



Welcome

Public Open-House Meeting #2



IL 100-106 River Crossing
Project
Florence Bridge -
Phase I Study

December 7, 2017
4:30pm - 6:30pm



What Are We Trying to Accomplish?



River Crossing Project

- ▶ Study Area and Preliminary Alternatives
- ▶ Review of Environmental Resources
- ▶ What is the Purpose and Need of the Project?
- ▶ Review Range of Alternatives Considered
- ▶ Obtain Public Input for Each of the Alternatives
- ▶ Project Timeline & Next steps



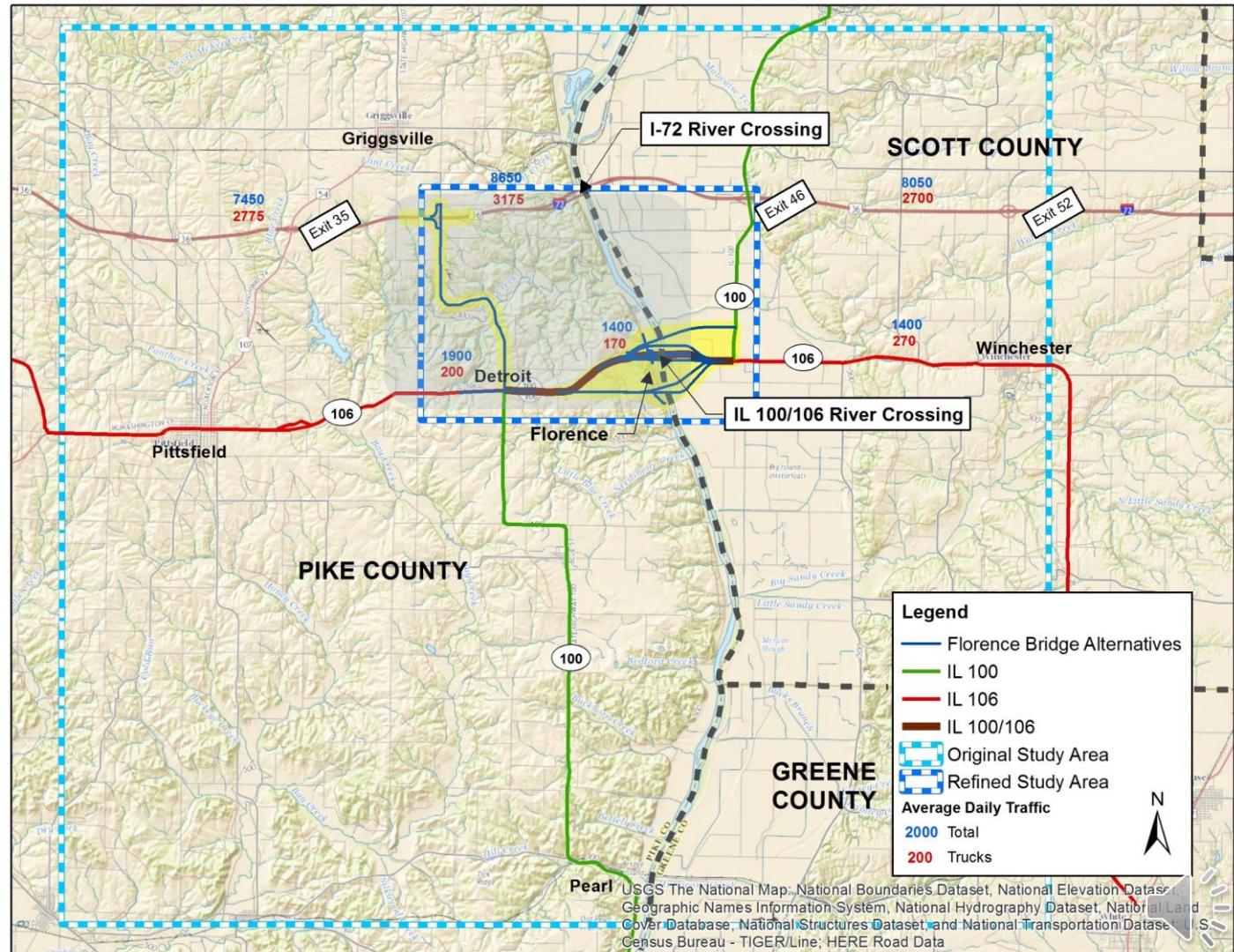
Study Area

- ▶ Originally included parts of Pike, Scott and Greene Counties
 - ▶ A crossing option at Pearl was also proposed, but was not brought forward by the Citizens Advisory Group (CAG)*
- ▶ Was narrowed down to approximately 50 square miles
- ▶ All draft alternatives are in the Florence area, or in eastern Pike County and western Scott County

- Citizens Advisory Group (CAG):
Volunteer Group of Communities, Businesses, Groups, Citizens
- Provide input and knowledge to the Florence Bridge Study



