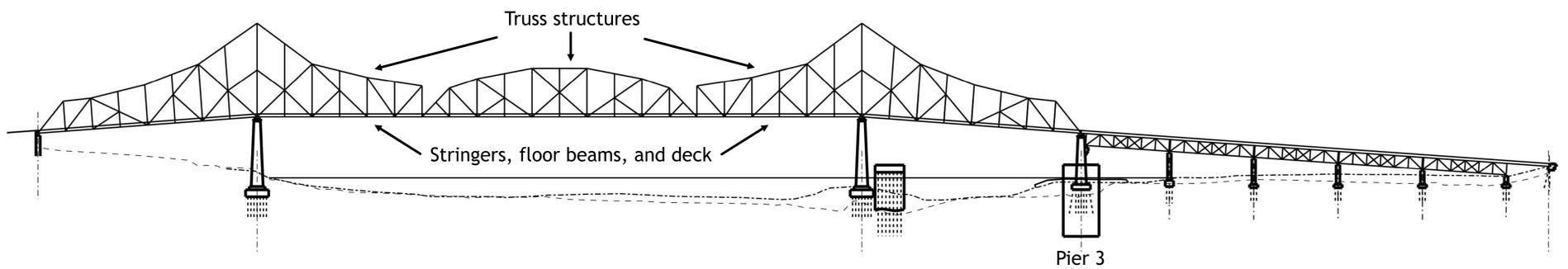


REHABILITATION ALTERNATIVE



Under the Rehabilitation Alternative, the Black Hawk Bridge and connecting roadways would remain as they are today. Major rehabilitation of the bridge would need to occur by 2024 (assume project included on the State's 5-year plan) to extend its remaining service life, estimated at 20-30 years from today, at which time the existing Black Hawk Bridge would need to be replaced.

During major rehabilitation, the bridge would be closed to traffic for approximately 18 months. Travelers would need to drive approximately 35 miles to the north to cross the Mississippi River near La Crosse, or drive approximately 30 miles to the south to cross the Mississippi River at Prairie du Chien.

Major rehabilitation would include - replacement of the stringers, floor beams, and deck; stabilization of Pier 3; and spot painting of the truss structures.

Anticipated Costs:

- Major rehabilitation is estimated to cost approximately \$29.8 million. This amount does not include the \$500,000 worth of repairs to be made in 2018.
- The annualized cost of inspections is approximately \$125,000 for the existing Black Hawk Bridge in comparison to approximately \$75,000 for a newer/replacement bridge.
- The total cost of the Rehabilitation Alternative, including the major rehabilitation actions described and construction of a new bridge, is estimated, at this time, to range between \$107.7 million and \$136.8 million.

Purpose & Need:

The Rehabilitation Alternative would address the needs identified in the project area, but would only do so when the bridge is replaced in 20-30 years from now:

- **Roadway Deficiencies** - The narrow lanes, lack of shoulders, and limited sight distances would remain until the bridge is replaced.
- **System Linkage** - Programmed maintenance and rehabilitation would extend the bridge's lifespan for another 20-30 years from today. Major barge or vehicle collisions with the bridge or major flood events could further damage the bridge requiring the bridge to be closed or a new bridge to be constructed earlier than anticipated or programmed. During extensive closures, traffic would need to use alternate routes to connect to regional employment, educational, and retail/commercial centers on both sides of the river.
- **Modal Interrelationships** - The location and spacing of the existing river piers would not be addressed until the bridge is replaced. Lane or bridge closures would continue to occur to accommodate maintenance; bicycle/pedestrian use would be prohibited.

BUILD ALTERNATIVE CROSSING LOCATION COMPARISON

The following comparison of the crossing locations under consideration is based on preliminary engineering evaluation. A 600-foot wide corridor (approximate) has been established to identify features and resources that could be affected by each Build Alternative. These preliminary alignments and the corridor for each are shown on the large maps in the display area. As the study process progresses, the alignments will be refined and the corridors reduced to identify the probable impacts of the alternatives to be carried forward for detailed evaluation.

Issue/Category	Green Alternative	Blue Alternative	Purple Alternative	Orange Alternative
Increase in IA/26/I-9 elevation at new crossing touchdown (approx.)	4 feet	5 feet	7 feet	20 feet
Re-Use of Big Slough Bridge	YES	YES	YES	NO, requires new bridge
Height of Additional Fill Required at Big Slough Boat Access (approx.)	2 feet	1 foot	1 foot	none
Approach Roadway Design Speed (Wisconsin - WI-82)	40	40	40	60
Time period existing crossing would be closed during construction of new bridge (approx.)	1 month	1 month	1 month	1 month
FEATURES IDENTIFIED WITHIN THE PRELIMINARY STUDY CORRIDOR FOR EACH ALTERNATIVE*				
Homes (single and multi-family)	30	32	33	57
Businesses	7	7	7	16
Historic Resources / Districts	10 / 2	11 / 2	11 / 2	9 / 3
Archaeological Sites	5	5	5	3
Acres of Floodplain	64.6	62.6	62.3	91.6
Acres of Wetlands	25.1	25.3	24.9	42.5
Recreation Areas (acres)	20.8	18.9	19.4	26.2
Acres of Refuge (USFWS Upper Mississippi River NWFR)	52.9	51.4	51.5	77.8

* Represents an inventory of features/resources present within the preliminary study corridor for each alternative. No impacts have been quantified at this stage in the study.

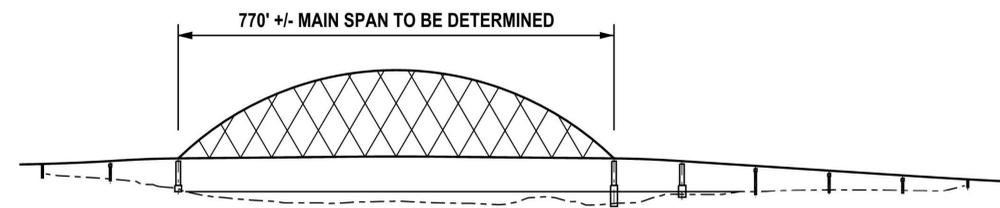
MISSISSIPPI RIVER BRIDGE AT LANSING

BRIDGE TYPE OPTIONS

These bridge types were initially considered in the *2004 Feasibility Study* and presented at the first public meeting held in August 2017.

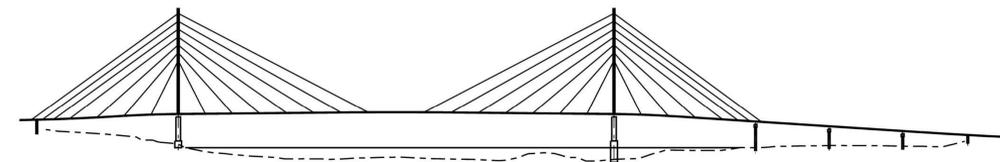
At this location on the river, the bridge span length (opening between 2 piers) required by the US Coast Guard to allow barges to move up and down the navigation channel is +/- 770 feet.

