

TAC 1 Meeting Agenda



fortbertholdplan.org

FORT BERTHOLD BRIDGE FEASIBILITY STUDY

TAC #1 MEETING AGENDA

New Town, North Dakota

11:00am – 1pm

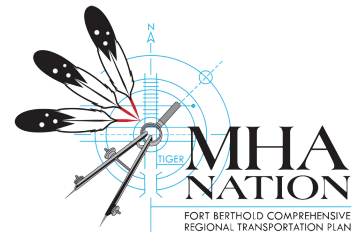
November 28, 2017

- ❖ Welcome and Introductions: Ron Hall
 - Project Introduction
 - Project Management Team (PMT)
 - Technical Advisory Committee (TAC)
 - Consultant Team
- ❖ Project Overview and Discussion: Russ Call, Kurt Wald and Dan Pitzler
 - Project Overview
 - Purpose Statement
 - Feasibility Study Process
 - Review Options / Alternatives
- ❖ WORKING LUNCH
 - Critical Success Factors for this Project
 - Project Goals and Screening Criteria
 - TAC Member Preferences (DOT Exercise)
 - Key Assumptions and Boundaries
 - Project issues and Challenges
 - Confirm Project Schedule
- ❖ Conclusions – Next Steps: Ron Hall

TAC 1 Sign-in Sheet

NAME	TITLE/AFFILIATION	PHONE	EMAIL	Project BRIDGE FEASIBILITY STUDY	Date 11/29/17	Page Of
					Designed	
John B. Steele	State Dept, Planning & Grant	701-421-7527	jsteele@nd.gov		Checked	
Sharon Mary Roberts	Director, Planning & Grant	701-421-0644	smaryr@nd.gov			
Ron Hall	Prov. Sec. Bubar & Hall Consulting	970-217-9076	ron@bubarkhall.com			
Dean Beggs	Grant W. Ter, TAT Planning & Grant Dept	701-421-0058	dbeggs@nd.gov			
Sharon G. Gault	Grant W. Ter, TAT Planning & Grant Dept	701-421-1469	sgault@nd.gov			
Alex Barenson	BOARD of ARTS, COMMUNITY & ECONOMIC DEVELOPMENT	(970) 391-7028	alex@bubarkhall.com			
Abby Kerstetter	Bubar & Hall Consulting	717-269-2416	abby@bubarkhall.com			
Don Pitzer	CH2M	425 241 1837	don.pitzer@ch2m.com			
Richard	MHA DOT	701-627-2838	richard@nd.gov			
Travis Hallam	TAT Pipeline Auth	701-421-0300	travis@nd.gov			
Frankie Lee	TAT Pipeline Authority	701-421-0300	frankie@nd.gov			
Deanna Rainbow	Nueta Hidaka Sarnish College	701-627-8036	drainbow@nd.gov			
Stuart Fricke	White Shild Lve.	509-366-7230	stfricke@whitehill.com			
Jeffrey Fox	Four Bears Inspector	701-421-1303	jfox@fourbears.com			
Kurt Wald	CH2M Proj mgr	208-863-4266	kwalder@ch2m.com			

TAC 1 Meeting Notes



Technical Advisory Council (TAC 1)

(November 28, 2017)

The Technical Advisory Council (TAC) for the Fort Berthold Bridge Feasibility Study is made up of Tribal and non-Tribal key stakeholders. The objective of the initial TAC meeting was to focus the presentation of the bridge feasibility study goals and objectives on MHA Nation stakeholders only and seek feedback that could shape the study outcomes and decision process.

Meeting Summary and Outcomes

A presentation was made to the meeting participants that described how the bridge feasibility study fits into the Fort Berthold Comprehensive Regional Transportation Plan. The presentation focused on elements of the larger plan being a grassroots-based and leadership-driven plan. The Fort Berthold Comprehensive Regional Transportation Plan is intended to address community issues and prepare the community through positive engagement with stakeholder and project partners to improve conditions in a 20- to 50-year horizon.