River Crossing Project

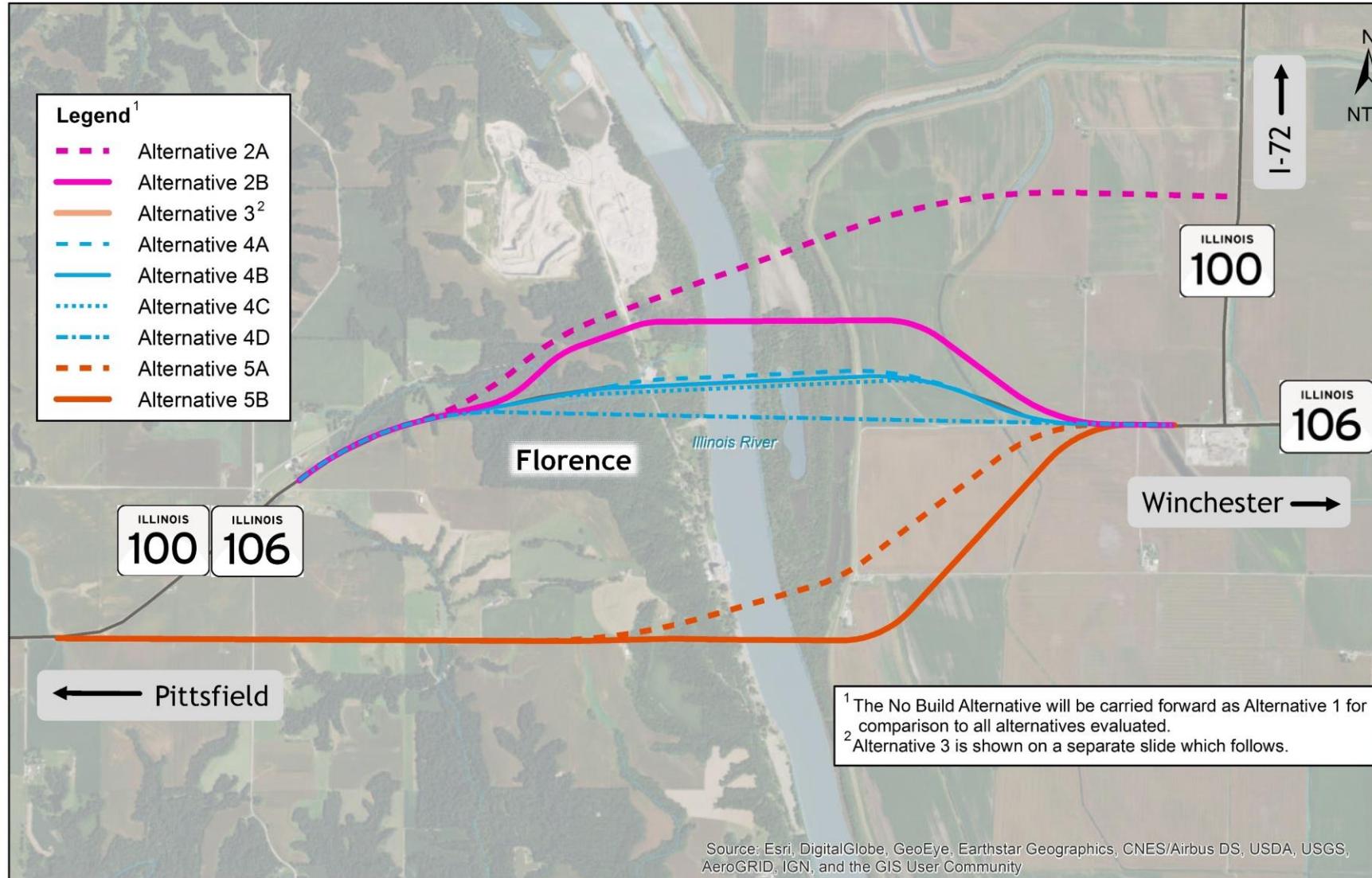


Range of Alternatives Considered

Alternatives Location Map



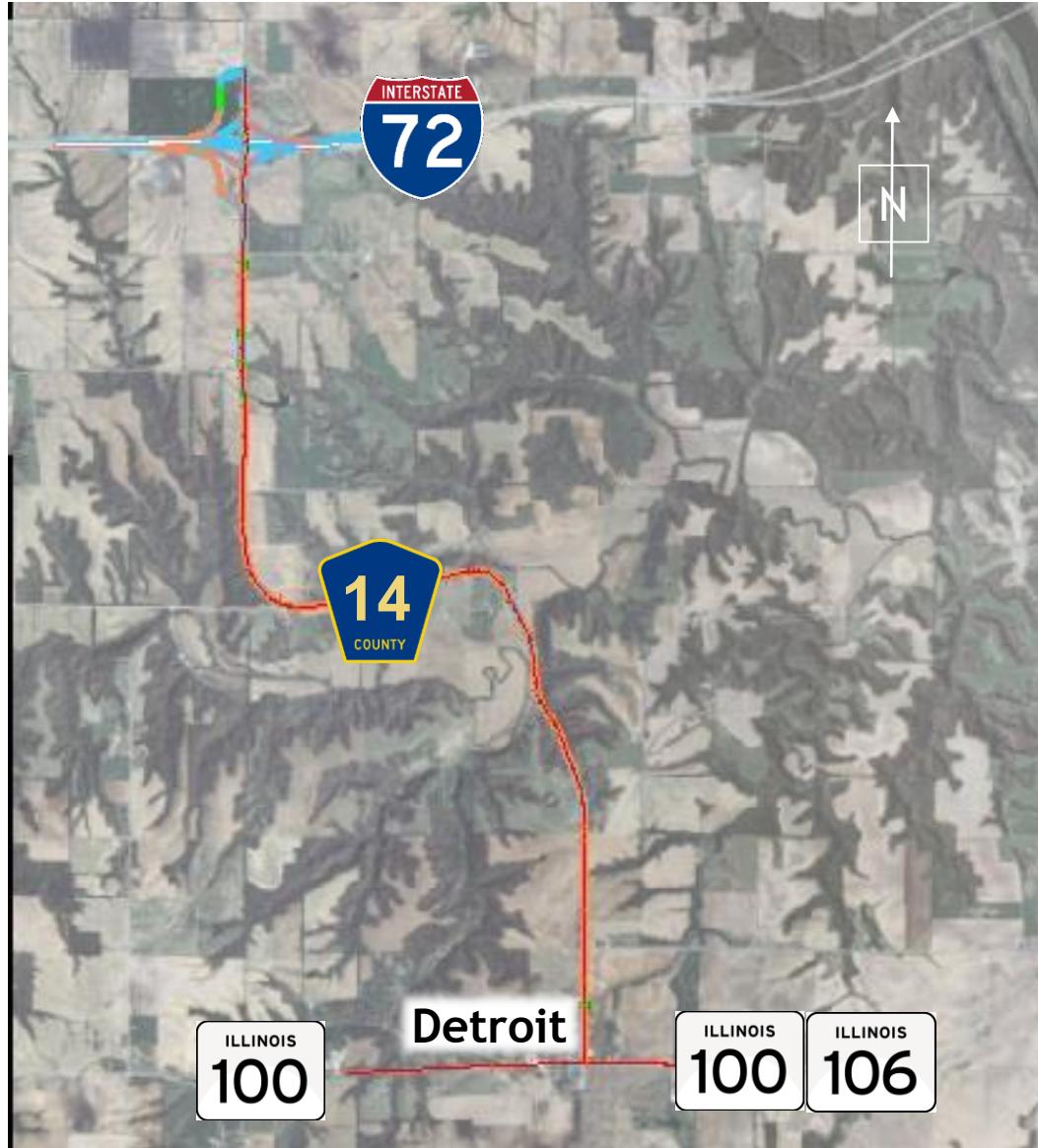
River Crossing Project



Alternatives Location Map



River Crossing Project



Alternative 3

- ▶ Located to the west of the other Alternatives
- ▶ Improves existing County Highway 14 between Detroit and I-72
- ▶ Construct an interchange to connect CH 14 with I-72
- ▶ The existing bridge at Florence would be removed



Environmental Resources



River Crossing Project

ENVIRONMENTAL ASSESSMENT KEY COMPONENTS

Alternatives Analysis

Is an evaluation of the preliminary alternatives using established evaluation criteria. Alternatives that are not reasonable, feasible, or do not meet the purpose and need are dismissed.

Purpose and Need

Identifies the problems that the project is intended to address.

Preferred Alternative

Identifies an alternative that best balances the environmental impacts and costs with the ability to fulfill the project's purpose and need.

Environmental Consequences

Includes a detailed evaluation of the social and environmental impacts of the alternatives that are retained.

Affected Environment

Provides a description of the project area environs potentially affected by the alternatives.

Scoping

Is an open coordination process with agencies and public to identify scope of issues to be addressed.

Project follows the National Environmental Protection Act (NEPA) :

- Preparing an inventory of Environmental Resources in the project study area.
- Avoidance of sensitive resources if reasonably possible.
- Minimizing impacts to resources when unavoidable.
- Mitigation of resources as required.

The NEPA process ensures that environmental factors are weighted equally when compared to other factors in the decision making process.



Purpose & Need Statement

- ▶ Serves as the basis for which all alternatives are evaluated.
- ▶ **P&N Statement*** - “The purpose of the project is to evaluate new transportation facility options across the Illinois River that are safe, reliable and meet current design standards. The project shall provide connectivity across the Illinois River for all modes of vehicular traffic, facilitate river traffic, and support local and regional economic needs.”

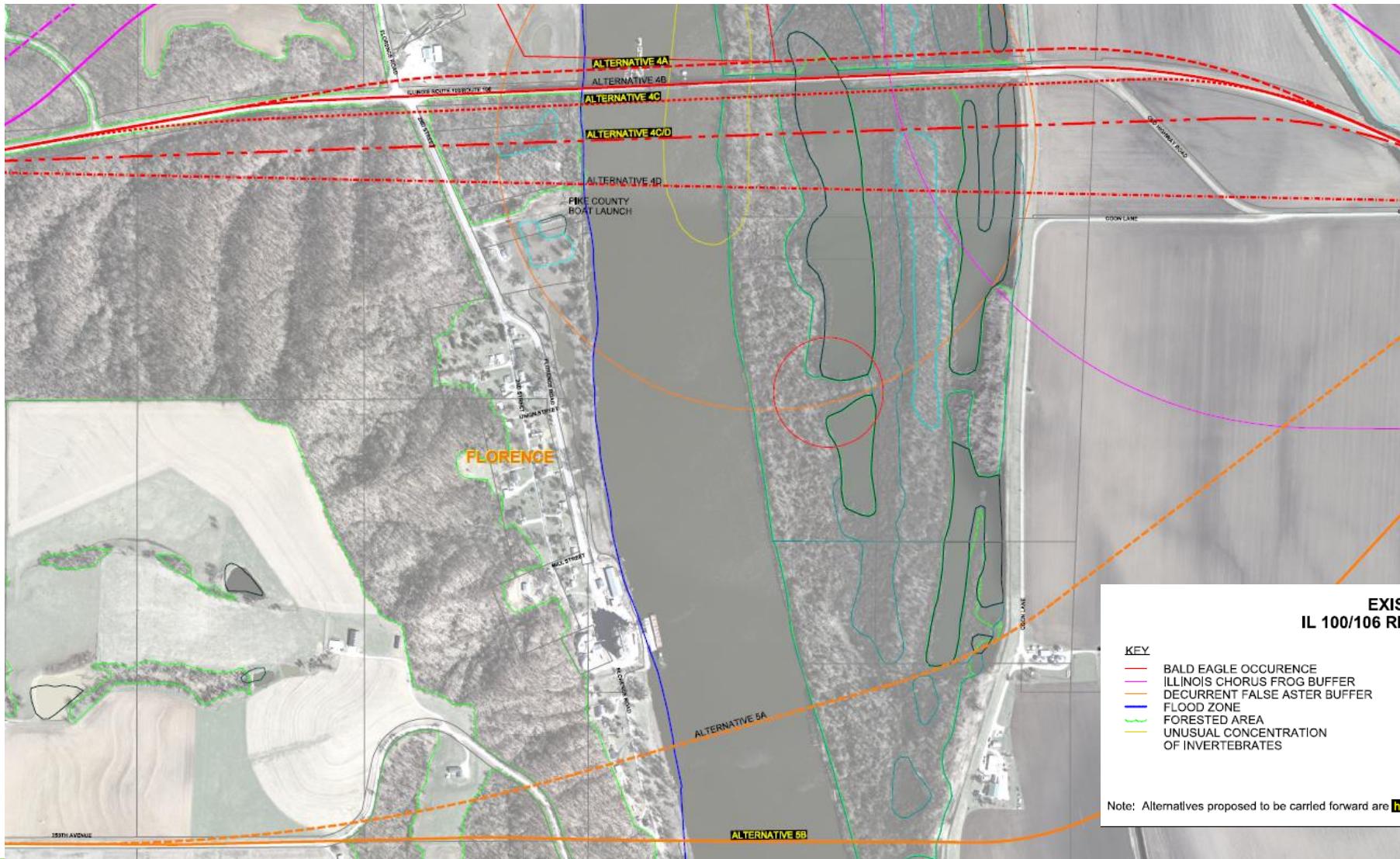
* Concurrence was obtained at February 23, 2017 NEPA/404 Merger Meeting