All of these bridge types could accommodate the required span length.



Arch Bridge

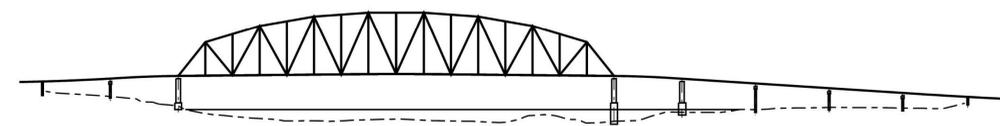
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Cable Stay Bridge

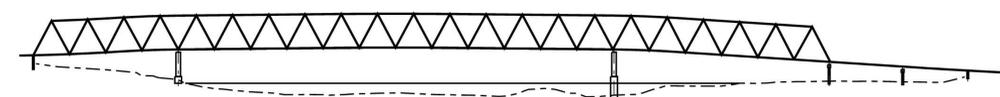
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Because of cost and design issues associated with this bridge type, it is not likely that a cable stay bridge will be carried forward as a feasible option for this crossing.



Simple Span Truss Bridge

\$\$



Continuous Truss Bridge

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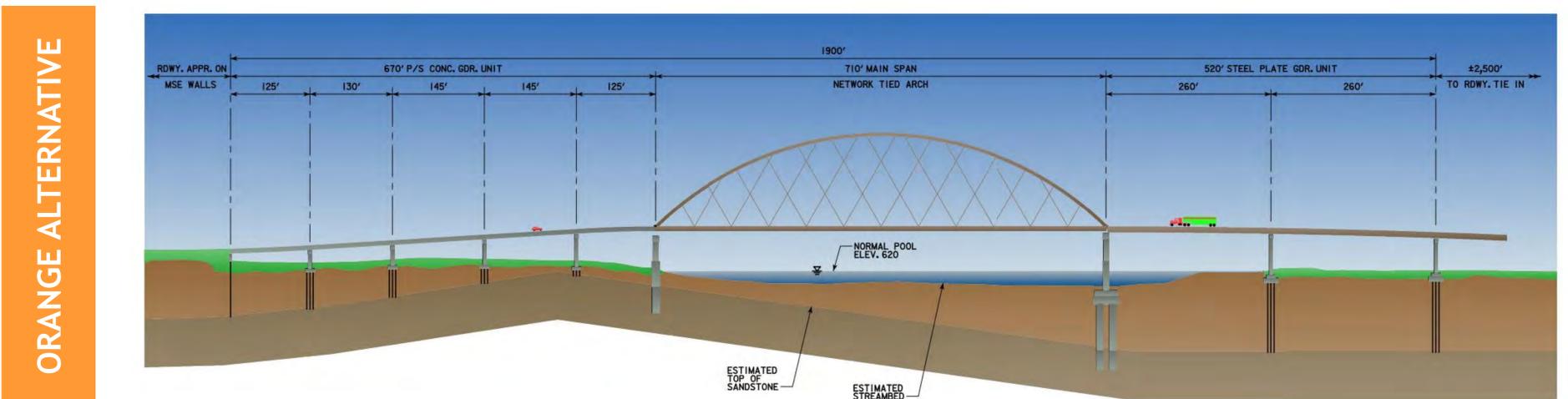
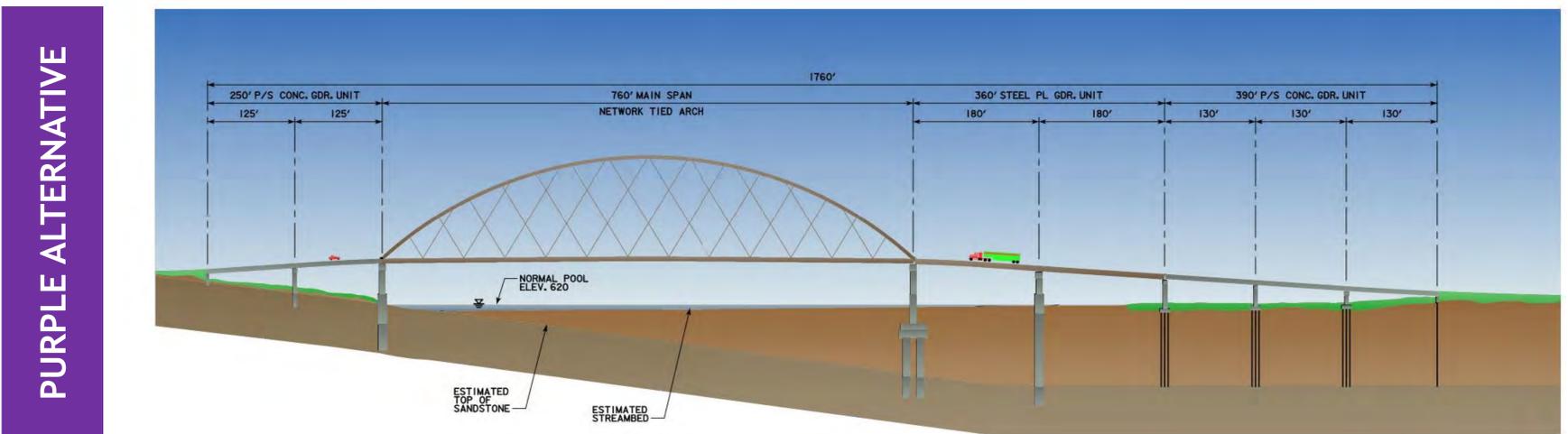
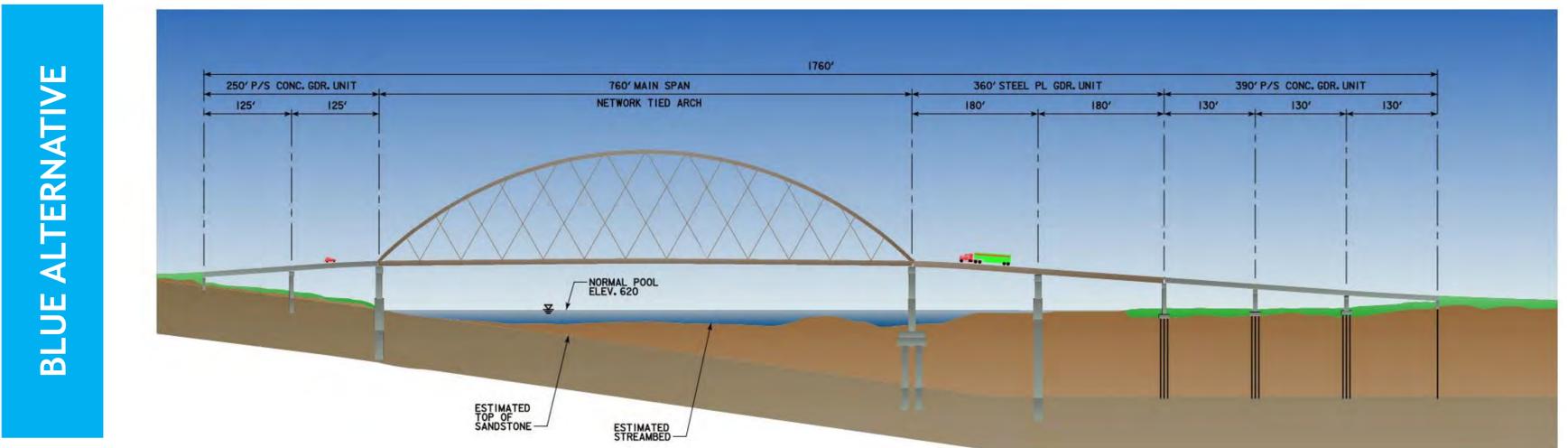
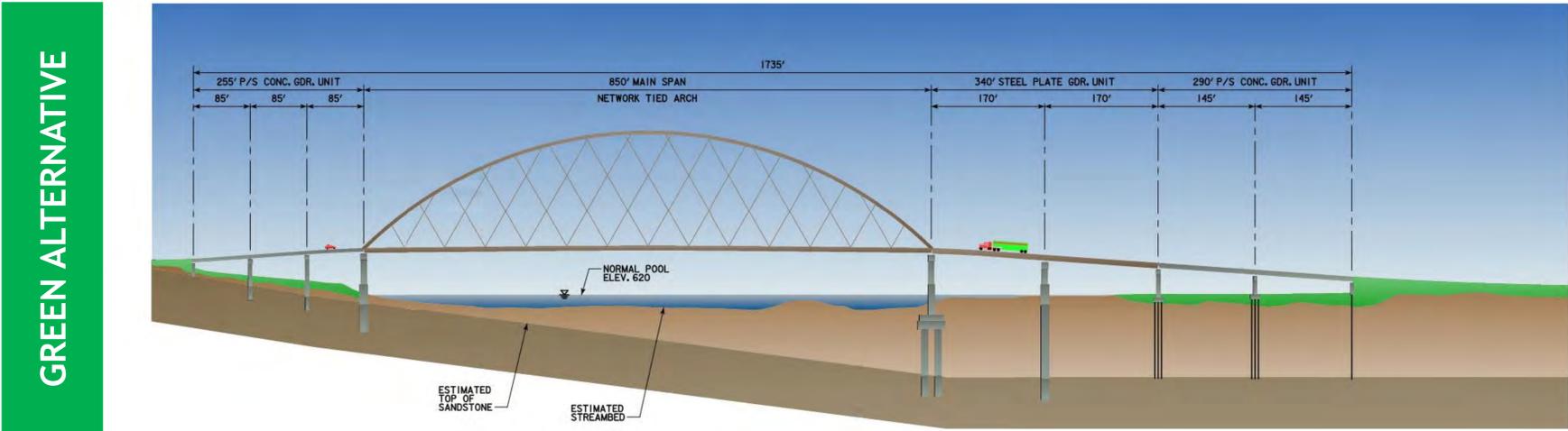
Cost Range - estimated construction cost based on preliminary information, includes new bridge, IA-9/IA-26 improvements, WI-82 improvements, boat ramp access, existing bridge removal, dolphin removal, mobilization, and 15% contingency.

