. Examples of major projects recently managed by Knoxville Engineering Department include Hill Avenue Viaduct Rehabilitation, Grainger Ave Bridge Replacement, I-275 Business Park Access Improvement, and Jackson Ave. Ramps Project.

The City's experience in all phases of project management for federally funded projects has met or exceeded the requirements of many federal agencies including USDOT, the Federal Aviation Administration, Federal Transit Administration, U.S. Department of Housing and Urban Development (HUD), U.S. Department of Commerce, Environmental Protection Agency, and the U.S. Department of Energy.

# BENEFIT COST ANALYSIS

## Executive Summary

The Tennessee River and Appalachian Mountains’ topography creates a natural barrier constraining mobility and connectivity to/from South Knoxville. These natural barriers constrain housing and commuting patterns, resulting in longer commuting, increased travel time, and accidents.

The proposed infrastructure provides a pedestrian bridge across the Tennessee River for walking, biking, etc., connecting South Knoxville, the University of Tennessee (UT) main campus, medical centers, and major employment concentrations. Bridge landing ramps link users to existing greenways, trails, and transit. This benefit-cost analysis (BCA) evaluates the project costs and associated benefits of building a new Tennessee River Pedestrian Bridge.

## Overview, Alternatives, and Benefit Types

Current Status/Baseline and Problem	Alternative Change to Baseline	Benefit Types
Current natural barriers constrain housing and commercial development, and increase travel time, and accidents.	Build a new Tennessee River Pedestrian Bridge connecting existing and planned student housing across from the central UTK campus, sport/entertainment venues, medical facilities, and employment centers.	The bridge reduces travel disbenefits (e.g., distance, safety, accident, and emission savings), fosters mortality reduction, and facilitates active transportation amenity benefits associated with mode shifting from vehicles to pedestrian.

The BCA starts in 2024 with planning and engineering services, followed by 2025 to 2027 construction, and a 30-year operating horizon thereafter. Monetary costs and benefits are estimated in 2022\$ and summarized in standard metrics such as a benefit-cost ratio (BCR), net present value (NPV), internal rate of return (IRR), payback period, etc.

*Conclusions* – Discounting the estimated capital costs and 30-year travel efficiency benefits at 3.1% discounting (2.0% for CO2) yields \$237.9m net benefits and \$50.4m net costs, resulting in a positive \$187.5m NPV, equating to a 4.72 BCR, and payback period by 2034.

*Major Factors/Sensitivities* – Capital costs are a major assumption. On the benefits-side, the major determinates are mortality reduction and facility amenities associated with vehicle to pedestrian/bike trip diversions, VMT-related benefits (VOC, safety, and emissions) cost-savings, and congestion reduction externalities.

## Overview, Alternatives, and Benefit Types (\$2022)

Net Present Components (millions)	
Benefits	\$237.9
Costs	-\$50.4
Value (NPV)	\$187.5
Other Summary Metrics	
Benefit-Cost Ratio (BCR)	4.72
Internal Rate of Return (IRR)	16.7%
Payback Period	2034



## Approach

This benefit-cost analysis (BCA) evaluates building a 25’ wide by 1,660’ long pedestrian bridge to accommodate commuting demand on congested roadways (and Chapman Bridge) to a more direct, pedestrian-oriented route. Accommodating the modal shift from vehicles to pedestrian would reduce travel disbenefits (e.g., distance, safety, accident, and emission savings) and foster mortality reduction and amenity benefits.

The bridge includes a 710’ span over the Tennessee River, three north-end spans (25’, 135’, and 140’) connecting to the UTK campus, four south-end spans (130” each), and a 130’ ramp connecting near Clancy Avenue (South Knoxville). The analysis follows RAISE BCA guidance and recommended values.<sup>1</sup> These and other sources/materials are provided in the accompanying workbook.

**No-Build Alternative** – Reflects current and future travel congestion and mortality disbenefits associated with UTK commuting (student, faculty, and staff) from residences south of the Tennessee River to the central UTK campus, sport/entertainment venues, medical facilities, and employment centers. Existing roadway/bridge constraints and limited pedestrian/bike lanes inhibit non-vehicle transport.

**Build Alternative** – Construct a pedestrian/bike bridge to alleviate roadway congestion and mortality disbenefits associated with commuting patterns from current and future housing development.

Table 1: Overview, Alternatives, and Benefit Types

Current Status/Baseline and Problem	Alternative Change to Baseline	Benefit Types
Current natural barriers constrain housing and commercial development, and increase travel time, and accidents.	Build a new Tennessee River Pedestrian Bridge connecting existing and planned student housing across from the central UTK campus, sport/entertainment venues, medical facilities, and employment centers.	The bridge reduces travel disbenefits (e.g., distance, safety, accident, and emission savings), fosters mortality reduction, and facilitates active transportation amenity benefits associated with mode shifting from vehicles to pedestrian.

**Basic Parameters** – The BCA starts in 2024 with preliminary planning and engineering (P/E), followed-by a 2025 to 2027 capital construction timeframe, and a subsequent 30-year operating horizon. Costs and benefits are evaluated in 2022\$ and discounted at 3.1% (except CO2 at 2.0%), per USDOT guidelines, and summarized in standard BCA metrics such as a benefit-cost ratio (BCR), net present value (NPV), internal rate of return (IRR), payback period, etc. The following table summarizes the significance of the various cost and benefit categories as enumerated in the following subsections.

<sup>1</sup> <https://www.transportation.gov/office-policy/transportation-policy/benefit-cost-analysis-guidance-discretionary-grant-programs-0>

Table 2: Cost and Benefit Types

Type	Description	Significance
Costs	P/E, Design, Construction	High
User Benefits	Vehicle Operating. Cost	Medium
	Safety	Medium
	Emissions (NOX, PM2.5, SOX, CO2)	Low
	Congestion Externalities	Low
	Ped/ Bike Mortality Reduction	High
	Facility Amenities	High
Agency Benefits	Agency - Operations and Maintenance Costs	Medium
	Agency - Residual Value	Low

Differential construction lifecycle costs (build vs. no-build scenarios) are compared against the expected net societal benefits stemming from the bridge construction. Societal benefits reflect travel efficiency-related cost savings (vehicle operations, safety, emissions, and congestion externalities), and Ped/Bike mortality reduction and facility amenities.

### Project Facility Costs

**Bridge Implementation Capital Costs** – Costs shown below are in year 2022\$ values and would span four years (2024-2027). The \$53.3m includes planning/engineering and final design (\$4.0m, 7.4%) in year 2024. Construction (bridge and approaches), ROW, utilities, CEI, and contingencies span three years (2025-2027) totaling \$49.4m (92.6%).

Table 3: Annual Capital Cost Summary by Type (2022\$, millions)

Year	Plan/Design	Construction	Total	Discounted
2024	\$3.95	\$0.00	\$3.95	\$3.95
2025	\$0.00	\$16.45	\$16.45	\$15.96
2026	\$0.00	\$16.45	\$16.45	\$15.48
2027	\$0.00	\$16.45	\$16.45	\$15.01
Total	\$3.95	\$49.36	\$53.31	\$50.40

### Benefit Analysis Assumptions

Assumptions regarding daily traffic volume, vehicle occupancy, unit costs, diverted trips, etc. are discussed below. All tables are provided in the accompanying BCA Excel workbook.

**Traffic Volumes** – A Knoxville VISSIM model (TDM) was used to simulate base and future years’ average daily vehicle volumes (years 2023 and 2045, respectively) and pedestrian/bike diversions. Modeling runs were conducted for three peak-hour time periods and time of year. Peak-hours comprise an AM peak (7-8 AM), a midday (12-1 PM), and evening (5-6 PM). Time of year reflects 200 in-session school weekdays, 60 not-in-session weekdays, and 100 weekend days. Peak-hour/time-period volumes were used to annualize build vs. no-build vehicle volumes.

The VISSIM model focused on the University of Tennessee central Knoxville area directly affected by the proposed pedestrian bridge. Several new student housing developments are planned over the next 10+ years comprising roughly 1,000 units with 2,000 beds. This major influx of new students commuting across the Tennessee River will significantly exacerbate congested traffic over the Chapman Bridge. Ped/Bike diversions were based on ITE data and a UTK study. While both studies provided similar diversion data, the localized UTK study provided

additional data that accounted for constraints associated with the Tennessee River.

The analysis found annual VMT savings of 0.3m (2.4%) in 2023 rising to 2.2m (13.4%) by 2045, resulting in diverted trip savings of 0.3m (1.9%) in 2023 and 1.5m (6.0%) by 2045.

**Table 4: Annual VMT Savings and Diverted Trips**

Year	Vehicle Distance Travelled (VMT)	Vehicle Trips (1x) Diverted to Ped.
<b>2023</b>		
No Build	10,738,302	17,135,878
Build	<u>10,480,403</u>	<u>16,816,895</u>
Change	-257,898	-318,983
Percent	-2.4%	-1.9%
<b>2045</b>		
No Build	16,237,653	24,374,870
Build	<u>14,069,316</u>	<u>22,902,599</u>
Change	-2,168,337	-1,472,271
Percent	-13.4%	-6.0%

**User Benefit Assumptions** – VMT-related, trip-diversion, and pedestrian journey quality valuation benefits were developed based on USDOT BCA guidance. VMT-related benefits include vehicle-operating, accident (safety), emissions, and congestion externality cost-saving benefits. Morbidity reduction methods were used to assess trip-diversion related benefits. And active transportation infrastructure amenities valuation was used to monetize benefits.

- *Vehicle Operating* – Values and factors used include average vehicle occupancy (1.67), and VOC/mile for light duty vehicles (\$0.52), per USDOT Guidelines, which are applied to the VMT reductions.
- *Safety* – Year 2022 Tennessee accident rates and VMT were applied to USDOT rates by severity type to estimate an average accident cost of \$0.402 per VMT, as summarized in Table 5.
- *Emissions* – Were quantified and monetized by type. A Non-CO2 cost factor of \$0.012 and a CO2 factor of \$0.107 were applied to annual VMT changes, per BCA Guidelines discussion on modal diversion (Table A-14).

**Table 5: Safety Factors (2022\$)**

	VMT (million)	Crashes		Cost	
		Number	per 100m VMT	per Type	per VMT
Travel Distance	83,220				
Accident Severity					
Fatalities		1,265	1.52	\$14,022,900	\$0.213
Injuries		46,124	55.42	\$313,000	\$0.173
PDO		139,952	168.17	\$9,100	\$0.015
Avg. Cost per VMT					\$0.402

- *Mortality Reduction* – Unit cost-savings per trip are applied to diverted Ped/Bike trips to quantify user benefits, accounting for user age. Walking trips are assumed to account for 85% of the diverted trips, and benefits are accounted for those between the ages 20-74 (68% of walking trips). Cycling trips are assumed to account for 15% of the diverted trips, and benefits are accounted for those between the ages 20-64 (59% of cycling trips).
- *Congestion Externalities* – The recommended value of \$0.138 per VMT was applied to VMT reductions, per USDOT Guidelines.

**Agency Benefit Assumptions** – Include the additional O&M costs and the residual value:

- *O&M Costs* – The disbenefits associated with annual bridge operation and maintenance costs assume annual drainage cleaning, bi-annual bridge inspection, and lighting (every five-years) as summarized in table below.

**Table 7: Annual User Benefits (Undiscounted 2022\$, millions)**

Year	VOC	Safety	Emissions		Amenities	Congest.	Mortality	Total
			non-CO2	CO2		Extern.	Reduction	
2028	\$0.34	\$0.26	\$0.01	\$0.07	\$1.81	\$0.09	\$1.87	\$4.45
2029	\$0.34	\$0.26	\$0.01	\$0.07	\$1.81	\$0.09	\$1.87	\$4.45
2030	\$0.92	\$0.71	\$0.02	\$0.19	\$4.88	\$0.25	\$5.04	\$12.01
2035	\$1.13	\$0.87	\$0.03	\$0.23	\$5.95	\$0.30	\$6.15	\$14.66
2040	\$1.13	\$0.87	\$0.03	\$0.23	\$5.95	\$0.30	\$6.15	\$14.66
2045	\$1.13	\$0.87	\$0.03	\$0.23	\$5.95	\$0.30	\$6.15	\$14.66
2050	\$1.13	\$0.87	\$0.03	\$0.23	\$5.95	\$0.30	\$6.15	\$14.66
2055	\$1.13	\$0.87	\$0.03	\$0.23	\$5.95	\$0.30	\$6.15	\$14.66
Total	\$31.24	\$24.15	\$0.72	\$6.43	\$164.93	\$8.29	\$170.38	\$406.13

**Table 6: O&M Frequency and Costs (2022\$)**

O&M	Freq. (Yrs.)	Cost
Drainage	1	\$10,000
Inspection	2	\$60,000
Lighting	5	\$15,000

- *Residual Value* – A 50-year life cycle was assumed for the bridge. Given the 30-year analysis horizon, a 20-year remaining life is assumed totaling 40% of the construction value, per USDOT guidelines. This results in an undiscounted agency benefit of \$19.7m in year 2057.

### Project Benefits

VMT-related, trip-related morbidity reduction, and facility amenity benefits are summarized below. Unit costs savings are applied to annual VMT travel benefits to monetize user cost-savings by type (vehicle operations, safety, emissions, and congestion externalities). Undiscounted user benefits are summarized below by type for opening and 5-year increments.

## BCA Summary

**Conclusions** – Discounting the estimated capital costs and 30-year travel benefits at 3.1% (2.0% for CO2) yields \$237.9m in net benefits versus \$50.4m in net costs, resulting in a positive \$237.9m NPV, equating to a 4.72 BCR, and a payback period by 2034, as summarized Table 8. Annual undiscounted benefits and costs are summarized by type in Table 9 and Figure 1. Discounted annual benefits and costs are graphed in Figure 2, which shows the annual cumulative total project value breaking-even in year 2034.

**Major Factors/Sensitivities** – Capital costs are a major assumption, especially with the early timing and lower net discounting. Discounted benefits are led by mortality reduction (\$96.8m, 40.7%) and active transportation amenities (\$93.7m, 39.4%) associated with trip diversion, VMT-related benefits (\$41.2m, 17%),<sup>2</sup> and agency benefits.

**Merit Criteria** – Of the eight merit criteria identified in the USDOT grant materials, a number are directly quantified and incorporated into the BCA, a few are indirectly quantified, and a couple are not directly pertinent to this BCA. Directly quantified and monetized benefits pertain to merit criteria: Safety (VMT reduction-related), Environmental Sustainability (VMT-emissions), Mobility and Community Connectivity (South Knoxville access to downtown Knoxville), Economic Competitiveness and Opportunity (increased travel reliability and faster travel time). Quality of Life is also improved for the commuters (mortality reduction). Partnership and Collaboration

and Innovation merit criteria are not quantifiable or monetizable within a BCA paradigm.

**Table 8: BCA Summary (2022\$, millions)**

<b>Net Present Benefits (millions)</b>			
Mortality Red. (Diverted Roundtrips)	User	\$96.8	40.7%
Amenities	User	\$93.7	39.4%
VMT-Related			
VOC	User	\$17.7	7.5%
Safety	User	\$13.7	5.8%
non-CO2	User	\$0.4	0.2%
CO2	User	\$4.4	1.9%
Congestion Externalities	User	\$4.7	2.0%
O&M	Agency	-\$0.7	-0.3%
Residual	Agency	\$7.2	3.0%
<b>Total Benefits</b>		<b>\$237.9</b>	<b>100.0%</b>
<b>Net Present Costs (millions)</b>			
P/E		-\$3.9	7.8%
Constr.		-\$46.4	92.2%
<b>Total Costs</b>		<b>-\$50.4</b>	<b>100.0%</b>
<b>Summary Metrics</b>			
Net Present Value (NPV, millions)		\$187.5	
Benefit-Cost Ratio (BCR)		4.72	
Internal Rate of Return (IRR)		16.7%	
Payback Period (year)		2034	
Breakeven Annual Benefits (millions)		\$2.9	

<sup>2</sup> VOC, safety, emissions and congestion externality cost-savings

Table 9: Annual Benefits and Costs by Type, and Discounting (2022\$, millions)

Years				Capital Costs			(dis) Benefits										Discounting				
Cap.	Ops.	Proj.	Cal.	P/E	Constr.	Subtotal	VOC	Safety	non-CO2	CO2	Amenities	Externalities	Mort. Red.	O&M	Residual	Subtotal	Total	3.1%	2.0%	Total	
1	0	0	2024	-\$3.950	\$0.000	-\$3.950	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	-\$3.950	1.000	1.000	-\$3.950
2	0	1	2025	\$0.000	-\$16.452	-\$16.452	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	-\$16.452	0.970	0.980	-\$15.957
3	0	2	2026	\$0.000	-\$16.452	-\$16.452	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	-\$16.452	0.941	0.961	-\$15.477
4	0	3	2027	\$0.000	-\$16.452	-\$16.452	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	-\$16.452	0.912	0.942	-\$15.012
0	1	4	2028	\$0.000	\$0.000	\$0.000	\$0.342	\$0.265	\$0.008	\$0.070	\$1.807	\$0.091	\$1.867	-\$0.010	\$0.000	\$4.441	\$4.441	\$4.441	0.885	0.924	\$3.933
0	2	5	2029	\$0.000	\$0.000	\$0.000	\$0.342	\$0.265	\$0.008	\$0.070	\$1.807	\$0.091	\$1.867	-\$0.070	\$0.000	\$4.381	\$4.381	\$4.381	0.858	0.906	\$3.764
0	3	6	2030	\$0.000	\$0.000	\$0.000	\$0.924	\$0.714	\$0.021	\$0.190	\$4.879	\$0.245	\$5.040	-\$0.010	\$0.000	\$12.004	\$12.004	\$12.004	0.833	0.888	\$10.006
0	4	7	2031	\$0.000	\$0.000	\$0.000	\$0.924	\$0.714	\$0.021	\$0.190	\$4.879	\$0.245	\$5.040	-\$0.070	\$0.000	\$11.944	\$11.944	\$11.944	0.808	0.871	\$9.658
0	5	8	2032	\$0.000	\$0.000	\$0.000	\$0.924	\$0.714	\$0.021	\$0.190	\$4.879	\$0.245	\$5.040	-\$0.025	\$0.000	\$11.989	\$11.989	\$11.989	0.783	0.853	\$9.405
0	6	9	2033	\$0.000	\$0.000	\$0.000	\$0.924	\$0.714	\$0.021	\$0.190	\$4.879	\$0.245	\$5.040	-\$0.070	\$0.000	\$11.944	\$11.944	\$11.944	0.760	0.837	\$9.089
0	7	10	2034	\$0.000	\$0.000	\$0.000	\$0.924	\$0.714	\$0.021	\$0.190	\$4.879	\$0.245	\$5.040	-\$0.010	\$0.000	\$12.004	\$12.004	\$12.004	0.737	0.820	\$8.862
0	8	11	2035	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.715	0.804	\$10.448
0	9	12	2036	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.693	0.788	\$10.178
0	10	13	2037	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.085	\$0.000	\$14.574	\$14.574	\$14.574	0.672	0.773	\$9.823
0	11	14	2038	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.652	0.758	\$9.578
0	12	15	2039	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.633	0.743	\$9.254
0	13	16	2040	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.614	0.728	\$9.015
0	14	17	2041	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.595	0.714	\$8.710
0	15	18	2042	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.025	\$0.000	\$14.634	\$14.634	\$14.634	0.577	0.700	\$8.476
0	16	19	2043	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.560	0.686	\$8.197
0	17	20	2044	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.543	0.673	\$7.985
0	18	21	2045	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.527	0.660	\$7.715
0	19	22	2046	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.511	0.647	\$7.515
0	20	23	2047	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.085	\$0.000	\$14.574	\$14.574	\$14.574	0.496	0.634	\$7.254
0	21	24	2048	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.481	0.622	\$7.073
0	22	25	2049	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.466	0.610	\$6.834
0	23	26	2050	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.452	0.598	\$6.657
0	24	27	2051	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.439	0.586	\$6.432
0	25	28	2052	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.025	\$0.000	\$14.634	\$14.634	\$14.634	0.425	0.574	\$6.259
0	26	29	2053	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.413	0.563	\$6.054
0	27	30	2054	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.400	0.552	\$5.897
0	28	31	2055	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.070	\$0.000	\$14.589	\$14.589	\$14.589	0.388	0.541	\$5.698
0	29	32	2056	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.010	\$0.000	\$14.649	\$14.649	\$14.649	0.376	0.531	\$5.551
0	30	33	2057	\$0.000	\$0.000	\$0.000	\$1.128	\$0.872	\$0.026	\$0.232	\$5.953	\$0.299	\$6.150	-\$0.085	\$19.742	\$34.316	\$34.316	\$34.316	0.365	0.520	\$12.566





Figure 1: Annual Benefits and Costs by Type (Undiscounted 2022\$, millions)

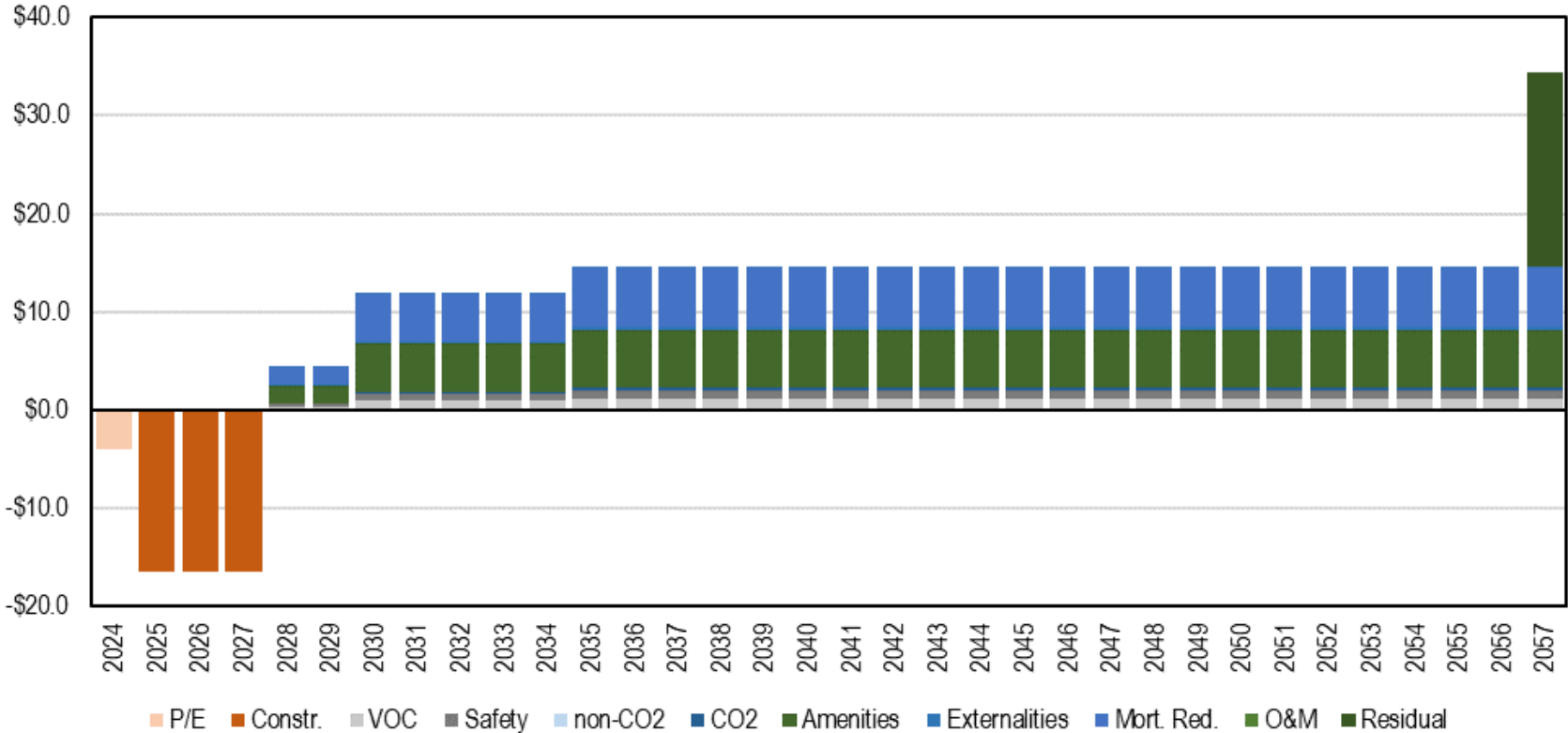
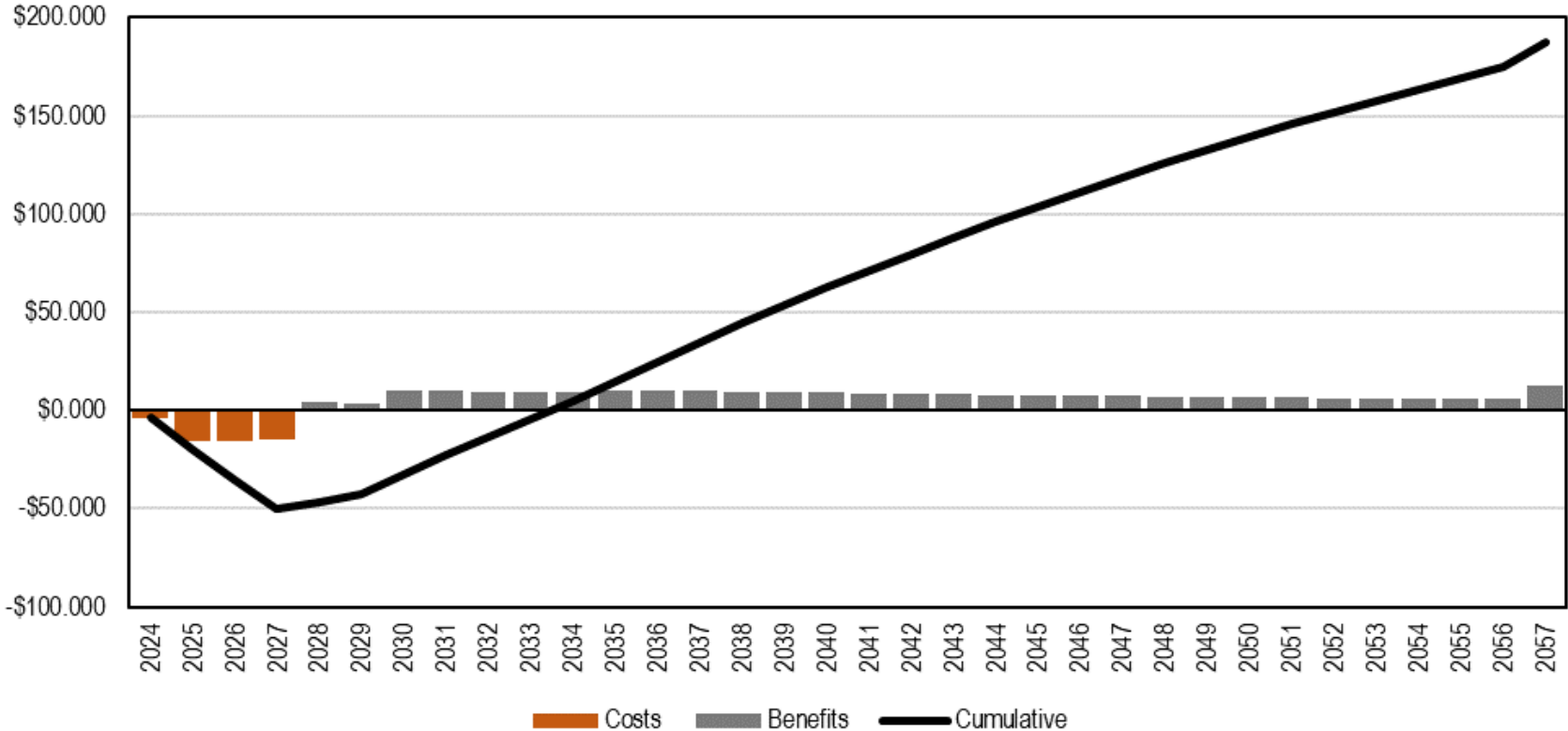