Environmental Resources



River Crossing Project



- ▶ Environmental data collected and interpreted to determine potential impacts of each alternative

Engineering Performance & Environmental Screening



River Crossing Project

Alternatives Proposed to be Carried Forward are **Highlighted**.

IL 100-106 Alternatives Comparison Matrix^A

Category	Measure	1	2A	2B	3 ^B	4A	4B	4C	4C/D	4D	5A	5B	3 & 4B
New Right-of-Way	Acres	0	85	70	60	30	10	20	50	65	95	95	70
Estimate of Probable Construction Cost (April 2017)	Current (Millions of Dollars) \$ M	\$- N/A	\$100.5 M N/A	\$110.0 M N/A	\$23.5 M N/A	\$73.5 M N/A	\$64.0 M N/A	\$70.5 M N/A	N/A ^C \$77.3 M	\$97.0 M N/A	\$129.5 M N/A	\$103.5 M N/A	\$87.5 M N/A
Revised Estimate of Probable Construction Cost (December 2017)					\$70.6 M	\$73.5 M	\$77.6 M	\$77.3 M		\$72.1 M			
Main Bridge Length	Feet	0	2,260	2,630	0	2,810	2,800	2,830	2,830	2,800	2,340	1,640	2,800
New Roadway Length	Miles	0	2.6	2.0	5.6	0.9	0.4	0.8	N/A	1.8	3.4	3.3	6.0
Adverse Travel (Florence)	User Delay Cost (\$/yr.)	0	↓	↑	↑	↓	↑	↑	↑	↑	↑	↑	↑
Adverse Travel (Through Travel)	User Delay Cost (\$/yr.)	0	↓	↑	↑	↓	↑	↑	↑	↑	↑	↑	↑
Constructability	Subjective (described)	↑	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓
Forest Land	Acres		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Wetlands	Acres		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Permanent River/Stream Crossings	Each		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Floodplain	Acres		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Prime Farmland	Acres		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Inventoried Natural Areas and Park Space ^D	Acres		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
T&E Species Areas of Occurrences ^E	Present - #		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Bald Eagle Sightings ^F	Present - #		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Community (Section 4(f))	Listed Properties - Each		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Cultural (Section 106)	Listed Properties - Each		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Displacements (Residential)	Each		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Displacements (Commercial)	Each		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Displacements (Industrial)	Each		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Divided Parcels	Each		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Hazardous Waste Sites	Each		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

A. Impacts Assessment at this time includes the mainline alternative only and are based on a preliminary screening. The preliminary screening was done using a database of information available in April 2017. Calculations of impacts are pending and may result in revisions to the table. This table does not include an assessment of any connector roadways.

B. Alternative 3 was evaluated and will not move forward because it does not meet the Purpose and Need.

C. Not Applicable. Alternative 4C/D was not one of the original proposed designs and was not evaluated by the same criteria as the other alternatives. Alternative 4C/D is a compromise between two designs and was evaluated for environmental impacts.

Alternatives that were not chosen to be carried forward after the Citizen Advisory Group (CAG) meetings were not re-evaluated for cost.

D. Acres coincident with the Florence Bridge Bed (Illinois Natural Area Inventory Site #1658), identified as Category VI, for an unusual concentration of flora or fauna and high quality streams.

E. Zones around a point of occurrence.

F. Bald Eagle sightings are a record in the Illinois Natural History Survey (INHS) database, but are not indicative of geospatially located nests. They are included in the alternatives matrix with respect to the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

For Positive and Negative responses that do not require a full scale are identified with (↑) for positive and (↓) for negative.

Categories that do not vary in impacts are populated with a (I) symbol.



Date Printed: December 5, 2017

Engineering and Performance Considerations

Environmental Impacts

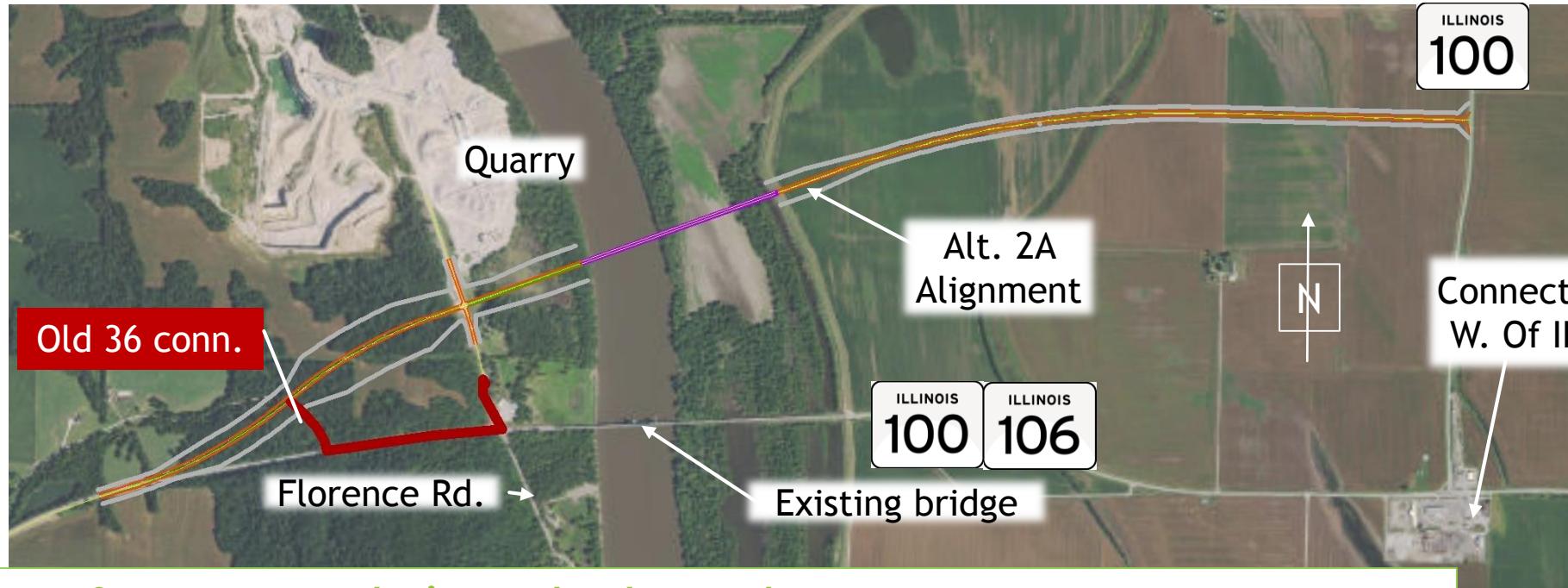


Alternatives Proposed To Be Dropped

Alternative 2A (2,000 feet north)

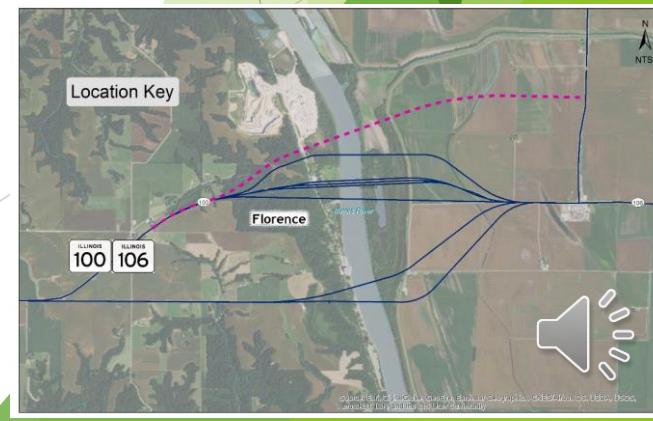


River Crossing Project



Reasons for recommendation to be dropped

- ▶ Extensive farmland impacts east of river
- ▶ Negatively impacts future quarry expansion
- ▶ Substantial work within the floodplain, forested lands, and recorded wetlands on the National Wetlands Inventory (NWI)
- ▶ Potential for impacts to the Illinois Chorus Frog and Bald Eagle
- ▶ Higher construction cost
- ▶ Introduces a new stop condition for motorists on IL 100/106

