PARKWAY EAST BRIDGE OVER FOUR MILE RUN (SR 376-A77) FEASIBILITY STUDY

PUBLIC MEETING









WELCOME

Doug Seeley, Assistant District Executive - Design PennDOT District 11



INTRODUCTIONS

PennDOT District 11

- Doug Seeley, P.E., Assistant District Executive-Design
- Cheryl Solosky, P.E., Senior Project Manager
- John Zelesnak, P.E., Portfolio Manager
- Shane Szalankiewicz, P.E., District Bridge Engineer
- Mark Young, District Environmental Manager
- Nick Krobot, P.E., Assistant Environmental Manager
- Jacqueline Evans, P.E., Right-of-Way Administrator
- Ethan Bailey, Chief Negotiator
- Nicole Haney, Community Relations Coordinator



INTRODUCTIONS



John Petulla, P.E.

Ben Karnish, P.E.

Betsy Zang

Carrie Machuga

Elisa Kownacki



Adam Groshek Eva LaGard



Kelly Rigot, P.E.













MEETING PURPOSE







Introduce the

Feasibility Study

Discuss Draft Purpose &

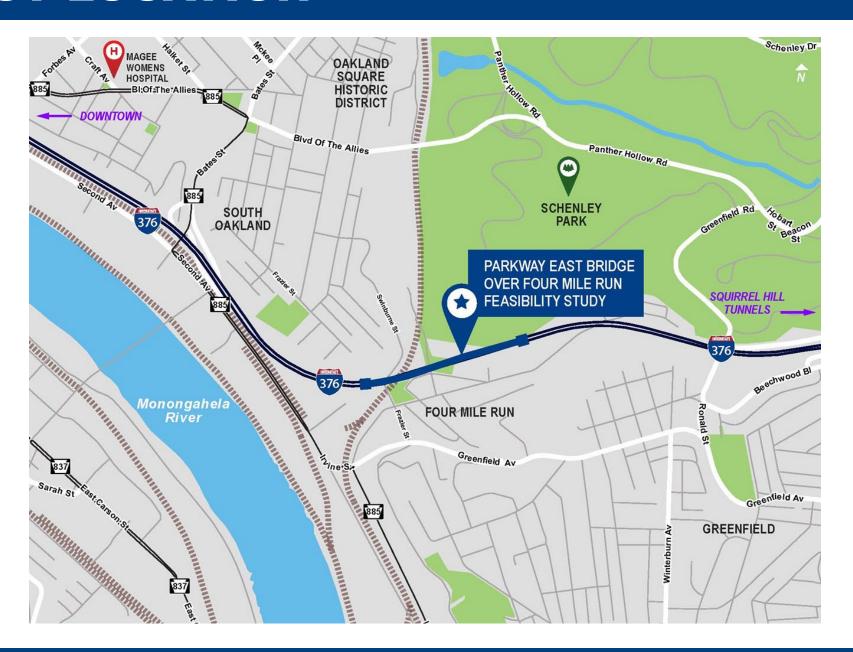
Need and Project Goals

Collect

Feedback

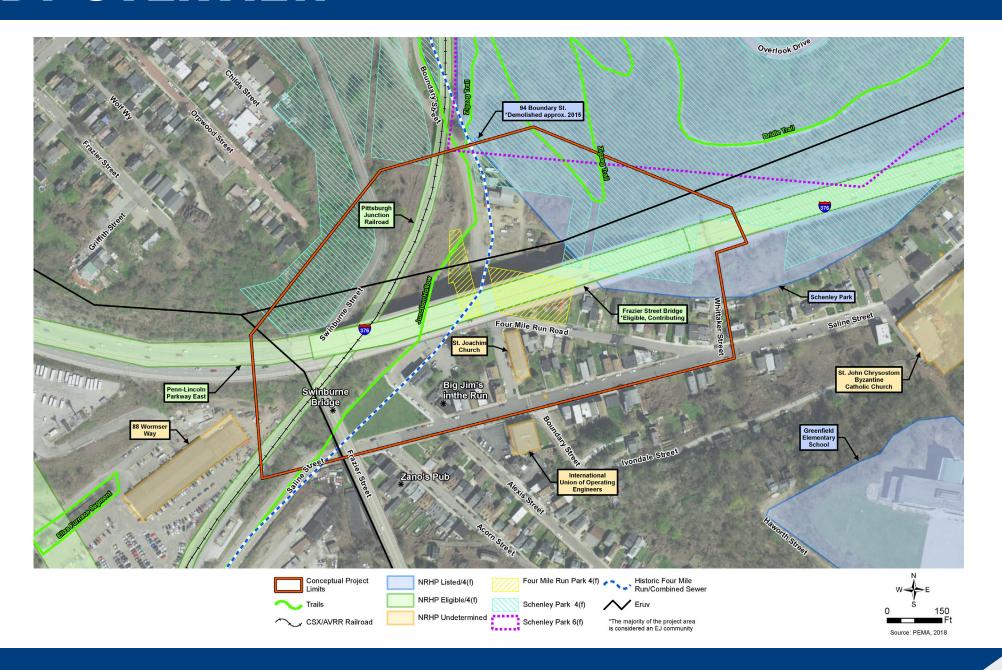


PROJECT LOCATION



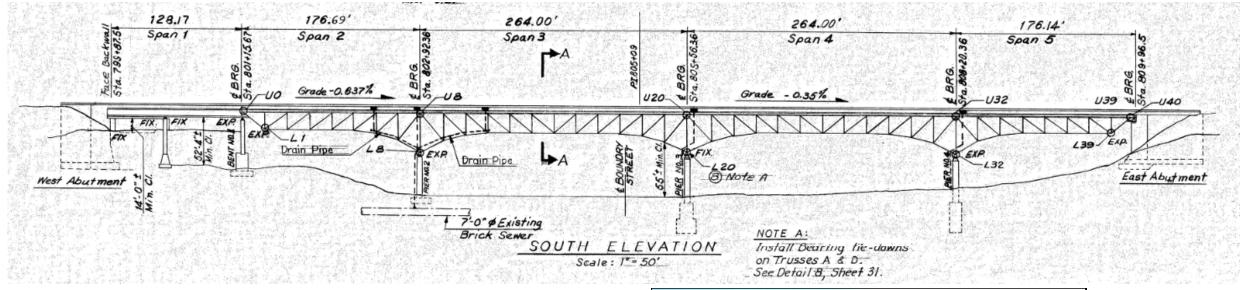


STUDY OVERVIEW

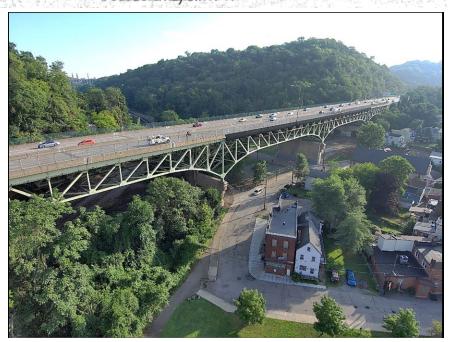




BRIDGE DESCRIPTION



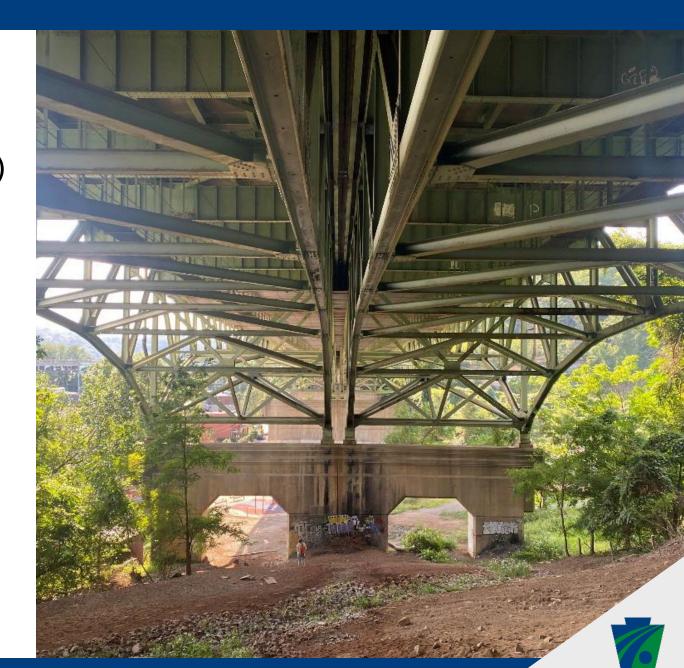
- Built in 1951
- 4-span continuous steel deck truss
- 2-span girder-floorbeam-stringer
- 1015' total length
- Dual Structure with 3 lanes of I-376 (Parkway East) traffic on each bridge





BRIDGE CONDITION

- Deck/Superstructure/Substructure
 Condition Ratings are 5 (Fair).
 Rating on a 0 (Failed) to 9 (Excellent) scale.
- Dropping to a Condition rating of 4 (Poor) would trigger load posting the bridge.
- Emergency repairs increasing in frequency causing significant user impacts.
- Pieces of Underdeck Shielding have recently fallen on park/playground below. Procurement of replacement material underway.