Figure 2: Total Annual Benefits and Costs (Discounted 2022\$, millions)





Tennessee Accidents

	VMT <sup>^</sup> (million)	Crashes*		Cost	
		Number	per 100m VMT	per Type	VMT (2022\$)
Travel Distance	83,220				
Accident Severity					
Fatalities		1,265	1.52	\$14,022,900	\$0.213
Injuries		46,124	55.42	\$313,000	\$0.173
PDO		139,952	168.17	\$9,100	\$0.015
Avg. Cost per VMT					\$0.402

TNDOT 2022<sup>^</sup>

<https://www.tn.gov/tdot/long-range-planning-home/longrange-road-inventory/longrange-road-inventory-highway-performance-monitoring-system.html>

<https://www.tn.gov/content/dam/tn/tdot/long-range-planning/road-inventory/2022-VMT-by-Admin-Sys.pdf>

TN Dept. of Safety and Homeland Security: TN Traffic Crash Data County Rankings and Statistics by Emphasis Area 2019–2023

[https://www.tn.gov/content/dam/tn/safety/documents/crash\\_stats/CountyCrashRankings.pdf](https://www.tn.gov/content/dam/tn/safety/documents/crash_stats/CountyCrashRankings.pdf)

VISSIM Simulation - TDM metrics by Year and Alternative

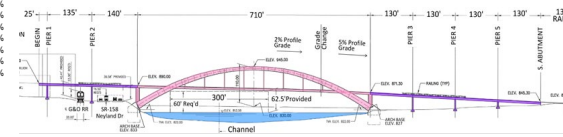
	7-8AM	12-1MD	5-6PM	Daily Total	Annualized
<b>2023 No Build</b>					
Total Distance of all Vehicles (mi)	6,421	6,925	8,853	82,510	10,738,302
Total Vehicles Arrived at Destination	9,707	11,478	14,899	134,964	17,135,878
<b>2023 Build</b>					
Total Distance of all Vehicles (mi)	6,267	6,920	8,601	81,221	10,480,403
Total Vehicles Arrived at Destination	9,585	11,362	14,699	133,369	16,816,895
<b>2045 No Build</b>					
Total Distance of all Vehicles (mi)	9,615	10,582	11,790	119,720	16,237,653
Total Vehicles Arrived at Destination	14,234	16,706	19,327	188,824	24,374,870
<b>2045 Build</b>					
Total Distance of all Vehicles (mi)	8,683	9,560	10,868	108,879	14,069,316
Total Vehicles Arrived at Destination	13,584	15,885	18,909	181,462	22,902,599

Cost	2023e	2022s	
<b>Final Design</b>			
Geotech Design	\$400,000	\$385,356	0.7%
Structures Design	\$1,500,000	\$1,445,087	2.7%
Design Detail Plans & Specs	\$1,000,000	\$963,291	1.8%
Coordination / Meetings	\$150,000	\$144,509	0.3%
Civil Design & Utility Relocation Design Plans	\$350,000	\$337,187	0.6%
Architectural Detailing	\$500,000	\$481,896	0.9%
Permits	\$200,000	\$192,679	0.4%
Subtotal Final Design	\$4,100,000	\$3,849,904	7.4%
<b>ROW</b>	\$2,103,500	\$2,026,483	3.8%
<b>Construction</b>			
Main Span Arch Bridge	\$33,578,000	\$32,348,748	60.7%
Bridge Approaches, Touchdown Points, Lighting	\$6,783,700	\$6,535,356	12.3%
Contingency*	\$4,037,000	\$3,889,210	7.3%
CEI**	\$3,229,000	\$3,110,790	5.8%
Utility Relocations (electrical & sanitary - north end)	\$1,500,000	\$1,445,087	2.7%
Subtotal Construction	\$49,127,700	\$47,329,191	88.8%
<b>Total</b>	\$55,331,200	\$53,305,588	100.0%

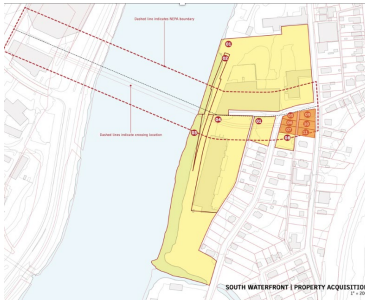
source: 2023 base bridge cost update provided by MEM

- \*Contingency % 10.0%
- \*\*CEI % 8.9%
- Annual Inflation 3.8%

Description	Owner	Address	Previously Acquired		Proposed Estimated Sale Price	Acres		
			Purchase Price	Partial Take for Bridge		Total Area	For Bridge	%
1 ACQUIRED	Greater TN Housing Assistance Corp.	2323 W BLOUNT AVE	\$9,000,000	\$341,700	\$0	0.200	0.200	2.3%
2 TVA Easement	TVA				\$25,000	4.200	0.100	26.6%
3 Commercial (partial take)	Southdown Inc	0 SCOTTISH PIKE	\$800,000	\$38,100	\$0	4.200	0.200	4.8%
4 Commercial	Bille E. Taylor	2547 SCOTTISH PIKE	\$6,250,000	\$198,700	\$0	1.130	0.400	12.8%
5 vacant residential lot	William A Terry, William White, Douglas R. Brown	0 SCOTTISH PIKE			\$40,000	0.074	0.074	#####
6 residential relocation	Mai Nopp Phan	2500 SCOTTISH PIKE			\$225,000	0.083	0.083	#####
7 residential relocation	Charlotte Rhinehart	2504 SCOTTISH PIKE			\$225,000	0.107	0.107	#####
8 ACQUIRED	Greater TN Housing Assistance Corp.	2512 SCOTTISH PIKE			\$0	0.241	0.070	29.0%
9 small business relocation	Hannah Jahl & Dajal Saah	2501 W BLOUNT AVE			\$300,000	0.142	0.142	#####
10 parking for Tract 9	Hannah Jahl & Dajal Saah	2505 W BLOUNT AVE			\$55,000	0.110	0.110	#####
11 parking for Tract 9	Hannah Jahl & Dajal Saah	2509 W BLOUNT AVE			\$55,000	0.115	0.070	67.0%
<b>ROW Subtotal</b>					<b>\$1,178,500</b>			



- 710-foot long span arch over the river and multiple shorter spans at the bridge ends.
- North-end comprises 3 spans (25', 135', 140')
  - o Connecting to UT campus
- South-end comprises four spans at 130-foot each
  - o Connecting near Clancy Avenue.
- Cross section: 25' wide



Occurrence	Drainage			Inspection			Lights		
	Cost	\$10,000	\$60,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000

Years	Annual O&M Costs		Total			
	Proj.	Cost	Drainage	Inspection	Lights	Total
1	2028	\$10,000	\$0	\$0	\$0	\$10,000
2	2029	\$10,000	\$60,000	\$0	\$0	\$70,000
3	2030	\$10,000	\$0	\$0	\$0	\$10,000
4	2031	\$10,000	\$60,000	\$0	\$0	\$70,000
5	2032	\$10,000	\$0	\$15,000	\$25,000	\$25,000
6	2033	\$10,000	\$60,000	\$0	\$0	\$70,000
7	2034	\$10,000	\$0	\$0	\$0	\$10,000
8	2035	\$10,000	\$60,000	\$0	\$0	\$70,000
9	2036	\$10,000	\$0	\$0	\$0	\$10,000
10	2037	\$10,000	\$60,000	\$15,000	\$85,000	\$85,000
11	2038	\$10,000	\$0	\$0	\$0	\$10,000
12	2039	\$10,000	\$60,000	\$0	\$0	\$70,000
13	2040	\$10,000	\$0	\$0	\$0	\$10,000
14	2041	\$10,000	\$60,000	\$0	\$0	\$70,000
15	2042	\$10,000	\$0	\$15,000	\$25,000	\$25,000
16	2043	\$10,000	\$60,000	\$0	\$0	\$70,000
17	2044	\$10,000	\$0	\$0	\$0	\$10,000
18	2045	\$10,000	\$60,000	\$0	\$0	\$70,000
19	2046	\$10,000	\$0	\$0	\$0	\$10,000
20	2047	\$10,000	\$60,000	\$15,000	\$85,000	\$85,000
21	2048	\$10,000	\$0	\$0	\$0	\$10,000
22	2049	\$10,000	\$60,000	\$0	\$0	\$70,000
23	2050	\$10,000	\$0	\$0	\$0	\$10,000
24	2051	\$10,000	\$60,000	\$0	\$0	\$70,000
25	2052	\$10,000	\$0	\$15,000	\$25,000	\$25,000
26	2053	\$10,000	\$60,000	\$0	\$0	\$70,000
27	2054	\$10,000	\$0	\$0	\$0	\$10,000
28	2055	\$10,000	\$60,000	\$0	\$0	\$70,000
29	2056	\$10,000	\$0	\$0	\$0	\$10,000
30	2057	\$10,000	\$60,000	\$15,000	\$85,000	\$85,000

Notes:  
 Drainage: Clean bridge drains once a year. (\$10K every year)  
 Inspection: Repel down bridge bi-annually and inspect components. (\$60K every two years).  
 Lighting: Replace LED bulbs (deck, arch, and rebar) every 5 to 10 years. (\$15K every 5 years).  
 Painting: No painting will be required since the bridge is constructed with weathering steel.



Annual Passenger Vehicle Travel Metrics -

Metric	Terms	Year 2023			Year 2045		
		No Build	Build	A	No Build	Build	A
Average Delay	seconds	224,053	218,341	-5,752	355,488	243,184	-112,304
Average Stops/Vehicle	vehicles	6,746	6,555	-191	11,849	7,229	-4,620
Average Speed	mph	14.3	14.4	0.1	12.0	13.7	1.7
<b>Total Distance of all Vehicles</b>	<b>miles</b>	<b>10,738,302</b>	<b>10,480,403</b>	<b>-257,899</b>	<b>16,237,653</b>	<b>14,069,316</b>	<b>-2,168,337</b>
Total Travel Time	seconds	2,449,527,483	2,361,021,908	-88,505,575	4,092,266,548	3,346,817,216	-1,745,449,332
<b>Total Vehicles Arrived at Destination</b>	<b>vehicles</b>	<b>17,136,878</b>	<b>16,816,895</b>	<b>-319,983</b>	<b>24,374,870</b>	<b>22,902,599</b>	<b>-1,472,271</b>
Network NOx Emissions	grams	6,836,693	6,505,983	-330,710	13,342,765	9,726,353	-3,616,412
Network VOC Emissions	grams	8,107,972	7,749,750	-358,222	15,693,588	11,389,803	-4,303,784
Network Fuel Consumption	grams	500,462	478,380	-22,082	881,088	745,173	-135,915

\*Metrics are one-way trips (morality benefits assumed as per round-trip)

New Housing/ Phasing Trip Diversions	Opening Year	Number Units	Number Beds	% Units		% Beds	
				Units	Beds	Units	Beds
Phase 2	2025	777	104	-	-	5.4%	
LIV	2025	321	465	33.0%	33.0%	25.0%	
Knox River Warehouse Lot	2030	334	501	35.0%	35.0%	25.8%	
Warehouse Lot Scottish Pike	2030	200	500	20.9%	20.9%	25.8%	
Clayview Expansion	2035	100	350	10.5%	10.5%	18.0%	
<b>Total</b>		<b>955</b>	<b>1,340</b>	<b>100.0%</b>	<b>100.0%</b>		

Year	Bed Phasing	Annual Allocation			VMT Δ	Average Daily			VMT/Diversion
		VMT A	Diversed Car Trips	Bike & Ped (1x Trip)		Diversed Car Trips	Bike & Ped (1x Trip)	Diversion	
2023	0.0%	257,898	318,983	532,702	707	874	1,439	0.81	
2024	0.0%	0	0	0	0	0	0	0.00	
2025	100.0%	658,325	446,994	746,480	1,804	1,225	2,045	1.47	
2026	100.0%	658,325	446,994	746,480	1,804	1,225	2,045	1.47	
2027	100.0%	658,325	446,994	746,480	1,804	1,225	2,045	1.47	
2028	100.0%	658,325	446,994	746,480	1,804	1,225	2,045	1.47	
2029	100.0%	658,325	446,994	746,480	1,804	1,225	2,045	1.47	
2030	82.0%	1,777,142	1,206,655	2,015,114	4,869	3,306	5,521	1.47	
2031	82.0%	1,777,142	1,206,655	2,015,114	4,869	3,306	5,521	1.47	
2032	82.0%	1,777,142	1,206,655	2,015,114	4,869	3,306	5,521	1.47	
2033	82.0%	1,777,142	1,206,655	2,015,114	4,869	3,306	5,521	1.47	
2034	82.0%	1,777,142	1,206,655	2,015,114	4,869	3,306	5,521	1.47	
2035	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2036	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2037	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2038	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2039	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2040	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2041	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2042	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2043	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2044	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2045	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2046	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2047	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2048	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2049	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2050	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2051	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2052	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2053	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2054	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2055	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2056	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	
2057	100.0%	2,168,337	1,472,271	2,458,693	5,941	4,034	6,736	1.47	

\*per USDOT guidance, expect growth post-TDM forecast year (2045)

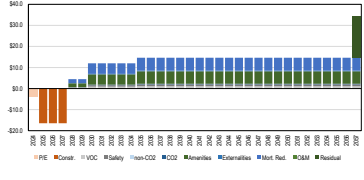
for Facility Amenities Benefits

Year	Annual Trips (1x)		0.86		2.38	
	Ped	Bike	Ped/Miles	Bike/Miles	Ped/Miles	Bike/Miles
2023	452,797	79,305	366,087	64,604		
2024	0	0	0	0		
2025	634,508	111,972	545,677	164,910		
2026	634,508	111,972	545,677	164,910		
2027	634,508	111,972	545,677	164,910		
2028	634,508	111,972	545,677	164,910		
2029	634,508	111,972	545,677	164,910		
2030	1,712,847	302,267	1,472,049	445,174		
2031	1,712,847	302,267	1,472,049	445,174		
2032	1,712,847	302,267	1,472,049	445,174		
2033	1,712,847	302,267	1,472,049	445,174		
2034	1,712,847	302,267	1,472,049	445,174		
2035	2,089,889	368,804	1,799,305	543,168		
2036	2,089,889	368,804	1,799,305	543,168		
2037	2,089,889	368,804	1,799,305	543,168		
2038	2,089,889	368,804	1,799,305	543,168		
2039	2,089,889	368,804	1,799,305	543,168		
2040	2,089,889	368,804	1,799,305	543,168		
2041	2,089,889	368,804	1,799,305	543,168		
2042	2,089,889	368,804	1,799,305	543,168		
2043	2,089,889	368,804	1,799,305	543,168		
2044	2,089,889	368,804	1,799,305	543,168		
2045	2,089,889	368,804	1,799,305	543,168		
2046	2,089,889	368,804	1,799,305	543,168		
2047	2,089,889	368,804	1,799,305	543,168		
2048	2,089,889	368,804	1,799,305	543,168		
2049	2,089,889	368,804	1,799,305	543,168		
2050	2,089,889	368,804	1,799,305	543,168		
2051	2,089,889	368,804	1,799,305	543,168		
2052	2,089,889	368,804	1,799,305	543,168		
2053	2,089,889	368,804	1,799,305	543,168		
2054	2,089,889	368,804	1,799,305	543,168		
2055	2,089,889	368,804	1,799,305	543,168		
2056	2,089,889	368,804	1,799,305	543,168		
2057	2,089,889	368,804	1,799,305	543,168		

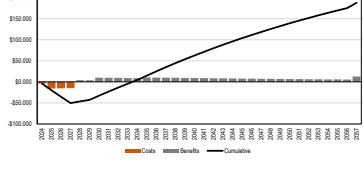
RCA Assumptions	
Real Discount Rate	3.1%
Project Start Year	2024
Project End Year	2037
Operating Year	2028
Operating Years	30
Capital Expenditure Assumptions	
Vehicle Occupancy	1.87%
Walking vs Cycling Proportion	86.7%
Introduction of Electric TPLV Taxis	Physical
Clear Space Proportion	68.7%
EV/TPLV/Shared Mobility/Programs Trip	17.1%
Trip Occupancy (Over Time Weight)	3
Public Transit Facilities Available	100%
EV/Shared Mobility (Miles)	35
Revenue Cost Analysis (2022) million	
Net Present Benefits	\$237.4
Net Present Costs	\$50.4
Net Present Value (NPV)	\$187.0
Benefit-Cost Ratio (BCR)	3.72
Internal Rate of Return (IRR)	18.7%
Payback Period	2034
Breakdown Annual Benefits	\$6.3

Cap.	Disc.	Year	Cap.	P/E	Capital Costs	Subtotal	(a) Benefits											Discounting				
							VOC	Safety	non-CO2	CO2	Amenities	Externals	Mort. Red.	ODM	Residual	Subtotal	Total	Costs	Benefits	Total		
1	0	2024	\$1,900		\$1,900		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$4,441	\$4,441	\$0,000	\$3,533	\$3,533		
2	0	2025	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$4,261	\$4,261	\$0,000	\$3,764	\$3,764		
3	0	2026	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$4,081	\$4,081	\$0,000	\$3,500	\$3,500		
4	0	2027	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,901	\$3,901	\$0,000	\$3,240	\$3,240		
5	0	2028	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,721	\$3,721	\$0,000	\$2,980	\$2,980		
6	0	2029	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,541	\$3,541	\$0,000	\$2,720	\$2,720		
7	0	2030	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,361	\$3,361	\$0,000	\$2,460	\$2,460		
8	0	2031	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,181	\$3,181	\$0,000	\$2,200	\$2,200		
9	0	2032	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$3,001	\$3,001	\$0,000	\$1,940	\$1,940		
10	0	2033	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$2,821	\$2,821	\$0,000	\$1,680	\$1,680		
11	0	2034	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$2,641	\$2,641	\$0,000	\$1,420	\$1,420		
12	0	2035	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$2,461	\$2,461	\$0,000	\$1,160	\$1,160		
13	0	2036	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$2,281	\$2,281	\$0,000	\$900	\$900		
14	0	2037	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$2,101	\$2,101	\$0,000	\$640	\$640		
15	0	2038	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,921	\$1,921	\$0,000	\$380	\$380		
16	0	2039	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,741	\$1,741	\$0,000	\$120	\$120		
17	0	2040	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,561	\$1,561	\$0,000	\$0	\$0		
18	0	2041	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,381	\$1,381	\$0,000	\$0	\$0		
19	0	2042	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,201	\$1,201	\$0,000	\$0	\$0		
20	0	2043	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$1,021	\$1,021	\$0,000	\$0	\$0		
21	0	2044	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$841	\$841	\$0,000	\$0	\$0		
22	0	2045	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$661	\$661	\$0,000	\$0	\$0		
23	0	2046	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$481	\$481	\$0,000	\$0	\$0		
24	0	2047	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$301	\$301	\$0,000	\$0	\$0		
25	0	2048	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$121	\$121	\$0,000	\$0	\$0		
26	0	2049	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$0	\$0	\$0	\$0	\$0		
27	0	2050	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$0	\$0	\$0	\$0	\$0		
28	0	2051	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$0	\$0	\$0	\$0	\$0		
29	0	2052	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$0	\$0	\$0	\$0	\$0		
30	0	2053	\$0,000		\$0,000		\$0,342	\$0,265	\$0,008	\$0,070	\$1,807	\$0,091	\$1,867	\$0,010	\$0,000	\$0	\$0	\$0	\$0	\$0		
Total							\$3,900	\$49,398	\$63,398	\$31,229	\$24,146	\$0,721	\$6,028	\$16,925	\$2,289	\$170,378	\$1,289	\$10,742	\$424,580	\$52,367	\$372,213	\$167,489
Share							7.4%	92.6%	90.0%	7.4%	5.7%	0.2%	1.5%	38.8%	2.0%	40.1%	4.3%	1.6%	100.0%	100.0%	100.0%	100.0%

Annual Benefits and Costs by Type (Undiscounted 2022, million)



Total Annual Benefits and Costs (Discounted 2022, million)



\$7.90 \$70.41 \$78.341 90% Const Per 40%

\$26.020 \$232.012 \$258.032 90%

\$425.9

Table 2: Overview, Alternatives, and Benefit Types

No Build	Build	Benefit
Current natural barrier constrain housing and commercial development, and increase travel time and accidents.	Build a new Tennessee River Pedestrian Bridge connecting existing and planned modern housing across from the central city campus.	The bridge reduces travel distance (i.e., distance, safety, accident, and emission savings), fosters mobility reduction, and facilitates active transportation benefits associated with pedestrian and employment centers.