The Fort Berthold Bridge Feasibility Study is one of several ongoing efforts that are being advanced. The purpose of the study is to execute a feasibility study process that informs the Tribal leadership and community members about the feasibility of constructing either or both of the proposed bridges crossings. Its critical to document the social, cultural, environmental, and economic tradeoffs and impacts.

Goals and Objective Framing Workshop

The focus of the meeting was to define project purpose, critical success factors, roles and responsibilities; understand challenges; affirm team commitment; and refine/develop high-level screening criteria. The following questions were asked to TAC members: Imagine it's many years in the future and this project has met all your expectations and been a complete success. What made it so good? What's important to you about this project? What do you need to get from this study?"

The following outline was followed and the results were captured on notes and placed on the wall. New and existing screening criteria were then evaluated for importance. A "dot" exercise was conducted where participants placed dots next to criteria and goals that were important to them. The results of the exercise are captured in the revised draft of the goals and criteria matrix and included with the meeting summary.

- Project Overview
 - Purpose Statement
- Feasibility Study Process
- Review Options/Alternatives
- Critical Success Factors for this Project
- Project Goals and Screening Criteria
- TAC Member Preferences (Dot Exercise)
- Key Assumptions and Boundaries
- Project Issues and Challenges
- Confirm Project Schedule

TAC Member List

Name	Organization/Segment	Title	Phone	Email
Ron Hall	Bubar & Hall Consulting	Project Manager	970-217-9076	ron@bubarhall.com
Randy Phelan	Mandaree	Vice Chariman	701-759-3386	rphelan@mhanation.com
Fred Fox	White Shield	Executive Secretary	701-743-4244	ffox@mhanation.com
Cory Spotted Bear	Twin Buttes	Councilman	701-938-4403	coryspottedbear@mhanation.com
Justin Spotted Bear	Twin Buttes	Public Works	701-627-5291	jlsponsoredbear@mhanation.com
Texx Lone Bear	Director	Natural Resources	701-627-2393	texx@restel.net
Wade Spooner	USACE (Garrison)	Garison Project Manager	701-654-7411	Wade.D.Spooner@usace.army.mil
Mark Herman	BIA	Environmental Engineer	605-226-7656	mark.herman@bia.gov
Elgin Crows Breast	THPO	THPO	701-862-2474	redhawk@mhanation.com
Stephanie Hickman	FHWA	Acting Engineering Supervisor	701-221-9462	Stephanie.Hickman@dot.gov
Joel Wilt	NDDOT	Williston District Engineer	701-774-2700	jwilt@nd.gov
Doug Nordby	McKenzie County	Commission Chairman	701-444-3221	drd@ruggedwest.com
Arlo Borud	Mountrail County	Commission Chairman	701-628-3287	arloborud@gooseneckimp.com
Reinhard Hauck	Dunn County	Commission Chairman	701-548-8287	rshauck@ndsupernet.com
Larry Louser	Ward County	Commission Chairman	701-839-4628	larry.louser@wardnd.com
Duane Scheurer	Mercer County	Commission Chairman	701-983-4408	dscheurer@nd.gov
Barry Suydam	McLean County	Commission Chairman	701-337-5557	barrysuydam@hotmail.com
Daniel Uran	City of New Town	Mayor	701-627-4812	Daniel.Uran@k12.nd.us
Richard Hall	MHA DOT	Director	701-627-2838	richardhall@mhanation.com
Cliff Whitman	MHA Homeland Security	Director	701-627-4805	cwhitman@mhanation.com
Shirley Bentrup	Vision West/REAP	REAP Director	701-483-1443	bentrup@ndsupernet.com
Jay Elkin	Stark County	Comission Chairman	701-974-3583	jelkin@starkcountynynd.com
Kyle Christianson	City of Parshall	Mayor	701-862-3459	cityauditor@restel.com
Joleen Steele	Planning and Grants	Data Tech	701-421-7527	jsteele@mhanation.com
Sheila Manyribs	Planning and Grants	Director	701-421-0649	smanyribs@mhanation.com
Dean Bear Claw	Planning and Grants	Grant Writer	701-421-0058	dbearclaw@mhanation.com
Sherrie Gillette	Planning and Grants	Grant Writer	701-421-1469	sherriegillette@mhanation.com
Travis Hallam	TAT Pipeline Authority		701-421-0300	thallam@mhanation.com
Frankie Lee	TAT Pipeline Authority		701-421-0300	frankieleee86@hotmail.com
Deanna Rainbow	Nueta Hidatsa Sahnish College		701-627-8036	drainb@nhsc.edu

