### Welcome to the Skinners Falls Project Advisory Committee Meeting!

- This meeting will be recorded.
- Please log in using your first and last names.
- Use either your computer or phone for audio, not both.
  - Everyone is muted by default when they enter the room. If you are on a phone for audio press \*6 to unmute when you are ready to speak.
- Using video is encouraged, if available, especially when you are speaking.
- "Raise" your hand if you'd like to speak next.



• Email Kelly.Offner@aecom.com if you are having technical trouble.



## **Skinners Falls Bridge**

Planning and Environmental Linkages (PEL) Study

Project Advisory Committee Meeting Presentation #4

May 24, 2023









### Agenda



01

#### Alternatives Analysis – Rehabilitation



02

#### Conceptual Bridge Alignment Locations

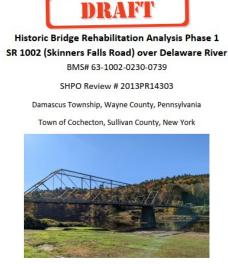


Next Steps

## Alternatives Analysis -Rehabilitation

### Historic Bridge Rehabilitation Analysis (HBRA)

- Design Team presented the HBRA process in January 2023
- HBRA examines two main questions:
  - Can the bridge be rehabilitated while still retaining its character defining features per the Secretary of Interior's (SOI) standards?
  - 2. How well will the rehabilitated bridge meet the project needs?
- HBRA typically conducted in NEPA not in a PEL
- DOT/FHWA committed to carrying Rehabilitation Alternative into NEPA
- Therefore, HBRA will not be completed until NEPA







PennDOT Engineering District 4-0

Prepared By:

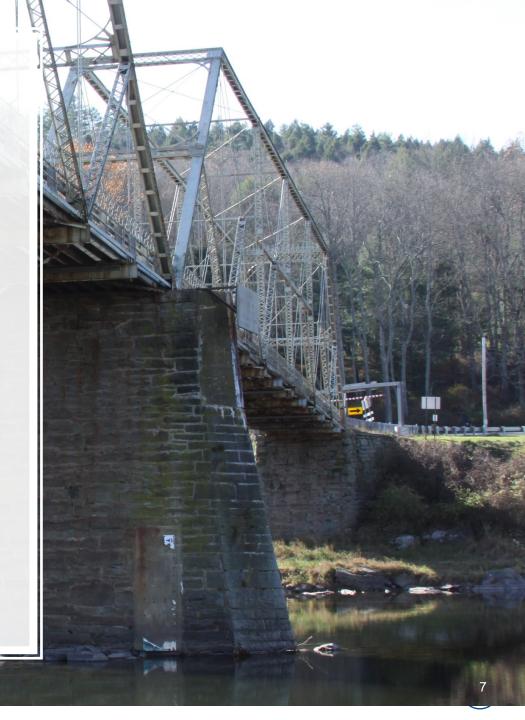


### Historic Bridge Rehabilitation Analysis (HBRA)

	HBRA Phase 1 PEL Study	HBRA Phase 2 NEPA Studies
Identify	<ul> <li>Preservation Priority of Bridge</li> <li>Character Defining Features</li> </ul>	<ul> <li>Additional non-traditional rehabilitation options</li> </ul>
Determine	How much load can the rehabilitated bridge carry while still meeting SOI standards and maintaining character defining features?	Will additional rehabilitation alternative meet SOI Standards? How well does each rehabilitation option meet purpose and need?