Table 3: Cost and Benefit Types

Type	Description	Significance
Costs	P/B, ROW, Construction	High
User Benefits	Vehicle Operating, Cost Safety	Medium
	Emissions (NOx, PM2.5, SOx, CO2)	Low
	Convenient Externalities	Low
	Public Safety	High
	Facility Amenities	High
Benefits/Benefits	Aesthetics, Recreation and Maintenance Cost	Low
	Aesthetics, Recreational Value	Low

Table 4: Annual Capital Cost Summary (2022 Inflation)

Year	Flow/Change	Construction	Total	Inflated
2024	\$1.95	\$1.95	\$1.95	\$1.95
2025	0.00	\$16.45	\$16.45	\$16.45
2026	0.00	\$16.45	\$16.45	\$16.45
2027	0.00	\$16.45	\$16.45	\$16.45
2028	0.00	\$16.45	\$16.45	\$16.45
2029	0.00	\$16.45	\$16.45	\$16.45
2030	0.00	\$16.45	\$16.45	\$16.45
2031	0.00	\$16.45	\$16.45	\$16.45
2032	0.00	\$16.45	\$16.45	\$16.45
2033	0.00	\$16.45	\$16.45	\$16.45
2034	0.00	\$16.45	\$16.45	\$16.45
2035	0.00	\$16.45	\$16.45	\$16.45
2036	0.00	\$16.45	\$16.45	\$16.45
2037	0.00	\$16.45	\$16.45	\$16.45
2038	0.00	\$16.45	\$16.45	\$16.45
2039	0.00	\$16.45	\$16.45	\$16.45
2040	0.00	\$16.45	\$16.45	\$16.45
2041	0.00	\$16.45	\$16.45	\$16.45
2042	0.00	\$16.45	\$16.45	\$16.45
2043	0.00	\$16.45	\$16.45	\$16.45
2044	0.00	\$16.45	\$16.45	\$16.45
2045	0.00	\$16.45	\$16.45	\$16.45
2046	0.00	\$16.45	\$16.45	\$16.45
2047	0.00	\$16.45	\$16.45	\$16.45
2048	0.00	\$16.45	\$16.45	\$16.45
2049	0.00	\$16.45	\$16.45	\$16.45
2050	0.00	\$16.45	\$16.45	\$16.45
2051	0.00	\$16.45	\$16.45	\$16.45
2052	0.00	\$16.45	\$16.45	\$16.45
2053	0.00	\$16.45	\$16.45	\$16.45
2054	0.00	\$16.45	\$16.45	\$16.45
2055	0.00	\$16.45	\$16.45	\$16.45
2056	0.00	\$16.45	\$16.45	\$16.45
2057	0.00	\$16.45	\$16.45	\$16.45
2058	0.00	\$16.45	\$16.45	\$16.45
2059	0.00	\$16.45	\$16.45	\$16.45
2060	0.00	\$16.45	\$16.45	\$16.45
2061	0.00	\$16.45	\$16.45	\$16.45
2062	0.00	\$16.45	\$16.45	\$16.45
2063	0.00	\$16.45	\$16.45	\$16.45
2064	0.00	\$16.45	\$16.45	\$16.45
2065	0.00	\$16.45	\$16.45	\$16.45
2066	0.00	\$16.45	\$16.45	\$16.45
2067	0.00	\$16.45	\$16.45	\$16.45
2068	0.00	\$16.45	\$16.45	\$16.45
2069	0.00	\$16.45	\$16.45	\$16.45
2070	0.00	\$16.45	\$16.45	\$16.45
2071	0.00	\$16.45	\$16.45	\$16.45
2072	0.00	\$16.45	\$16.45	\$16.45
2073	0.00	\$16.45	\$16.45	\$16.45
2074	0.00	\$16.45	\$16.45	\$16.45
2075	0.00	\$16.45	\$16.45	\$16.45
2076	0.00	\$16.45	\$16.45	\$16.45
2077	0.00	\$16.45	\$16.45	\$16.45
2078	0.00	\$16.45	\$16.45	\$16.45
2079	0.00	\$16.45	\$16.45	\$16.45
2080	0.00	\$16.45	\$16.45	\$16.45
2081	0.00	\$16.45	\$16.45	\$16.45
2082	0.00	\$16.45	\$16.45	\$16.45
2083	0.00	\$16.45	\$16.45	\$16.45
2084	0.00	\$16.45	\$16.45	\$16.45
2085	0.00	\$16.45	\$16.45	\$16.45
2086	0.00	\$16.45	\$16.45	\$16.45
2087	0.00	\$16.45	\$16.45	\$16.45
2088	0.00	\$16.45	\$16.45	\$16.45
2089	0.00	\$16.45	\$16.45	\$16.45
2090	0.00	\$16.45	\$16.45	\$16.45
2091	0.00	\$16.45	\$16.45	\$16.45
2092	0.00	\$16.45	\$16.45	\$16.45
2093	0.00	\$16.45	\$16.45	\$16.45
2094	0.00	\$16.45	\$16.45	\$16.45
2095	0.00	\$16.45	\$16.45	\$16.45
2096	0.00	\$16.45	\$16.45	\$16.45
2097	0.00	\$16.45	\$16.45	\$16.45
2098	0.00	\$16.45	\$16.45	\$16.45
2099	0.00	\$16.45	\$16.45	\$16.45
2100	0.00	\$16.45	\$16.45	\$16.45

Table 5: Safety Factors (2022)

Year	Flow/Change	Construction	Total	Inflated
2024	\$1.95	\$1.95	\$1.95	\$1.95
2025	0.00	\$16.45	\$16.45	\$16.45
2026	0.00	\$16.45	\$16.45	\$16.45
2027	0.00	\$16.45	\$16.45	\$16.45
2028	0.00	\$16.45	\$16.45	\$16.45
2029	0.00	\$16.45	\$16.45	\$16.45
2030	0.00	\$16.45	\$16.45	\$16.45
2031	0.00	\$16.45	\$16.45	\$16.45
2032	0.00	\$16.45	\$16.45	\$16.45
2033	0.00	\$16.45	\$16.45	\$16.45
2034	0.00	\$16.45	\$16.45	\$16.45
2035	0.00	\$16.45	\$16.45	\$16.45
2036	0.00	\$16.45	\$16.45	\$16.45
2037	0.00	\$16.45	\$16.45	\$16.45
2038	0.00	\$16.45	\$16.45	\$16.45
2039	0.00	\$16.45	\$16.45	\$16.45
2040	0.00	\$16.45	\$16.45	\$16.45
2041	0.00	\$16.45	\$16.45	\$16.45
2042	0.00	\$16.45	\$16.45	\$16.45
2043	0.00	\$16.45	\$16.45	\$16.45
2044	0.00	\$16.45	\$16.45	\$16.45
2045	0.00	\$16.45	\$16.45	\$16.45
2046	0.00	\$16.45	\$16.45	\$16.45
2047	0.00	\$16.45	\$16.45	\$16.45
2048	0.00	\$16.45	\$16.45	\$16.45
2049	0.00	\$16.45	\$16.45	\$16.45
2050	0.00	\$16.45	\$16.45	\$16.45
2051	0.00	\$16.45	\$16.45	\$16.45
2052	0.00	\$16.45	\$16.45	\$16.45
2053	0.00	\$16.45	\$16.45	\$16.45
2054	0.00	\$16.45	\$16.45	\$16.45
2055	0.00	\$16.45	\$16.45	\$16.45
2056	0.00	\$16.45	\$16.45	\$16.45
2057	0.00	\$16.45	\$16.45	\$16.45
2058	0.00	\$16.45	\$16.45	\$16.45
2059	0.00	\$16.45	\$16.45	\$16.45
2060	0.00	\$16.45	\$16.45	\$16.45
2061	0.00	\$16.45	\$16.45	\$16.45
2062	0.00	\$16.45	\$16.45	\$16.45
2063	0.00	\$16.45	\$16.45	\$16.45
2064	0.00	\$16.45	\$16.45	\$16.45
2065	0.00	\$16.45	\$16.45	\$16.45
2066	0.00	\$16.45	\$16.45	\$16.45
2067	0.00	\$16.45	\$16.45	\$16.45
2068	0.00	\$16.45	\$16.45	\$16.45
2069	0.00	\$16.45	\$16.45	\$16.45
2070	0.00	\$16.45	\$16.45	\$16.45
2071	0.00	\$16.45	\$16.45	\$16.45
2072	0.00	\$16.45	\$16.45	\$16.45
2073	0.00	\$16.45	\$16.45	\$16.45
2074	0.00	\$16.45	\$16.45	\$16.45
2075	0.00	\$16.45	\$16.45	\$16.45
2076	0.00	\$16.45	\$16.45	\$16.45
2077	0.00	\$16.45	\$16.45	\$16.45
2078	0.00	\$16.45	\$16.45	\$16.45
2079	0.00	\$16.45	\$16.45	\$16.45
2080	0.00	\$16.45	\$16.45	\$16.45
2081	0.00	\$16.45	\$16.45	\$16.45
2082	0.00	\$16.45	\$16.45	\$16.45
2083	0.00	\$16.45	\$16.45	\$16.45
2084	0.00	\$16.45	\$16.45	\$16.45
2085	0.00	\$16.45	\$16.45	\$16.45
2086	0.00	\$16.45	\$16.45	\$16.45
2087	0.00	\$16.45	\$16.45	\$16.45
2088	0.00	\$16.45	\$16.45	\$16.45
2089	0.00	\$16.45	\$16.45	\$16.45
2090	0.00	\$16.45	\$16.45	\$16.45
2091	0.00	\$16.45	\$16.45	\$16.45
2092	0.00	\$16.45	\$16.45	\$16.45
2093	0.00	\$16.45	\$16.45	\$16.45
2094	0.00	\$16.45	\$16.45	\$16.45
2095	0.00	\$16.45	\$16.45	\$16.45
2096	0.00	\$16.45	\$16.45	\$16.45
2097	0.00	\$16.45	\$16.45	\$16.45
2098	0.00	\$16.45	\$16.45	\$16.45
2099	0.00	\$16.45	\$16.45	\$16.45
2100	0.00	\$16.45	\$16.45	\$16.45

Table 6: Annual User Benefits (Uninflation 2022)

Year	Flow/Change	Construction	Total	Inflated
2024	\$1.95	\$1.95	\$1.95	\$1.95
2025	0.00	\$16.45	\$16.45	\$16.45
2026	0.00	\$16.45	\$16.45	\$16.45
2027	0.00	\$16.45	\$16.45	\$16.45
2028	0.00	\$16.45	\$16.45	\$16.45
2029	0.00	\$16.45	\$16.45	\$16.45
2030	0.00	\$16.45	\$16.45	\$16.45
2031	0.00	\$16.45	\$16.45	\$16.45
2032	0.00	\$16.45	\$16.45	\$16.45
2033	0.00	\$16.45	\$16.45	\$16.45
2034	0.00	\$16.45	\$16.45	\$16.45
2035	0.00	\$16.45	\$16.45	\$16.45
2036	0.00	\$16.45	\$16.45	\$16.45
2037	0.00	\$16.45	\$16.45	\$16.45
2038	0.00	\$16.45	\$16.45	\$16.45
2039	0.00	\$16.45	\$16.45	\$16.45
2040	0.00	\$16.45	\$16.45	\$16.45
2041	0.00	\$16.45	\$16.45	\$16.45
2042	0.00	\$16.45	\$16.45	\$16.45
2043	0.00	\$16.45	\$16.45	\$16.45
2044	0.00	\$16.45	\$16.45	\$16.45
2045	0.00	\$16.45	\$16.45	\$16.45
2046	0.00	\$16.45	\$16.45	\$16.45
2047	0.00	\$16.45	\$16.45	\$16.45
2048	0.00	\$16.45	\$16.45	\$16.45
2049	0.00	\$16.45	\$16.45	\$16.45
2050	0.00	\$16.45	\$16.45	\$16.45
2051	0.00	\$16.45	\$16.45	\$16.45
2052	0.00	\$16.45	\$16.45	\$16.45
2053	0.00	\$16.45	\$16.45	\$16.45
2054	0.00	\$16.45	\$16.45	\$16.45
2055	0.00	\$16.45	\$16.45	\$16.45
2056	0.00	\$16.45	\$16.45	\$16.45
2057	0.00	\$16.45	\$16.45	\$16.45
2058	0.00	\$16.45	\$16.45	\$16.45
2059				



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**COMMISSIONER'S OFFICE**  
SUITE 700, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-1402  
(615) 741-2848

**BUTCH ELEY**  
DEPUTY GOVERNOR &  
COMMISSIONER OF TRANSPORTATION

**BILL LEE**  
GOVERNOR

February 13, 2024

The Honorable Pete Buttigieg  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: City of Knoxville, Tennessee's South Knoxville Waterfront Pedestrian Bridge  
2024 RAISE Grant Application

Dear Secretary Buttigieg,

I am writing in support for the City of Knoxville, Tennessee's South Knoxville Waterfront Pedestrian Bridge RAISE grant application, Fiscal Year 2024. TDOT fully supports this project and the State of Tennessee has committed \$20 million in state funding towards its completion.

The project will provide safe, protected access across the Tennessee River for walkers, cyclists, employees, students, visitors, and other active transportation users. This project has been under discussion in the community for almost 25 years and submitted as a TIGER grant years ago. The need for this bridge continues and the benefits from improved access and safety are significant and greatly supported.

The pedestrian bridge will improve mobility for residents living throughout the South Knoxville Redevelopment Area, employees and students at the flagship campus of the University of Tennessee, and citizens throughout Knoxville that regularly use the 112.5 miles of paved greenways and trails connecting Knoxville communities.

Many of the communities that will directly benefit from this project are Areas of Persistent Poverty and Historically Disadvantaged Communities. This bridge will connect these neighborhoods to major employment areas with diverse, well-paying jobs and training opportunities; help to reduce vehicle emissions; and improve health outcomes for these citizens.

Transportation safety is always TDOT's primary goal. This project will benefit the growing community of active transportation users in Knoxville and help to reduce crashes involving pedestrians and cyclists. The bridge supports TDOT's safety improvement program for US-441/SR-71 (Chapman Highway), a National Highway System (NHS) corridor that serves the south waterfront, the City of Knoxville, Knox County, Blount County, Sevier County and visitors to the Great Smoky Mountains National Park.

I am confident that this project firmly aligns with the values and goals of the RAISE Grant Program, and I greatly thank you for your consideration of Knoxville's grant application.

Sincerely,

Howard H. Eley  
Commissioner of Transportation



THE UNIVERSITY OF TENNESSEE SYSTEM

OFFICE OF THE PRESIDENT

RANDY BOYD  
*President*

February 5, 2024

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

Dear Secretary Buttigieg,

The City of Knoxville is submitting a 2024 RAISE grant application seeking funding to help construct the proposed South Knoxville Waterfront Pedestrian and Bicycle Bridge across the Tennessee River. As President of The University of Tennessee System and Chancellor of the UT Knoxville campus, we strongly support this grant request.

The Tennessee River creates a natural divide that constrains mobility and connectivity for residents, students, employees, and visitors within walking and biking distance of the University of Tennessee's flagship campus and downtown Knoxville. The bridge will provide affordable transportation options to reach desired destinations on either side of the river, and provide efficient, sustainable access to jobs, services, and school while maximizing pedestrian and bicycle safety.

Knoxville is experiencing an increasing demand for compact, walkable, mixed use housing developments (transportation efficient land use) which requires strategic active transportation. The University is making significant investments in land across the river from campus to provide affordable housing for students. The bridge will provide important connectivity, while facilitating new economic growth.

Safety is a main concern. When crossing the river, only the Alcoa Highway includes a protected shared use path, but the path only provides access to Cherokee Farms Research and Development Center. Safe and secure active human-powered transportation options would be available for active transportation users once the new bridge is constructed.

We encourage the U.S. Department of Transportation to make this important investment in Knoxville, the waterfront communities, and in the State of Tennessee.

Sincerely,

Randy Boyd  
President

Donde Plowman  
Chancellor

January 29, 2024

The Honorable Pete Buttigieg  
Secretary  
US Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg,

We write to support the City of Knoxville's 2024 RAISE Grant application seeking funding to help construct the proposed South Knoxville Waterfront Pedestrian and Bicycle Bridge crossing the Tennessee River. The Aslan Foundation has invested over \$30 million in land conservation, public outdoor recreation, historic preservation, and cultural centers in South Knoxville to provide better access for the people of this underserved community.

The natural divide of the Tennessee River constrains mobility and connectivity, isolating the designated Areas of Persistent Poverty, Historically Disadvantaged Communities, and Justice 40 communities in the South Knoxville waterfront neighborhoods. The Waterfront Pedestrian and Bicycle Bridge will provide to these communities lower-cost access to jobs, affordable housing opportunities, and efficient connections to health care and other essential services. The Bridge will accomplish this while reducing greenhouse gas emissions by increasing access to alternative modes of transportation. The Aslan Foundation supports the City's efforts to secure this grant and the project it will fund. We encourage the U.S. Department of Transportation to make this vital investment in Knoxville and the State of Tennessee.

Sincerely,



Andrea Bailey  
Executive Director





**Official Chapter of NIGP  
Diversity Business Alliance Committee**

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

Dear Secretary Buttigieg,

The East Tennessee Purchasing Association's Diversity Business Alliance would like to express its support of the City of Knoxville's 2024 RAISE Grant application, seeking funding for the proposed South Knoxville Waterfront Bike and Pedestrian Bridge.

The Diversity Business Alliance, whose mission is to work collaboratively to conduct outreach to increase our agencies' utilization of diverse businesses; represents a collaboration of eleven East Tennessee government agencies who partner on various initiatives to support small and diversity-owned companies in our region. The Diversity Business Alliance consists of the City of Knoxville, Knox County Government, the University of Tennessee, Knoxville's Community Development Corporation, Knoxville Utilities Board, Blount County Government, the Public Building Authority, the Tennessee Valley Authority, the Tennessee Board of Regents, Hamilton County Schools, Hamilton County Government, the City of Chattanooga and the Knoxville Metropolitan Airport Authority.

The proposed bridge will bring positive environmental and community-building impacts to our city, the construction of the bridge will promote business opportunities for local subcontracting firms that are small, minority-owned, woman-owned, service-disabled veteran-owned, and businesses owned by persons with disabilities. The Alliance's annual *Diversity Business Expo*, which brings together government agencies, general contractors, and diverse subcontractors, provides an excellent opportunity for the city to cast a wide net toward including diverse businesses in the proposed bridge project.

The City of Knoxville is a recognized community innovator in supporting small and diversity-owned businesses as evidence through their strong participation with the Diversity Business Alliance, their annual Diversity Business Enterprise Awards ceremony and their yearly Business Opportunities Breakfast. City employees representing the mayor's office, procurement, communications, engineering, public works, and numerous other city departments engage regularly in small and diversity-business outreach events.

The Diversity Business Alliance stands ready to support the City in engaging small and diversity-owned businesses in subcontracting opportunities that will result from the construction of the proposed South Knoxville Waterfront Bike and Pedestrian Bridge.

The East Tennessee Purchasing Association's Diversity Business Alliance fully supports the City's efforts to secure this 2024 RAISE work search grant and the project it will fund. I encourage the U.S. Department of Transportation to make this important investment in Knoxville, the waterfront communities, and in the State of Tennessee.

Best regards,

*Karen Binkley*

*Pamela Cotham*

Karen Binkley and Pamela Cotham  
Diversity Business Alliance Co-Chairs



301 Church Avenue • Knoxville, Tennessee • 37915-2590

January 26, 2024

The Honorable Pete Buttigieg  
Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue, S.E.  
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of the Knoxville Area Transit, I write in support of City of Knoxville's 2024 RAISE grant application for a pedestrian-bicycle bridge that will connect downtown Knoxville and the University of Tennessee campus with the South Knoxville Waterfront Redevelopment Area.

Identified as a key investment through the extensive community driven process to support greater connectivity throughout Knoxville, the pedestrian-bicycle bridge will provide efficient, sustainable access to jobs, services, and school while maximizing pedestrian and bicycle safety across the river. It will expand the pedestrian-bicycle network by connecting 18 miles of greenways, more than 50 miles of Urban Wilderness, Volunteer Landing, and the South Knoxville Riverwalk.

The City of Knoxville and the University of Tennessee are committed to work together during the final design and construction phase of this project to evaluate options for providing shuttle service that would connect the South Knoxville Waterfront communities to the new bridge. This potential transit service would enable more people to access jobs and educational services at the University, the cultural and natural assets in South Knoxville, and foster greater accessibility for people with disabilities who rely on active transportation to a greater degree than those without disabilities (based on a recent National Household Travel Survey and a 2022 VTPI report). Options will be evaluated to institute a Universal Fare Card for transit and will consider opportunities to leverage the transit assets of the City and University to increase resilience, environmental sustainability, and benefit all of our citizens.

Sincerely,

A handwritten signature in black ink, appearing to read "Isaac Thorne", written in a cursive style.

Isaac Thorne  
Director of Transit, Knoxville Area Transit



January 26, 2024

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

Dear Secretary Buttigieg,

Legacy Parks Foundation is in full support of The City of Knoxville's 2024 RAISE Grant application seeking funding to help construct the proposed South Knoxville Waterfront Pedestrian and Bicycle Bridge crossing the Tennessee River.

Legacy Parks is committed to building healthy communities through play and recreation. We work to expand parks, trails, access to our river, and create recreational opportunities for our community as we promote Knoxville as an outdoor destination. An important factor when considering community and visitor usage of our roadways and greenways to increase safe, healthy, equitable transportation for all, constructing this bridge is significant to improving the environmental quality of all South Knoxville Waterfront communities.

Legacy Parks fully supports the City's efforts to secure this grant and the project it will fund. We encourage the U.S. Department of Transportation to make this important investment in Knoxville, the waterfront communities, and in the State of Tennessee.

Sincerely,

Carol Evans  
Executive Director

**Board of Directors**

Cathy Ackermann	Duane Grieve	Greg Marret	Ken Rueter
Bruce Bosse	Jenny Hines	Bill Mason	Todd Skelton
Nicki Collett	Marv House	Julie Moul	Will Skelton
Dave Collins	Larsen Jay	Jeremy Nelson	Charlie Thomas
Sheryl Ely	David Long	Cecilia Petersen	John Thurman
Greg Gheen	Joe Mack	Joe Petre	Chris Trump

**Board of Advisors**

John Becker	Mark Mamantov	Tommy Schumpert
Bart Carey	David Martin	Susan Richardson Williams
Pete Claussen	Cassandra Stuart	
Steve Fritts	Don Parnell	
Missy Kane	Sharon Pryse	

February 13, 2024

The Honorable Pete Buttigieg Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave. SE  
Washington, DC 20590

Dear Secretary Buttigieg,

Please accept this letter of support from the Knoxville Regional Transportation Planning Organization for the City of Knoxville, Tennessee's South Knoxville Waterfront Pedestrian Bridge RAISE grant application, FY 2024.

The South Knoxville Bike and Pedestrian bridge will provide a safe and accessible bridge across the Tennessee River for walking, biking, rolling, and other human-powered transportation. This new bridge will enable underserved and disadvantaged people within walking and biking distance on the north and south side of the river an opportunity to choose affordable transportation options to reach desired destinations on either side of the river. This project was initially envisioned nearly 25 years ago as part of the South Knoxville Waterfront Vision Plan. This project will benefit more than the four south Knoxville waterfront census tracts focused on in this application. Knoxville recently submitted a Reconnecting Communities Grant application to "create new multi-modal transportation paths to connect underserved communities that were part of Morningside, Mountain View, and Willow Street urban renewal areas. This bridge will assist in eliminating barriers for underserved communities north and south of the river and enable them to reach free recreation and educational opportunities that belong to everyone in Knoxville.

This proposed project will also benefit a growing community of active transportation users in Knoxville and help to reduce crashes involving pedestrians and cyclists. This project is on the Transportation Improvement Program and the City will readily be able to meet the obligation of funds deadline of June 30, 2028.

This project is consistent with ongoing safety efforts in Tennessee and will enhance transportation choices, environmental sustainability and resilience, economic development, and transportation equity. Thank you for your favorable consideration of the City of Knoxville's RAISE Grant application.

Sincerely,



Amy Brooks, AICP  
Executive Director

D-List Categorical Exclusion – South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

Knoxville/Knox County

TN-PIN: 113061.00

Date: 10/24/2014

## Environmental Commitments

Commitments are involved on the project.

### List of Environmental Commitments

1) It is possible that historical releases of petroleum hydrocarbons, metals and polyaromatic hydrocarbons from the Knox River Warehouse and Specialty Metals facilities that may experience nearby ground disturbance during construction could have impacted the subsurface soils and/or groundwater in this area. If impacted soils are encountered during these activities, a Phase II ESA investigation may be necessary. The Phase II ESA would support either preconstruction remediation or a site health and safety plan/soil handling plan for construction.

2) Ground disturbing activities proposed in the vicinity of the south bridge landing may include pier and sidewalk construction and possible sidewalk removal and replacement. This would include excavation below the ground surface. The Hazardous Material Evaluation report indicated that a Phase II ESA was performed on the Specialty Metals property in 2011. Mercury, arsenic, barium chromium, lead, and polyaromatic hydrocarbons (PAHs) were detected in soils at levels exceeding the EPA Regional Screening Levels. The report stated that disturbances and excavation of soils on the Specialty Metals property during pier construction will require further characterization in order to determine proper handling and disposal of the soils from this property. This will be done during the construction phase of the project.

3) Aesthetically, the bridge must complement the family of nearby historic bridges (Henley Street Bridge and Gay Street Bridge), the nearby downtown buildings, and the University of Tennessee campus.





STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334  
(615) 741-3655

## D-List Categorical Exclusion

### Memorandum

**To:** Ms. Leigh Ann Tribble  
Environmental Program Engineer  
Federal Highway Administration - Tennessee Division  
404 BNA Drive, Suite 508  
Nashville, Tennessee 37217

**From:** Ann Epperson  
Assistant Director, TDOT Environmental Documentation Office  
James K. Polk Building, Suite 900  
505 Deaderick Street  
Nashville, Tennessee 37243

**Date:** 10/24/2014

### Project Information

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Project Termini:** South and North Waterfronts of the Tennessee River

**City/Town/County:** Knoxville/Knox County

**MPO/RPO/TPO Area:** Knoxville TPO Area **PIN #:** 113061.00

	<b>PE #</b>	<b>Right-of-Way #</b>	<b>Construction #</b>
<b>Federal</b>	TCSP-9TN(2)	N/A	N/A
<b>State</b>	PE-N: 47LPLM-F0-038 PE-D: 47LPLM-F1-038	N/A	N/A

### Project Planning

- The project is in an MPO/TPO**—The relevant Transportation Improvement Program (TIP) page is included in the attachment.
- The project is in an RPO**—The relevant State Transportation Improvement Program (STIP) page is included in the attachment.

## Project Description

The project involves the construction of a new pedestrian/bicycle bridge, connecting Knoxville's South Waterfront to the University of Tennessee at Knoxville campus. The site is located in the City of Knoxville (Site Vicinity Map is provided in Attachment B), directly across the Tennessee River from downtown Knoxville. It will span the Tennessee River from Clancy Avenue on the south side of the river to Lake Loudon Boulevard on the north (university) side connecting to the pedestrian concourse located between Thompson-Boling Arena and Pratt Pavilion (Project Location Map provided in Attachment B).

## Purpose and Need

The South Waterfront Pedestrian bridge was included in the City of Knoxville's 2006 Knoxville South Waterfront Vision Plan to provide connectivity between the South Waterfront and the University of Tennessee campus, and to expand the pedestrian/ bicycle network envisioned as a major loop connecting existing greenways, Volunteer Landing and the South Waterfront riverwalks. The Knoxville South Waterfront Redevelopment Plan calls for mixed use with the idea that the South Waterfront will become an extension of downtown where people will live, work, exercise, and seek entertainment. Many owners of new condominiums in the South Waterfront purchased their units because the location allows them to be less reliant on vehicular transportation. The Pedestrian Bridge will provide efficient access to jobs, services, and centers of trade on both sides of the river. The pedestrian/bicycle bridge will maximize pedestrian and bicycle safety by allocating a non-motorized route unshared by vehicles across the river, and will aid in minimizing environmental impacts, transportation-related fuel consumption, and reliance on foreign oil by providing safe and attractive alternative transportation and commuting options.

## Public Involvement

- No public meeting/hearing was held on the project.
- A public meeting/hearing was held on the project. The meeting/hearing summary is included as an attachment.

A public meeting for the South Waterfront Pedestrian Bridge was held on 10/10/2011. Fifty-eight people signed in for the meeting. The majority of the comments received at the public meeting were in favor of the project. The public is generally excited about the pedestrian bridge as a component of the proposed overall South Waterfront redevelopment opportunities. The Knoxville City Council held a workshop for the South Waterfront Pedestrian Bridge on 10/13/2011. The City Council workshop was attended by the mayor, vice-mayor, the finance director, five council members, and a few south waterfront property owners, along with the South Waterfront Redevelopment Director and six representatives from the design team. The City's consultant design team presented the preliminary plans and the environmental team discussed the progress of the environmental clearance. Refer to Attachment C for a copy of the public meeting and workshop announcement, a copy of the public meeting sign-in sheet, and a copy of the October 13, 2011 meeting minutes.

## Project Alternatives

### Build Alternative

The proposed bridge will connect existing pedestrian and bicycle systems located on the north side of the river to the South Waterfront Riverwalk. The City has several portions of the South Waterfront Riverwalk constructed in an effort to ultimately provide approximately three miles of riverwalk. Several alignments were identified (Alternatives Exhibit provided in Attachment B) and an initial evaluation was made. It was determined that the best alignments to stimulate growth in the South Waterfront Area, and create functional and economic development linkages between the UT campus and the South Waterfront Redevelopment Area, as well as expand the pedestrian/bicycle network, connecting existing greenways and Volunteer Landing, and supporting the planned South Waterfront Riverwalk, included alignments A through D. As a result, Alignments E, F and G were eliminated from further study. After further evaluation, Alignment B was eliminated due to

potential conflicts with the UT Master Plan, and C and D were combined (Alternatives Exhibit provided in Attachment B). The south landing is at Clancy Avenue for both alignments (C and D).