\$ = <\$60 million \$\$ = \$60 million to \$70 million \$\$\$ = \$70 million to \$80 million \$\$\$\$ > \$80 million

MISSISSIPPI RIVER BRIDGE AT LANSING

BUILD ALTERNATIVES – BRIDGE PROFILES

The drawings below depict the profile of a new bridge based on the design criteria under consideration. An arch design is shown for comparison purposes.



DESIGN CRITERIA – TYPICAL SECTIONS

New Bridge

(arch type bridge is shown)

A new bridge would be wider than the existing bridge, designed to accommodate two 12-foot wide travel lanes and an 8-foot wide shoulder on each side of the bridge.

The height of a new bridge would be taller than the existing bridge, ranging from 100 feet to 170 feet depending on the bridge type and crossing location.

Shoulders would allow room for the operation of maintenance vehicles and could be used by bicyclists and pedestrians.



Existing Black Hawk Bridge

The existing Black Hawk Bridge is 95 feet tall at its highest point.

The bridge is approximately 25 feet wide and accommodates two 10-foot wide travel lanes and no shoulders.

The lack of shoulders requires at least one lane to be closed when maintenance is conducted, and prohibits use of the bridge by bicyclists and pedestrians.

FREQUENTLY ASKED QUESTIONS

How were the alternatives developed?

The Iowa DOT conducted a Feasibility Study in 2004 which created concepts for a future river crossing. Three (3) alignments from that study (Blue, Purple, and Orange) have been carried forward to be looked at in greater detail in this current study. The Green alignment was developed during the early phase of this study.

Is there funding for construction of a new crossing?

No funding has been programmed for this project at this time. This study will allow us to determine future construction costs.

Why is this study not looking at improvements to WI-82?

The Wisconsin DOT is currently studying WI-82 for short-term and long-term roadway and structure improvements as well as monitoring measures triggered by Mississippi River levels.

What if the alignment shown goes through my house or business?

The Build Alternatives shown on the large maps today have been modified from the wide colored lines shown in August 2017. Preliminary design criteria have been used to estimate the area it would take to construct the new crossing including how it would tie into the existing roadway network. These preliminary alignments allow us to study potential impacts to human, cultural, and natural resources. As this study progresses, more design will take place and we eventually will identify a preferred alignment. Future design efforts will refine the amount of land needed for a new structure and improvement of the adjoining roadway network.

Once the environmental process is completed, the final design phase of the project can begin. Topographic surveys would be conducted to better understand what areas would be needed for construction of the selected alignment. At that time, representatives from the Iowa DOT Office of Right-of-Way would reach out to property owners to discuss the property acquisition process which is defined by state and Federal laws. At future meetings once potential impacts are defined, we will have right-of-way agents available to answer questions.

Remember, we are still in the early stages of the study and no decisions have been made.