### **Historic Significance**

- Exceptional
- Criterion C, Engineering Significance, as a rare, intact example of a multiple span Baltimore truss bridge of moderate length.
- A contributing element to the NRHP-listed Milanville Historic District





### Character Defining Features

- Primary character defining features:
  - Two Baltimore Through Truss spans;
  - Truss configurations;
  - Pin connections; and the
  - Stone piers, abutments, and wing walls
- Secondary character defining features
  - The size and scale of the structure, portals, bracing, finials, decorative railings, bridge plaques and decorative ornamentation



### Primary Features

- Two through Baltimore trusses
- Stone abutments and pier



### Primary Features

- Stone masonry abutment
- Stone masonry pier





### Primary Features

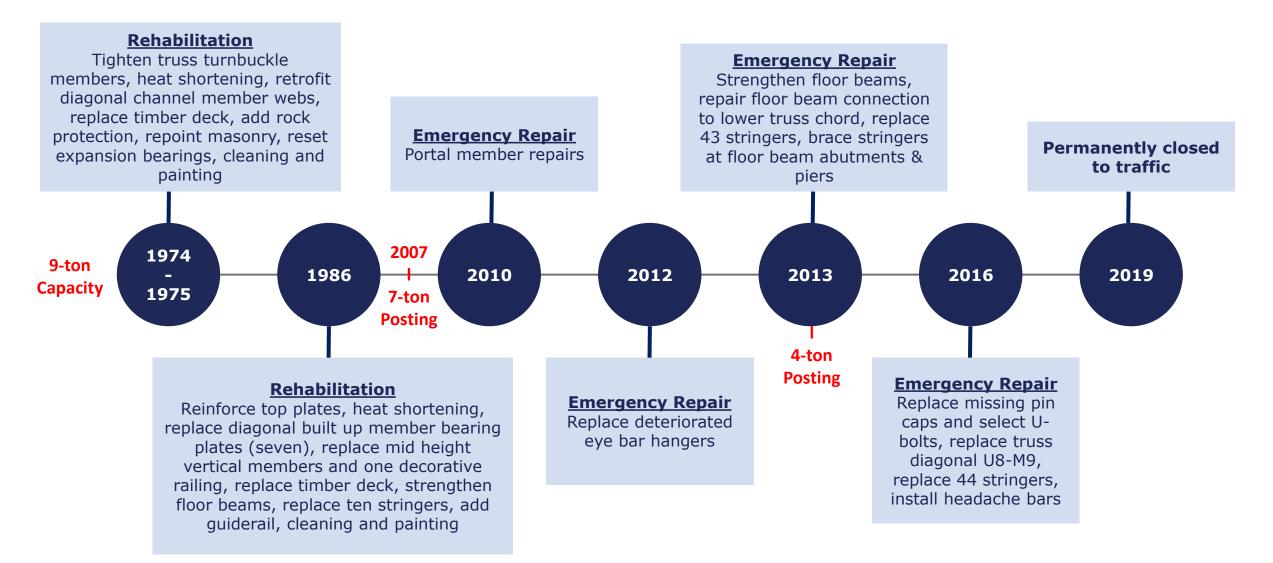
- Truss members
- Pin connections



### Secondary Features

- Decorative rail with rosette
- Portal Bracing

### Rehabilitation History of Skinners Falls Bridge



Plans for the rehab conducted in 1974-1975 were developed in 1971

### Summary of HBRA Phase 1

Rehabilitation Option	SOI Standards	Cost Estimate*	Comments
Minimum (4-ton) Rehabilitation	Yes	\$15.6M	10-15 Year Design Life, Maintenance Plan Required
7-ton Rehabilitation	Yes	\$15.7M	10-15 Year Design Life, Maintenance Plan Required
10-ton Rehabilitation	Yes	\$17.3M	Extensive Rehab, 25 Year Design Life, Maintenance Plan Required

\*Costs are from the 2014 Feasibility Study and escalated to 2022 dollars, including deck replacement and more significant substructure repairs.