The combined C and D alignment was selected as the preferred alignment. The north landing will be in the vicinity of the pedestrian concourse between Thompson-Boling Arena and the Pratt Pavilion. Aesthetically, the bridge must complement the family of nearby historic bridges (Henley Street Bridge and Gay Street Bridge), the nearby downtown buildings, and the University of Tennessee campus, yet be designed to speak to its own time. The preliminary plan presented in this purpose and need document depicts the north landing between Thompson Boling Arena and Pratt Pavilion and the south landing at Clancy Avenue.

The conceptual design considers both concrete and steel designs. The concrete could be precast or cast in place. For the concrete design, a concrete box girder was considered, probably a single cell that would be post-tensioned in order to attain adequate strength. It would include an edge girder system with transverse floorbeams and a longitudinal slab system. This would be particularly suitable for a cable-stayed structure and other types of structures involving hangers, such as the arch structure. Single-cell and two-cell box girders were considered under the structural steel alternative.

#### No Build Alternative

The No-Build Alternative would not result in a maximized pedestrian and bicycle safety by allocating a non-motorized route unshared by vehicles across the river, or aid in minimizing environmental impacts, transportation-related fuel consumption, and reliance on foreign oil by providing safe and attractive alternative transportation and commuting options.

## Relocation and Right-of-Way (ROW) Impacts

- The project does not involve relocation.
- The project involves relocation and the relevant Conceptual Stage Relocation Plan is included in the Technical Studies attachment.
- The project involves permanent easements.

The exact amount of right-of-way and/or easements that will be acquired for the project has not yet been determined. The bridge will be on air rights over the Tennessee River and no piers are proposed in the river. The bridge route other than the south bank is on property which will not be purchased in fee.

Therefore, for purposes of the Categorical Exclusion document a corridor measuring 1,930-feet long by 80-feet wide was assumed between Phillip Fulmer Way and Blount Avenue in order to calculate potential easements or fee simple right-of-ways. Based on this assumption, the potential right-of-way and/or easement acquisition could be as much as 3.5 acres. The City of Knoxville will carry out a right-of-way and relocation program. This program will be in accordance with the Tennessee Uniform Relocation Assistance Act of 1972 and the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646).

## TECHNICAL STUDIES

### Ecology

- The Ecology Report is included in the Technical Studies attachment.

An ecology report was not completed for the proposed project. The proposed bridge will cross the Tennessee River. Temporary impacts are anticipated to the banks of the Tennessee River during construction of the bridge. The bridge will be a span bridge as opposed to a pier bridge or culvert to avoid permanent impacts. Tree clearing is anticipated on the river banks during bridge construction, which is typically a concern for the USFWS, in that such activity could impact potential Indiana bat habitat. The City's natural resource consultants evaluated the trees in the vicinity of the north and south landings where clearing is anticipated and determined that suitable habitat for the Indiana bat does not exist. Snags were not present, nor trees with loose bark.

## Executive Order 11990—Protection of Wetlands

- No wetland areas protected under Executive Order 11990 will be impacted.
- Wetlands are impacted and supporting documentation is included as an attachment.

Coordination with the US Army Corps of Engineers (USACE) has occurred. A response letter dated 02/06/2013 from the agency is included in Attachment D. The letter states that a review of the information provided indicates an activity that will not involve work in waters of the U.S. (streams and/or wetlands). Therefore, a Department of Army permit would not be required.

## Endangered Species

### **USFWS**

- The proposed project meets the TDOT/U.S. Fish and Wildlife Service (USFWS) Memorandum of Agreement (MOA). No further coordination with USFWS is required. A copy of the MOA is included as an attachment.
- The proposed project has been coordinated with the USFWS Field Office. The USFWS response dated 01/23/2013 is included as an attachment. The USFWS's response letter states: We are unaware of any federally listed or proposed species that would be adversely impacted by this project. Therefore, based on the best information available at this time, we believe the requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled for all species that currently receive federal protection.

### **TDEC Database**

- On mm/dd/yyyy the preparer checked the Tennessee Department of Environment and Conservation (TDEC) database to determine if any federal or state listed endangered species are known to exist in the project area. The findings are included in the attachment.
- N/A—A check of the TDEC database was not required.

### **TDEC Natural Heritage Inventory Program**

- The proposed project was coordinated with TDEC's Natural Heritage Inventory Program. The TDEC response dated 01/10/2013 is included as an attachment. The TDEC response e-mail states: Thank you for the opportunity to review this project for potential impacts to rare, threatened, and endangered species. Based on the project description, we cannot envision any impacts to species of concern.
- N/A—Coordination with TDEC's Natural Heritage Inventory Program was not required because either no plant species of concern were found during the TDEC database check or were determined not to be affected by the project.

### **TWRA**

- The proposed project was coordinated with Tennessee Wildlife Resources Agency (TWRA). TWRA response dated 01/04/2013 is included as an attachment. The TWRA response letter states that they concur with the City of Knoxville and TDOT's determination that the proposed project meets the criteria for Categorical Exclusion.
- N/A—Coordination with TWRA was not required because no animal species of concern were found during the TDEC database check.

## Biological Assessment for Endangered Species

- No Biological Assessment is needed.
- A Biological Assessment will be required prior to construction.
- The Biological Assessment is included in the Technical Studies attachment.
- A concurrence letter dated mm/dd/yyyy is included as an attachment.

N/A.

## Executive Order 11988—Floodplain Management

- No encroachments upon the 100-year floodplain protected under Executive Order 11988 are involved.
- Encroachments upon the 100-year floodplain are involved and a FEMA map is included in an attachment.

This project is located within and will encroach upon the 100-year flood plain. The City will address FEMA requirements associated with the bridge construction. Flood Insurance Rate Map Panel 47093C0283F is included in Attachment E.

## Farmland

- The project does not convert farmland to a transportation use.
- If the project converts farmland, the total points in the Natural Resource Conservation Service (NRCS) Farmland Impact Conversion Form are less than 160 points.

N/A.

## Wild and Scenic Rivers

- The project does not involve a designated Wild and Scenic River.
- The project involves a designated Wild and Scenic River.

N/A.

## Air Quality

### *Transportation Conformity*

- The Air Quality Report is included in the Technical Studies attachment.
- Air quality coordination information is included as an attachment.

This project is located in the Knoxville ozone and PM<sub>2.5</sub> nonattainment areas. However, the project is exempt from conformity.

The Knoxville Area Interagency Consultation (IAC) Group concurred with the exempt status of the project on the following dates: FHWA, October 2, 2012; EPA, October 1, 2012; TDEC, October 2, 2012; and Knox County, October 1, 2012. The PM<sub>2.5</sub> clearance record and IAC concurrence responses are attached.

**Mobile Source Air Toxics (MSAT)**

- The project is exempt from MSAT analysis. Coordination information is included as an attachment.
- An MSAT analysis is required.
- MSAT supporting documentation is included as an appendix.

This project is exempt from MSATs analysis since it is exempt from conformity per FHWA's "Interim Guidance Update on Air Toxic Analysis in NEPA Documents".

**Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>)**

- The project area is in a nonattainment area for PM<sub>2.5</sub>.
- The project area is in attainment for PM<sub>2.5</sub>.
- Inter-agency consultation (IAC) documentation is included as an attachment.

**Noise**

- This project is Type III. Coordination information is included as an attachment.
- This project is Type I or Type II. The Noise Report is included in the Technical Studies attachment.

This proposed project is Type III, so a noise study is not needed. Refer to Attachment F for the noise clearance statement provided by TDOT.

**Section 4(f) of the Department of Transportation Act of 1966**

- No land given protection under Section 4(f) will be affected by this project.
- Section 4(f) land is involved. The required Section 4(f) evaluation is included in the Technical Studies attachment.
- A *de minimus* finding for this project is included in the Technical Studies attachment.

N/A.

**Section 6(f) of the Land and Water Conservation Fund Act of 1965**

- Section 6(f) is not involved.
- Section 6(f) is involved. Supporting documentation is included as an attachment.

N/A.



## Section 106 of the National Historic Preservation Act of 1966

### **Cultural Resources**

- This project meets a TDOT/Tennessee State Historic Preservation Office (SHPO) Memorandum of Understanding (MOU). No further coordination with the SHPO is necessary.
- Combined Cultural Resources Report was prepared (the combined report is in the Technical Studies attachment).
- SHPO combined cultural resources letter dated mm/dd/yyyy is included as an attachment.
- Separate Cultural Resources Reports were prepared (see next two sections below). The Historic/Architectural and the Archaeology Reports are in the Technical Studies attachment.
- SHPO historic/architectural resources letter dated 08/13/2014 is included as an attachment.
  - National Register of Historic Places listed or eligible historic/architectural properties are affected.
  - No National Register of Historic Places listed or eligible historic/architectural properties are affected.
- SHPO archaeological resources letter dated 08/13/2014 is included as an attachment.
  - National Register of Historic Places listed or eligible archaeological properties are affected.
  - No National Register of Historic Places listed or eligible archaeological properties are affected.

The proposed project has been coordinated with the SHPO. The SHPO response dated 08/13/2014, regarding the Historic Architectural Report, states: Based on the information provided, we find that the project contains eight cultural resources eligible for listing in the National Register of Historic Places. We further find that the project as currently proposed will not adversely affect any of these resources. Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary.

The SHPO response dated 08/13/2014, regarding the archaeological report, states: Based on the information provided, we find that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

- Cultural resources mitigation measures are included as an attachment.

N/A.

### **Native American Consultation**

- This project does not require Native American consultation. Verification that coordination is not required is included as an attachment.
- Pursuant to 36 CFR 800, a consultation letter dated 09/26/2012 was sent to the following tribes (*check below all tribes that apply*) and is included as an attachment.
- Responses were received from the following tribes (*check below all tribes that apply*) and are included as an attachment.
- No tribal responses were received.

*Letters sent to/responses received from (Check all that apply):*

Sent to	Received from		Sent to	Received from	
<input type="checkbox"/>	<input type="checkbox"/>	Absentee—Shawnee Tribe of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Muscogee (Creek) Nation
<input type="checkbox"/>	<input type="checkbox"/>	Alabama Quassarte Tribal Town	<input type="checkbox"/>	<input type="checkbox"/>	Poarch Band of Creek Indians
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cherokee Nation	<input type="checkbox"/>	<input type="checkbox"/>	Quapaw Tribe of Oklahoma
<input type="checkbox"/>	<input type="checkbox"/>	Chickasaw Nation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shawnee Tribe
<input type="checkbox"/>	<input type="checkbox"/>	Choctaw Nation of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Thlopthlocco Tribal Town
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Eastern Band of Cherokee Indians	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	United Keetoowah Band of Cherokee Indians in Oklahoma
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Eastern Shawnee Tribe of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Other—name of tribe
<input type="checkbox"/>	<input type="checkbox"/>	Kialegee Tribal Town	<input type="checkbox"/>	<input type="checkbox"/>	Other—name of tribe

The United Keetoowah Band of Cherokee Indians responded by email on 09/30/2012, stating they have no comments or objections to the proposed project.

The Cherokee Nation responded by email on October 25, 2012, stating they have no knowledge of any historic, cultural or sacred sites within the effected area.

The NAC coordination letter and both responses are located in Attachment H..

## Hazardous Materials

- No underground storage tanks or sources of hazardous materials are, or have been, located in the project impact area. If any hazardous materials are found during construction they will be handled and disposed of in compliance with applicable federal and state regulation. Verification that there are not sites or a study is not needed is included as an attachment.
- Hazardous material site(s) are involved.
- The Hazardous Materials (Phase I ESA) Report is included in the Technical Studies attachment.

A Hazardous Material Evaluation was conducted for the South Waterfront Pedestrian Bridge project area based on regulatory file reviews, historic aerial photographs and topographic maps, city directory reviews, interviews of regulatory personnel and field observations. The combined findings of the evaluation indicated that three registered UST sites and two US Brownfields sites (Knox River Warehouses and Specialty Metals) are within or adjacent to the pedestrian bridge corridor. According to the Tennessee Department of Environment and Conservation Division of Underground Storage Tanks the three UST sites have received closure letters, and are therefore not expected to pose a concern for the project corridor.

Ground disturbing activities proposed in the vicinity of the south bridge landing may include pier and sidewalk construction and possible sidewalk removal and replacement. This would include excavation below the ground surface. The Hazardous Material Evaluation report indicated that a Phase II ESA was performed on the Specialty Metals property in 2011. Mercury, arsenic, barium chromium, lead, and polyaromatic hydrocarbons (PAHs) were detected in soils at levels exceeding the EPA Regional Screening Levels. The report stated that disturbances and excavation of soils on the Specialty Metals property during pier construction will require further characterization in order to determine proper handling and disposal of the soils from this property.

The report also stated that the adjacent Knox River Warehouses operated as a textile mill for over 45 years. It is possible that historical releases of petroleum hydrocarbons, metals, or PAHs from this property could have impacted the subsurface soils and/or groundwater in this area. If impacted soils are encountered during these activities, a Phase II ESA investigation may be necessary. The Phase II ESA would support either preconstruction remediation or a site health and safety plan/soil handling plan for construction.

In the event hazardous substances/wastes are encountered within the proposed right-of-way or other portions of the project corridor, their disposition shall be subject to the applicable sections of the Federal Resources Conservation and Recovery Act, as amended; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1977.

The Hazardous Materials Evaluation was reviewed by TDOT. In an email dated 03/06/2013, the TDOT Hazardous Materials Office stated that it had reviewed the report and found it to be acceptable, and they anticipate more information once the final alignment is tied down. Refer to the email dated 03/06/2013 located in Attachment I.

## Environmental Justice

- No Environmental Justice issue is involved.
- Environmental Justice issues are involved.
- Environmental Justice documentation is included in the Technical Studies attachment.

The project will be in compliance with Executive Order 12898, which requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low income populations in the United States.

It is not anticipated that the proposed project would disproportionately impact any environmental justice populations/communities.

## Other Issues

- No other issues are involved.
- Other issues are involved.
- Supporting documentation of other issues is included as an attachment.

N/A.

## Environmental Commitments

- Commitments are involved on the project and the list is found on the Environmental Commitments Green Sheet.
- Commitments are not involved on the project.

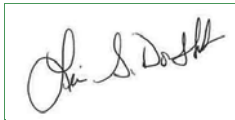
## Preparer's Certification

I hereby certify that I have read and understand the *Guidance for TDOT Environmental Document Templates*.

This document has been reviewed for compliance with applicable federal, state, and local laws and regulations. It has been prepared in compliance with the Council on Environmental Quality Regulations for Implementing the Procedural Provision of the National Environmental Policy Act, 40 CFR 1500–1508, 23 CFR 771, and the Tennessee Environmental Procedures Manual. I hereby certify that I have read and understand 23 CFR 771.117(d).

This document has been prepared by experienced, technically competent, and knowledgeable professionals. I can attest to the document's quality, accuracy, and completeness. By signing this document I am further certifying that, to the best of my knowledge, it meets the criteria for a D-List Categorical Exclusion.


Prepared by:



10/24/2014

Leira Douthat  
Project Manager  
S&ME Inc.  
865-970-0003  
ldouthat@smeinc.com

Local Government  
Representative Signature  
(if prepared by local  
government):



10/24/2014

Tom Clabo  
Chief Civil Engineer  
City of Knoxville  
865-215-6100  
tclabo@cityofknoxville.org

## TDOT Approval

The Environmental Division TDOT has reviewed the proposed project for compliance with environmental laws and regulations. This project as proposed will not involve significant impacts to planned growth, land use, or existing travel patterns. The above findings demonstrate the fact that the proposed improvements will not indirectly or cumulatively have any significant environmental impacts. Therefore; it is our recommendation that this project be classified as a D-List Categorical Exclusion under the provision of 23 CFR 771.117(d).

**Reviewed by:**



10/24/2014

Drew Gaskins  
Transportation Planner  
TDOT Environmental Documentation Office

**Approved by:**




10/24/2014

Ann Epperson  
Assistant Director  
TDOT Environmental Documentation Office

## FHWA Concurrence

**Concurrence**



10-29-14

Ms. Leigh Ann Tribble  
Environmental Program Engineer  
Federal Highway Administration- Tennessee Division Region 1

**cc:** TDOT Environmental Docs, TDOT  
Region 1, TDOT Local Programs,  
Mr. Ronnie Porter, Mr. Tom Clabo,  
City of Knoxville, Ms. Leira Douthat

## Attachments



## Attachments



PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment A  
2011-2014 TIP

*NOTE: This project was included in the 2011-2014 TIP, and the status is listed as "obligated" in the 2014-2017 TIP.*

## Knoxville Regional Transportation Planning Organization TRANSPORTATION IMPROVEMENT PROGRAM FY 2011-2014

TIP No.	2011-043	Revision No.	0	
TDOT PIN		L RTP No.	944	
Project Name	Tennessee River Pedestrian Crossing			
Lead Agency	City of Knoxville			
Total Project Cost	\$12,500,000			
Project Description	Greenway connecting Knoxville's South Waterfront to UT.			
Termini/Intersection				
Counties	Knox			
City/Agency	City of Knoxville			
Length		(miles)	Conformity Status	Exempt
Additional Details	Local non-federal funding allocation updated from \$106,704 to \$133,380. Conformity Status: Exempt under 40 CFR 93.126			

Programmed Funds

FY	Type of Work	Funding Type	Total Funds	Federal	State	Local	Other
2011	PE-D	TCSP	\$666,900	\$533,520	\$0	\$133,380	\$0
Total			\$666,900	\$533,520	\$0	\$133,380	\$0

Revision Date	
Revision Details	
Previous TIP No.	2008-139





PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment B  
Project Location Maps, Conceptual Plans and Photographs



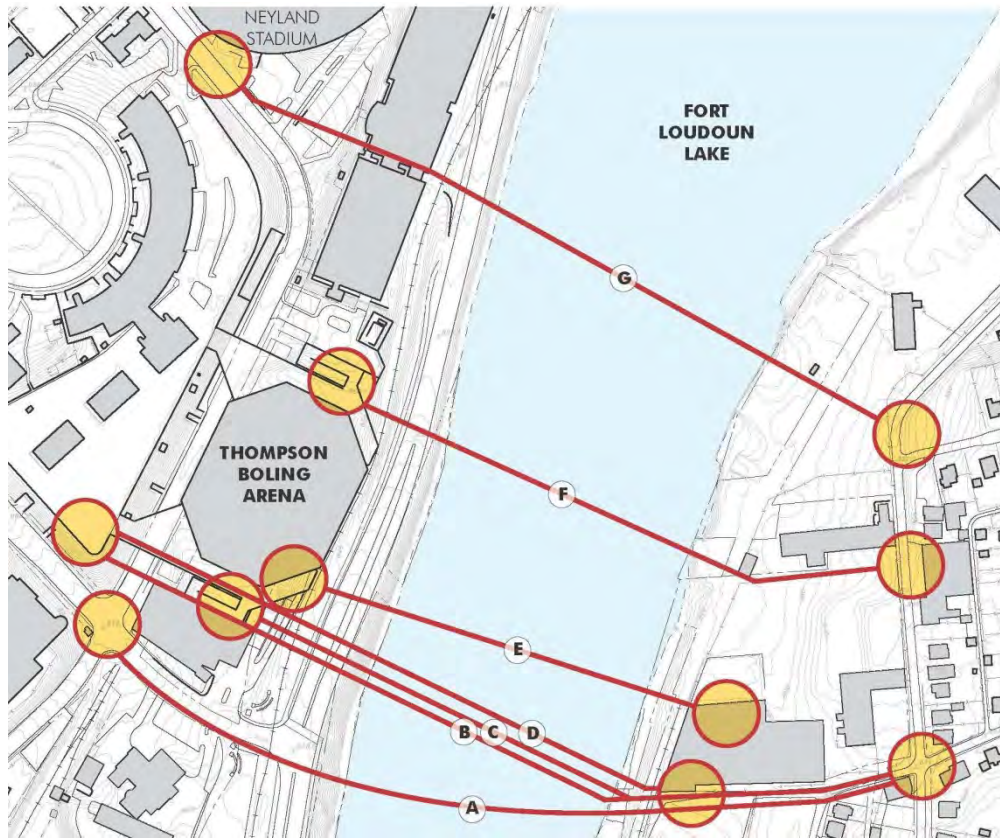




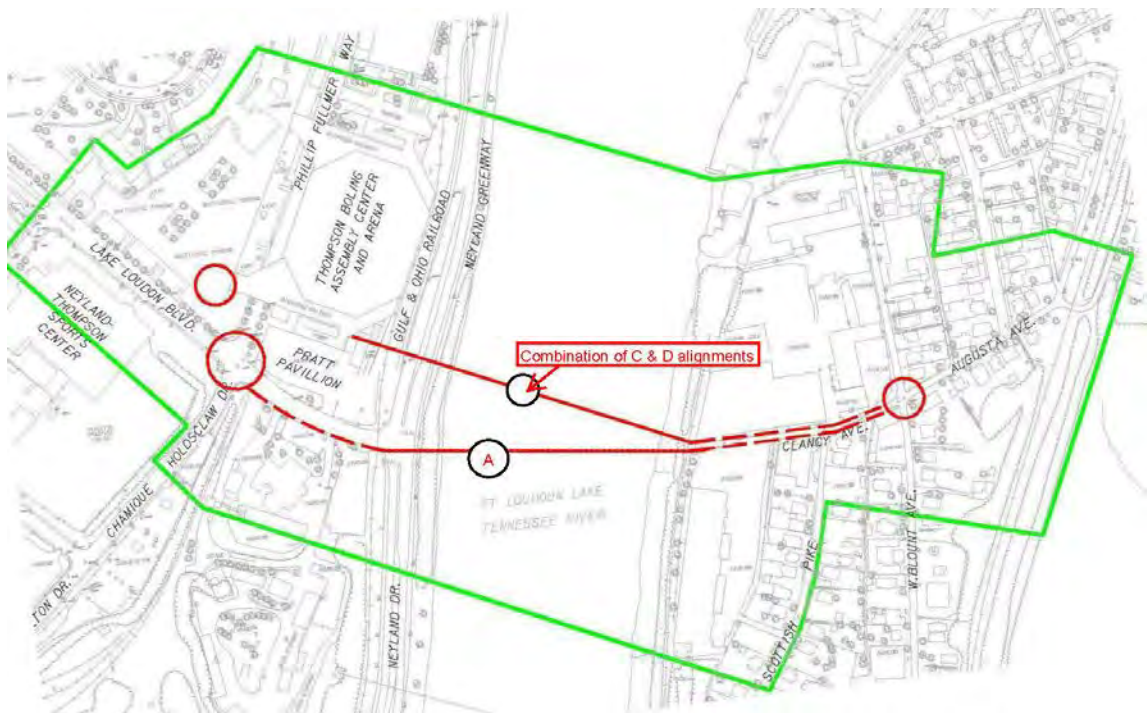


**Evaluation Corridor for Proposed South Waterfront Pedestrian Bridge**

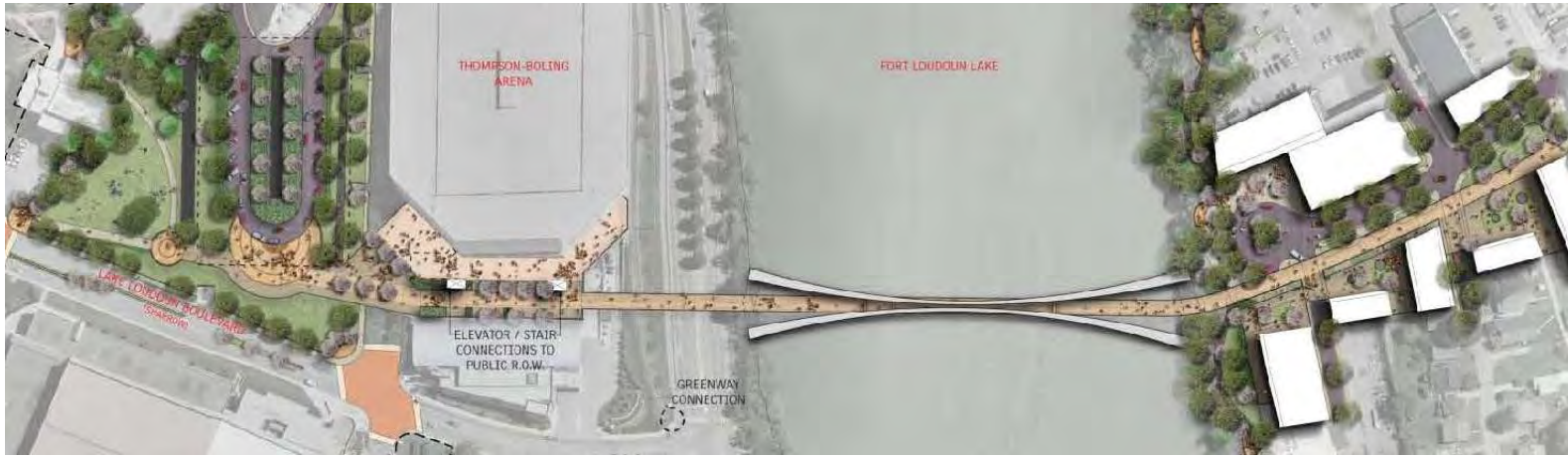




Alternatives A through G that were considered for the Pedestrian Bridge



Preferred Alternatives for the Pedestrian Bridge  
(combination of C & D alignments selected)



## Preliminary Plans





## Bridge Concept



## North Landing Concept



## South Landing Concept



1. Top deck of Thompson Boling Arena facing southeast towards proposed south landing of the pedestrian bridge.



2. Top deck of Thompson Boling Arena facing southeast.





3. Top deck of Thompson Boling Arena facing southeast.



4. Thompson Boling Arena parking lot facing southeast.



5. Entrance to Thompson Boling Arena at Fort Loudon Boulevard, facing southeast



6. Lake Loudon Boulevard at the entrance to Thompson Boling Arena, facing Northwest





7. Parking lot of Specialty Metals at proposed south landing for pedestrian bridge facing northwest towards the Tennessee River, which is just beyond the tree line.