Project Goals and Screening Criteria



Fort Berthold Bridge Feasibility Study

APPENDIX A – PROJECT GOALS and SCREENING CRITERIA

PROJECT GOALS AND SCREENING CRITERIA				
Goals	Screening Criteria	How to Measure	Information Required to Screen Concepts	Relative Importance for Screening
Enhance Safety To and from: best location, safety on location, the bridge, weather conditions, health issues, fires. Reduce truck or agricultural traffic on the main roads Straight bridge, not on curves Wide bridge has side walks on both sides; wider lines & shoulders	Can this alternative accommodate a safe transportation enhancement?	Allows for safe connecting road intersection Accommodates safe bicycle and pedestrian travel in key areas	- Identification of key safety concern areas - ROM of operation and maintenance Costs	● ● ● ● ●
	Can this alternative improve road safety (reduced crashes) and/or provide lighting on Tribal Lands roads	Improved lighting and other safety enhancements		● ●
Engineering Feasibility	Is the alternative feasible from an engineering perspective?	Meets approved roadway and bridge design criteria	- Approved roadway and bridge design criteria - Identify any Design exceptions, such as steep grades, lower than desired design speeds for curves et.	
Facility Ownership by MHA	Can the design of this alternative allow for desired facility ownership by MHA??	Is the Tribe able to fund Operation and Maintenance of the facility?	Facility ownership options and decision	
Enhance MHA Nation Culture, Spirituality & Traditions Unite the communities, unite the tribes	Does this alternative enhance traditional cultural values, e.g., provide information about heritage?	Need additional Tribal Feedback here.	Need additional Tribal Feedback here.	●
Minimize Local Impacts (Undesirable Aspects of Bridge - Bring in More People) Quiet town of Twin Buttes e.g., drugs coming into town No visual Pollution from Twin Buttes or bridge Dark/Night skies	Does the alternative(s) provide a means to access residences and business along the corridor?	Need additional Tribal Feedback here.	Need additional Tribal Feedback here.	

PROJECT GOALS AND SCREENING CRITERIA				
Goals	Screening Criteria	How to Measure	Information Required to Screen Concepts	Relative Importance for Screening
Improve Connections Improve regional and intra-segment movement of people, goods and services by providing a new connection(s) over Lake Sakakawea	Can the alternative meet the current and future traffic needs? Qualitative measure of forecast regional roadway system performance, access to jobs, healthcare and education?	Forecast 2030 - Daily traffic volumes - Daily or peak-hour volume to capacity ratio. - Daily or peak-hour levels of service	- Travel Demand Model - Forecast 2030 traffic data and travel patterns	
Improve Travel Time and Access Reduce travel time and improve access. Some factors mentioned include: - Quick road to New Town - Increased access - Access to Twin Buttes Hardware Store - Significantly shorter drive time from New Town to Twin Buttes and vice versa - Twin Buttes folks hardly go to New Town - Access to resources in New Town or surrounding communities - Easier access for students to attend college. Language school promoted by Cultural Gathering Ceremonies and travel time. - Sightseeing from bridge	Does the alternative reduce future congestion on other regional roadways? Qualitative evaluation of arterial network forecast traffic operations	Comparison of forecast daily traffic demand on regional arterial roadways	- Travel Demand Model - Forecast 2030 arterial roadway network configuration. - Forecast 2030 daily traffic demand	
Improve Regional Circulation Improve access to 1804 and or ND 22, 8 and across Lake Sakakawea travel	Does the alterative improve access to 1804 and or ND 22, 8?	Comparison of peak-hour travel times in study area. Qualitative measure of traffic operations at key intersections and on new facility.	Travel Demand Model and forecast travel time by roadway	
Coordination of Transportation and Land Use Planning Develop project as a component of the Tribal regional transportation system, compatible with intra-jurisdictional land use and transportation plans. Identify and preserve a transportation corridor to allow the Tribe to plan and allow development of the surrounding area consistent with the needs and services of the Tribe.	Is the alternative compatible with Tribal and local comprehensive land-use plans and regional long-range transportation plan	Project supports locally- and regionally-adopted growth, land-use and development plans	- Future land-use planning data - Adopted regional plan - Approved local developments.	
Environmental Impacts Avoid, minimize, and mitigate adverse impacts to the natural and built environments.	Can the environmental impacts be reasonably mitigated? Primary environmental impacts considered during level 1 screening include right-of-way, Endangered Species Act and Critical	- Presence of natural environment resources - Presence of built environment resources	Information for this preliminary evaluation will be collected from a variety of available sources including existing reports, aerial photographs, data bases, interviews with agency staff, and	