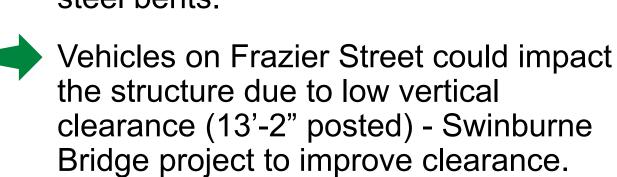


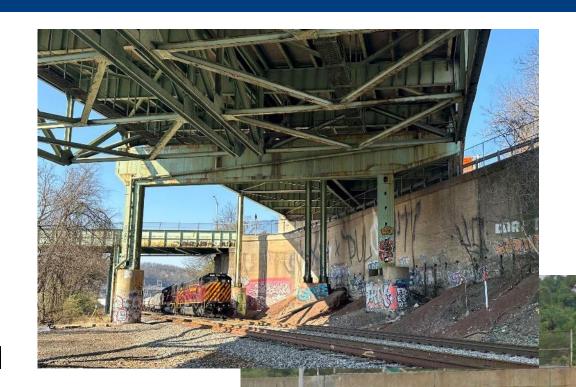
BRIDGE CONDITION

Lack of resiliency gives no reasonable detour for 120,000 vehicles.

Structure includes nonredundant steel tension members (NSTMs).

Railroad derailment could impact the unprotected steel bents.







BRIDGE REHABILITATION HISTORY

Previous rehabilitation projects occurred in 1981, 2007, 2018

- 1981 (30-year interval)
 - Deck, Barrier, Protective Fence, Expansion Joint, & Drainage System Replacements; Latex Deck Overlay; Full Painting
- 2007 (26-year interval)
 - Latex Deck Overlay, Zone Painting, Substructure Repairs, Deck Joint Replacement
- 2018 (11-year interval)
 - Deck Joint Replacement, Underdeck Shielding System Installation
- 2024 (6-year interval)
 - Underdeck Debris Shield Replacement

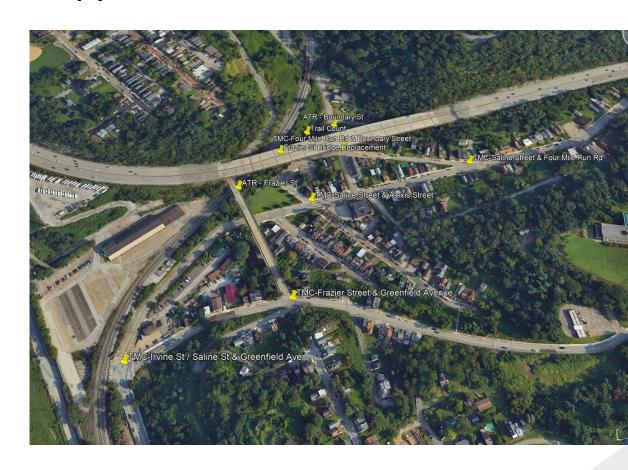


DATA COLLECTION

Parkway East Average Daily Traffic – Approx. 120,000 vehicles

In your neighborhood, Traffic Data Collection Completed to Date:

- 24-hour vehicular counts
- Intersection turning movement counts
- Trail Counts
- Trail and Park Field Views





JUNCTION HOLLOW TRAIL COUNT

Day	Date	Location	Total			Weather Notes
			Pedestrians	Bikes	Total	- Weather Notes
Thursday	5/16/2024	Trail	91	161	252	Dry Conditions
		Road	91	272	363	
		TOTAL	182	433	615	
Friday	5/17/2024	Trail	44	35	79	Light Rain 9AM to 7PM
		Road	27	60	87	
		TOTAL	71	95	166	
Saturday	5/18/2024	Trail	73	152	225	Rain early morning ended by 6AM
		Road	98	185	283	
		TOTAL	171	337	508	
Sunday	5/19/2023	Trail	57	227	284	Dry Conditions
		Road	137	279	416	
		TOTAL	194	506	700	
Wednesday	5/22/2023	Trail	86	162	248	Dry Conditions
		Road	40	183	223	
		TOTAL	126	345	471	

Data represents usage during daylight hours from 6AM-9PM





FIELD OBSERVATIONS

Visited during the week and a weekend

- "Essential connector to downtown from Shadyside"
- Observed multiple students and residents biking and walking who use the trail for commuting
- Utilizing park facilities even with barricades in place
- Regularly used soccer field (in-season)
- Varying levels of experienced cyclists use the trail







STUDY OVERVIEW

Adjacent Projects

- Swinburne Street Bridge (City of Pittsburgh)
- Charles Anderson Bridge (City of Pittsburgh)*
- Panther Hollow Bridge (City of Pittsburgh)
- Four Mile Run Stormwater Project (PWSA)
- Bates Street Improvement Project
- Squirrel Hill Interchange
- Commercial Street Bridge*
- I-376 Barrier Replacement Project*
- Advanced Traffic Management System (ATMS) Project
- Bates Street Interchange Study*



STUDY OVERVIEW

Project Development to Date



Initial Bridge Inspection and Analysis



Draft Bridge Rehabilitation Study



Traffic and Trail Counts



Draft Purpose & Needs, Project Goals



Draft Design Criteria and Typical Section



DRAFT PURPOSE & NEED

Purpose

To address the roadway and bridge deficiencies of the Parkway East (I-376) crossing over the Four Mile Run area while maintaining connectivity of local roadways, railroads, sidewalks, and trails.