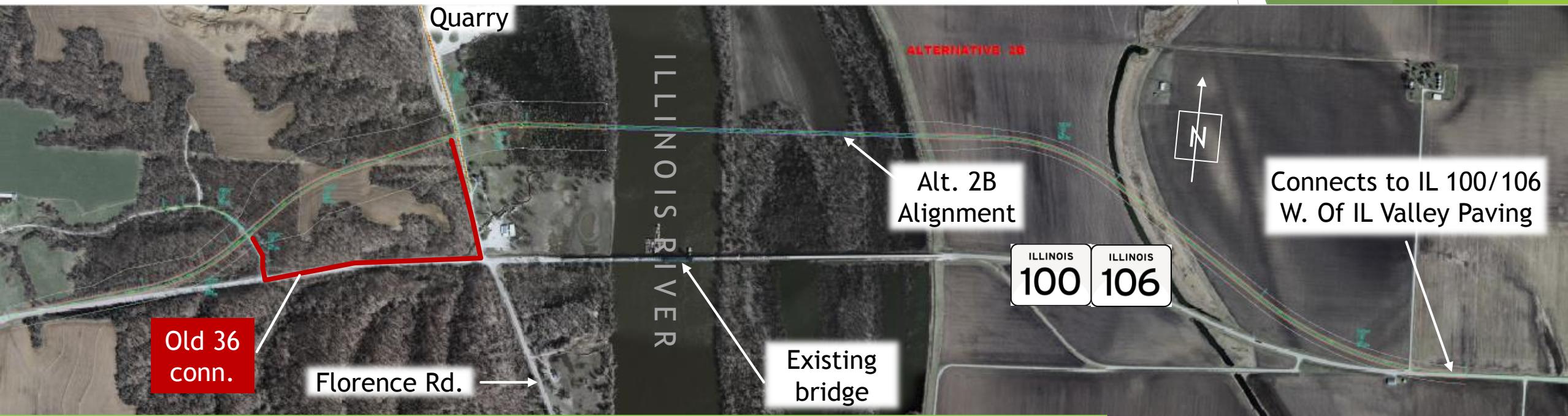


Alternatives Proposed To Be Dropped

Alternative 2B (1,100 feet north)



River Crossing Project



Reasons for recommendation to be dropped

- ▶ Extensive farmland impacts east of river
- ▶ Negatively impacts future quarry expansion
- ▶ Substantial work within the floodplain, forested lands, and wetlands on the NWI
- ▶ Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, and Bald Eagle
- ▶ Higher construction cost

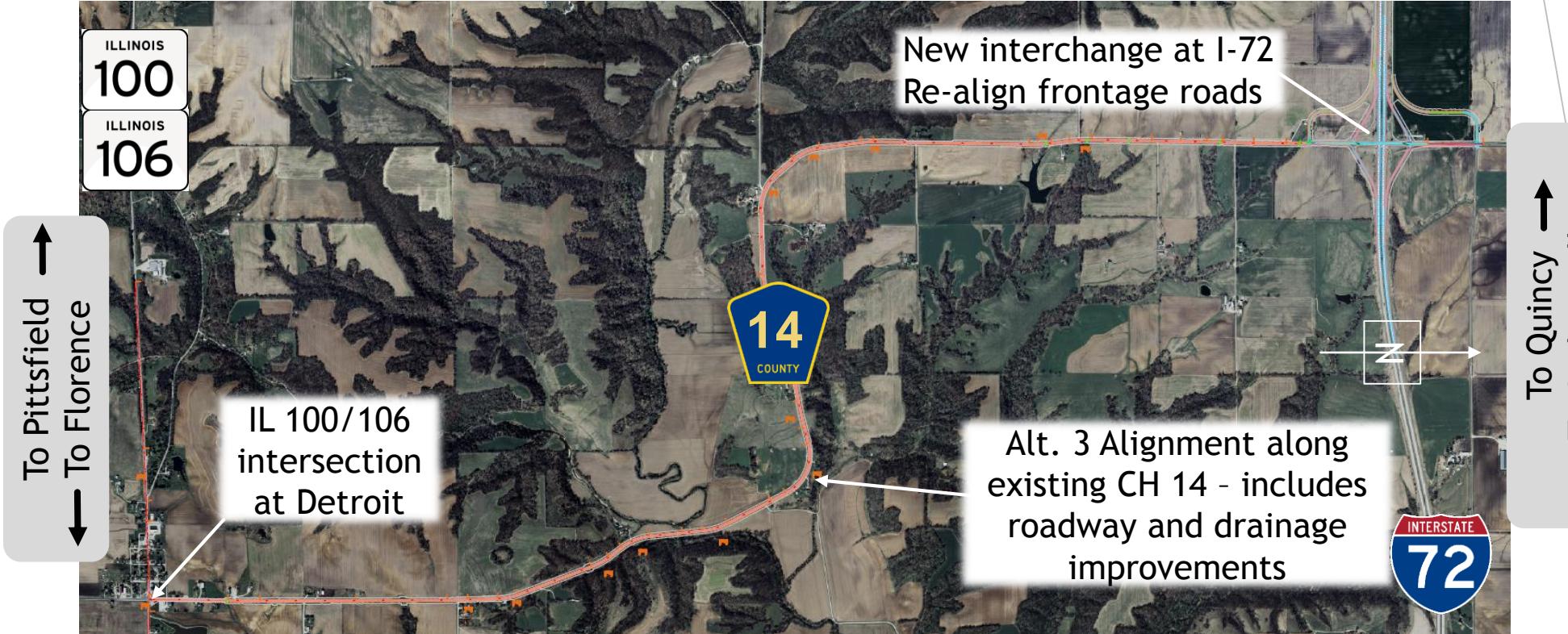


Alternatives Proposed To Be Dropped

Alternative 3 (Upgrade existing CH 14)



River Crossing Project



Reasons for recommendation to be dropped

- ▶ Doesn't accommodate all modes of traffic
- ▶ Highest out-of-direction local travel
- ▶ Doesn't meet the requirements of the Purpose and Need Statement
 - ▶ Combination of Alternatives 3 and 4B considered, but had high impacts and costs as compared to other alternatives

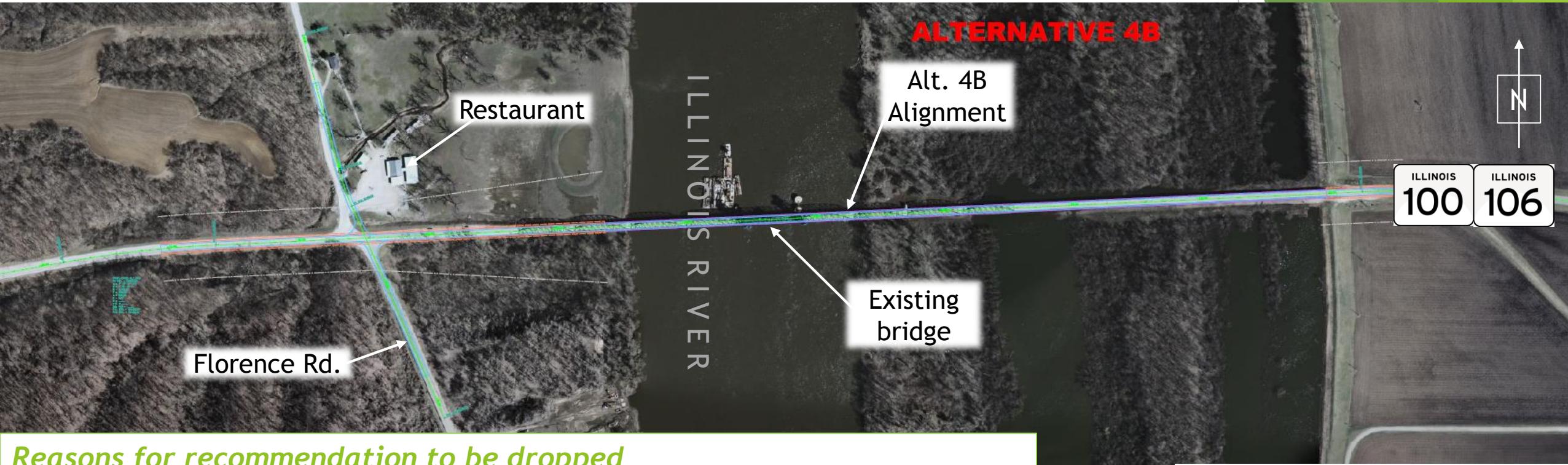


Alternatives Proposed To Be Dropped

Alternative 4B (Existing alignment)