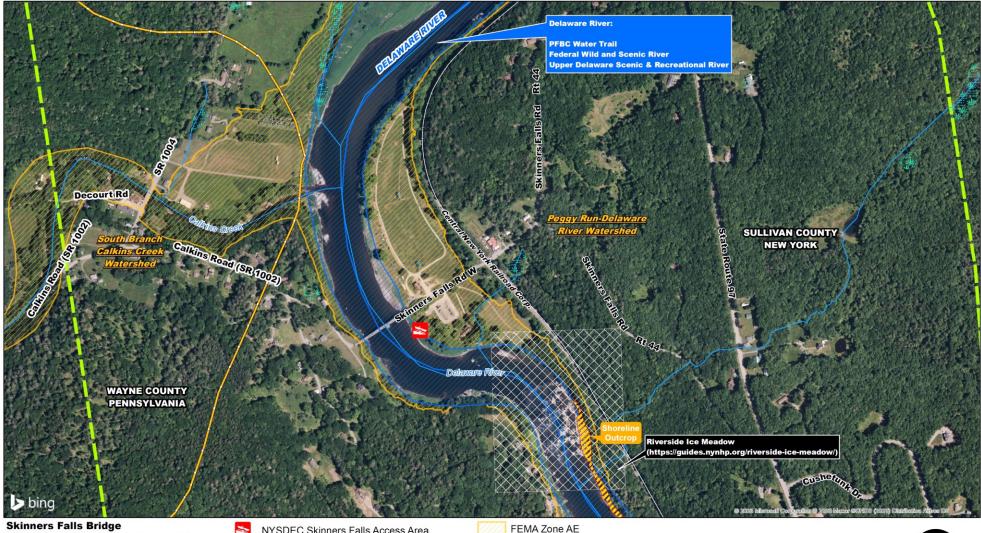
### HBRA Phase 2

- HBRA will be completed in NEPA phase
- Focus: How well does Rehabilitation Alternative meet the project purpose and needs?
- HBRA Phase 2 to be completed Winter 2024-2025
- PennDOT will conduct a Consulting Party meeting once
   Phase 2 is posted to PATH



# Conceptual Bridge Alignment Locations

### **Environmental Resources**



#### Skinners Falls Bridge SR 1002-651 over the Delaware River

ENVIRONMENTAL RESOURCES MAP Long / Lat. 41.670139, -75.057724

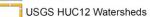
Source: USGS Earthstar Geographics SIO, 2022 Microsoft Corporation, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.



**FEMA Floodway** 

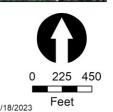
NHP Natural Heritage Community Occurances

----- Waterway NHP Significant Natural Community Occurance



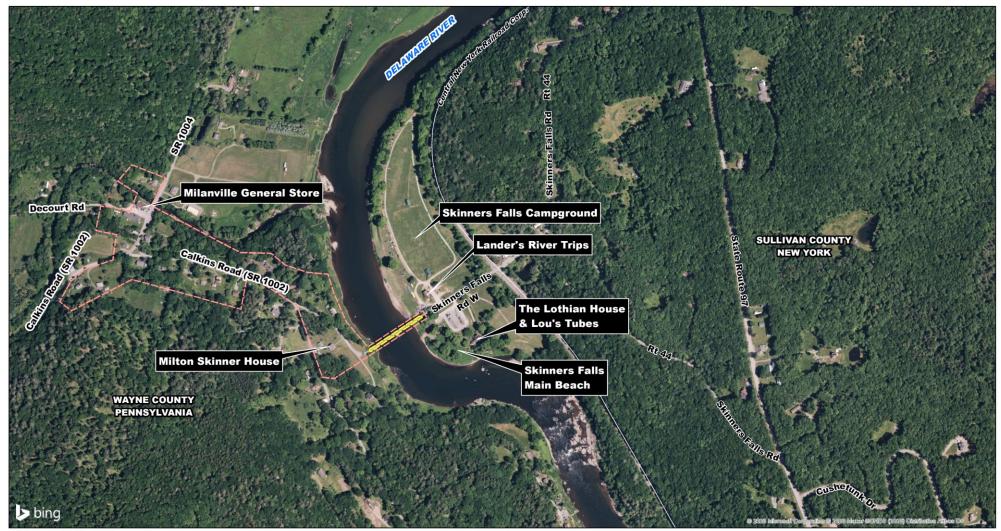
NWI Wetlands

NPS-Upper Delaware Scenic & Recreational River Boundary



Date: 4/18/2023

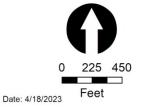
### **Cultural and Socioeconomic Resources**