DRAFT PURPOSE & NEED

Needs

- Current bridge condition is rated 5 (Fair) with ongoing deterioration. The operating rating is at the minimum for interstate traffic. Without rehabilitation, load rating will decrease, necessitating load posting.
- Fatigue-prone details and nonredundant steel tension members (NSTMs) could create a risk of closure from fatigue-initiated cracks.
- The bridge cannot carry Permit Loads without special accommodations due to insufficient load-carrying capacity.
- Eastbound I-376 roadway curvature and median barrier limits stopping sight distance.
- The existing median shoulders on I-376 are roughly 2'-3' wide, and 10'-0" shoulders are required to meet current design standards.



DRAFT STUDY GOALS

Draft Project Goals



Keep four lanes open with limited detours for I-376 traffic.



Minimize construction duration.



Minimize right-of-way impacts.



Manage stormwater infrastructure related to runoff associated with I-376.



Minimize trail impacts under the bridge during construction.



Minimize community impacts.



Provide equivalent Four Mile Run Playground/Park following construction.



Continue coordination with City of Pittsburgh's Swinburne Bridge project.



NEXT STEPS/TENTATIVE SCHEDULE

2024-2025

Feasibility Study/Alternatives Analysis

2025-2026

Preliminary Engineering & Environmental Clearance

2026-2028

Final Design

2028

Tentative Construction Start



- The existing underdeck shielding is deteriorating and has been falling on the playground below. When will this be repaired or replaced?
 - PennDOT is in the process of procuring new shielding material and replacement of the existing shielding system will begin this fall.
- Four Mile Run Park was just renovated. What's going to happen to the park during and after construction?
 - The design team will work with the City of Pittsburgh and the local community to minimize disturbances to park use. During construction, the park will be temporarily closed, and the new park equipment will be removed and stored for reuse. The design team will work with the City of Pittsburgh and the community to reestablish the park after construction.



Will the Junction Hollow Trail be closed during construction?

■ It is too early in the project design process to know what temporary impacts will occur in relation to the Junction Hollow Trail. The design team is aware of the importance of the trail to the community, commuters and recreational users. Our design team will consider traffic impacts to I-376 travelers and impacts to travelers below the bridge.

Flooding is a big issue in our neighborhood. Will this project make it worse?

■ The PennDOT team has been coordinating with Pittsburgh Water & Sewer Authority on their Four Mile Run Stormwater project, which is intended to help to reduce basement backups and neighborhood flooding that many residents in The Run have experienced. Stormwater drainage from the I-376 bridge and roadway will be studied and drainage systems will be properly designed, constructed, and maintained to meet State requirements.



- Are noise studies going to be completed for this project? Are sound barriers being considered for this project?
 - It is too early in the project design process to know if a preliminary noise study will be completed. More information regarding the scope and size of the improvement is needed, which will be developed, and clarified, as the project progresses. Moving forward the design team will also consider the effects of temporary construction noise, daytime and nighttime work, and construction duration. Regardless of the alternative that is selected, the project team will incorporate noise reducing features, such as reducing the number of expansion joints on the bridge, the use of longitudinal grooving on the bridge deck, etc.



Will my property be impacted by the project?

- PennDOT will make an effort to minimize properties impacted for this project, but it is too early in the process to identify what properties will be impacted and to what degree. There are right-of-way representatives present at tonight's meeting that can answer general questions about the state's right-of-way program and process.
- Following environmental clearance and if your property is impacted by the project, your first contact will be a letter informing you that your property will be affected. You will also be personally assigned a Real Estate Specialist to answer any questions you may have and/or explain all of the benefits to which you may be entitled. The value of your property will be determined by a State Certified Appraiser. Local real estate trends and the value of comparable properties will be taken into consideration when determining the value of your property which you will be offered as Just Compensation. Future Public Meetings will include more information on the state's right-of-way process.



- What are you doing about the debris that falls from the Parkway traffic (litter, car crash debris, etc.)?
- Regardless of whether a rehabilitation or replacement option is chosen the design team will investigate including fencing on the top of the bridge. The design team will also investigate extending the fencing along the roadway to capture debris as well. The public will have the opportunity to comment on the specifics of these improvements later in the design process.





CONTACT



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Visit the project website!



To help keep motorists informed as work progresses, PennDOT has created an email distribution list for Parkway East traffic advisories and construction updates.

Enroll by sending email addresses to ymanyisha@pa.gov.

Please write

"Subscribe – Parkway East"

in the subject line.