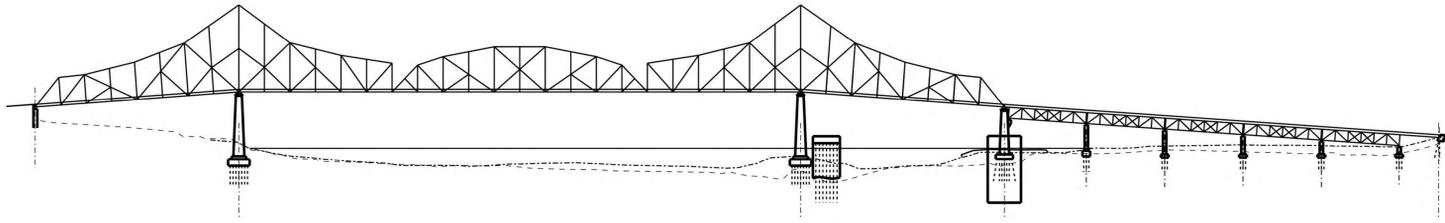
RESOURCES CONSIDERED

Potential impacts to a variety of environmental resources will be evaluated during the study process. We welcome your input:

- Land use
- Farmland
- Geology and Soils
- Socioeconomics
- Low Income/Minority Populations
- Relocations
- Considerations Relating to Pedestrians and Bicycles
- Transportation
- Air Quality
- Noise and Vibration
- Light Emissions
- Hazardous Materials and Wastes
- Construction Impacts
- Historic, Architectural, and Archaeological Resources
- Section 4(f)/Section 6(f)
- Wetlands and Waters of the US
- Water Quality and Pollution Prevention
- Floodplains/Floodways
- Permits
- Wildlife, Plants, and Fish
- Threatened or Endangered Species
- Public Lands
- Recreation
- Visual Resources
- Indirect/Cumulative Effects

Resources in the study area are shown on the alternative maps in the center of the room. We encourage you to share what you know about the study area with the project team.

FREQUENTLY ASKED QUESTIONS



Can the existing Black Hawk Bridge be repaired or rehabilitated?

- *Because the bridge is eligible for listing on the National Register of Historic Places and is a resource given consideration under Section 4(f) of the DOT Act, we will continue to consider rehabilitation. Knowing some of the maintenance history of the bridge, including previous closures, pier issues, and intersection geometry, rehabilitating the bridge would be difficult. Rehabilitation will be part of the ongoing analysis.*
- *The original bridge is nearly 90 years old and it was not designed to carry the weight of today's trucks.*
- *Extensive strengthening of the structure that took place in the 1950's has provided capacity for legal trucks but there is limited excess capacity. Any significant deterioration or damage caused by overweight vehicles could result in traffic restrictions on the bridge. Further strengthening of the bridge would be very challenging from a technical perspective.*
- *This bridge has a finite service life because of fatigue caused by the flexing of steel members under load. This bridge is reaching the point where fatigue related issues will become more common and result in more frequent unscheduled closures and repairs.*
- *Given the overall condition of the bridge, its age, and design, performing a major rehabilitation to provide significantly more service life may not be cost effective.*
- *The location of the bridge on a major river bend makes it difficult for commercial river traffic to negotiate through it. Many barges collide with the bridge and its foundations were not designed for impacts from barges. Impacts to the piers could significantly affect the bridge.*
- *The foundations of the bridge are susceptible to scour. Significant countermeasures have been added to protect the bridge but make the river more challenging to navigate during major flood events.*
- *The bridge is narrow. Wide loads present an impediment to opposing traffic. Typically, maintenance activities can only be accomplished by closing one lane or the entire bridge to traffic.*
- *The tight intersection at IA-26 causes problems for large trucks turning on and off the bridge.*
- *The steep grades on both approach spans create limited sight distances for traffic on the bridge.*

Can the Black Hawk Bridge remain in place as a pedestrian/bicycle only access across the river?

As noted above, there are a number of issues that make ongoing maintenance of the existing bridge difficult and costly. Regardless of where a new crossing is constructed, the existing bridge would need to be removed.

- *Because of the anticipated cost, neither the Iowa or Wisconsin DOTs nor the city of Lansing would be able to maintain the condition of the bridge for continued use, even by only pedestrians or bicyclists.*
- *Both IA-9 and WI-82 as state highways would need to be redesignated along the new crossing to maintain highway system continuity, thereby removing the bridge from either state's jurisdiction.*
- *The locations of the existing piers in the river pose a challenge to navigation. A new bridge would introduce new pier locations in the river that would be at a much different spacing than the existing piers. The US Coast Guard would not allow a new bridge to be constructed on a different alignment and allow the existing piers to remain in place. As noted above, the existing foundations are old and subject to scour. Reuse of them and the existing piers would be very difficult and not good engineering practice.*

CULTURAL RESOURCES

Section 106 Process

One of the key environmental factors that must be considered in an Environmental Assessment (EA) is **cultural resources**. The study team uses a systematic process to identify these resources, evaluate potential impacts on them, and determine what action will be taken to avoid or mitigate those impacts.

For cultural resources, this is commonly referred to as the **Section 106 Process**. Section 106 is named after the portion of the National Historic Preservation Act that requires agencies to take into account the effects of those actions on historic properties.

There are a number of resources that are listed on or considered eligible for listing in the National Register of Historic Places (NRHP). Examples include: Black Hawk Bridge, Lansing Main Street Historic District, and Lansing Stone School.

The study team will be conducting further investigations and consulting with interested groups throughout the study process to consider project effects on Black Hawk Bridge and other historic resources.

Cultural resources are defined as:

Any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places.

This includes artifacts, records, and material remains related to such properties. Some examples include national and local historic landmarks, Native American and pioneer cemeteries, prehistoric settlements, and architecturally significant structures and buildings.

It is the specific policy of the United States Government that:

Special efforts be made to preserve the natural beauty of the countryside and public parks and recreation lands, wildlife and waterfowl refuges, and historic sites of the United States.

The Mississippi River Bridge at Lansing study will follow a four step process to determine and address any potential impacts to cultural resources.

1

Establish Area of Potential Effects (APE)

The study area for the Mississippi River Bridge at Lansing extends from IA 9 on the west edge of Lansing to east of Big Slough Bridge on WI 82. The APE will be defined to encompass both direct (project footprint) and indirect (adjacent areas) effects. The APE will be used to examine the potential effects of the project on architectural resources as well as historic districts.

2

Identify Resources and Their Significance

Data and field research is conducted to identify cultural resources within the APE. Their significance or potential significance is documented and discussed with staff of the Iowa State Historic Preservation Office (SHPO) and other parties interested in cultural resources, including the historic preservation commission and tribal governments.

3

Determination of Effect

The study team determines how the alternatives might affect cultural resources within the APE. If a resource is adversely affected, options for avoiding or mitigating those effects are proposed.

4

Resolve Adverse Effects

The study team works with the SHPO, other state and Federal agencies, and consults with the public to determine the best course of action for resolving adverse effects on historic properties.

MISSISSIPPI RIVER BRIDGE AT LANSING

CULTURAL RESOURCES

There are several historic resources documented within the Lansing community. As the EA is developed, the potential effect of the proposed project on these resources will be evaluated following the Section 106 process. These resources may include:

Black Hawk Bridge

Black Hawk Bridge is a three-span cantilevered through-truss, approximately 1,127 feet long. Constructed in 1931, the bridge originally was a tolled crossing over the Mississippi River until 1945 when ice damaged the approach spans. The bridge was closed for several years until it was re-opened to traffic in 1957. The bridge carries IA 9 and WI 82 across the river.