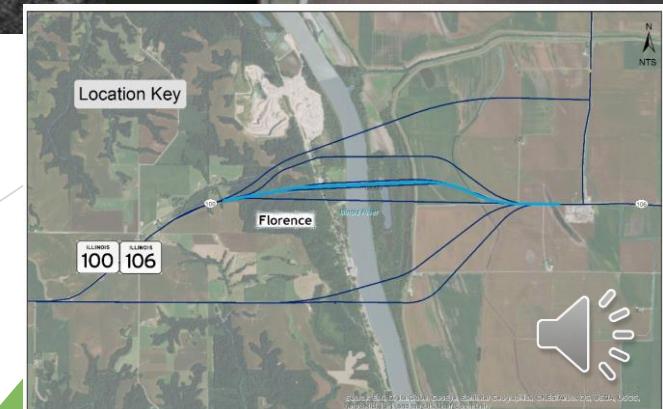


River Crossing Project



Reasons for recommendation to be dropped

- ▶ Bridge would be closed to all traffic during construction
 - ▶ Potentially 2-3 years
- ▶ High adverse travel during construction
- ▶ Substantial work near wetlands on the NWI
- ▶ Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, River Invertebrates, and Bald Eagle

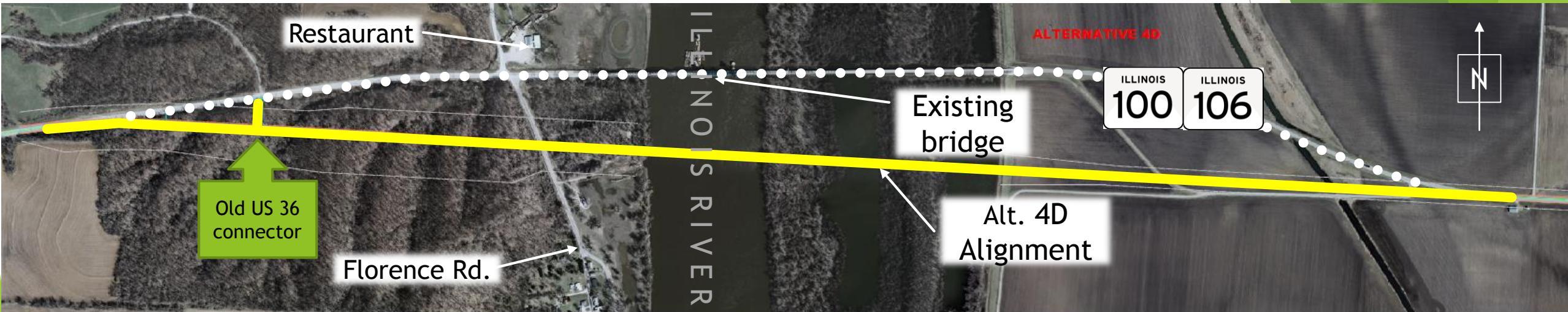


Alternatives Proposed To Be Dropped

Alternative 4D (600 feet south)

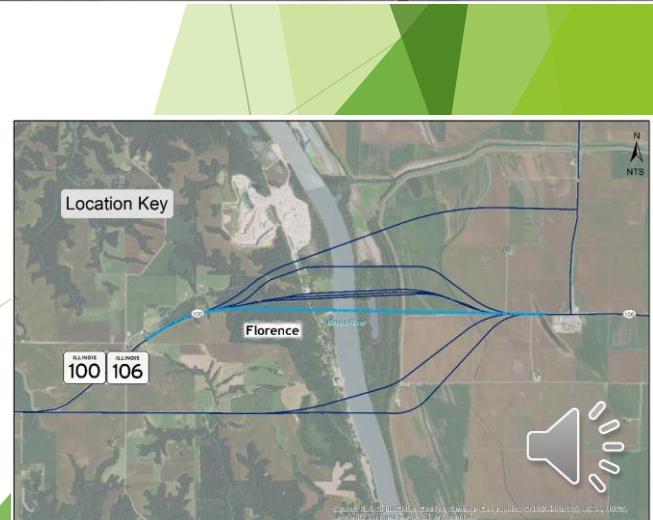


River Crossing Project



Reasons for recommendation to be dropped

- ▶ Increased property and farmland impacts as compared to 4A, B and C
- ▶ Potential impact to Pike County boat launch
- ▶ Increased rock excavation through bluff
- ▶ Extensive impacts to forested land
- ▶ Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, and River Invertebrates

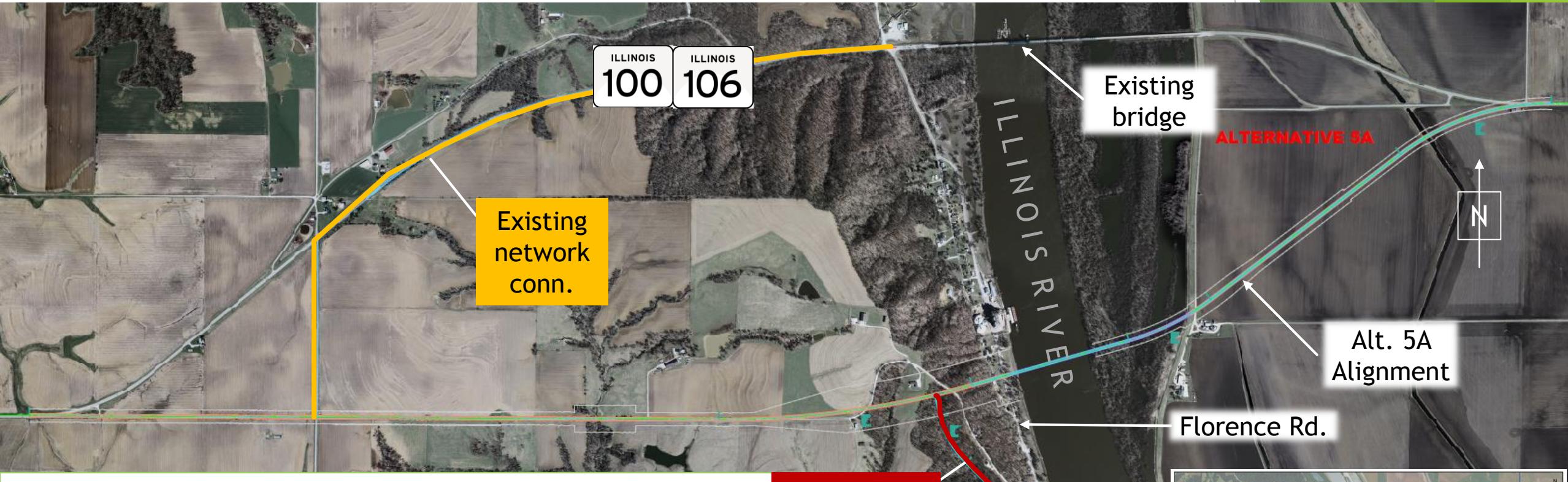


Alternatives Proposed To Be Dropped

Alternative 5A (4,000 feet south)

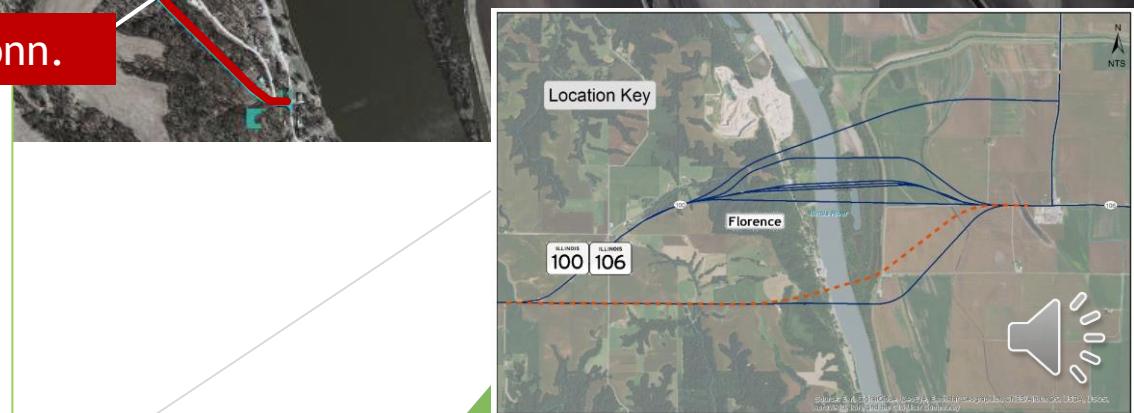


River Crossing Project



Reasons for recommendation to be dropped

- ▶ Highest overall construction cost
- ▶ Extensive farmland impacts east of river
- ▶ Potential for impacts to the Illinois Chorus Frog
- ▶ Potential for displaced residences
- ▶ Does not have the same benefit in bridge length as 5B