8. South Clancy Avenue facing east. Scottish Pike on right.



9. South Clancy Avenue facing west towards Specialty Metals entrance.



10. Intersection of Clancy Avenue and Blount Avenue facing east.



11. Augusta Avenue at Cambridge Street facing east.



PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment C  
Public Meeting Information





# KNOXVILLE SOUTH WATERFRONT Monthly Newsletter

Website Information:

No. 10-11 (October 2011)

[www.cityofknoxville.org/southwaterfront](http://www.cityofknoxville.org/southwaterfront)

## PRESS RELEASE

*Issued by the City of Knoxville  
September 29, 2011*

The City of Knoxville announced today that the University of Tennessee has agreed with the continued development of the proposed pedestrian/bicycle bridge that would connect Knoxville's South Waterfront with the UT campus.

UT's decision came after staff members, who worked with the City of Knoxville's design consultants on the project for several months, determined that the conceptual design has the potential to benefit both the city and the University. That has led to the university's endorsement of the city's efforts to continue to review and refine the design.

The proposed landing for the bridge on the north (university) side of the Tennessee River is located between Thompson Boling Arena and Pratt Pavilion, and is intended to connect to an upper level exterior walkway – enabling students to walk or bike from the bridge into campus.

The City of Knoxville plans to unveil the preliminary design for the bridge and its landings during an open house on October 10, followed by a presentation at a City Council workshop on October 13. If the consensus is to move forward, the formal environmental review and permitting process could begin.

"I know the city still has a long way to go before the final decision is completed and any funding or construction decisions are made," said UT Chancellor Jimmy Cheek. "However, we feel comfortable that the project works from the university's standpoint."

The proposed bridge is part of the city's South Waterfront Vision Plan, a guide for long-term development of the south bank of the Tennessee River, a large segment of which is directly across from the UT campus.

"We're grateful to the University of Tennessee for its support of this project," said Knoxville Mayor Daniel Brown. "We value our relationship with UT and we're always pleased to work with the university on efforts like this one that could have some wonderful benefits for the city and the school."

## SW-UT PEDESTRIAN / BICYCLE BRIDGE Conceptual Design Phase

October 2011 marks the first opportunity for public review of the recommended design for the bridge. Please note the meeting announcements below, and the press release to the left. Anyone interested in this project is encouraged to attend the meetings.

### Public Meeting Announcements

#### SW-UT PEDESTRIAN / BICYCLE BRIDGE

Two meetings open to the public have been scheduled for review of the Conceptual Design for the Pedestrian / Bicycle Bridge connecting the South Waterfront to the University of Tennessee:

#### PUBLIC OPEN HOUSE

Monday, October 10, 2011  
6:00 – 8:00 PM

Cityview Condominiums Club Room

445 W. Blount Avenue  
Knoxville, TN

#### CITY COUNCIL WORKSHOP

Thursday, October 13, 2011  
5:00 PM

Small Assembly Room

City County Building

400 Main Street

Knoxville, TN

The recommended Conceptual Design for the bridge and landings, along with other information, will be presented. A Draft Design Program is available for review on the City's South Waterfront website shown at the bottom of this page, or by clicking on the following link:

[http://www.cityofknoxville.org/southwaterfront/draft\\_pedbicyclebridge.pdf](http://www.cityofknoxville.org/southwaterfront/draft_pedbicyclebridge.pdf)

**We hope to see you at the meetings!!**

## PROJECT UPDATE

### Waterfront Drive / Suttree Landing Park

On June 24<sup>th</sup>, the Knox County Rail Authority approved the sale of the rail spur located on the future Suttree Landing Park property by the Knoxville & Holston River Railroad to KCDC (acting on behalf of the City). The spur runs parallel to the river, and will serve as the base for the section of Riverwalk that will cross through the park. This is the last piece of land needed to accommodate construction of the park.

Also, as part of the TVA / US Corps of Engineers permit for the park, a historic structures inventory report for the entire South Waterfront area was recently completed. The inventory is in draft form and has been submitted to several state and federal agencies for review. In the near future, the inventory will be made available for public review, and will be submitted to the City of Knoxville Historic Zoning Commission for review. The report will also be posted on the South Waterfront website once the agency reviews are complete.

### SW-UT BRIDGE

#### Working Group Meeting

The Bridge Working Group will meet to review the bridge design on October 10, 2011, at 2:00 PM in the Small Assembly Room, City County Building. The meeting is open to the public.

South Waterfront Development Department  
400 Main Street, Room 503  
Knoxville, Tennessee 37902



[southwaterfront@cityofknoxville.org](mailto:southwaterfront@cityofknoxville.org)

Dave Hill, Senior Director  
(865) 215-3764 [dhill@cityofknoxville.org](mailto:dhill@cityofknoxville.org)



# KNOXVILLE SOUTH WATERFRONT BRIDGE DESIGN OPEN HOUSE: OCTOBER 10, 2011

## MEETING SIGN-IN SHEET

NAME	ADDRESS	PREFERRED PHONE CONTACT #	E-MAIL ADDRESS
GRANT V. McDERMOTT	P.O. Box 2301 KNOXVILLE, TN 37901	865-777-5807	GRANT.V.McDERMOTT@MORGANKEEGAN.com
Frances Adams-O'Brien	5300 Stoneoak Lane 37920		faobrien57@gmail.com
Jeff Maples	University of Tennessee	865-974-3061	maples@utk.edu
John Sanders	514 W JACKSON AVE	329-0360	jsanders@sanderspace.com
Duane + Rhonda Bias	2501 Robin Bend Lane Knox 37924	637-1946	duanebias@comcast.net
Joe Sullivan	3813 Maloney Rd	921-4983	sullivan@metropolisp.com
Kevin Hill	509 Cambridge	719-7456	thehills2007@hotmail.com
Jerry Britton	2389 John Deere Drive	865-595-0363	jbritten@brittanbridge.com
John & Kathy McLeod	5321 Peregrine Crest Pkwy	540-321-6178	KathyPhonycreek.com
Sam Adams	5300 Stoneoak Lane 37920	865-577-8821	Smada.home@gmail.com
GARY E. DRITSCH	406 MILLERS 37920	865-573-7355	GARYEDRITSCH@BELL SOUTH TN
Charlotte Klinehager	2504 Scottish Pike 37920	865 573 4087	174081@comcast.net
JIM HAGERMAN	2222 Island Home Blvd 37920	865 579 6048	HELLBIKER@VID.IONEMAIN.COM
SUSAN MALBIN	307 YOAKUM PKWY ALEXANDRIA VA 22304	202-390-3301	susan-malbin@hotmail.com
Sean Dunehew	Apt 424		seandunehew@yahoo.com
ALVIN NANCE	901 N. BROADWAY K-TN 37914	(865) 403-1106	ANANCE@KLCDC.ORG
Steve King	1400 Lorraine St, Knoxville, TN 37921	865-215-6103	sKing@cityofknoxville.org
JOHN HUNTER	1400 LORRAINE ST. 37921	865-215-6100	JHUNTER@cityofknoxville.org
Randall Kenner	RM 654A City County Bldg	865-215-3710	RKenner@cityofknoxville.org
NATHAN HUNTER	2173 HUSBORO HEIGHTS 37920	225-772-7393	nathanielhunter@hotmail.com



## KNOXVILLE SOUTH WATERFRONT BRIDGE DESIGN OPEN HOUSE: OCTOBER 10, 2011 MEETING SIGN-IN SHEET

NAME	ADDRESS	PREFERRED PHONE CONTACT #	E-MAIL ADDRESS
Madeline Rogero	418 Woodlawn Pike 37920	609-6878	rogero@comcast.net
Juni Voots -	4847 Tomache Dr. 37909	454-1553	Footr4847@comcast.net
William TERRY	4812 Tomache Dr. 37909	556-5966	Terry.W@Comcast.net
Jim Staub	2128 Spence Pl 37920	850-7994	—
Robert Tanner	2646 Scottish Pike 37920	<del>865-544-2000</del>	waterfront@2646scottishpike.com
Bob Thompson	8136 Jonesboro 37920	577 1560	T3ANDPC@bellsouth.net
Martin Pleasance	4937 Reed Lane 37920		martin.pleasant@yqloo.com
Monte Stanley	3029 Davenport 37920	621-3745	MWStan@comcast.net
Sean Vasington	524 S Gay St #201 37902	522-2752	sean@cija.com
MAXI FRANK	555 W JACKSON AVE #502 37902		maxitittel@gmail.com
MICHAEL DAVIS	504 N CENTRAL ST APT 2 37911	931.409.7540	Michael.alan.davis@gmail.com
Marie Parrish-CITYVIEW	(Please add me to email newsletter)		marie.parrish@CITYVIEWTV.COM
Lib Ness	5201 Yorktown	661-4633	libnett@comcast.net
Bob Ness	5201 Yorktown	"	"
CHUCK DRAPER	779 MORRIS ST #5	865-442-3048	cdraper2@utk.edu
Jack O'Hanlon	313 N. GAY ST	" 546-6735	johanlon@ohginc.com
Regina Ann Borawski	730 Avenue A	646-8482	REGISB9@CS.COM
John Thurman	703 Forest Heights Rd.	865.544.2000	jthurman@mhmiac.com



# KNOXVILLE SOUTH WATERFRONT BRIDGE WORKING GROUP MEETING: OCTOBER 11, 2011

## MEETING SIGN-IN SHEET

NAME	ADDRESS	PREFERRED PHONE CONTACT #	E-MAIL ADDRESS
David Cook	901 N. Broadway KWC	403-1188	dcook@kcdc.org
Mark Rauhuff	KUB	558-2757	mark.rauhuff@kub.org
HOYL GILL	6505 S. NORTHSHORE DR 37919	584-3543	gill@microceru.com
Bill Taylor	2547 Scottish Pk KV 37920	603-2056	taylor1618@bellsouth.net
Dave Hill	Rm 503, 400 Main Street, Knox 37902	865 215 3764	dhill@cityofknoxville.org
SUSAN McCollum	TVA	865-632-8073	semccollum@TRA.gov
Janet Duffey	Eastern Region TVA 260 Interchange Permitting PK Dr. Lenoir City 37722	865 632 1302	jlduffey@tra.gov
Bob Bowers	WSA	865/963-4300	rbowers@willbursmith.com
Sean Vasington	CRJA 524 S Gray St #201	522-2752	sean@crja.com
Liz Porter	S&ME 143 Topside Rd Louisville 37777	970-0003	lporter@smeinc.com
Mike Stomen	S&ME	970-0003	mstomen@smeinc.com
BRANSON RACE	SANDERS RACE ARCHITECTURE 514 W. JACKSON	729-0916	brance@sanderspace.com
David Watson	1300 N Broadway 37917	(865) 603-3988	david@etcdc.org
Jeff Maples	405B Andy Holt Tower Univ. of TN	(865) 974-3061	maples@utk.edu
JOHN HUNTER	1400 LORRAINE STREET 37921	(865) 215-6100	jthunter@cityofknoxville.org
Poc Claussen	472 W. Cumberland AVE 37902	(865) 525-9400	pvc@GULFANDOHIO.COM
Joe Hultquist	2290 Fisher Place 37920	(865) 579-5172	joseph44@bellsouth.net
Ellen Zavisca	CCB Suite 403	865 215-2500	ellen.zavisca@knoxtrans.org

**KNOXVILLE CITY COUNCIL WORKSHOP**  
**SOUTH WATERFRONT PEDESTRIAN BRIDGE**

**Minutes of Meeting**

**October 13, 2011**

Members Present—Mayor Daniel Brown; Vice Mayor Joe Bailey; Councilpersons Nick Della Volpe, Duane Grieve, Brenda Palmer, Nick Pavlis, Charles Thomas

Team Members—Dick Lawrie, Bob Bowers, Sean Vasington, Brandon Pace, Mike Stomer, Liz Porter

---

Dave Hill initiated the discussion with brief introductory remarks:

- City contracted with Lawrie & Associates in the Fall of 2010 to initially undertake Program Development for the project. This included development of a Design Program, a Concept Design for the main span bridge and north and south landings, and initiation of an Environmental Review and Permitting Process.
- Explained that the purpose of the discussion is for the Lawrie Team to update City Council on its progress to date and to present its final recommended Concept Design.
- Described the proposed alignment for the bridge – a connection to the west side pedestrian plaza of Thompson Boling Arena on the north bank and the extension of Clancy Avenue on the south bank. He noted that this alignment was chosen after considerable deliberation for three primary reasons: 1) it provides a connection to the heart of the UT campus at a location that the UT administration has endorsed; 2) It is strategically spaced between other bridges which provide pedestrian crossing of the river; and 3) It provides good connectivity for both recreation and functionality.
- Noted that project development would require a rather complex environmental approval and permitting process and that the right-of-way acquisition process would involve property owned by TDOT, the G&O Railroad, TVA and UT in addition to private property owners on the south bank.
- Noted that City staff has had continuing coordination with the UT campus administration.
- Noted that bridge construction could begin in a 3-5 year window but would likely be timed to coincide with redevelopment of the South Waterfront area which at this point is dependent on an improving economy.

- Concluded that with City Council concurrence, project development was ready to move toward the environmental assessment and preliminary design phases and detailed discussion of the funding strategy.

The Lawrie Design Team then presented a detailed review of progress to date. In his opening remarks, Dick Lawrie noted that the Team was fully committed to the goal of excellence in bridge design with strong emphasis on economical construction. There followed a detailed discussion with graphics of the three main components; the main span, the north landing and the south landing.

### Main Span

The recommended structure is a single arch that would span the entire 710 ft. width of the river. It likely would be a concrete structure although steel is an option. Approach spans would also be required on the north bank to cross Neyland Drive and the G&O Railroad to reach Thompson Boling Arena and on the south bank toward Blount Avenue to provide an acceptable grade for walking and biking.

### North Bank

The bridge would connect to the upper level pedestrian plaza on the westerly end of Thompson Boling Arena. The Concept Design proposes multi-phase development of the campus connection with the long term plan being undertaken in conjunction with future (and currently unbudgeted) campus redevelopment in this area. An interim connection can be developed which has minimal impact on University facilities. An elevator would be provided along with the existing ramp (which does not meet ADA requirements) to reach Phillip Fulmer Boulevard and via that street and Lake Loudon Boulevard to reach the Neyland Drive Greenway.

### South Bank

The elevation of the main span deck at the south riverbank is approximately 30 ft. above ground, so an approach span will be needed that will extend to the vicinity of Blount Avenue. It was explained that this approach span should be designed in conjunction with south bank private development in order to maximize connectivity and economy of construction of both public and private projects.

Liz Porter with S&ME described the environmental clearance process which will include TDOT, TVA, TDEC, the Corps of Engineers and other regulatory agencies. She noted that the Team's current scope of services includes initiation of this process and that it can begin as soon as there is final agreement on the location of the main span.

## Questions, Comments and Discussion

- Based on questions from Councilpersons, Dave Hill provided the following information regarding the probable development cost of the project and the current budget availability for same. Estimated probable cost of project: \$17.3M-\$20.5M with a breakdown of \$11.3M for the main span, \$5M for the north landing and \$4.2M for the south landing. Budget: The current Concept Design work is being funded by a \$600K grant. An additional \$7.425M is available thru budgeted (TPO) transportation funds and there is an \$8M reserve fund for South Waterfront development.
- Ms. Susan Mauldin, a South Knoxville property owner who currently lives in Alexandria, VA, said that south Knoxville needs an economic stimulus and that she considers the South Waterfront plan and this project to be excellent. She said the project might provide UT with the opportunity to expand its campus to the South Knoxville area which would perhaps allow their financial involvement.
- Robert Tanner, 2646 Scottish Pike, also voiced support for the bridge, noting that it would provide another connection to the established greenway system.
- In response to a question from Councilman Della Volpe, Dick Lawrie indicated that indeed the bridge design would take into account heavy pedestrian loading from such groups as marching bands, UT game-day crowds and Boomsday.
- In response to questions from Councilman Della Volpe and Vice Mayor Bailey, Sean Vassington said that the Team had considered seven different alignments for the bridge prior to making a final recommendation and explained the reasoning for that decision. He also said that direct connection to Neyland Drive and the existing greenway was not practical as there was a 27 ft. elevation difference due to the clearance requirement over the barge channel.
- Councilman Brown said that final design architecture must be carefully conceived in consideration of cost, aesthetics and safety.
- Councilman Grieve commented that the proposed bridge was a beautiful structure but expressed concern about funding for the project.
- Councilman Pavlis expressed cautious optimism about funding; suggesting that the project must be coordinated with increased tax revenue from South Waterfront redevelopment. He also noted that the project represents an opportunity for a direct tie to the proposed "urban wilderness". Finance Director York indicated that the tax increment for FY 10/11 was \$3.6M.
- Councilwoman Palmer said that the proposed design is beautiful and that the project offers a great opportunity for development in the area.
- Councilman Thomas said that he also liked the design, especially because it did not include any piers in the river.

- Dave Hill reiterated that the UT administration has indicated their approval of the plan and location and sees the bridge as complimentary to the campus.

Dave Hill concluded the discussion with some additional thoughts on the budget and urged City Council consideration of an additional budget authorization in the short term to allow the Lawrie Team to proceed to preliminary design.





PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment D  
Agency Coordination Letters



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
NASHVILLE DISTRICT, CORPS OF ENGINEERS  
3701 Bell Road  
NASHVILLE, TENNESSEE 37214

February 6, 2013

Regulatory Branch

SUBJECT: File No. 2013-00142; Pedestrian Bridge Connecting South Knoxville and UTK,  
City of Knoxville, Knox County, Tennessee (Local Government Program Initial Coordination,  
PIN 113061.00)

Ms. Scarlett Sharpe  
Tennessee Department of Transportation  
Environmental Documentation Office – Local Programs  
Suite 900, James K. Polk Building  
Nashville, TN 37243-0334

Dear Ms. Sharpe:

This is in response to your January 3, 2013, request for our comments concerning the subject project. We understand that the project proposal may not have specific design plans at this time, and this inquiry is an initial review to obtain grant funds. The U.S. Army Corps of Engineers (USACE) has regulatory responsibilities pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Under Section 10, the USACE regulates any work in, or affecting, navigable waters of the U.S. Under Section 404, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands.

A review of the information provided indicates an activity that would not involve work in waters of the US (streams and/or wetlands). Therefore, a Department of the Army permit would not be required.

If you have questions or need further assistance, please contact me at the above address or phone (615) 369-7504. Thank you for the opportunity to participate in your planning process.

Sincerely,

A handwritten signature in cursive script that reads "Lisa R. Morris".

Lisa R. Morris  
Project Manager  
Operations Division



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

January 23, 2013

Ms. Scarlett Sharpe  
Tennessee Department of Transportation  
Environmental Planning and Permits Division  
Suite 900, James K. Polk Building  
505 Deaderick Street  
Nashville, Tennessee 37243-0334

Subject: FWS# 13-CPA-0179. Proposed pedestrian bridge over the Tennessee River connecting South Knoxville Waterfront and the University of Tennessee at Knoxville; State Project No: 47LPLM-FO-038, Federal Project No: TCSP-9TN(2), PIN# 113061.00, Knox County, Tennessee.

Dear Ms. Sharpe:

Thank you for your correspondence dated October 16, 2012, regarding the proposed pedestrian bridge over the Tennessee River connecting South Knoxville Waterfront and the University of Tennessee at Knoxville in Knox County, Tennessee. The project would involve construction of a full span bridge to improve access between the north and south sides of the Tennessee River and promote investment and redevelopment in the South Waterfront area. The Tennessee Department of Transportation (TDOT) has requested our comments on federally listed species, wetlands, or other areas of concern for this project. Personnel of the U.S. Fish and Wildlife Service (Service) have reviewed the subject proposal and offer the following comments.

A review of our endangered species database indicates that a number of federally-listed species historically inhabited this reach of the Tennessee River, but have likely been extirpated. TDOT has committed to protective measures which include construction of a full span bridge and proper implementation of erosion and sediment control measures. A survey of forested habitat within the project area concluded that no suitable summer roosting habitat is present for the federally endangered Indiana bat (*Myotis sodalis*).

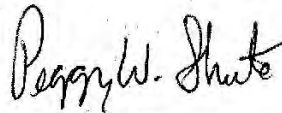
We are unaware of any federally listed or proposed species that would be adversely affected by this project. Therefore, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled for all species that currently receive federal protection. Obligations under section 7 of the Act must be

reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

Information available to the Service does not indicate that wetlands exist in the vicinity of the proposed project. However, our wetland determination has been made in the absence of a field inspection and does not constitute a wetland delineation for the purposes of Section 404 of the Clean Water Act. The Corps of Engineers should be contacted if other evidence, particularly that obtained during an on-site inspection, indicates the potential presence of wetlands.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/525-4995 or by email at [john\\_griffith@fws.gov](mailto:john_griffith@fws.gov).

Sincerely,

*for*   
Mary E. Jennings  
Field Supervisor



## TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER  
P. O. BOX 40747  
NASHVILLE, TENNESSEE 37204

January 4, 2013

Scarlett Sharpe  
Senior Transportation Planner  
Tennessee Department of Transportation  
James K. Polk Building, Suite 900  
Environmental Documentation Office  
505 Deaderick Street  
Nashville, TN 37243-7120

Re: Agency Coordination and Environmental Review  
Pedestrian Bridge Connecting South Knoxville Waterfront and the University of  
Tennessee at Knoxville  
Knoxville, Knox County, Tennessee  
State Project No: 47LPLM-F0-038, Federal Project No.: TCSP-9TN(2)  
PIN No.: 113061.00

Dear Ms. Sharpe:

The Tennessee Wildlife Resources Agency has reviewed the information that you provided regarding the proposed pedestrian bridge project connecting South Knoxville Waterfront and the University of Tennessee at Knoxville, Knox County, Tennessee. Your letter to us requested comments by our agency regarding potential impacts to endangered species, wetlands, and other areas of concern as we may think pertinent due to this proposed project.

The proposed project consists of constructing a pedestrian bridge over the Tennessee River within a 1,930 foot by 80 foot corridor in Knoxville, Tennessee. It is our understanding the amount of right-of-way and/or easements have not been determined yet, the project is located in the 100-year floodplain and the City of Knoxville will address FEMA requirements, the Tennessee River will be crossed but will be spanned by the pedestrian bridge, and no wetlands were found within the project footprint as a result of a survey. Five federally listed mussels, two listed fish, and two listed bat species have been documented near proposed project but it is unlikely that impacts to listed mussels and fish would occur since construction activities are limited to riverbanks and the edge of the river at both landing sites. It is our understanding the City's natural resource consultant's evaluation of the trees at the landings determined that suitable habitat for the Indiana bat is not present. Based upon these understandings, we concur that the proposed project meets the criteria for Categorical Exclusion.

Thank you for the opportunity to review and comment on this proposed project. If you have further questions regarding this matter, please contact me at 615-781-6572.

The State of Tennessee

IS AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER



Sincerely,

*Robert M. Todd*

Robert M. Todd  
Fish and Wildlife Environmentalist

cc: Vincent Pontello, Wildlife Biologist/East TN TDOT Liaison  
Rob Lindbom, Region IV Habitat Biologist  
Bart Carter, Region IV Fisheries Coordinator  
John Gregory, Region IV Manager  
John Griffith, USFWS

**From:** [David Withers](#)  
**To:** [Scarlett Sharpe](#); [Chelsea Broach](#)  
**Cc:** [Leira Douthat](#)  
**Subject:** RE: PIN 113061.00 Pedestrian Bridge Connecting South Knoxville and UTK, Knox County  
**Date:** Thursday, January 10, 2013 1:55:16 PM

---

Dear Ms. Sharpe-

Thank you for the opportunity to review this project for potential impacts to rare, threatened, and endangered species. Based on the project description, we cannot envision any impacts to species of concern.

We hope the project goes well.

Please contact me if you have any questions.

Kind regards-

Dw

David Ian Withers  
Heritage Zoologist  
Tennessee Natural Heritage Program  
7th Floor L&C Tower, 401 Church Street  
Nashville, TN 37243-0447  
(615) 532-0441, (615) 532-3019 fax  
[david.withers@tn.gov](mailto:david.withers@tn.gov)  
<http://tn.gov/environment/na/nhp.shtml>

---

**From:** Scarlett Sharpe  
**Sent:** Thursday, January 03, 2013 2:44 PM  
**To:** David Withers; Chelsea Broach  
**Cc:** 'Leira Douthat' (LDouthat@smeinc.com)  
**Subject:** PIN 113061.00 Pedestrian Bridge Connecting South Knoxville and UTK, Knox County

Dear Sir and Madam,

The Tennessee Department of Transportation (TDOT) in coordination with the City of Knoxville, Tennessee requests your agency's comments regarding this federally funded projects possible impact on endangered species, wetlands and any other area of concern you may think pertinent. Section 7(a)(2) of the Endangered Species Act requires federal agencies to consult with the Secretary of Interior (i.e., U.S. Fish Wildlife Service) to insure that federal actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat. In accordance with 50 CFR 402.8, the federal agency, the Federal Highway Administration (FHWA), can designate in writing a non-federal representative to conduct informal consultation. The FHWA has so designated TDOT.

If you have any questions or need further information about the project, I may be contacted at the

TDOT information shown below.

Please use the Reply All for your response as no paper copy is required.