The bridge was named in honor of Chief Black Hawk, leader of the Sauk.

Because the bridge is eligible for listing on the National Register of Historic Places (NRHP), the bridge will also be given consideration under Section 4(f) of the DOT Act.



Lansing Main Street Historic District

Nominated to the NRHP in 2014, this district encompasses most of the present central business district along Main Street. The Italiante architectural style, common during the late 1800's, dominates the district. Several buildings, already individually NRHP-listed, are included in the district: the G. Kerndt & Brothers Office Block (1861), the G. Kerndt & Brothers Warehouses Nos. 11, 12, and 13 (1868), the former jail and fire station (ca. 1855-1865), the former City Hall (Art Deco, 1938), and the U.S. Post Office (Modern, c. 1960).

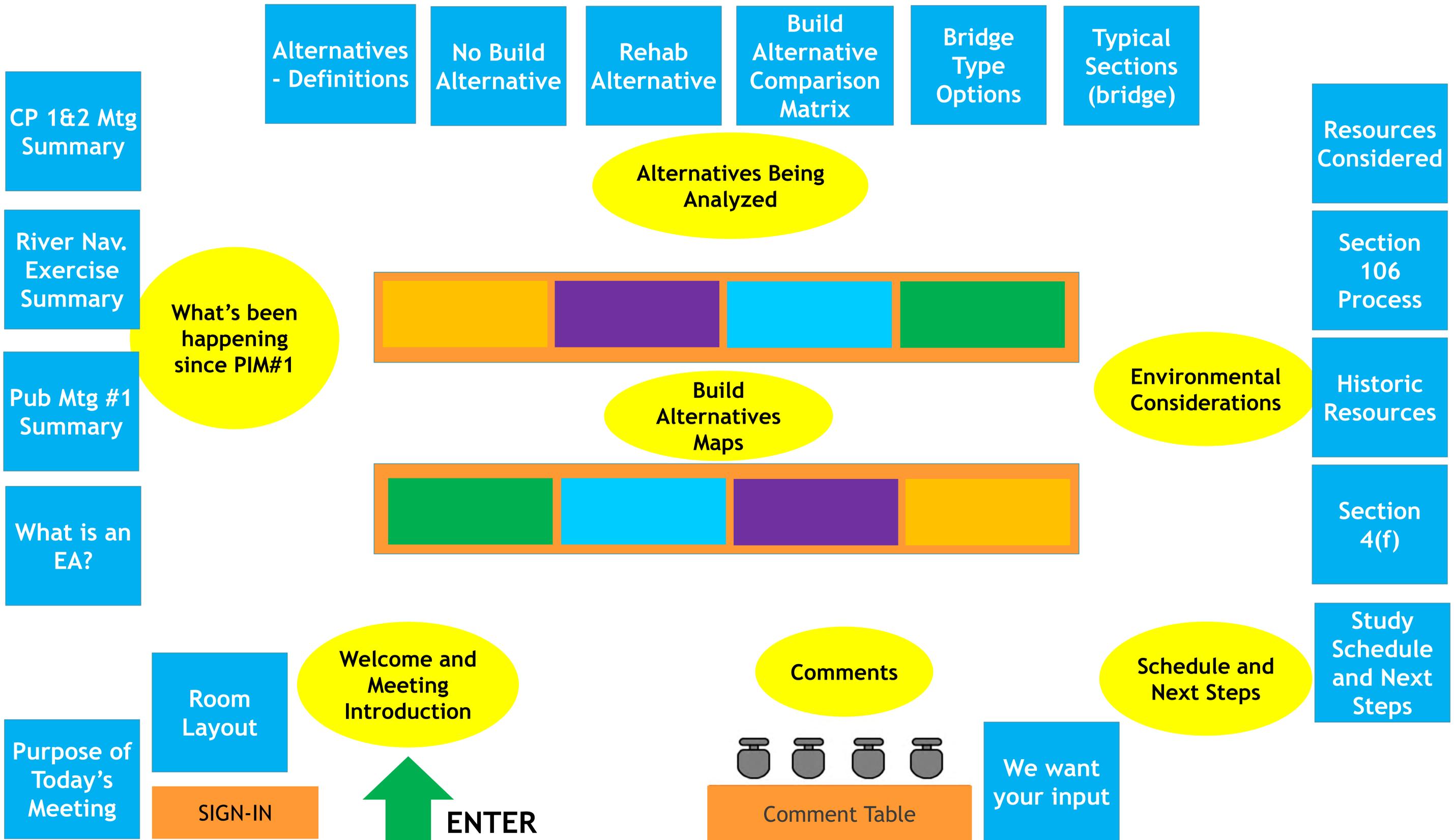


Archaeological Sites

Starting soon and occurring throughout the summer, surveys to inspect for archaeological resources will be conducted throughout the study area. In floodplains and river terraces, holes may be dug approximately every 50 feet looking for artifacts. Typically, holes are about the size of a basketball and can vary in depth from 3 to 6 feet. Soil from each hole is sifted through a screen and then the holes are back-filled immediately with the soil that was removed.



MISSISSIPPI RIVER BRIDGE AT LANSING



PURPOSE OF TODAY'S MEETING:

We want to share information on the study of the Mississippi River Bridge at Lansing:

- Progress made since August 2017
- Alternatives under consideration
- Issues to be addressed
- Next steps in the study process

We want to hear your thoughts:

- Talk with project staff
- Visit our comment station
- Submit a comment in writing tonight; staff are available to help you
- Submit a comment (by mail or online) by May 29, 2018

STUDY SCHEDULE AND NEXT STEPS

Spring of 2017 - Summer of 2017

- Define Purpose and Need
- Early coordination with agencies and elected officials
- Collect data
- Review alternatives from Feasibility Study
- Conduct Public Meeting #1 - *Purpose & Need* (August 8, 2017)

Summer of 2017 - Spring of 2018

- Review input received
- Review and refine alternatives
- Coordinate with agencies
- Conduct background studies
- Conduct Public Meeting #2 - *Alternatives Under Consideration* May 15, 2018



WE ARE HERE

Summer of 2018 - Fall of 2018

- Conduct field studies
- Coordinate with agencies
- Evaluate alternatives
- Conduct Public Meeting #3 *Alternatives Selected for Detailed Evaluation*