Alternative 1 (No Action)

- ▶ Leave existing bridge in place
 - ▶ Required to be carried forward under federal NEPA process
 - ▶ Provides a baseline for comparison with other alternatives
- ▶ Bridge maintenance
 - ▶ Bridge may become unserviceable in the future when repairs are no longer possible

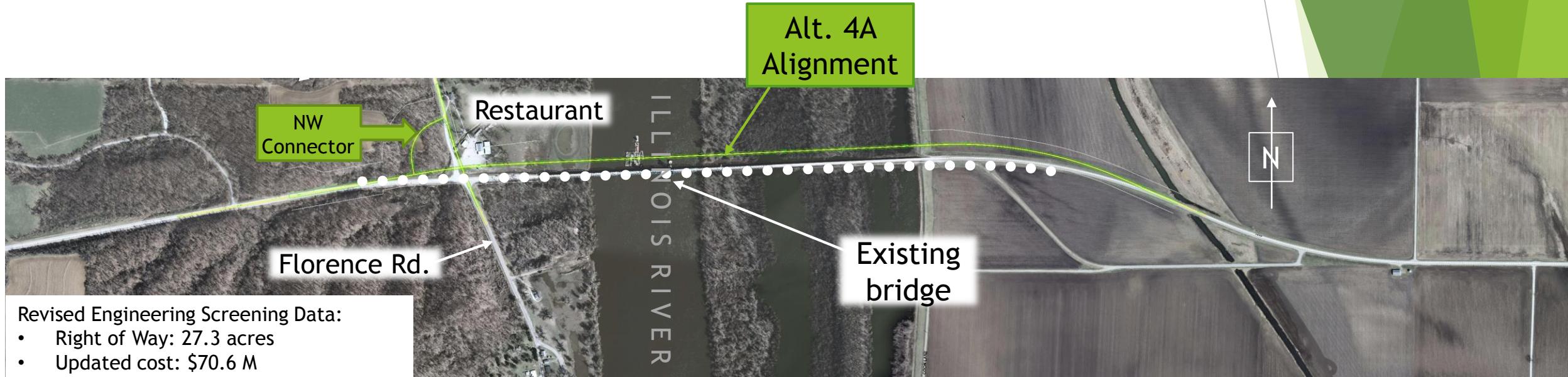


Alternatives Proposed To Be Carried Forward

Alternative 4A (100 feet north)



River Crossing Project



Revised Engineering Screening Data:

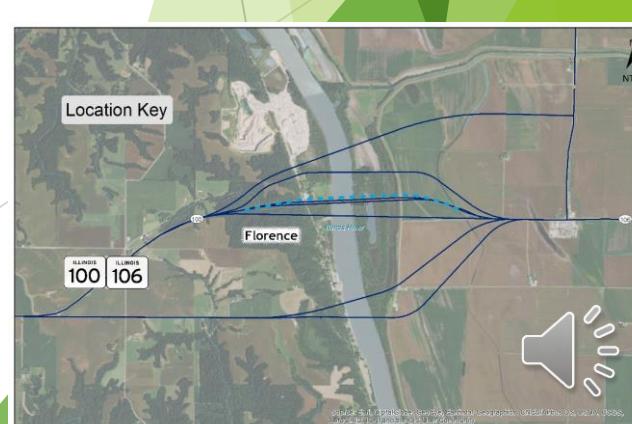
- Right of Way: 27.3 acres
- Updated cost: \$70.6 M
- Illinois River bridge length: 3,165 feet
- New roadway length: 4,232 feet

Reasons for recommendation to be carried forward

- ▶ Lowest construction cost of recommended alternatives
- ▶ Relatively low impacts to farmland and forested land

*Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, River Invertebrates, and Bald Eagle

*Potential to displace business



Alternatives Proposed To Be Carried Forward

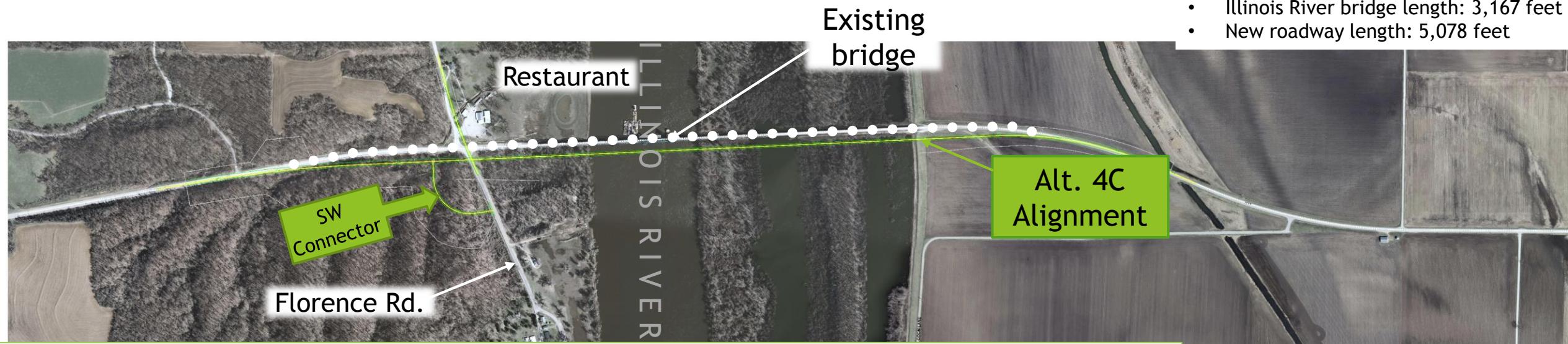
Alternative 4C (100 feet south)



River Crossing Project

Revised Engineering Screening Data:

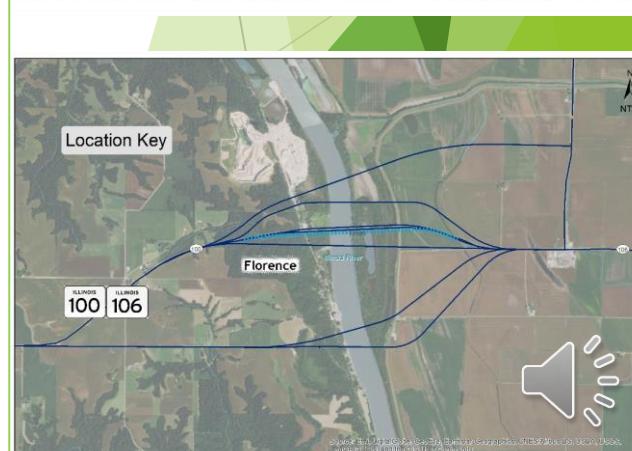
- Right of Way: 32.9 acres
- Updated cost: \$77.6 M
- Illinois River bridge length: 3,167 feet
- New roadway length: 5,078 feet



Reasons for recommendation to be carried forward

- ▶ Lowest property impacts of recommended alternatives
- ▶ Reduces the amount of rock excavation as compared to 4D
- ▶ Least impact to the floodplain
- ▶ Relatively low impacts to farmland and forested land
- ▶ Relatively low construction costs and impacts

*Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, and Invertebrates

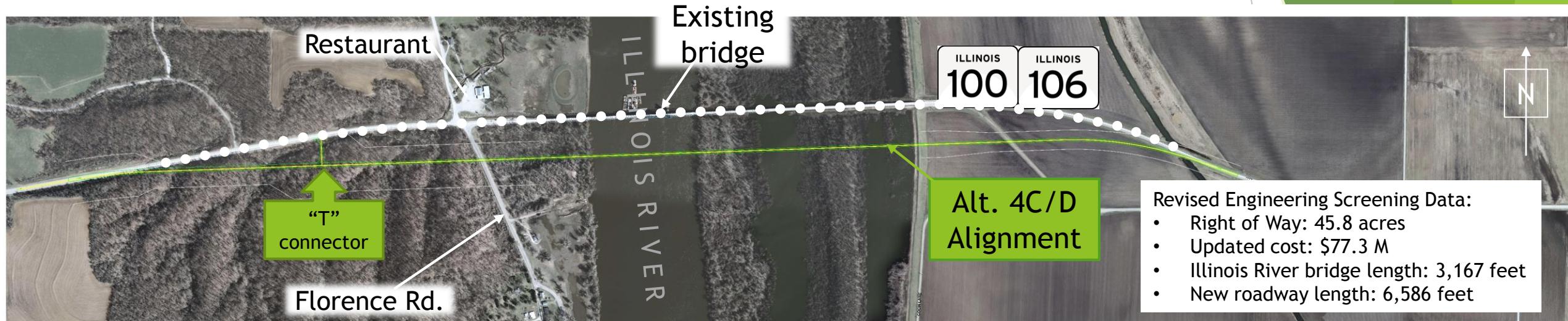


Alternatives Proposed To Be Carried Forward

Alternative 4C/D (300 feet south)



River Crossing Project

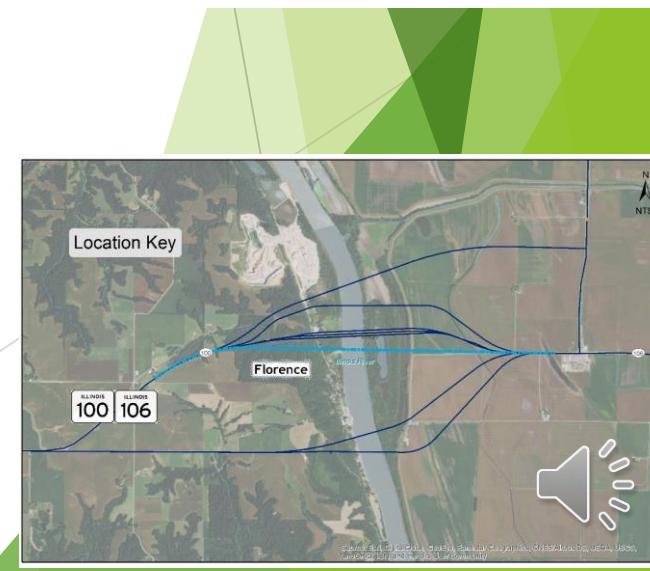


Reasons for recommendation to be carried forward

- Variation of Alternative 4D
- Creates a "T" intersection connector road west of the bridge
- Can be constructed with minimal impacts to existing traffic
- Similar construction costs as 4C
- Reduces the amount of rock excavation as compared to 4D
- Reduced property impacts as compared to 4D

*Would increase farmland and forested land impacts as compared to 4C

*Potential for impacts to the Illinois Chorus Frog, Decurrent False Aster, River Invertebrates, and Bald Eagle

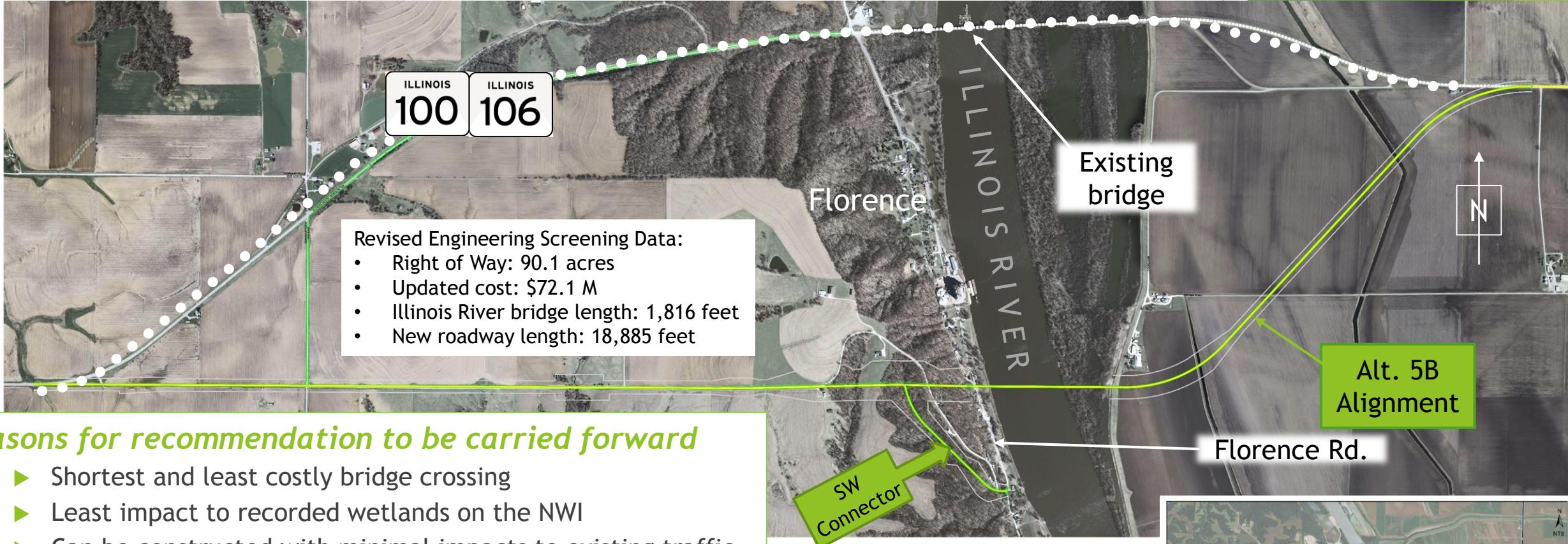


Alternatives Proposed To Be Carried Forward

Alternative 5B (4,500 feet south)



River Crossing Project



Reasons for recommendation to be carried forward

- ▶ Shortest and least costly bridge crossing
- ▶ Least impact to recorded wetlands on the NWI
- ▶ Can be constructed with minimal impacts to existing traffic
- ▶ Furthest alternative from river bend (improves navigation)