Thank you,  
Scarlett

Scarlett Sharpe  
Senior Transportation Planner

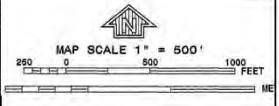
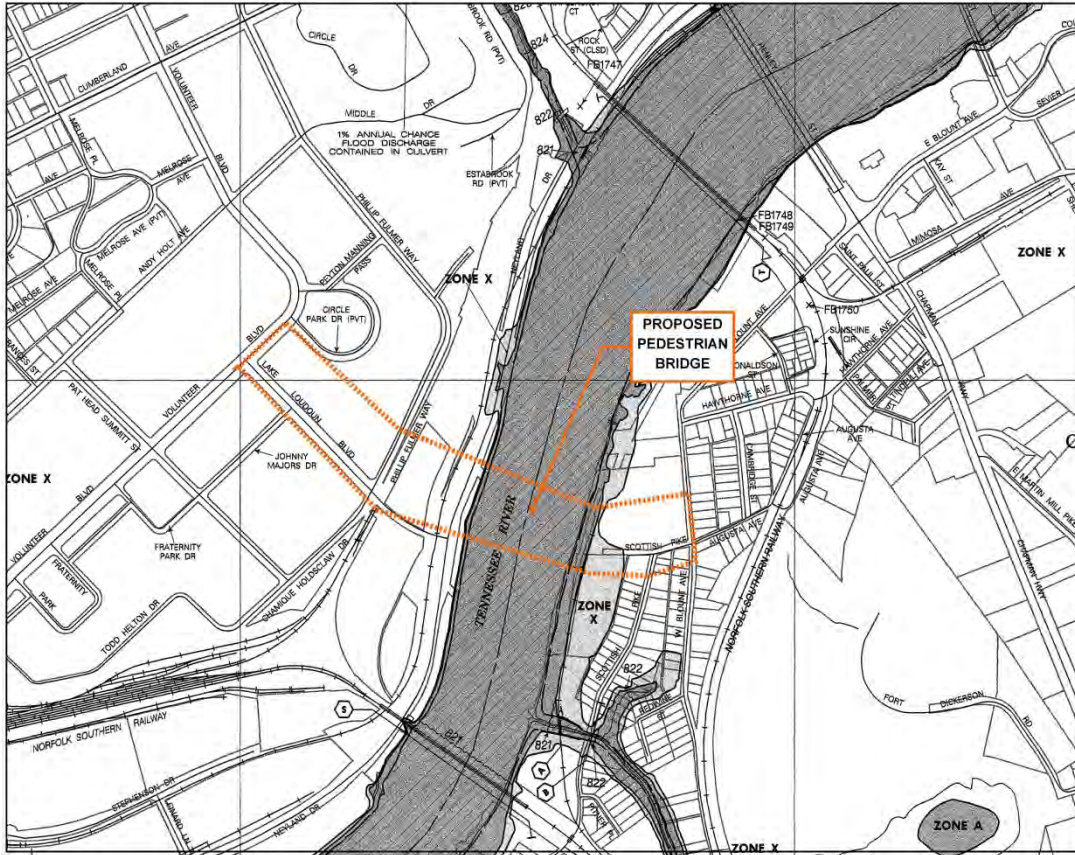
Tennessee Department of Transportation  
James K. Polk Building, Suite 900  
Environmental Documentation Office  
505 Deaderick Street  
Nashville, Tennessee 37243-7120  
615-741-5369 – Direct  
[Scarlett.sharpe@tn.gov](mailto:Scarlett.sharpe@tn.gov)



Gresham, Smith & Partners  
511 Union Street, Suite 1400  
Nashville, Tennessee 37219-1710  
615-770-8542 – Direct  
[scarlett\\_sharpe@gsynet.com](mailto:scarlett_sharpe@gsynet.com)



PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment E  
FEMA Map



PANEL 0283F

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**KNOX COUNTY,**  
**TENNESSEE**  
**AND INCORPORATED AREAS**

PANEL 283 OF 430

SEE MAP INDEX FOR PANEL LAYOUT

COUNTY	ALABAMA	ARKANSAS	FLORIDA
COUNTY	ALABAMA	ARKANSAS	FLORIDA
COUNTY	ALABAMA	ARKANSAS	FLORIDA

MAP NUMBER  
**470830283F**

EFFECTIVE DATE  
**MAY 2, 2007**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT Ch2Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.fema.gov](http://www.fema.gov)





PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment F  
Air/Noise Statement and e-mail IAC Coordination Responses

## Joe Matlock

---

**From:** Darlene Reiter  
**Sent:** Thursday, October 11, 2012 10:50 AM  
**To:** Joe Matlock  
**Subject:** RE: Pedestrian Bridge Connecting South Knoxville and the University of Tennessee at Knoxville - PIN 113061.00  
**Attachments:** 113061.00 PM25 Clearance Record.pdf; IAC Concurrence Responses Knoxville 9-28-12.pdf

Joe –

The air quality and noise statements for this project are provided below.

### **Air Quality**

#### ***Transportation Conformity***

This project is located in the Knoxville ozone and PM<sub>2.5</sub> nonattainment areas. However, the project is exempt from conformity.

The Knoxville Area Interagency Consultation (IAC) Group concurred with the exempt status of the project on the following dates: FHWA, October 2, 2012; EPA, October 1, 2012; TDEC, October 2, 2012; and Knox County, October 1, 2012. The PM<sub>2.5</sub> clearance record and IAC concurrence responses are attached.

#### ***Mobile Source Air Toxics (MSATs)***

This project is exempt from MSATs analysis since it is exempt from conformity per FHWA's "*Interim Guidance Update on Air Toxic Analysis in NEPA Documents.*"

### **Noise**

This project is Type III; therefore, a noise study is not needed.

- Darlene

---

Darlene Reiter, Ph.D., P.E.  
TDOT Environmental Division Consultant  
(615) 574-8102

**Project-Level Conformity**

PIN

Federal Project Number

Conformity Type

County

IAC Group

Type

Priority

**Project Description**

Route Name

Project Description

**Project Origination**

Date Need Identified

Determination Requested By

**Data Collection**

Date Traffic Data Requested

Source of Traffic Data

**TDOT Conclusion**

Conformity Determination

Date of Determination

**Interagency Consultation (IAC)**

IAC Status

Deadline for IAC Comments

**Agency Concurrence Dates**

FHWA  EPA

FTA  TDEC

**Notification And Notes**

Date of TDOT Internal Notification

[Reply](#) [Reply All](#) [Forward](#)

## RE: Knoxville PM2.5 Exempt List, September 28, 2012

corbin.davis@dot.gov

**To:** Darlene Reiter; Alan Jones; Angela Midgett; Benjamin.Lynorae@epa.gov; teresa\_cantrell@nps.gov; Mike.Conger@knoxtrans.org; richd@mymorristown.com; Jim.Ozment; laliddington@aqm.co.knox.tn.us; Marc.Corrigan; Elizabeth.H.Martin@dot.gov; asmcDaniel@aqm.co.knox.tn.us; jim\_renfro@nps.gov; Robert.Rock; Ronnie.Porter;

Tuesday, October 02, 2012 9:40 AM

Retrieving Deleted All Deleted (2 Months) Entries: 10/01/2012

Greetings,

The FHWA Tennessee Division concurs with TDOT's recommendation that the projects listed below are exempt from transportation conformity.

Regards,  
Corbin

---

### Corbin Davis

Planning & Air Quality Specialist  
Federal Highway Administration  
Tennessee Division  
404 BNA Drive  
Building 200, Suite 508  
Nashville, TN 37217

[corbin.davis@dot.gov](mailto:corbin.davis@dot.gov)  
Phone: 615-781-5767  
Fax: 615-781-5773

---

**From:** Darlene Reiter [mailto:Darlene.Reiter@tn.gov]  
**Sent:** Friday, September 28, 2012 12:01 PM  
**To:** Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin (FHWA); Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth (FTA); McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann (FHWA); Welch, Jeff  
**Subject:** Knoxville PM2.5 Exempt List, September 28, 2012

Knoxville Area IAC -

TDOT recommends that the following project be classified as EXEMPT from Transportation Conformity:

County	PIN	Description
Knox	115213.00	Sidewalk Improvements: South Castle Street
Knox	113061.00	Pedestrian/Bicycle Bridge Connecting South Knoxville Waterfront and UTK
Loudon	115750.00	Northbound I-75 Exit 81: Safety improvements
Knox	117574.00	Resurfacing: SR 1
Knox	117578.00	Resurfacing: SR 115
Loudon	117581.00	Resurfacing: SR 95
Anderson	117582.00	Resurfacing: SR 61
Knox	117584.00	Resurfacing: SR 33
Knox	084646.01	Resurfacing: SR 331



Reply Reply All Forward

# (10) Re: Knoxville PM2.5 Exempt List, September 28, 2012

Kelly Sheckler [Sheckler.Kelly@epamail.epa.gov]

**To:** Darlene Reiter

**Cc:** Alan Jones; Angela Midgett; McDaniel, A [asmcdaniel@aqm.co.knox.tn.us]; Davis, Corbin [corbin.davis@dot.gov]; Dianna Smith [Smith.Dianna@epamail.epa.gov]; Martin, Elizabeth [Elizabeth.Martin@dot.gov]; Welch, Jeff [Jeff.Welch@knoxtrans.org]; Jim Ozment; Renfro, Jim [jim\_renfro@nps.gov]; Liddington, L

Monday, October 01, 2012 7:08 AM

Retention Policy: All Folders (3 Months) Expires: 12/30/2012

EPA concurs that these 10 projects are exempt from transportation conformity.

Kelly Sheckler  
 US Environmental Protection Agency- Region 4  
 Diesel Collaborative and Transportation Outreach Liaison  
 61 Forsyths Street  
 Atlanta, Georgia 30303  
 (404) 562-9222  
 Sheckler.Kelly@epa.gov

-----Darlene Reiter <Darlene.Reiter@tn.gov> wrote: -----

To: Alan Jones <Alan.Jones@tn.gov>, Angela Midgett <Angela.Midgett@tn.gov>, Lynorae Benjamin/R4/USEPA/US@EPA, "Cantrell, Teresa" <teresa\_cantrell@nps.gov>, "Conger, Mike" <Mike.Conger@knoxtrans.org>, "D, Rich" <richd@mymorristown.com>, "Davis, Corbin" <corbin.davis@dot.gov>, "Jim Ozment" <Jim.Ozment@tn.gov>, "Liddington, L" <laliddington@aqm.co.knox.tn.us>, Marc Corrigan <Marc.Corrigan@tn.gov>, "Martin, Elizabeth" <Elizabeth.Martin@dot.gov>, "McDaniel, A" <asmcdaniel@aqm.co.knox.tn.us>, "Renfro, Jim" <jim\_renfro@nps.gov>, Robert Rock <Robert.Rock@tn.gov>, "Ronnie Porter" <Ronnie.Porter@tn.gov>, Kelly Sheckler/R4/USEPA/US@EPA, Dianna Smith/R4/USEPA/US@EPA, "Tribble, Leigh Ann" <LeighAnn.Tribble@fhwa.dot.gov>, "Welch, Jeff" <Jeff.Welch@knoxtrans.org>

From: Darlene Reiter <Darlene.Reiter@tn.gov>

Date: 09/28/2012 01:01PM

Subject: Knoxville PM2.5 Exempt List, September 28, 2012

Knoxville Area IAC -

TDOT recommends that the following project be classified as EXEMPT from Transportation Conformity:

County	PIN	Description
Knox	115213.00	Sidewalk Improvements: South Castle Street
Knox	113061.00	Pedestrian/Bicycle Bridge Connecting South Knoxville Waterfront and UTK
Loudon	115750.00	Northbound I-75 Exit 81: Safety improvements
Knox	117574.00	Resurfacing: SR 1
Knox	117578.00	Resurfacing: SR 115
Loudon	117581.00	Resurfacing: SR 95
Anderson	117582.00	Resurfacing: SR 61
Knox	117584.00	Resurfacing: SR 33
Knox	084646.01	Resurfacing: SR 331
Knox	117617.00	Resurfacing: SR 131



[Reply](#) [Reply All](#) [Forward](#)

## RE: Knoxville PM2.5 Exempt List, September 28, 2012

Marc Corrigan

**To:** Darlene Reiter; Alan Jones; Angela Midgett; Benjamin, Lynorae [Benjamin.Lynorae@epa.gov]; Cantrell, Teresa [teresa\_cantrell@nps.gov]; Conger, Mike [Mike.Conger@knoxtrans.org]; D, Rich [richd@mymorristown.com]; Davis, Corbin [corbin.davis@dot.gov]; Jim Ozment; Liddington, L [liddington@aqm.co.knox.tn.us]; Martin, Elizabeth

Tuesday, October 02, 2012 10:20 AM

Retention Policy: All Folders (3 Months) Expires: 12/31/2012

Darlene,

TAPCD agrees with TDOT's determination that the projects listed below are exempt from transportation conformity.

Marc

**From:** Darlene Reiter

**Sent:** Friday, September 28, 2012 12:01 PM

**To:** Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin; Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth; McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann; Welch, Jeff

**Subject:** Knoxville PM2.5 Exempt List, September 28, 2012

Knoxville Area IAC -

TDOT recommends that the following project be classified as EXEMPT from Transportation Conformity:

County	PIN	Description
Knox	115213.00	Sidewalk Improvements: South Castle Street
Knox	113061.00	Pedestrian/Bicycle Bridge Connecting South Knoxville Waterfront and UTK
Loudon	115750.00	Northbound I-75 Exit 81: Safety improvements
Knox	117574.00	Resurfacing: SR 1
Knox	117578.00	Resurfacing: SR 115
Loudon	117581.00	Resurfacing: SR 95
Anderson	117582.00	Resurfacing: SR 61
Knox	117584.00	Resurfacing: SR 33
Knox	084646.01	Resurfacing: SR 331
Knox	117617.00	Resurfacing: SR 131

More details are provided in the attached spreadsheet. TDOT requests your concurrence with our recommendation that this project is EXEMPT.

Please respond no later than close of business (4:30 central time) on **October 12, 2012**. If TDOT does not receive a response to the contrary then TDOT will assume that you concur with our recommended determination.

Thank you.

Darlene D. Reiter, Ph.D., P.E.  
TDOT Environmental Division Consultant  
(615) 574-8102

[Reply](#) [Reply All](#) [Forward](#)

## RE: Knoxville PM2.5 Exempt List, September 28, 2012

Arthur S. McDaniel [asmcdaniel@aqm.co.knox.tn.us]

**To:** Darlene Reiter

Monday, October 01, 2012 7:56 AM

Retention Policy: All Folders (3 Months) expires: 12/30/2012

Knox County Air Quality Management concurs.

Steve McDaniel, P.E.

Knox County Air Quality Management

---

**From:** Darlene Reiter [mailto:Darlene.Reiter@tn.gov]

**Sent:** Friday, September 28, 2012 1:01 PM

**To:** Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin; Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth; McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann; Welch, Jeff

**Subject:** Knoxville PM2.5 Exempt List, September 28, 2012

Knoxville Area IAC -

TDOT recommends that the following project be classified as EXEMPT from Transportation Conformity:

County	PIN	Description
Knox	115213.00	Sidewalk Improvements: South Castle Street
Knox	113061.00	Pedestrian/Bicycle Bridge Connecting South Knoxville Waterfront and UTK
Loudon	115750.00	Northbound I-75 Exit 81: Safety improvements
Knox	117574.00	Resurfacing: SR 1
Knox	117578.00	Resurfacing: SR 115
Loudon	117581.00	Resurfacing: SR 95
Anderson	117582.00	Resurfacing: SR 61
Knox	117584.00	Resurfacing: SR 33
Knox	084646.01	Resurfacing: SR 331
Knox	117617.00	Resurfacing: SR 131

More details are provided in the attached spreadsheet. TDOT requests your concurrence with our recommendation that this project is EXEMPT.

Please respond no later than close of business (4:30 central time) on **October 12, 2012**. If TDOT does not receive a response to the contrary then TDOT will assume that you concur with our recommended determination.

Thank you.

Darlene D. Reiter, Ph.D., P.E.

TDOT Environmental Division Consultant

(615) 574-8102



PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment G  
SHPO Letter



**TENNESSEE HISTORICAL COMMISSION**  
STATE HISTORIC PRESERVATION OFFICE  
2941 LEBANON ROAD  
NASHVILLE, TENNESSEE 37214  
OFFICE: (615) 532-1550  
[www.tnhistoricalcommission.org](http://www.tnhistoricalcommission.org)

August 13, 2014

Ms. Tammy Sellers  
Tennessee Department of Transportation  
505 Deaderick St/900  
Nashville, Tennessee, 37243-0349

RE: FHWA, EFFECT DETERMINATION, SOUTH WATERFRONT PEDESTRIAN BR., KNOXVILLE,  
KNOX COUNTY, PIN# 113-61.00

Dear Ms. Sellers:

Pursuant to your request, received on Thursday, August 7, 2014, this office has reviewed documentation concerning the above-referenced undertaking. This review is a requirement of Section 106 of the National Historic Preservation Act for compliance by the participating federal agency or applicant for federal assistance. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739)

Based on the information provided, we find that the project area contains eight cultural resources eligible for listing in the National Register of Historic Places. We further find that the project as currently proposed will not adversely affect any of these resource.

Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary. Questions and comments may be directed to Joe Garrison (615) 770-1092. Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jyg



**TENNESSEE HISTORICAL COMMISSION**  
STATE HISTORIC PRESERVATION OFFICE  
2941 LEBANON ROAD  
NASHVILLE, TENNESSEE 37243-0442  
OFFICE: (615) 532-1550  
[www.tnhistoricalcommission.org](http://www.tnhistoricalcommission.org)

August 13, 2014

Mr. Gerald Kline  
TDOT – Environmental Division  
Suite 900, James K. Polk Building  
505 Deaderick Street  
Nashville, Tennessee 37243-1402

RE: FHWA, ARCHAEOLOGICAL ASSESSMENT, SOUTH WATERFRONT PEDESTRIAN  
BRIDGE, KNOXVILLE, KNOX COUNTY, TN

Dear Mr. Kline:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we find that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jmb





PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment H  
Native American Tribal Coordination



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**ENVIRONMENTAL DIVISION**  
SUITE 900, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-1402  
(615) 741-3655

**JOHN C. SCHROER**  
COMMISSIONER

**BILL HASLAM**  
GOVERNOR

September 26, 2012

The Cherokee Nation  
17675 South Muscogee  
Tahlequah, OK 74465  
Attn: Dr. Richard Allen, Policy Analyst

**SUBJECT:** Section 106 Initial Coordination for Proposed South Waterfront – University of Tennessee Pedestrian/Bicycle Bridge, Spanning Tennessee River, Knoxville, Knox County, Tennessee

Dear Dr. Allen:

The City of Knoxville in cooperation with Tennessee Department of Transportation (TDOT) and with funding from the Federal Highway Administration (FHWA) is proposing to construct the South Waterfront – University of Tennessee Pedestrian/Bicycle Bridge in in Knox County (maps attached). The project will construct a pedestrian/bicycle bridge on new location, connecting Knoxville's South Waterfront with the University of Tennessee campus. The bridge will span the Tennessee River from Clancy Avenue on the south side to Lake Loudon Boulevard on the north side, connecting with the pedestrian concourse between Thompson-Boling Arena and Pratt Pavilion. The conceptual design considers both concrete and steel designs. The project corridor length is approximately 1,930-feet long by 80-feet wide. The bridge will stand at least 60-feet vertically above the Tennessee River. No piers are proposed in the river. Approximately 3.5-acres of additional right-of-way will be needed.

The National Historic Preservation Act (NHPA) recognizes that federally funded undertakings, like the subject project, can affect historic properties to which your tribe attaches religious, cultural, and historic significance. In accordance with 36 CFR 800 regulations implementing compliance with Section 106 of the NHPA, I would like to know if you have information you could share with me about tribal concerns in the project area and if you wish to be a consulting party on the project? Early awareness of your concerns can serve to protect historic properties valued by your tribe.

If you act as a consulting party you will receive archaeological assessment reports and related documentation, be invited to attend project meetings with FHWA, TDOT, and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held, and be asked to provide input throughout the process. If you choose to not act as a consulting party at this time, you can do so at a later date simply by notifying me.

Please respond to me via letter, telephone (615-741-5257), fax (615-741-1098), or E-mail ([Gerald.Kline@tn.gov](mailto:Gerald.Kline@tn.gov)). I respectfully request responses (email is preferred) to project reports and other materials within thirty (30) days of receipt if at all possible. Thank you for your assistance.

Sincerely,

Gerald Kline  
Transportation Specialist I  
Archaeology Program Manager

Enclosure

cc. Robin Dushane, Eastern Shawnee Tribe of Oklahoma  
Kim Jumper, Shawnee Tribe

Lisa LaRue-Baker, United Keetowah Band of Cherokee Indians  
Tyler Howe, Eastern Band of Cherokee Indians

TDOT PIN# 113061.00 – Region 1

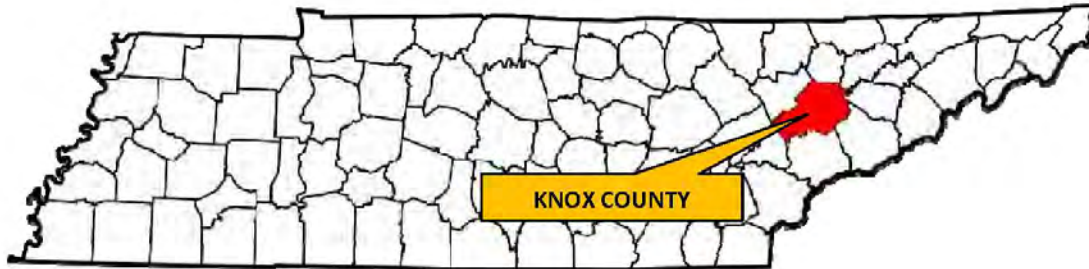


# SOUTH WATERFRONT – UNIVERSITY OF TENNESSEE

## PEDESTRIAN/BICYCLE BRIDGE PROJECT

SPANNING THE TENNESSEE RIVER

KNOXVILLE, KNOX COUNTY, TENNESSEE



**PROJECT VICINITY MAP**

TDOT PIN# 113061.00 – Region 1





South Waterfront – UT Pedestrian Bridge, Knoxville, Tennessee

Page 2



Project Corridor Location Map



Project Location Map – USGS Quad Knoxville (147 NW)

**Robbie D. Jones**

---

**From:** Richard Allen <Richard-Allen@cherokee.org>  
**Sent:** Thursday, October 25, 2012 10:01 AM  
**To:** Robbie D. Jones  
**Subject:** RE: Section 106 Coordination, Knox Co., TN #113061.00

The Cherokee Nation has no knowledge of any historic, cultural or sacred sites within the affected area. Should any ground disturbance reveal an archaeological site or human remains, we ask that the all activity cease immediately and the Cherokee Nation and other appropriate agencies be contacted immediately.

Thank you,

Dr. Richard L. Allen  
Policy Analyst  
NAGPRA/Section 106 Contact  
Cherokee Nation  
P.O. Box 948  
Tahlequah, Oklahoma 74465  
(918) 453-5466 (office)  
(918) 822-2707 (cell)  
(918) 458-5898 (fax)

---

**From:** Robbie D. Jones [<mailto:Robbie.D.Jones@tn.gov>]  
**Sent:** Wednesday, September 26, 2012 1:36 PM  
**To:** Richard Allen  
**Cc:** Gerald Kline; Robbie D. Jones  
**Subject:** Section 106 Coordination, Knox Co., TN #113061.00

Dear Dr. Allen:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

**South Waterfront – UT Pedestrian Bridge, Knoxville, Knox County Tennessee (PIN# 113061.00)**

If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or [Gerald.Kline@tn.gov](mailto:Gerald.Kline@tn.gov).

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones  
Native American Coordinator  
TDOT Environmental Division  
Suite 900, J.K. Polk Building  
Nashville, TN 37243-0334  
Telephone: 615-741-3655  
Fax: 615-741-1098



**Robbie D. Jones**

---

**From:** Lisa LaRue-Baker - UKB THPO <ukbthpo-larue@yahoo.com>  
**Sent:** Sunday, September 30, 2012 3:51 PM  
**To:** Robbie D. Jones  
**Cc:** lstapleton@unitedkeetoowahband.org  
**Subject:** Re: Section 106 Coordination, Knox Co., TN #113061.00

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your projects for Section 106 NHPA purposes, and cultural resources. At this time, we have no objection or comment. However, if any human remains or funerary items are inadvertently discovered, please cease all work and contact us immediately.

**Lisa LaRue-Baker**

Acting THPO  
United Keetoowah Band of Cherokee Indians in Oklahoma  
PO Box 746  
Tahlequah, OK 74465

c 918.822.1952 f 918.458.6889  
[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)

--- On Wed, 9/26/12, Robbie D. Jones <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)> wrote:

From: Robbie D. Jones <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)>  
Subject: Section 106 Coordination, Knox Co., TN #113061.00  
To: "ukbthpo-larue@yahoo.com" <[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)>  
Cc: "Robbie D. Jones" <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)>  
Date: Wednesday, September 26, 2012, 1:37 PM

Dear Ms. LaRue-Baker:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

**South Waterfront – UT Pedestrian Bridge, Knoxville, Knox County Tennessee (PIN# 113061.00)**



PIN 113061.00  
South Waterfront Pedestrian Bridge  
Attachment I  
Hazardous Material Clearance E-mail

---

**From:** Scarlett Sharpe [mailto:Scarlett.Sharpe@tn.gov]  
**Sent:** Wednesday, March 06, 2013 10:51 AM  
**To:** Leira Douthat  
**Subject:** FW: South Waterfront Pedestrian Bridge - pin 113061.00

Haz Mat clearance for your use. Please note the comments in the email below. Thanks!

---

**From:** Jeffrey Ballard  
**Sent:** Wednesday, March 06, 2013 9:50 AM  
**To:** Scarlett Sharpe  
**Subject:** RE: South Waterfront Pedestrian Bridge - pin 113061.00

Scarlett,

It is good to go as far as Hazmat is concerned. I think they will send us more when they tie down the final alignment.

Thanks,  
Jeff

---

**From:** Scarlett Sharpe

**Sent:** Wednesday, March 06, 2013 9:23 AM  
**To:** Jeffrey Ballard  
**Subject:** RE: South Waterfront Pedestrian Bridge - pin 113061.00

As far as haz mat though, are they good to go or do you want recommendations on a PH II?

---

**From:** Jeffrey Ballard  
**Sent:** Wednesday, March 06, 2013 9:18 AM  
**To:** Scarlett Sharpe  
**Subject:** RE: South Waterfront Pedestrian Bridge - pin 113061.00

Scarlett,

The report looks good. It would be nice to have some recommendations indicating if a Phase II should be conducted on any of the properties. They may be waiting for final ROW plans for that.

There were a couple of misspelled words. In the Introduction, on line 9, "hazardous" should be either "hazards" or "hazardous materials". In Photo 24, Augusta is misspelled.

In Photo 1, should that be "Northeast of corridor"? In Photo 7, should that be "West side of Thompson Boling Arena"? Please verify.