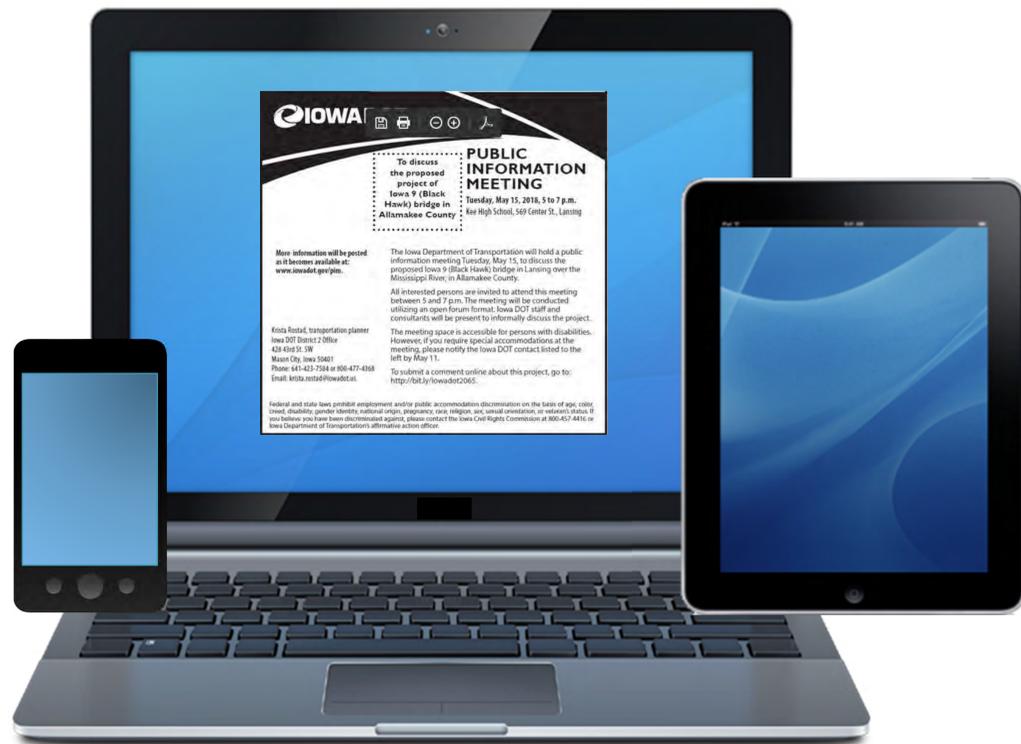
Winter of 2018 - Fall of 2019

- Complete studies and analyses
- Coordinate with agencies
- Prepare Environmental Assessment document
- Conduct Public Hearing

MISSISSIPPI RIVER BRIDGE AT LANSING

WE WANT YOUR INPUT!

Comment Period: May 15, 2018 through May 29, 2018



Project staff are available to help you submit a written comment today and to explain the online options for submitting your comments.

You also may submit your comment using the computer comment station at today's meeting.

OR

You may submit a comment online using your home computer, smartphone, or tablet.

Go to: <http://bit.ly/iowadot2065>

You may also visit www.iowadot.gov/pim to see the displays from today's meeting.

SECTION 4(f)

Section 4(f) requirements stipulate that the Federal Highway Administration and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent avoidance alternative to the use of that land; and the action includes all possible planning to minimize harm to the property resulting from such use;
- OR
- The Administration determines that the use of the property will have a *de minimis* impact.

For this study, Section 4(f) could be applied to resources such as:

- Black Hawk Bridge
- Lansing Stone School
- Lansing Main Street Historic District
- Various historic homes
- Mt. Hosmer Park
- Clear Creek Park
- Certain areas of the Upper Mississippi National Wildlife and Fish Refuge

The process of determining potential impacts to Section 4(f) resources is typically conducted in tandem with reviews for cultural resources under Section 106 (see previous boards). The study process to determine potential impacts along with the evaluation of possible avoidance options will be summarized in the EA.



View of Mt. Hosmer Park (wooded bluff), several historic homes, and Black Hawk Bridge from the Upper Mississippi River National Wildlife and Fish Refuge

WHAT IS AN ENVIRONMENTAL ASSESSMENT?

The Federal National Environmental Policy Act (NEPA) requires us to complete an Environmental Assessment (EA) to document the impacts a transportation project may have on the human and natural environment. We will review historic and cultural interests of the community; endangered species and their habitats; along with the Mississippi River, the National wildlife refuge, and wetlands. Through this process, we will coordinate and document public and agency input on the proposal, alternatives, impacts, and mitigation. In addition to the public, the US Coast Guard, US Army Corps of Engineers, US Fish and Wildlife Service, Native American Tribes, conservation groups, local governments, and many others will be engaged in the study process.

Steps to develop an Environmental Assessment:

DEFINE PURPOSE AND NEED	IDENTIFY REASONABLE ALTERNATIVES	ASSESS IMPACTS ON HUMAN & NATURAL ENVIRONMENT	DEVELOP EA DOCUMENT
<ul style="list-style-type: none">• Define the Study Area• Identify what problems or deficiencies need to be addressed• Public Meeting #1 - August 8, 2017	<ul style="list-style-type: none">• Identify feasible crossing locations and bridge types• Identify design criteria• Modify alternatives to avoid or minimize impacts• Conduct Public Meeting #2	<ul style="list-style-type: none">• Conduct studies• Coordinate with agencies• Determine appropriate mitigation (if needed)• Determine alternatives advancing for detailed study• Conduct Public Meeting #3	<ul style="list-style-type: none">• Identify Preferred Alternative• Summarize study findings• Publish document for public review and comment• Conduct Public Hearing• Obtain FHWA and Cooperating Agency approvals

WE ARE HERE

MISSISSIPPI RIVER BRIDGE AT LANSING

PUBLIC MEETING #1 – AUGUST 8, 2017

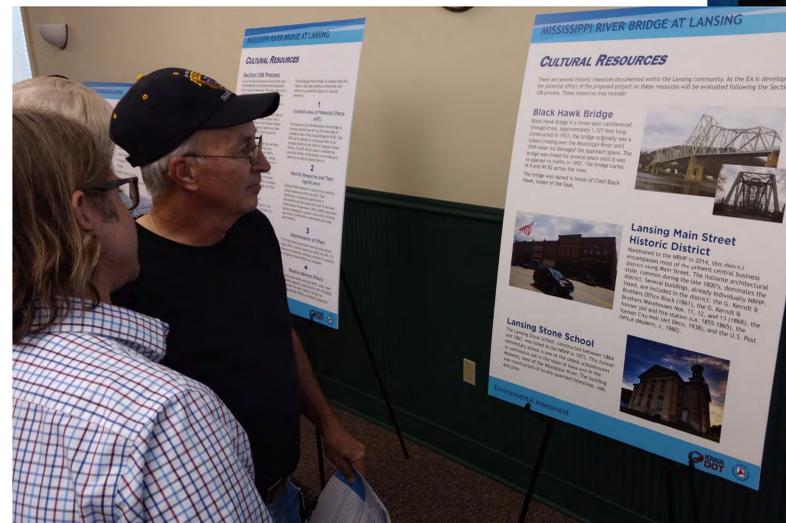
The Iowa Department of Transportation (Iowa DOT) and the Wisconsin Department of Transportation (WISDOT) conducted a public meeting in Lansing, Iowa, to start the environmental review process for the Mississippi River Bridge at Lansing.

More than 180 people attended the open house meeting.