Skinners Falls Bridge SR 1002-230 over the Delaware River CULTURAL AND SOCIAL / ECONOMIC MAP Long / Lat. 41.670139, -75.057724

Milanville-Skinners Falls Bridge - National Register Listed

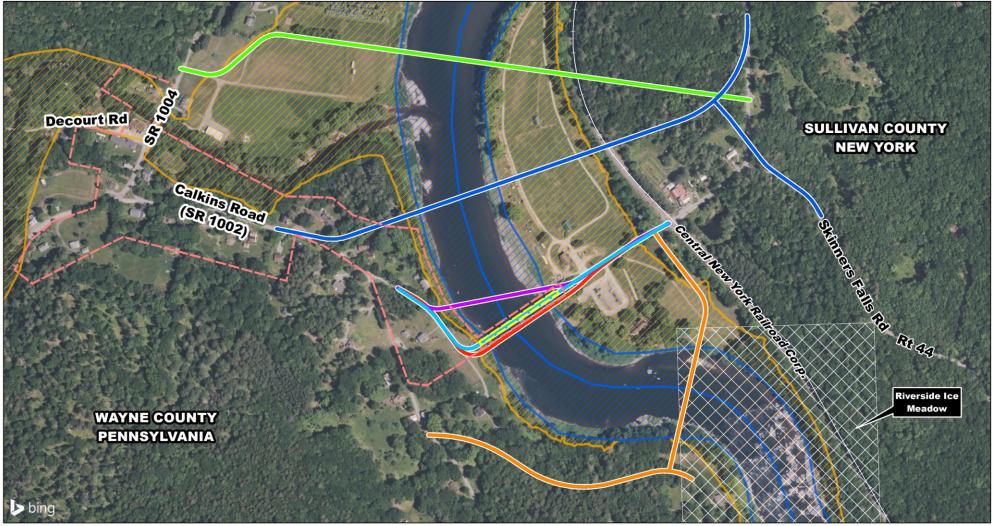
Milanville Historic District - National Register Listed



Source: USGS Earthstar Geographics SIO, 2022 Microsoft Corporation, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.



### **Conceptual Alignments**



**Skinners Falls Bridge** SR 1002-230 over the Delaware River ENVIRONMENTAL RESOURCES MAP Long / Lat. 41.670139, -75.057724

Source: USGS Earthstar Geographics SIO, 2022 Microsoft Corporation, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