Thanks,  
Jeff

Jeffrey Ballard, P.E.  
K.S. Ware & Associates

Hazmat Coordinator  
Social and Cultural Resources Office  
Environmental Division  
Tennessee Department of Transportation  
505 Deaderick Street – Suite 900  
Nashville, TN 37243

615.532.8684  
[jeffrey.ballard@tn.gov](mailto:jeffrey.ballard@tn.gov)

For Jim Ozment

---

**From:** Scarlett Sharpe  
**Sent:** Tuesday, March 05, 2013 4:29 PM  
**To:** Jeffrey Ballard

**Cc:** 'Leira Douthat' ([LDouthat@smeinc.com](mailto:LDouthat@smeinc.com))  
**Subject:** FW: South Waterfront Pedestrian Bridge - pin 113061.00

For your review and comment or approval.

Thanks Jeff!

Scarlett

---

**From:** Leira Douthat [<mailto:LDouthat@smeinc.com>]  
**Sent:** Tuesday, March 05, 2013 10:41 AM  
**To:** Scarlett Sharpe  
**Cc:** Dawn Michelle Foster  
**Subject:** South Waterfront Pedestrian Bridge - pin 113061.00

Good morning Scarlett. I have attached the Hazardous Waste Evaluation report for the South Waterfront Pedestrian Bridge.

---

**Leira Douthat, LEED AP**

Environmental Scientist



ENGINEERING INTEGRITY.

S&ME, Inc.  
1413 Topside Road  
Louisville, TN 37777   
Ph: 865-970-0003  
Fax: 865-970-2312  
Mobile: 865-804-4344  
[ldouthat@smeinc.com](mailto:ldouthat@smeinc.com)  
[www.sm.einc.com](http://www.sm.einc.com)

This electronic message is subject to the terms of use set forth at [www.sm.einc.com/email](http://www.sm.einc.com/email). If you received this message in error please advise the sender by reply and delete this electronic message and any attachments. Please consider the environment before printing this email.



Reevaluation: Knoxville South Waterfront Pedestrian/Bicycle Bridge (University of Tennessee Campus to Scottish Pike)

Knox County, Tennessee

TN-PIN: 113061.02

Date: 02/12/2018

Page EC-1

## Environmental Commitments

Commitments are involved on the project.

### List of Environmental Commitments

1) It is possible that historical releases of petroleum hydrocarbons, metals and polyaromatic hydrocarbons from the Knox River Warehouse and Specialty Metals facilities that may experience nearby ground disturbance during construction could have impacted the subsurface soils and/or groundwater in this area. If impacted soils are encountered during these activities, a Phase II ESA investigation may be necessary. The Phase II ESA would support either preconstruction remediation or a site health and safety plan/soil handling plan for construction.

2) Ground disturbing activities proposed in the vicinity of the south bridge landing may include pier and sidewalk construction and possible sidewalk removal and replacement. This would include excavation below the ground surface. The Hazardous Material Evaluation report indicated that a Phase II ESA was performed on the Specialty Metals property in 2011. Mercury, arsenic, barium chromium, lead, and polyaromatic hydrocarbons (PAHs) were detected in soils at levels exceeding the EPA Regional Screening Levels. The report stated that disturbances and excavation of soils on the Specialty Metals property during pier construction will require further characterization in order to determine proper handling and disposal of the soils from this property. This will be done during the construction phase of the project.

3) Aesthetically, the bridge must complement the family of nearby historic bridges (Henley Street Bridge and Gay Street Bridge), the nearby downtown buildings, and the University of Tennessee campus.



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334**

February 12, 2018

Ms. Leigh Tribble  
Environmental Program Engineer  
Federal Highway Administration  
404 BNA Drive, Suite 508  
Nashville, TN 37217

Subject: CE Reevaluation of Knoxville South Waterfront Pedestrian/Bicycle Bridge  
(University of Tennessee Campus to Scottish Pike)  
Knoxville, Knox County, TN  
PIN 113061.02

Dear Ms. Tribble,

This reevaluation of environmental effects is for the entire project as described in the D-List Categorical Exclusion (CE) approved by the Federal Highway Administration (FHWA) on 10/29/2014. The subject project was studied under PIN 113061.00. The approved D-List CE is included in Attachment A. The proposed project is listed in the Knoxville Regional Transportation Planning Organization's 2017-2020 Transportation Improvement Program (TIP). The TIP page is included in Attachment B.

Federal and State projects and phases of development are listed in Table 1 – Project Phases and Numbers:

**Table 1. Project Phases and Corresponding Project Numbers**

Phase	Federal Aid	State Project Number
Preliminary Engineering	STP-M-9109(167)	47LPLM-F1-107
Right of Way	N/A	N/A
Construction	N/A	N/A

The proposed project involves the construction of a new pedestrian/bicycle bridge, connecting Knoxville's South Waterfront to the University of Tennessee at Knoxville campus. The project is located in the City of Knoxville, directly across the Tennessee River from downtown Knoxville. The proposed bridge will span the Tennessee River from Clancy Avenue on the south side of the river to Lake Loudon Boulevard on the north (University) side connecting to the pedestrian concourse located between Thompson-Boling Arena and Pratt Pavilion. See Attachment C for a Project Location Map and the conceptual design.

## **Reason for Reevaluation**

In the TDOT Tennessee Environmental Procedures Manual, Section 6.5.1.1 *Reevaluation Timing and Purpose* states that, "After a period of three years has elapsed since receiving environmental approvals or an approved right of way reevaluation, TDOT will conduct a reevaluation of the CE, EA, or EIS prior to FHWA authorization of construction funds before the project letting."

Three years have lapsed since the approval of the D-List CE on 10/29/2014; therefore, a formal reevaluation is being completed at this time. The reevaluation of the environmental effects for this proposed project included the review of the proposed conceptual design (included in Attachment C) along with the information presented in the D-list CE. Of particular interest were the following topics:

- **Ecology**

An ecology report was not completed for the proposed project as documented in the approved D-List CE. The proposed bridge will cross the Tennessee River. Temporary impacts are anticipated to the banks of the Tennessee River during construction of the bridge. The bridge will be a span bridge as opposed to a pier bridge or culvert to avoid permanent impacts. In a letter dated 02/06/2013, the United States Army Corps of Engineers (USACE) stated "A review of the information provided indicates an activity that would not involve work in waters of the US (streams and/or wetlands). Therefore, a Department of the Army permit would not be required. Updated coordination with USACE has occurred, and in correspondence dated 7/13/2017, USACE determined that the previous coordination letter remains valid. Copies of this correspondence have been included in Attachment D.

- **Federally Protected Species List and Biological Assessments**

The proposed project was coordinated with the United States Fish and Wildlife Service (USFWS) and the Tennessee Wildlife Resource Agency (TWRA), as documented in the approved D-List CE. Updated correspondence with USFWS and TWRA on 7/18/2017 and 7/12/2017, respectively, states that their original responses remains valid. The TDOT Ecology Section stated in email correspondence dated 12/1/2017, "Both the USFWS and TWRA say they have reviewed the information in the re-evaluation and are satisfied that there will be no impacts to State or Federally-listed species. So from our corner, we think the species coordination is satisfactory for this project." Correspondence with TDOT Ecology, along with agency correspondence, is included in Attachment D.

- **Floodplain/Floodway**

Portions of this project are located in or near a FEMA defined floodplain and/or floodway; however, there is no work that will affect the base flood elevations or floodway limits (i.e., bridge repair, paving, roadway and bridge maintenance, intersection improvements, etc.). The project is located on Flood Insurance Rate Maps in Knox County, Panel 283 of 430, Map #47093C0283G. The design of the roadway system is consistent with the Memorandum of Understanding (MOU) between FHWA and FEMA and with the floodplain management criteria set forth in the National Flood Insurance Regulations of Title 44 of the Code of Federal Regulations (CFR). It will be consistent with the requirements of floodplain management guidelines for implementing Executive Order 11988 and FHWA guidelines 23 CFR 650A. A portion of the FEMA FIRM is included in Attachment E.

- **Air Quality**

1. Transportation Conformity – This project is located in the Knoxville ozone maintenance and PM2.5 nonattainment areas. However, the pedestrian bridge is exempt from conformity under Table 2 of 40 CFR 93.126. The Knoxville Interagency Consultation (IAC) members concurred with TDOT's determination that the project is exempt from conformity on the following dates: FHWA (10/2/2012), EPA (10/1/2012), TAPCD (10/2/2012), and Knox County (10/1/2012). The IAC concurrence responses, PM2.5 clearance record, and reevaluation coordination with TDOT's Environmental Division, dated 07/06/2017, are in Attachment F.

2. Mobile Source Air Toxics (MSATs) – Since the approval of the D-List CE, FHWA has released updated guidance for Mobile Source Air Toxics (MSATs) for CEs. This project qualifies as a CE under 23 CFR 771.117 and, therefore, does not require an evaluation of MSATs per "FHWA's Interim Guidance Update on Air Toxic Analysis in NEPA Documents" dated October 2016. See Attachment F for the MSATs for CEs Memorandum dated 5/2/2017 regarding this updated guidance.

- **Cultural Resources/Section 106 Coordination**

According to responses from TDOT Historic Preservation on 07/12/2017 and TDOT Archaeology on 07/05/2017, it was determined that the SHPO letters, dated 08/13/2014 (Historic) and 08/13/2014 (Archaeological), remain valid. Responses from TDOT Historic Preservation and Archaeology, in addition to previous SHPO coordination letters are included in Attachment G.

- **Native American Consultation**

According to a response from TDOT Archaeology, dated 07/11/17, the subject project was reviewed and determined that the documentation regarding consultation with federally recognized Native American tribes remains valid. Record of Native American Consultation is included in Attachment H.

- **Hazardous Materials**

According to a response from TDOT Environmental Programs Hazardous Materials Section, dated 07/05/2017, the previous Hazardous Materials review as shown in the D-List CE and Environmental Commitments dated 10/24/2014 remains valid. Record of coordination with TDOT Hazardous Materials Section is included in Attachment I.

**Conclusion**

Based on this reevaluation, it has been determined that there are no substantial changes in the environmental effects or the concept of the project as discussed in the D-List CE. There are no new developments that would affect the conditions and impacts previously reported. The anticipated impacts have not changed and the examination of the conceptual designs indicated that there have been no new environmental consequences.

In regard to these conclusions, TDOT believes the D-List CE remains valid for the requested Administrative action. A space below is provided for your concurrence.

Sincerely Yours,



Sharon Sanders  
Transportation Manager I

Concurrence:  Leigh Ann Jubble   
Federal Highway Administration

Date:  2-27-18

Prepared by Bryan Berry, City of Knoxville Project Manager

CC: Dawn Michelle Foster, City of Knoxville  
Tom Clabo, City of Knoxville



# Environmental Studies

## Air and Noise

# Environmental Studies Request

## Project Information

---

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Termini:** South and North Waterfronts of the Tennessee River

**County:** Knox

**PIN:** 113061.00

## Request

---

**Request Type:** Environmental Study Reevaluation

**Project Plans:** Other

**Date of Plans:** 00/00/0000

**Location:** Email Attachment

## Certification

---

**Requestor:** Drew Gaskins

**Title:** Transportation Planner

**Signature:** Drew  
Gaskins

Digitally signed by Drew Gaskins  
DN: cn=Drew Gaskins,  
o=Transportation Division, ou,  
email=drew\_gaskins@gspnet.com,  
c=US  
Date: 2017.07.05 08:37:51 -05'00'

# Environmental Study

## Technical Section

---

**Section:** Air and Noise

## Study Results

---

The air quality and noise statements provided on October 11, 2012 and summarized in the CE remain valid for the current plans.

## Commitments

---

Did the study of this project result in any environmental commitments?

No

## Additional Information

---

Is there any additional information or material included with this study?

No

## Certification

---

**Responder:** Darlene D Reiter

**Title:** TDOT Environmental Division Consultant

**Signature:** Darlene D  
Reiter

Digitally signed by  
Darlene D Reiter  
Date: 2017.07.06  
09:58:19 -05'00'

**Archived:** Wednesday, July 12, 2017 8:37:34 AM  
**From:** Drew Gaskins  
**Sent:** Wednesday, July 05, 2017 1:37:59 PM  
**To:** Liz Porter  
**Subject:** Fw: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County  
**Importance:** Normal

---

---

**From:** Alan Longmire  
**Sent:** Wednesday, July 5, 2017 9:03 AM  
**To:** Drew Gaskins  
**Cc:** Phillip Hodge  
**Subject:** RE: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

Morning Drew,

The SHPO letter for archaeology dated 8/13/14 remains valid. Thanks for checking!

Alan



C. Alan Longmire, RPA | TESS Adv., Archaeologist

TDOT District 17  
3213 N. Roane Street  
Johnson City, TN 37602  
865-292-8583  
423-773-1161  
[Alan.Longmire@tn.gov](mailto:Alan.Longmire@tn.gov)  
[tn.gov/tdot](http://tn.gov/tdot)

---

**From:** TDOT.Env Archaeology  
**Sent:** Wednesday, July 05, 2017 7:19 AM  
**To:** Alan Longmire  
**Subject:** FW: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County



Phillip Hodge | Archaeology Program Manager  
Environmental Division  
James K. Polk Building 9<sup>th</sup> Floor  
505 Deaderick Street, Nashville, TN 37243  
p. 615-741-0977  
[Phillip.Hodge@tn.gov](mailto:Phillip.Hodge@tn.gov)  
[tn.gov/tdot](http://tn.gov/tdot)

---

**From:** Drew Gaskins  
**Sent:** Monday, July 3, 2017 1:05 PM  
**To:** TDOT.Env Archaeology; TDOT.Env AirNoise; TDOT.Env HazmatOffice; TDOT.Env Historic  
**Cc:** Liz Porter  
**Subject:** PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

TDOT Local Programs is conducting a re-evaluation of the subject project prior to the environmental clearance validity for the project expiring on 10/24/2017. No design or scope changes have occurred since the original document approval.

Please review these materials and advise if the previous clearance remains valid. If not, please let me know what additional work will be needed to obtain clearance. For your reference, PDF page numbers of the original document may also be seen below. If you have not previously provided comment, please do so at this time. Let me know if you need additional information or clarification.

**D-List CE**

Page 3 – Project Description

**Attachments**

Page 3 – TIP Page

Page 4 - Project Maps

Page 8 – Project Concepts

Page 10 – Project Area Photos

Page 17 – Public Meeting Summary

Page 26 – USACE Letter

Page 27 – USFWS Letter

Page 29 – TWRA Letter

Page 31 – TDEC Letter

Page 34 – FEMA FIRM

Page 36 – Air and Noise

Page 43 – SHPO Letter

Page 46 – Native American Coordination

Page 52 – Hazardous Materials



**Drew Gaskins, AICP** | Transportation Planner

Local Programs Development Office

James K. Polk Building, 6<sup>th</sup> Floor

505 Deaderick Street, Nashville, TN 37243



# Environmental Studies

## Native American Consultation

# Environmental Studies Request

## Project Information

---

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Termini:** South and North Waterfronts of the Tennessee River

**County:** Knox

**PIN:** 113061.00

## Request

---

**Request Type:** Environmental Study Reevaluation

**Project Plans:** Other

**Date of Plans:** 00/00/0000

**Location:** Email Attachment

## Certification

---

**Requestor:** Drew Gaskins

**Title:** Transportation Planner

**Signature:** Drew  
Gaskins

 Digitally signed by Drew Gaskins  
DN: cn=Drew Gaskins,  
o=Transportation Division, ou,  
email=drew\_gaskins@gspnet.com,  
c=US  
Date: 2017.07.05 08:37:51 -05'00'

# Environmental Study

## Technical Section

---

**Section:** Native American Consultation

## Study Results

---

I have reviewed the subject project and determined that the documentation regarding consultation with federally recognized Native American tribes remains valid. Initial consultation materials were sent to the federally recognized tribes with interests in Knox County on 9/26/12. The Cherokee Nation responded on the same day, while the United Keetoowah Band of Cherokee Indians responded on 9/30/12. Both tribes indicated that they had no concerns or comments, but did request to be contacted if any archaeological materials or human remains were inadvertently discovered during construction.

## Commitments

---

**Did the study of this project result in any environmental commitments?**

No

## Additional Information

---

**Is there any additional information or material included with this study?**

Yes

**Type:** Native American Consultation

**Location:** Email Attachment

## Certification

---

**Responder:** Phillip R. Hodge

**Title:** Archaeology Program Manager

**Signature:** Phillip R.  
Hodge

Digitally signed by Phillip R. Hodge  
DN: cn=Phillip R. Hodge, o=TDOT  
Environmental Division,  
ou=Archaeology Section,  
email=Phillip.Hodge@tn.gov, c=US  
Date: 2017.07.11 16:30:20 -05'00'

## Robbie D. Jones

---

**From:** Richard Allen <Richard-Allen@cherokee.org>  
**Sent:** Thursday, October 25, 2012 10:01 AM  
**To:** Robbie D. Jones  
**Subject:** RE: Section 106 Coordination, Knox Co., TN #113061.00

The Cherokee Nation has no knowledge of any historic, cultural or sacred sites within the affected area. Should any ground disturbance reveal an archaeological site or human remains, we ask that the all activity cease immediately and the Cherokee Nation and other appropriate agencies be contacted immediately.

Thank you,

Dr. Richard L. Allen  
Policy Analyst  
NAGPRA/Section 106 Contact  
Cherokee Nation  
P.O. Box 948  
Tahlequah, Oklahoma 74465  
(918) 453-5466 (office)  
(918) 822-2707 (cell)  
(918) 458-5898 (fax)

---

**From:** Robbie D. Jones [<mailto:Robbie.D.Jones@tn.gov>]  
**Sent:** Wednesday, September 26, 2012 1:36 PM  
**To:** Richard Allen  
**Cc:** Gerald Kline; Robbie D. Jones  
**Subject:** Section 106 Coordination, Knox Co., TN #113061.00

Dear Dr. Allen:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

**South Waterfront – UT Pedestrian Bridge, Knoxville, Knox County Tennessee (PIN# 113061.00)**

If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or [Gerald.Kline@tn.gov](mailto:Gerald.Kline@tn.gov).

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones  
Native American Coordinator  
TDOT Environmental Division  
Suite 900, J.K. Polk Building  
Nashville, TN 37243-0334  
Telephone: 615-741-3655  
Fax: 615-741-1098

Email: [robbie.d.jones@tn.gov](mailto:robbie.d.jones@tn.gov)



## **Robbie D. Jones**

---

**From:** Lisa LaRue-Baker - UKB THPO <[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)>  
**Sent:** Sunday, September 30, 2012 3:51 PM  
**To:** Robbie D. Jones  
**Cc:** [lstapleton@unitedkeetoowahband.org](mailto:lstapleton@unitedkeetoowahband.org)  
**Subject:** Re: Section 106 Coordination, Knox Co., TN #113061.00

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your projects for Section 106 NHPA purposes, and cultural resources. At this time, we have no objection or comment. However, if any human remains or funerary items are inadvertently discovered, please cease all work and contact us immediately.

### **Lisa LaRue-Baker**

Acting THPO  
United Keetoowah Band of Cherokee Indians in Oklahoma  
PO Box 746  
Tahlequah, OK 74465

c 918.822.1952 f 918.458.6889  
[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)

--- On **Wed, 9/26/12**, **Robbie D. Jones** <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)> wrote:

From: Robbie D. Jones <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)>  
Subject: Section 106 Coordination, Knox Co., TN #113061.00  
To: "'ukbthpo-larue@yahoo.com'" <[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)>  
Cc: "Robbie D. Jones" <[Robbie.D.Jones@tn.gov](mailto:Robbie.D.Jones@tn.gov)>  
Date: Wednesday, September 26, 2012, 1:37 PM

Dear Ms. LaRue-Baker:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

**South Waterfront – UT Pedestrian Bridge, Knoxville, Knox County Tennessee (PIN# 113061.00)**

If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or [Gerald.Kline@tn.gov](mailto:Gerald.Kline@tn.gov).

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones

Native American Coordinator

TDOT Environmental Division

Suite 900, J.K. Polk Building

Nashville, TN 37243-0334

Telephone: 615-741-3655

Fax: 615-741-1098

Email: [robbie.d.jones@tn.gov](mailto:robbie.d.jones@tn.gov)

# Environmental Studies

## Hazardous Materials

# Environmental Studies Request

## Project Information

---

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Termini:** South and North Waterfronts of the Tennessee River

**County:** Knox

**PIN:** 113061.00

## Request

---

**Request Type:** Environmental Study Reevaluation

**Project Plans:** Other

**Date of Plans:** 00/00/0000

**Location:** Email Attachment

## Certification

---

**Requestor:** Drew Gaskins

**Title:** Transportation Planner

**Signature:** Drew  
Gaskins

Digitally signed by Drew Gaskins  
DN: cn=Drew Gaskins,  
o=Transportation Division, ou,  
email=drew\_gaskins@gspnet.com,  
c=US  
Date: 2017.07.05 08:37:51 -05'00'

# Environmental Study

## Technical Section

---

**Section:** Hazardous Materials

## Study Results

---

Based on the information provided, the previous HazMat review as shown in the D-List CE and Environmental Commitments dated 24 October 2014 remains valid.

## Commitments

---

**Did the study of this project result in any environmental commitments?**

Yes

Previously submitted

## Additional Information

---

**Is there any additional information or material included with this study?**

No

## Certification

---

**Responder:** Kyle Kirschenmann

**Signature:**

Kyle Kirschenmann

**Title:** Environmental Program Manager, Hazardous Materials Section

Digitally signed by Kyle Kirschenmann  
DN: cn=Kyle Kirschenmann, o=TDOT,  
ou=Environmental Division,  
email=kyle.kirschenmann@tn.gov,  
c=US  
Date: 2017.07.05 09:54:03 -04'00'



# Environmental Studies

## Historic Preservation

# Environmental Studies Request

## Project Information

---

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Termini:** South and North Waterfronts of the Tennessee River

**County:** Knox

**PIN:** 113061.00

## Request

---

**Request Type:** Environmental Study Reevaluation

**Project Plans:** Other

**Date of Plans:** 00/00/0000

**Location:** Email Attachment

## Certification

---

**Requestor:** Drew Gaskins

**Title:** Transportation Planner

**Signature:** Drew  
Gaskins

Digitally signed by Drew Gaskins  
DN: cn=Drew Gaskins,  
o=Transportation Division, ou,  
email=drew\_gaskins@gspnet.com,  
c=US  
Date: 2017.07.05 08:37:51 -05'00'

# Environmental Study

## Technical Section

---

**Section:** Historic Preservation

## Study Results

---

Based on the information provided: "No design or scope changes have occurred since the original document approval," the TN-SHPO letter from August 13, 2014 remains valid.

## Commitments

---

Did the study of this project result in any environmental commitments?

No

## Additional Information

---

Is there any additional information or material included with this study?

No

## Certification

---


**Responder:** Katherine Looney

**Signature:**



Digitally signed by  
Katherine Looney  
Date: 2017.07.12  
13:03:18 -05'00'

**Title:** TDOT Environmental Supervisor

**Archived:** Wednesday, July 12, 2017 2:56:31 PM  
**From:** Drew Gaskins  
**Sent:** Wednesday, July 12, 2017 2:06:33 PM  
**To:** Liz Porter  
**Subject:** Fw: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County  
**Importance:** Normal  
**Attachments:**  
PIN 113061.00 Environmental Study Request.pdf 

---

**From:** Katherine Looney  
**Sent:** Wednesday, July 12, 2017 1:05 PM  
**To:** Drew Gaskins Tammy Sellers  
**Subject:** FW: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

Hey Drew,  
The 2014 SHPO letter for Historic Preservation remains valid. The ESR is attached.  
Thanks!  
Katherine



**Katherine Looney** | TDOT Environmental Supervisor | Historic Preservation  
Environmental Division  
[Office of Social and Cultural Resources](#)  
James K. Polk Building, Suite 900  
505 Deaderick Street, Nashville, TN 37243  
p. 615-253-2997  
[katherine.looney@tn.gov](mailto:katherine.looney@tn.gov)

---

**From:** TDOT.Env Historic  
**Sent:** Wednesday, July 05, 2017 11:27 AM  
**To:** Katherine Looney  
**Subject:** FW: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

ESR attached.

---

**From:** Drew Gaskins  
**Sent:** Wednesday, July 5, 2017 10:39 AM  
**To:** TDOT.Env Archaeology; TDOT.Env AirNoise; TDOT.Env HazmatOffice; TDOT.Env Historic  
**Cc:** Sandy Layne Sclafani  
**Subject:** re: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

Good morning,

I erroneously omitted the ESR form from the re-evaluation request sent on 07/03/2017. See the attached file for the form.

-Drew

---

**From:** Drew Gaskins  
**Sent:** Monday, July 3, 2017 1:05 PM  
**To:** TDOT.Env Archaeology TDOT.Env AirNoise TDOT.Env HazmatOffice TDOT.Env Historic  
**Cc:** Liz Porter  
**Subject:** PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

TDOT Local Programs is conducting a re-evaluation of the subject project prior to the environmental clearance validity for the project expiring on 10/24/2017. No design or scope changes have occurred since the original document approval.

Please review these materials and advise if the previous clearance remains valid. If not, please let me know what additional work will be needed to obtain clearance. For your reference, PDF page numbers of the original document may also be seen below. If you have not previously provided comment, please do so at this time. Let me know if you need additional information or clarification.