PROJECT GOALS AND SCREENING CRITERIA				
Goals	Screening Criteria	How to Measure	Information Required to Screen Concepts	Relative Importance for Screening
	habitats, Traditional Cultural Properties, noise, water quality, S&EJ, Section 4(f) and 6(f) and regulatory permitting		reconnaissance-level field reviews. (Appendix 3)	
Compliment Foreseeable Regional Projects Develop project in coordination with and in consideration of intersecting local and regional energy and transportation projects.	Is the alternative compatible with or supports intersecting local and regional transportation projects	Evaluation of intersecting projects for compatible facility design elements and access control.	Tribal/County/NDDOT/Industry project information on intersecting corridor transportation projects.	
Provide Transportation System Redundancy Develop a project that provides redundant ingress and egress for MHA Nation residents. Improve options when natural disasters or severity concerns	Does the alternative provide transportation system redundancy?	The new facility meets the requirements of The Department of Homeland Security.	Coordination and compliance specifics from The Department of Homeland Security.	
Economic Development Attract traffic from other social parts of the State to improve connectivity & economy? Create local jobs and businesses in Twin Buttes and White Shield. Commercial economic development by providing access for recreation areas or new industry.	Does the alternative help facilitate economic development?	Economic impact analysis results	Economic model inputs	●●●●
Provides Factors Conducive to Getting Industry to Pay for Bridge and Road Infrastructure Multi-use for pipelines or electric power	Does the alternative include factors likely to result in industry participation in bridge funding	Analysis of existing regional infrastructure and development plans	GIS analysis of infrastructure	
Estimated Project Capital and Maintenance Cost	What is the initial construction cost and long-term maintenance cost of the alternative (including right-of-way)	Total alternative cost.	Engineering opinions of probable cost(s).	●