Milanville-Skinners Falls Bridge - National **Register Listed** 

Milanville Historic District

National Register Listed

NHP Significant Natural Alignment 1 Community Occurance

FEMA Zone AE

FEMA Floodway

Alignment 3A

Alignment 2 - North Shift A Alignment 4

Alignment 5

Alignment 3B

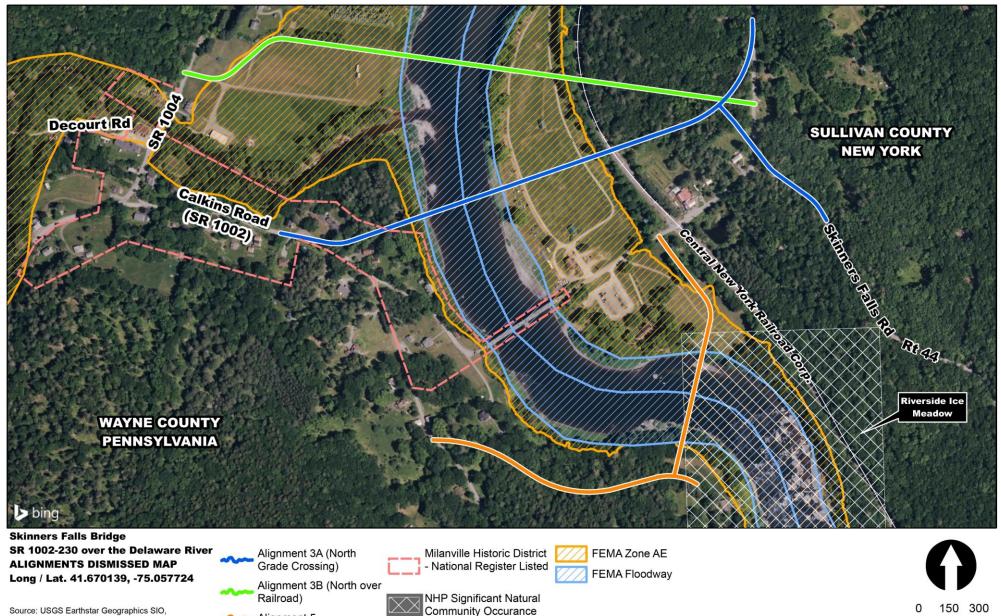


19

### Phase 1 Alignments Summary

Alignment	Pros	Cons
Rehabilitation (4, 7, 10-ton)	<ul> <li>Meets the Secretary of Interior Standards</li> <li>Maintains existing visual context</li> <li>Minimize impacts to Milanville HD</li> </ul>	<ul> <li>Limited weight capacity</li> <li>Single lane bridge width</li> <li>Substandard approach geometry remains</li> </ul>
Alignment 1 (Online replacement)	<ul><li>Minimizes ROW impacts</li><li>Low business impacts</li></ul>	<ul> <li>Impacts to Milanville HD</li> <li>Substandard approach geometry likely remains</li> </ul>
Alignment 2 (North Shift)	<ul><li>Improves roadway geometry on PA side</li><li>Low business impacts</li></ul>	<ul> <li>Impacts to Milanville HD</li> <li>Increased ROW impacts compared to online</li> </ul>
Alignment 3A (North grade crossing)	<ul> <li>Improves roadway geometry on PA side</li> <li>Shorter bridge than alternative 3B</li> </ul>	<ul> <li>Impacts to Milanville HD</li> <li>Potential viaduct</li> <li>Bisects campground</li> <li>Increased fill in floodplain/floodway</li> <li>Additional grade crossing of railroad</li> </ul>
Alignment 3B (North over RR)	<ul> <li>Crosses over railroad on viaduct</li> <li>Avoids impacts to Milanville HD</li> </ul>	<ul> <li>Impacts farmland</li> <li>Longest bridge (viaduct)</li> <li>Bisects campground</li> <li>New crossing of railroad, existing remains for businesses</li> </ul>
Alignment 4 (South Shift)	<ul><li>Shortest bridge</li><li>Low business impacts</li></ul>	<ul> <li>Closest to boat launch</li> <li>Impacts to Milanville HD</li> <li>Substandard approach geometry likely remains</li> </ul>
Alignment 5 (Downstream replacement)	<ul> <li>Avoids Impacts to Milanville HD</li> <li>Provides scenic vantage point over falls</li> </ul>	<ul> <li>Closest in proximity to falls and impacts to Natural Heritage Community</li> <li>Concerns with ice jams</li> <li>Widening of River Hideaway Drive</li> </ul>