*Highest roadway cost of the recommended alternatives

*Potential for impacts to the Illinois Chorus Frog

*Highest farmland impacts of the recommended alternatives

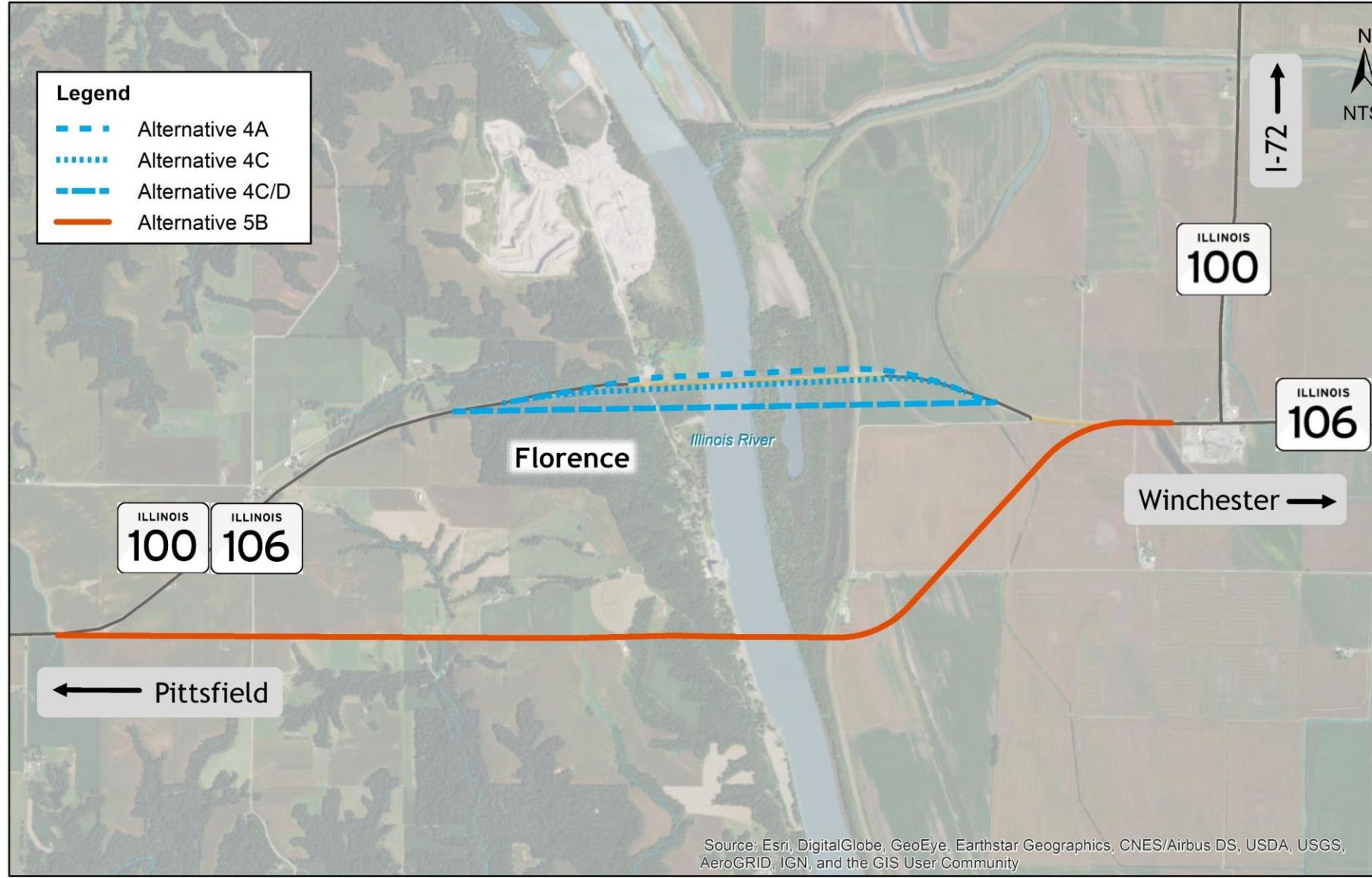
*Potential to displace residences



Recommended Alternatives Map



River Crossing Project



River Crossing



River Crossing Project

Twice the width of the existing bridge opening

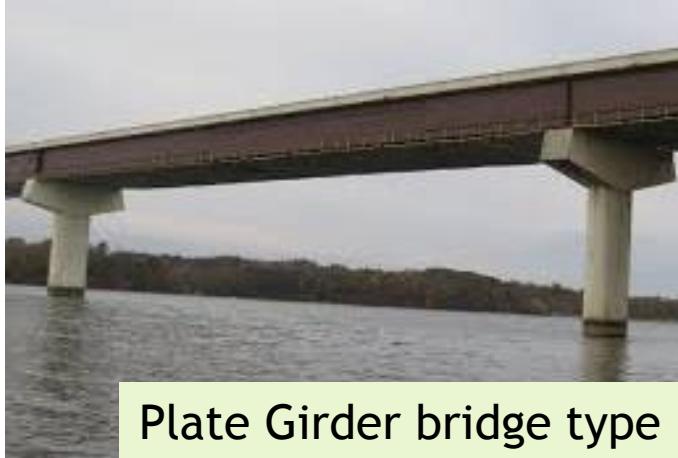
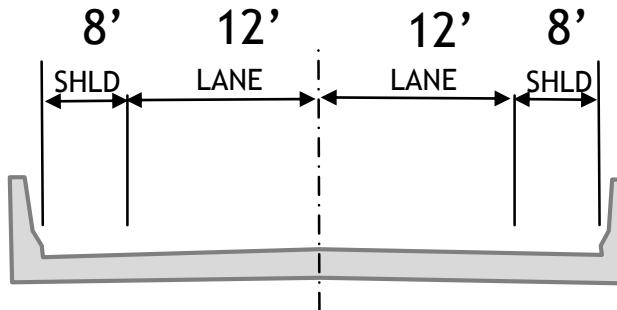


Plate Girder bridge type



Conceptual Typical Section

- ▶ 400' horizontal bridge navigation clearance (preliminary recommendation of Coast Guard)
 - ▶ *Existing horizontal navigation opening 202'*
- ▶ Preliminary width - two 12' lanes and two 8' shoulders (40' clear width) - accommodates farm implements, bicycle use, staging for future rehabilitation
- ▶ Plate girder bridge may be considered for spans \approx 500' or less



Evaluation & Review of Alternatives



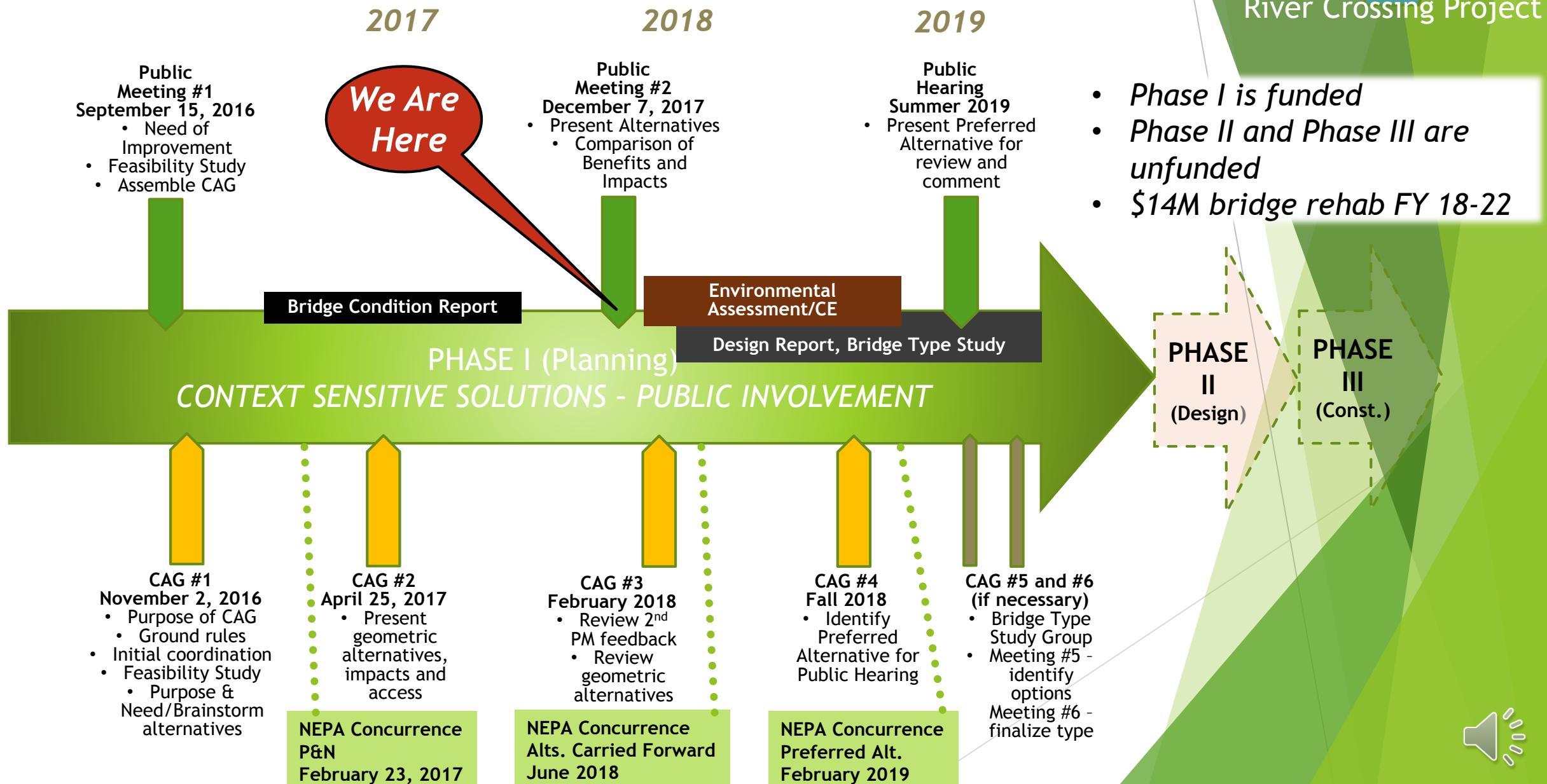
River Crossing Project

- ▶ Preliminary Alternatives evaluated for:
 - ▶ Roadway and Structure Alignment
 - ▶ Environmental Resource Impacts
 - ▶ Socio-Economic Impacts to the Community
 - ▶ Land Acquisition and Displacements
 - ▶ Cost
- ▶ Public Review of Alternatives and Provide Input
- ▶ Consider how well the Alternatives:
 - ▶ Satisfy the project Purpose?
 - ▶ Meet the project Needs?
 - ▶ Minimize impacts to Environmental Resources

What are
the Pros &
Cons?



Project Timeline



THANK YOU



River Crossing Project

- ▶ We need your input!
- ▶ Please fill out a Comment Form. Please submit by December 21, 2017.
- ▶ The Project Study Group will continue to refine and evaluate alternatives.
- ▶ Additional comments can be submitted via the project website.

www.florencebridgestudy.com

- ▶ We appreciate your participation!