Meeting displays presented information including:

- The purpose of the project and needs to be addressed
- The crossing locations under study including 3 from the Feasibility Study completed in 2004
- Information regarding historic properties and other types of environmental resources that will be taken into consideration as the study advances.

The public submitted numerous comments during and following the public meeting. Those comments will be considered as the study process continues.



ALTERNATIVES BEING ANALYZED

Alternative

Description

No Build

The existing bridge and connecting roadways would remain as they are today. Planned maintenance and repairs would continue until such time that the existing crossing would need to be closed to traffic. The No Build Alternative does not satisfy the identified project purpose and needs; but must be carried forward in the NEPA decision-making process.

Rehabilitation

The existing bridge and connecting roadways would remain in place. The existing bridge will require on-going maintenance and rehabilitation to extend its useful life span. At some point in the future, the bridge would need to be replaced or closed to traffic. This alternative is under further development to determine if it will address the roadway deficiencies, system linkage, and modal interrelationship concerns identified in the study area. This alternative is required in evaluation of potential project effects under Section 4(f) of the DOT Act of 1966.

Build a New Crossing

All of the proposed Build Alternatives (Green, Blue, Purple, and Orange) would provide a new bridge structure (carrying IA-9) over the Mississippi River. Under all Build Alternatives, the existing Black Hawk Bridge would be removed. Existing roadway alignments would be modified to maintain the connectivity of the existing highway network and continuity of the crossing over the river. A new bridge would be constructed to provide a navigation span in accordance with US Coast Guard requirements. Replacement of the existing bridge over Big Slough would be dependent on alignment and design speed used.

The preliminary Build Alternatives are shown on the large maps in the display area.

MISSISSIPPI RIVER BRIDGE AT LANSING

RIVER NAVIGATION EXERCISE – SEPTEMBER 25-27, 2017

The Iowa DOT and US Coast Guard worked with the Seamen's Church Institute in Paducah, Kentucky, to develop simulation models of the 4 crossing locations under consideration. Using the Institute's simulators, Mississippi River barge pilots were invited to "drive" through each crossing under various river conditions to help the study team evaluate issues associated with each crossing, including pier placement.



Example view from a simulator as the barge approaches one of the proposed bridge crossing locations.



At left - Example of a simulation run - each barge course is tracked by the computer as the pilots 'drive' their barge downriver and through the existing bridge location.

Below - pilots discuss approaches to navigating a new crossing location.



MISSISSIPPI RIVER BRIDGE AT LANSING

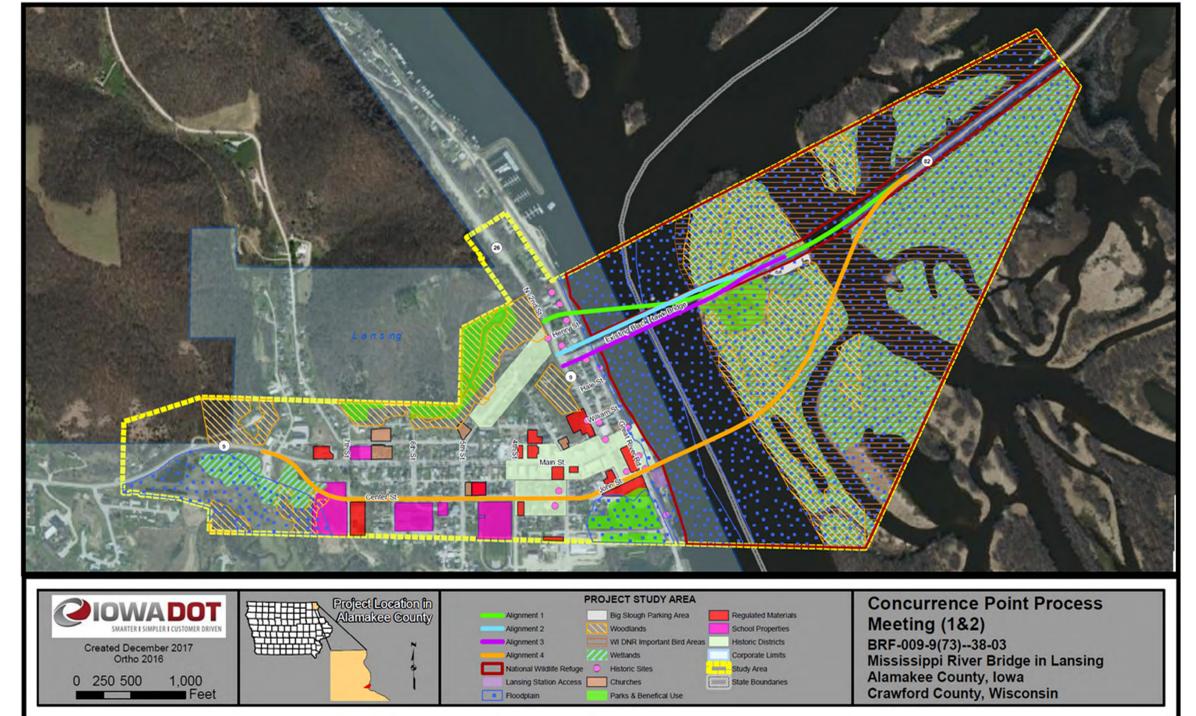
CONCURRENCE POINT MEETING – MARCH 5, 2018

The concurrence point process is intended to streamline project decision-making on Federal-aid highway projects requiring an Individual Section 404 Permit under the Clean Water Act.

The Iowa and Wisconsin DOTs conducted a Concurrence Point (CP) Meeting with several Federal and state resource and regulatory agencies to obtain their concurrence on the identified purpose and need (Concurrence Point 1) for the initial alternatives being analyzed (Concurrence Point 2).

Agencies invited to participate in the CP process for this project include:

- Federal Highway Administration
- US Army Corps of Engineers
- US Fish and Wildlife Service
- US Environmental Protection Agency
- Iowa and Wisconsin Departments of Natural Resources
- Iowa and Wisconsin State Historic Preservation Offices



Features map shared with the agencies as part of the Concurrence Point Process.