#### Phase 1 Alignments Recommended for Dismissal



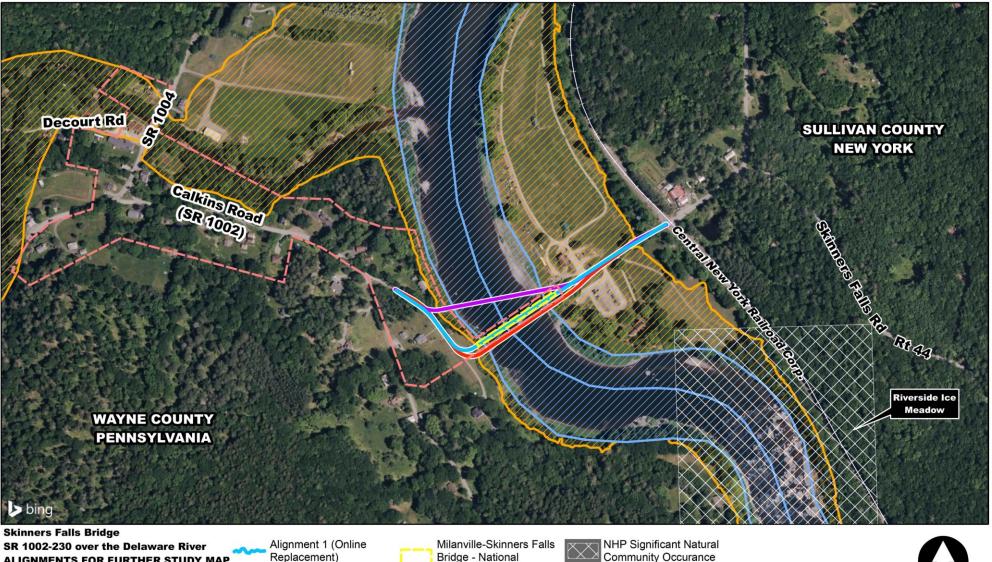
Source: USGS Earthstar Geographics SIO, 2022 Microsoft Corporation, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

Alignment 5

21)

Date: 5/10/2023 Feet

### Phase 1 Alignments Recommended for Further Study



ALIGNMENTS FOR FURTHER STUDY MAP Long / Lat. 41.670139, -75.057724

Replacement)

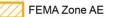
Alignment 2 (North Shift)

Alignment 4 (South Shift)

Register Listed

Milanville Historic District National Register Listed

Community Occurance



FEMA Floodway



Feet

Date: 5/10/2023

Source: USGS Earthstar Geographics SIO, 2022 Microsoft Corporation, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

22

# **Next Steps**

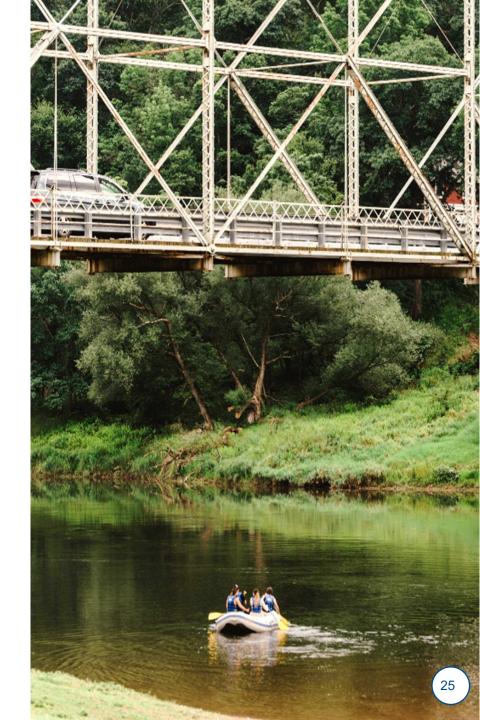


### Next Steps: PEL Study

- SHPO and Consulting Party Comment on HBRA Phase I
- Evaluation of Bridge Types
- Public Meeting
- Publish PEL Report
- Conclusion of PEL

### Next Steps: NEPA Phase

- Preparation of Supporting NEPA Documents
- HBRA Phase 2
- Public Involvement
- NEPA Decision & Permitting



# Questions

### **Thank You!**

### **Contact Information**

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