**D-List CE**

Page 3 – Project Description

**Attachments**

Page 3 – TIP Page

Page 4 - Project Maps

Page 8 – Project Concepts

Page 10 – Project Area Photos

Page 17 – Public Meeting Summary

Page 26 – USACE Letter

Page 27 – USFWS Letter

Page 29 – TWRA Letter

Page 31 – TDEC Letter

Page 34 – FEMA FIRM

Page 36 – Air and Noise

Page 43 – SHPO Letter

Page 46 – Native American Coordination

Page 52 – Hazardous Materials



**Drew Gaskins, AICP** | Transportation Planner

Local Programs Development Office

James K. Polk Building, 6<sup>th</sup> Floor

505 Deaderick Street, Nashville, TN 37243



**Archived:** Wednesday, July 12, 2017 11:30:25 AM  
**From:** [Drew Gaskins](#)  
**Sent:** Wednesday, July 12, 2017 11:27:10 AM  
**To:** [Liz Porter](#)  
**Subject:** Fw: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County  
**Importance:** Normal

---

---

**From:** incent Pontello  
**Sent:** Wednesday, July 12, 2017 9:04 AM  
**To:** Drew Gaskins  
**Subject:** Re: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

Drew,

Our response from TWRA is still valid. Please contact me if you need further assistance.

incent L. Pontello  
Wildlife Biologist  
Liaison to Federal Highway Admin. TDOT  
Tennessee Wildlife Resources Agency  
Environmental Services Division

---

**From:** Drew Gaskins  
**Sent:** Monday, July 3, 2017 2:08:51 PM  
**To:** John Griffith Stephanie.Ann Williams LRN OP-F Rob Todd  
**Cc:** incent Pontello Liz Porter  
**Subject:** PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

TDOT Local Programs is conducting a re-evaluation of the subject project prior to the environmental clearance validity for the project expiring on 10/24/2017. No design or scope changes have occurred since the original document approval.

Please review these materials and advise if the previous clearance remains valid. If not, please let me know what additional work will be needed to obtain clearance. For your reference, PDF page numbers of the original document may also be seen below. If you have not previously provided comment, please do so at this time. Let me know if you need additional information or clarification.

#### D-List CE

Page 3 – Project Description

#### Attachments

Page 3 – TIP Page  
Page 4 - Project Maps  
Page 8 – Project Concepts  
Page 10 – Project Area Photos  
Page 17 – Public Meeting Summary  
Page 26 – USACE Letter  
Page 27 – USFWS Letter  
Page 29 – TWRA Letter  
Page 31 – TDEC Letter  
Page 34 – FEMA FIRM  
Page 36 – Air and Noise  
Page 43 – SHPO Letter  
Page 46 – Native American Coordination  
Page 52 – Hazardous Materials



Drew Gaskins, AICP | Transportation Planner  
Local Programs Development Office

James K. Polk Building, 6<sup>th</sup> Floor  
505 Deaderick Street, Nashville, TN 37243

**Archived:** Thursday, July 13, 2017 11:15:16 AM  
**From:** Drew Gaskins  
**Sent:** Thursday, July 13, 2017 10:57:20 AM  
**To:** Liz Porter  
**Subject:** Fw: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County  
**Importance:** Normal

---

---

**From:** LRN OP-F NashvilleRegulatory usace.army.mil  
**Sent:** Thursday, July 13, 2017 9:50 AM  
**To:** Drew Gaskins  
**Subject:** RE: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

This is an E TERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. - STS-Security

Mr. Gaskins,

Following a review of the provided documents, USACE has determined that our opinion in the previous letter dated February 6, 2013 remains valid. The determination was that the project, as planned, would not require a Department of the Army permit. Thank you.

Chris

Christopher Nelson, MS, RPA  
Archaeologist  
Regulatory Division  
U.S. Army Corps of Engineers  
3701 Bell Road  
Nashville, Tennessee 37214  
615-369-7521 / 615-369-7501 Fax

The Nashville District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p\\_136:4:8126372295348](http://corpsmapu.usace.army.mil/cm_apex/f?p_136:4:8126372295348)

-----Original Message-----

**From:** Drew Gaskins <mailto:Drew.Gaskins@tn.gov>  
**Sent:** Monday, July 03, 2017 1:09 PM  
**To:** John Griffith [john.griffith@fws.gov](mailto:john.griffith@fws.gov) Stephanie.Ann.Williams [Stephanie.Ann.Williams@tn.gov](mailto:Stephanie.Ann.Williams@tn.gov) LRN OP-F NashvilleRegulatory usace.army.mil Rob Todd [Rob.Todd@tn.gov](mailto:Rob.Todd@tn.gov)  
**Cc:** incent Pontello [incent.Pontello@tn.gov](mailto:incent.Pontello@tn.gov) Liz Porter [LPorter@smeinc.com](mailto:LPorter@smeinc.com)  
**Subject:** Non-DoD Source PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

TDOT Local Programs is conducting a re-evaluation of the subject project prior to the environmental clearance validity for the project expiring on 10/24/2017. No design or scope changes have occurred since the original document approval.

Please review these materials and advise if the previous clearance remains valid. If not, please let me know what additional work will be needed to obtain clearance. For your reference, PDF page numbers of the original document may also be seen below. If you have not previously provided comment, please do so at this time. Let me know if you need additional information or clarification.

D-List CE

Page 3 - Project Description

Attachments

Page 3 - TIP Page

Page 4 - Project Maps

Page 8 - Project Concepts

Page 10 - Project Area Photos

Page 17 - Public Meeting Summary

Page 26 - USACE Letter

Page 27 - USFWS Letter

Page 29 - TWRA Letter

Page 31 - TDEC Letter

Page 34 - FEMA FIRM

Page 36 - Air and Noise

Page 43 - SHPO Letter

Page 46 - Native American Coordination

Page 52 - Hazardous Materials

Drew Gaskins, AICP Transportation Planner

Local Programs Development Office

James K. Polk Building, 6th Floor

505 Deaderick Street, Nashville, TN 37243

---

**From:** John Griffith [mailto:[john\\_griffith@fws.gov](mailto:john_griffith@fws.gov)]  
**Sent:** Tuesday, July 18, 2017 2:51 PM  
**To:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>  
**Cc:** Vincent Pontello <[Vincent.Pontello@tn.gov](mailto:Vincent.Pontello@tn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>; Stephanie.Ann Williams <[Stephanie.Ann.Williams@tn.gov](mailto:Stephanie.Ann.Williams@tn.gov)>; LRN OP-F <[NashvilleRegulatory@usace.army.mil](mailto:NashvilleRegulatory@usace.army.mil)>; Rob Todd <[Rob.Todd@tn.gov](mailto:Rob.Todd@tn.gov)>  
**Subject:** RE: PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

Drew,

Thank you for requesting reevaluation of the subject project due to the upcoming expiration of the environmental document. The design and scope of work have not changed since we provided TDOT with our section 7 clearance in a letter dated January 23, 2013. Upon review of the information provided, we would not anticipate impacts to any federally listed or proposed species. Therefore, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act (Act) of 1973, as amended, are fulfilled for all species that currently receive protection under the Act. Obligations under section 7 of the Act should be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. This email will serve as our official project response. Please let me know if we can offer further assistance. Thanks,

John Griffith  
Transportation Biologist  
U.S. Fish and Wildlife Service  
Tennessee Field Office  
931-525-4995 (office)  
931-528-7075 (fax)

---

**From:** Drew Gaskins [mailto:[Drew.Gaskins@tn.gov](mailto:Drew.Gaskins@tn.gov)]  
**Sent:** Monday, July 3, 2017 1:09 PM  
**To:** 'John Griffith' <[john\\_griffith@fws.gov](mailto:john_griffith@fws.gov)>; Stephanie.Ann Williams <[Stephanie.Ann.Williams@tn.gov](mailto:Stephanie.Ann.Williams@tn.gov)>; 'LRN OP-F' <[NashvilleRegulatory@usace.army.mil](mailto:NashvilleRegulatory@usace.army.mil)>; Rob Todd <[Rob.Todd@tn.gov](mailto:Rob.Todd@tn.gov)>



**Cc:** Vincent Pontello <[Vincent.Pontello@tn.gov](mailto:Vincent.Pontello@tn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>

**Subject:** PIN 113061.00 South Waterfront Pedestrian Bridge, Knox County

TDOT Local Programs is conducting a re-evaluation of the subject project prior to the environmental clearance validity for the project expiring on 10/24/2017. No design or scope changes have occurred since the original document approval.

Please review these materials and advise if the previous clearance remains valid. If not, please let me know what additional work will be needed to obtain clearance. For your reference, PDF page numbers of the original document may also be seen below. If you have not previously provided comment, please do so at this time. Let me know if you need additional information or clarification.

#### **D-List CE**

Page 3 – Project Description

#### **Attachments**

Page 3 – TIP Page

Page 4 - Project Maps

Page 8 – Project Concepts

Page 10 – Project Area Photos

Page 17 – Public Meeting Summary

Page 26 – USACE Letter

Page 27 – USFWS Letter

Page 29 – TWRA Letter

Page 31 – TDEC Letter

Page 34 – FEMA FIRM

Page 36 – Air and Noise

Page 43 – SHPO Letter

Page 46 – Native American Coordination

Page 52 – Hazardous Materials



**Drew Gaskins, AICP** | Transportation Planner  
Local Programs Development Office  
James K. Polk Building, 6<sup>th</sup> Floor  
505 Deaderick Street, Nashville, TN 37243

**From:** [Karen McKeehan](#)  
**To:** [Ziegler, Melissa](#); [Mize, Jeff](#); [Rebekah Jane Justice](#)  
**Subject:** FW: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information - Pedestrian Bridge  
**Date:** Friday, December 8, 2023 1:36:48 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.jpg](#)  
[image004.jpg](#)

---

Here is the confirmation that we received from TDOT on the NEPA Reevaluation. Just let me know if additional documentation is needed for the RAISE grant application.

---

**From:** TDOT Env.LocalPrograms <TDOT.Env.LocalPrograms@tn.gov>  
**Sent:** Friday, March 3, 2023 11:23 AM  
**To:** Sarah Rowe <srowe@smeinc.com>  
**Cc:** Karen McKeehan <kjmckeehan@knoxvilletn.gov>; Liz Porter <LPorter@smeinc.com>; Erin Rakus <Erin.Rakus@tn.gov>  
**Subject:** RE: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information - Pedestrian Bridge

**This message originated outside of S&ME. Please report this as phishing if it implies it is from an S&ME employee.**

---

Hi, Sarah,

No formal letter will be issued. This email can be used to confirm that no additional NEPA studies are warranted at this time based on your statement that the project plans have not been updated or revised since approval of the previous NEPA Reevaluation. How long your NEPA document remains valid depends on whether or not any significant changes are made to the project design or scope.

When you all are ready to move on to the next phase of your project, please submit the most up to date version of your plans to LPDO and they will distribute them to our office to determine if additional NEPA studies will be warranted at that time.

Thank you,



Mary Hieronymus  
Environmental Division | NEPA Programs Office  
James K. Polk Building, 9th Floor  
505 Deaderick Street, Suite 900, Nashville, TN 37243  
Email: [TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)

---

**From:** Sarah Rowe <[srowe@smeinc.com](mailto:srowe@smeinc.com)>  
**Sent:** Thursday, March 2, 2023 4:42 PM

**To:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>  
**Cc:** Karen McKeehan <[kjmckeehan@knoxvilletn.gov](mailto:kjmckeehan@knoxvilletn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>; Erin Rakus <[Erin.Rakus@tn.gov](mailto:Erin.Rakus@tn.gov)>  
**Subject:** [EXTERNAL] RE: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information - Pedestrian Bridge

Thank you, Mary. Based on your email below and since the plans have not changed since the prior NEPA document was completed, we assume that the NEPA will be valid until March 2026. Will there be a formal letter issued, or does this email adequately document completion of the NEPA process at this time?

Thanks again!

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////  
**Sarah A. Rowe, PWS, QHP //**  
Project Scientist

S&ME  
[6515 Nightingale Lane, Knoxville, TN 37909](http://6515.Nightingale.Lane.Knoxville.TN.37909)  
M: 865.804.5499 // O: 865.970.0003  
[www.smeinc.com](http://www.smeinc.com)

---

**From:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>  
**Sent:** Thursday, March 2, 2023 4:05 PM  
**To:** Sarah Rowe <[srowe@smeinc.com](mailto:srowe@smeinc.com)>  
**Cc:** Karen McKeehan <[kjmckeehan@knoxvilletn.gov](mailto:kjmckeehan@knoxvilletn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>; Erin Rakus <[Erin.Rakus@tn.gov](mailto:Erin.Rakus@tn.gov)>  
**Subject:** RE: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information - Pedestrian Bridge

**This message originated outside of S&ME. Please report this as phishing if it implies it is from an S&ME employee.**

---

Good afternoon, Sarah,

Thank you for providing this information. Our team reviewed the materials provided and determined that a reevaluation is not necessary at this time. The three-year mark alone is not cause for a reevaluation. It is more of a milestone check-in point as there truly is not an expiration on the NEPA document. Reevaluations are completed when there have been significant changes to the project design or scope.

Have new plans been developed since the approval of the last NEPA document? If so, please submit those to the Local Programs Development Office, who will forward those to us for review so we can confirm that no significant changes have been made. Please let us know if you have any questions or need additional information.

Thank you,



Mary Hieronymus

Environmental Division | NEPA Programs Office

James K. Polk Building, 9th Floor

505 Deaderick Street, Suite 900, Nashville, TN 37243

Email: [TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)

---

**From:** Sarah Rowe <[srowe@smeinc.com](mailto:srowe@smeinc.com)>

**Sent:** Thursday, February 23, 2023 8:56 AM

**To:** Erin Rakus <[Erin.Rakus@tn.gov](mailto:Erin.Rakus@tn.gov)>; TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>

**Cc:** Karen McKeehan <[kjmckeehan@knoxvilletn.gov](mailto:kjmckeehan@knoxvilletn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>

**Subject:** [EXTERNAL] FW: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information - Pedestrian Bridge

Hello, Erin – As outlined in Laura’s October 20, 2021 email and Monica’s January 26, 2023 email, we are providing the requested information to support TDOT’s reevaluation of the Knoxville South Waterfront Pedestrian Bridge (PIN 113061.00) project. Please see our responses in red below and visit the following link to access the required documents for inclusion in the Reevaluation coordination review packet: <https://smeinc.egnyte.com/fl/TWAIQErDQ> (Password: Xfvgtj4T).

- A copy of the previously approved NEPA documentation and associated technical appendices. **Provided at the link above (2014 NEPA Cat-ex and 2018 NEPA Reevaluation).**
- Updated plans
  - Have plans been updated since approval of the previous NEPA Reevaluation? If so, do the updated plans reflect changes to the proposed scope of work/design compared to what was approved in the previous NEPA Reevaluation? Is additional ROW/easement detail available? **The plans have not been updated or revised since approval of the previous NEPA Reevaluation. Additional ROW/easement details are not available.**
- Updated HazMat Desktop Review
  - Since more than a year has passed since the previous document was approved, TDOT Hazardous Materials will require a desktop review. You will need to prepare a statement to inform TDOT HazMat as to whether the proposed project will require acquisition of right of way or easements that have the potential to contain hazardous materials or if the property directly abuts property that might contain hazardous materials. You will need to include a definitive statement from the City or on behalf of the City that, based upon a desk top review of online databases, advises whether additional studies will be required (i.e., “The (local partner) has determined that additional hazardous materials studies are not necessary”). The list of databases can be found in the [Local Government Guidelines for Completing the NEPA Process](#). Please note that there is a new link available to the EPA EnviroMapper—[MyEnvironment | US Environmental Protection Agency \(epa.gov\)](#). **S&ME’s updated Hazardous Materials Assessment report (dated February 21, 2023) is provided at the link above (Updated Pedestrian Bridge HazMat).**  
**S&ME has identified evidence of environmental concerns within or adjacent to**

the proposed project corridor. Phase II environmental assessments performed on the Specialty Metals & Supply Corporation facility in 2011 detected mercury, arsenic, barium, chromium, lead, and polyaromatic hydrocarbons (PAHs) I soil at concentrations exceeding the 2012 EPA Regional Screening Levels (RSLs) on the northern portion of the Specialty Metals & Supply Corporation property, within the evaluation corridor. The metals concentrations are representative of the areas of the property sampled. Disturbances and excavation of soils on the Specialty Metals property during pier construction will require characterization in order to determine proper handling and disposal of the soils from this property.

The adjacent Knox River Warehouses operated as a textile mill for over 45 years. It is possible that historical releases of petroleum hydrocarbons, metals, or PAHs from this property could have impacted the subsurface soils and/or groundwater in the evaluation corridor. Planned ground disturbances in the proposed corridor will include bridge and sidewalk construction and possible sidewalk removal and excavation of four inches of ground surface below the sidewalk for the placement of new base stone. In the event hazardous substances/wastes are encountered within the proposed right-of-way or other portions of the project corridor, their disposition shall be subject to the applicable sections of the Federal Resources Conservation and Recovery Act, as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1977.

- Updated STIP/TIP page as applicable. **Provided at the link above (FY 20-23 TIP Pages).**
- Updated contact for the Local Government – we have been asked to copy the Local Government contact in all correspondence. Could you please provide the appropriate Local Government contact to include? **Please include Karen McKeehan ([kjmckeehan@knoxvilletn.gov](mailto:kjmckeehan@knoxvilletn.gov)) in your correspondence.**

Please let us know if you have any questions about the information we have provided or if you need anything else for your reevaluation.

Thank you,

////////////////////////////////////  
Sarah A. Rowe, PWS, QHP //  
Project Scientist

S&ME  
[6515 Nightingale Lane, Knoxville, TN 37909](http://6515NightingaleLane.Knoxville.TN.37909)  
M: 865.804.5499 // O: 865.970.0003  
[www.smeinc.com](http://www.smeinc.com)

---

**From:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>

**Sent:** Wednesday, October 20, 2021 10:35 AM

**To:** Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>

**Subject:** RE: Discussion: 109677.00 TDOT Comments and PIN 113061.00 Reeval Information

**This message originated outside of S&ME. Please report this as phishing if it implies it is from an S&ME employee.**

---

Good morning Liz,

Thank you for reaching out on both PIN 109677.00 and PIN 113061.00).

With regard to **PIN 109677.00** – the revised report was sent to TDOT Cultural Resources on 09/30/2021 and we have not yet received any comments. We will let you know as soon as they have completed their review.

For the Knoxville South Waterfront Pedestrian Bridge (**PIN 113061.00**), we would be happy to assist your team in getting started on the Reevaluation. We will need the following items to send with the Reevaluation coordination review packet.:

- A copy of the previously approved NEPA documentation and associated technical appendices.
- Updated plans
  - Have plans been updated since approval of the previous NEPA Reevaluation? If so, do the updated plans reflect changes to the proposed scope of work/design compared to what was approved in the previous NEPA Reevaluation? Is additional ROW/easement detail available?
- Updated HazMat Desktop Review
  - Since more than a year has passed since the previous document was approved, TDOT Hazardous Materials will require a desktop review. You will need to prepare a statement to inform TDOT HazMat as to whether the proposed project will require acquisition of right of way or easements that have the potential to contain hazardous materials or if the property directly abuts property that might contain hazardous materials. You will need to include a definitive statement from the City or on behalf of the City that, based upon a desk top review of online databases, advises whether additional studies will be required (i.e., “The (local partner) has determined that additional hazardous materials studies are not necessary”). The list of databases can be found in the [Local Government Guidelines for Completing the NEPA Process](#). Please note that there is a new link available to the EPA EnviroMapper—[MyEnvironment | US Environmental Protection Agency \(epa.gov\)](#).
- Updated STIP/TIP page as applicable.
- Updated contact for the Local Government – we have been asked to copy the Local Government contact in all correspondence. Could you please provide the appropriate Local Government contact to include?

Please let us know if any questions arise as you gather these items. Thank you,



**Laura Moribe**

Environmental Division | NEPA Special Projects

th



James K. Polk Building, 9 Floor  
505 Deaderick St., Nashville, TN 37243  
P. 615-253-6719  
[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)  
[tn.gov/tdot](http://tn.gov/tdot)

---

**From:** Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>  
**Sent:** Monday, October 18, 2021 10:20 AM  
**To:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>  
**Subject:** [EXTERNAL] RE: Discussion: 109677.00 TDOT Comments

**\*\*\* This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. \*\*\***

Good morning Patrick –

I wanted to follow up on the 4(f) issue for the Sevier Avenue project referenced above and in the e-mail below. Has Phil’s revised document been submitted to TDOT Historic Preservation, and if so, have you received any comments yet?

I also wanted to follow up on the Knoxville South Waterfront Pedestrian Bridge (PIN 113061.00). I understand that the City did a re-evaluation in 2017, and they are interested in performing another re-evaluation now. Would you mind sending me the latest re-evaluation template, and confirming that this is the appropriate next step to keep this CE approval current?

Thank you –

Liz

---

**Liz Porter, PG, PMP**  
Senior Project Manager/Vice President



S&ME  
6515 Nightingale Lane  
Knoxville, TN 37909 [map](#)  
O: 865.970.0003  
M: 865.804.4336  
[lporter@smeinc.com](mailto:lporter@smeinc.com)  
[www.smeinc.com](http://www.smeinc.com)  
[LinkedIn](#) | [Twitter](#) | [Facebook](#)

This electronic message is subject to the terms of use set forth at [www.smeinc.com/email](http://www.smeinc.com/email). If you received this message in error please advise the sender by reply and delete this electronic message and any attachments. Please consider the environment before printing this email.

---

**From:** Liz Porter

**Sent:** Thursday, September 30, 2021 12:51 PM

**To:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>

**Cc:** Tom Clabo <[tclabo@knoxvilletn.gov](mailto:tclabo@knoxvilletn.gov)>; Chasity Bell <[Chasity.Bell@tn.gov](mailto:Chasity.Bell@tn.gov)>; Amy Hume <[Amy.Hume@tn.gov](mailto:Amy.Hume@tn.gov)>; Dawn Michelle Foster <[dmfoster@knoxvilletn.gov](mailto:dmfoster@knoxvilletn.gov)>; Shawn Fitzpatrick <[sfitzpat@knoxvilletn.gov](mailto:sfitzpat@knoxvilletn.gov)>

**Subject:** RE: Discussion: 109677.00 TDOT Comments

Hi Patrick –

As part of our efforts on the NEPA D-List CE Reevaluation for the Sevier Avenue project, S&ME reached out to Phil Thomason and asked him to address the 4(f) issue as requested by TDOT Historic Preservation. Phil revised his 2014 report and tracked his changes on the document linked below. This is a very large file, so I thought I would go ahead and send it to you so you can pass it on for internal review and make sure TDOT Historic Preservation is OK with these revisions. If so, we will include this version and the TDOT response in the resubmittal of the CE Reevaluation document. Will that work for you? Please let me know if you have any questions or comments about this document. **The link will be valid for two weeks. Please let me know if you need more time to download the report.**

Blount Avenue -Sevier Avenue Corridor Improvements Revised 2021.doc

Password: **LjC5dxFc**

<https://smeinc.egnyte.com/dl/d0f0LEQkGJ>

Thank you –

Liz

---

**Liz Porter, PG, PMP**

Senior Project Manager/Vice President



S&ME  
6515 Nightingale Lane  
Knoxville, TN 37909 [map](#)  
O: 865.970.0003  
M: 865.804.4336  
[lporter@smeinc.com](mailto:lporter@smeinc.com)  
[www.smeinc.com](http://www.smeinc.com)  
[LinkedIn](#) | [Twitter](#) | [Facebook](#)

This electronic message is subject to the terms of use set forth at [www.smeinc.com/email](http://www.smeinc.com/email). If you received this message in error please advise the sender by reply and delete this electronic message and any attachments. Please consider the environment before printing this email.

---

**From:** TDOT Env.LocalPrograms <[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)>

**Sent:** Wednesday, September 8, 2021 11:39 AM

**To:** Dawn Michelle Foster <[dmfoster@knoxvilletn.gov](mailto:dmfoster@knoxvilletn.gov)>; Liz Porter <[LPorter@smeinc.com](mailto:LPorter@smeinc.com)>; Shawn Fitzpatrick <[sfitzpat@knoxvilletn.gov](mailto:sfitzpat@knoxvilletn.gov)>

**Cc:** Tom Clabo <[tclabo@knoxvilletn.gov](mailto:tclabo@knoxvilletn.gov)>; Chasity Bell <[Chasity.Bell@tn.gov](mailto:Chasity.Bell@tn.gov)>; Amy Hume <[Amy.Hume@tn.gov](mailto:Amy.Hume@tn.gov)>

**Subject:** RE: Discussion: 109677.00 TDOT Comments

**This message originated outside of S&ME. Please report this as phishing if it implies it is from an S&ME employee.**

---

Hi all,

Thanks again for meeting this morning—below is a bullet list of points we discussed:

1. SME is going to complete a desktop hazardous materials study for the entire project corridor and submit their determination to TDOT's NEPA Office to be forwarded to TDOT Hazardous Materials. Please make sure that you provide the Hazardous Materials section with a definitive statement advising whether further hazmat studies are needed (i.e., "The City has determined that no additional studies are needed.").
2. SME is going to move ahead with documentation of the 4(f) *de minimis* use and 4(f) exception outlined by TDOT Historic Preservation in the attached email.
3. SME is going to conduct an ecology review to confirm that there are no changes to the proposed impacts to jurisdictional waters.
4. City of Knoxville is going to send information about added tracts in the southeast corner of the roundabout to TDOT NEPA Office to forward to TDOT ROW to confirm whether an update to the CSRP is necessary.

If you have any questions or need additional information about any of the points above, please let us know.

Best,



**Patrick W. Garner** | Environmental Studies Specialist  
Environmental Division/ NEPA Special Projects

James K. Polk Building, 9<sup>th</sup> Floor  
505 Deaderick St., Nashville, TN 37243  
P. 615-253-6719

[TDOT.Env.LocalPrograms@tn.gov](mailto:TDOT.Env.LocalPrograms@tn.gov)  
[tn.gov/tdot](http://tn.gov/tdot)

-----Original Appointment-----

**From:** Patrick Garner

**Sent:** Tuesday, August 24, 2021 8:37 AM

**To:** Patrick Garner; Dawn Michelle Foster; Elizabeth Porter ([LPorter@smeinc.com](mailto:LPorter@smeinc.com))

**Cc:** Tom Clabo; Chasity Bell; Amy Hume; Shawn Fitzpatrick

**Subject:** Discussion: 109677.00 TDOT Comments

**When:** Wednesday, September 8, 2021 10:00 AM-11:00 AM (UTC-06:00) Central Time (US & Canada).

**Where:** Microsoft Teams Meeting

Meet to discuss TDOT comments on the D-List CE Reeval returned 8/23/21.

---

## Microsoft Teams meeting

**Join on your computer or mobile app**

[Click here to join the meeting](#)

**Or call in (audio only)**

[+1 629-209-4396,,192973741#](#) United States, Nashville

Phone Conference ID: 192 973 741#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

---