Concurrence Points

1

Purpose and Need

2

Alternatives to be Analyzed



3

Alternatives to be Carried Forward

4

Preferred Alternative

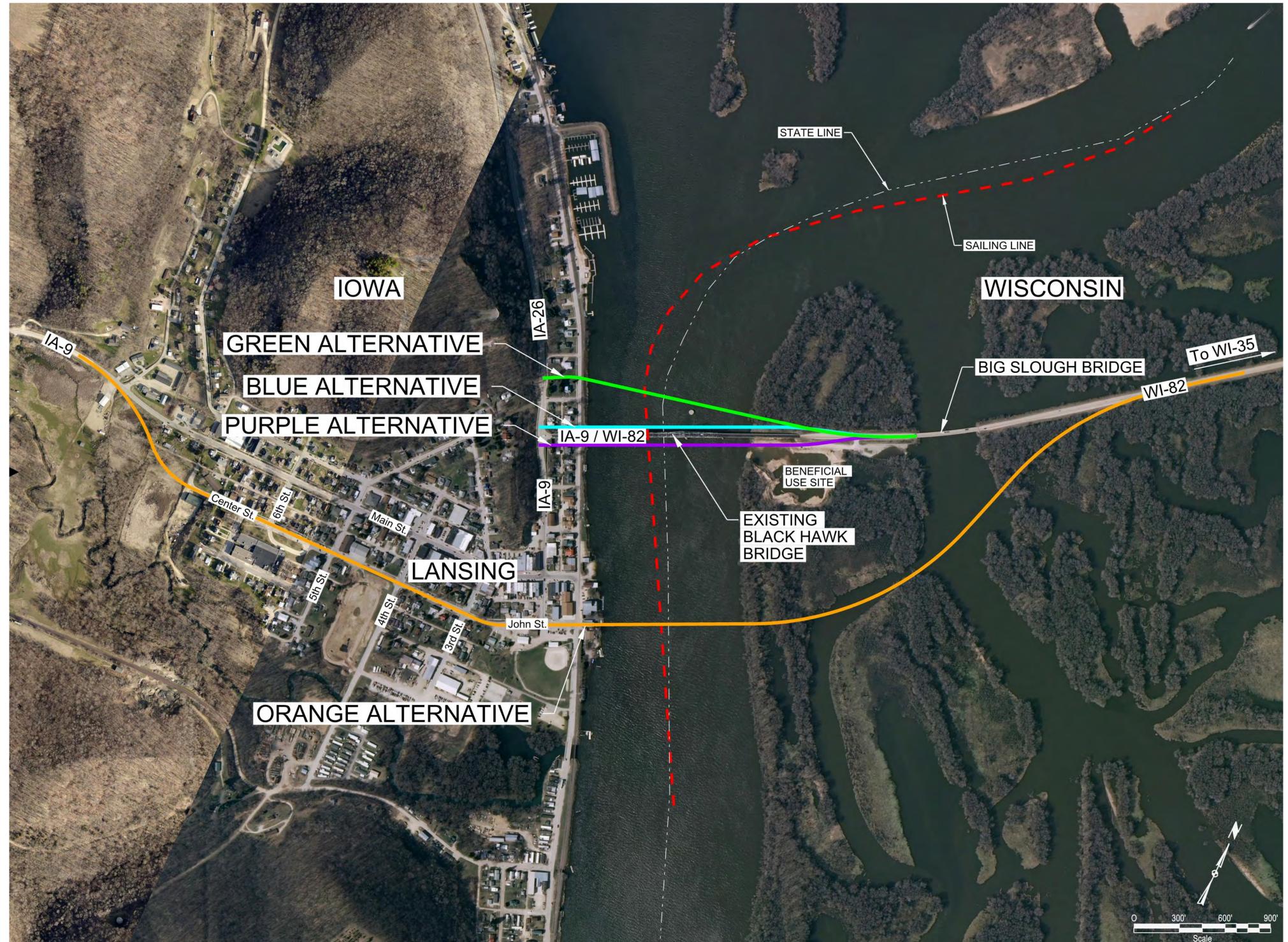
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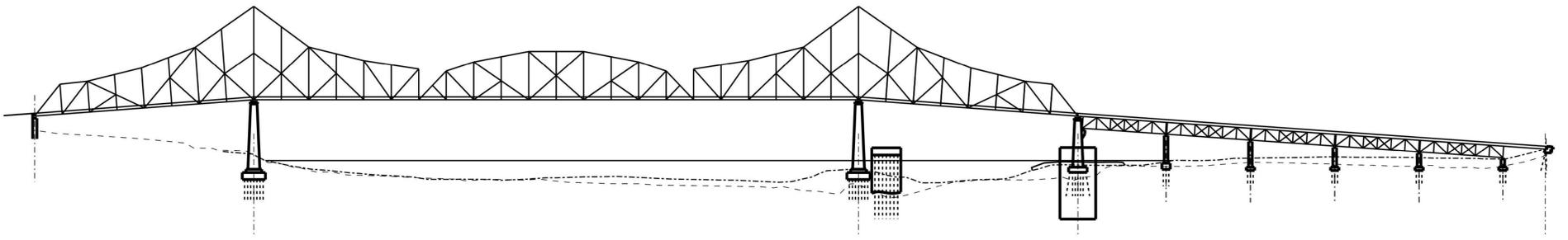
BUILD ALTERNATIVE CROSSING LOCATIONS

The image at the right depicts the Build Alternative locations currently being analyzed. These are the same locations presented at the first public meeting held for this study in August 2017.

Preliminary layouts of these 4 alternatives and features near them are shown on the large maps in the display area.



No BUILD ALTERNATIVE



Under the No Build Alternative, the existing Black Hawk Bridge and connecting roadways would remain as they are today. Scheduled maintenance and yearly inspections would continue to occur until a point in the future (around 2028) when the bridge would need to be closed to traffic. At that time, the bridge would need to be removed and replaced in order to maintain continuity of the existing highway system. The No Build Alternative does not include rehabilitation of the bridge.

Closure of the bridge could occur earlier than 2028 if major barge or vehicle collisions or river flooding would cause excessive damage to the piers or steel structure. Closure and removal of the Black Hawk Bridge without replacement would require IA-9 and WI-82 to be redesignated along other existing routes.

Anticipated Costs:

- The annualized cost of inspections is approximately \$125,000 for the existing Black Hawk Bridge in comparison to approximately \$75,000 for a newer/replacement bridge.
- Historically between 1995 and today, maintenance of the Black Hawk Bridge has cost \$16.1 million [includes \$500,000 for repairs scheduled to be completed in 2018; split between Iowa and Wisconsin]
- Approximately \$1 million would be expended to maintain the bridge until 2028. Closure of the crossing and use of alternate routes (for approximately 96 years - the comparable life of a replacement bridge) could add costs upwards of \$1 billion for future travelers.

Purpose & Need:

The No Build Alternative does not address the needs identified in the project area:

- **Roadway Deficiencies** - It would not improve lane widths, add shoulders, or address lack of adequate sight distance for vehicles approaching or leaving the bridge. It would not allow heavier vehicles to use the crossing, nor would it improve turn radii at the IA-9/IA-26 intersection.
- **System Linkage** - Programmed maintenance of the bridge would not extend its useful lifespan requiring the bridge to close to traffic as early as 2028. Without replacing the crossing, traffic would need to use alternate routes to connect to regional employment, educational, and retail/commercial centers on both sides of the river.
- **Modal Interrelationships** - It would not address the location and spacing of the existing river piers that pose a challenge to river navigation. It would not replace the open deck or provide shoulders to accommodate maintenance vehicles or use of the crossing by pedestrians and bicyclists accessing recreational areas.