TAC 1 Presentation



Fort Berthold Bridge Feasibility Study

Technical Advisory
Committee

November 28, 2017

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



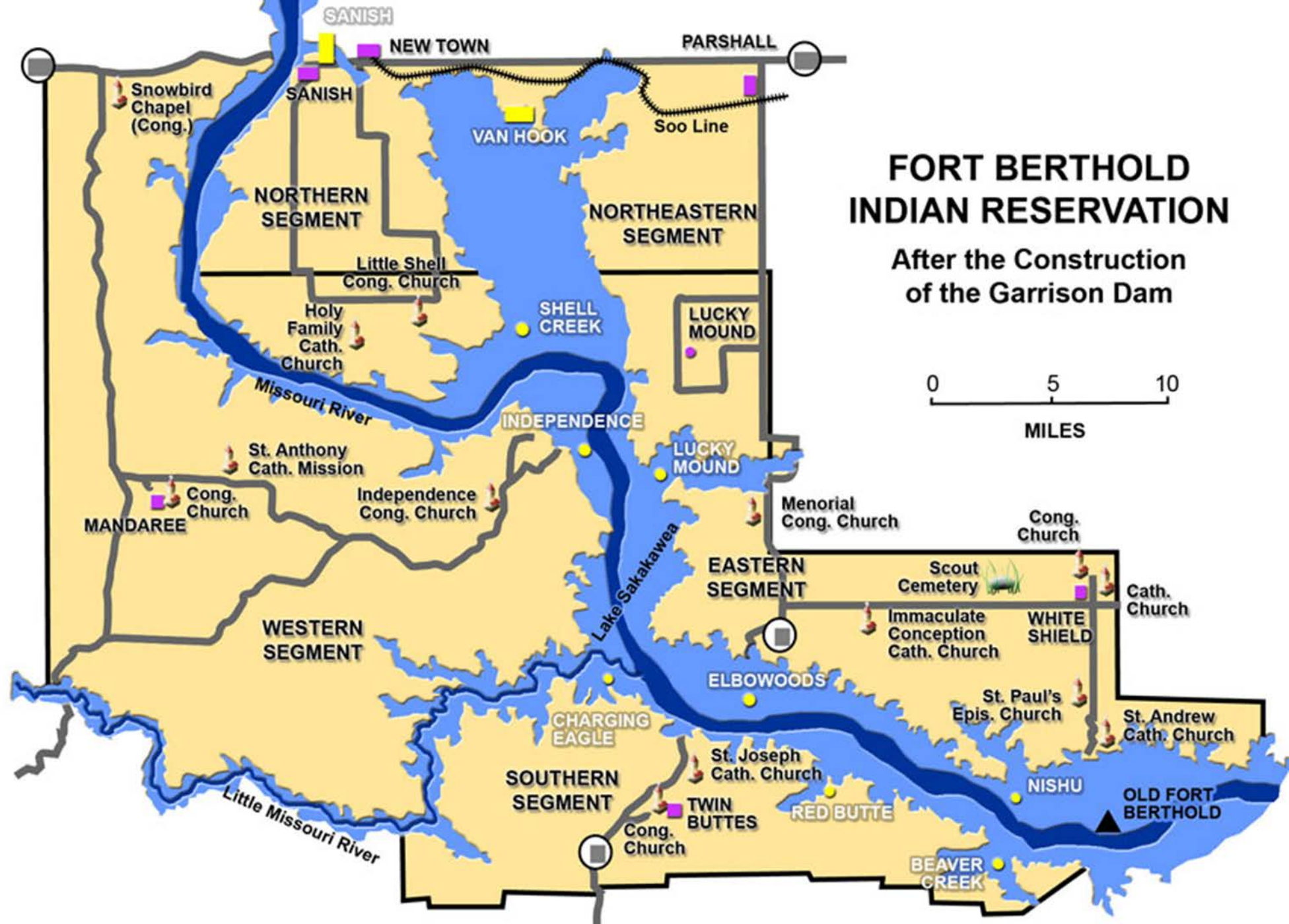
Project Overview

1. **Charging Eagle Bay Bridge Feasibility Study**
2. **Elbowoods Bridge Feasibility Study**
3. Update MHA Nation's Long-Range Transportation Plan (LRTP)
4. Update MHA Nation's Safety Plan and develop a Strategic Highway Safety Plan (SHSP)
5. Aviation Needs Assessment Study
6. Public transit and ferry system – feasibility and planning
7. Railroad – inventory, assessment, and feasibility
8. Pipeline – inventory, assessment, and feasibility
9. Electric Power Plan
10. Coordination and collaboration with neighboring city, county, and state governments and regional planning organizations



Foundation Principals of the Fort Berthold Comprehensive Regional Transportation Plan

- **Grassroots Based – Leadership Driven**
- **Build on community strengths to answer key questions**
 - Where Did We Come From?
 - Where are We Today?
 - Where Do We Want to Be in 20 to 50 years?
- **Address Community Readiness**
 - Education through engagement and in-depth research
 - Support informed decisions (consideration of tradeoffs)
 - Build consensus around values
 - Establish baseline of data and facts
- **Positive Engagement with Stakeholders and Partners**



FORT BERTHOLD INDIAN RESERVATION

After the Construction
of the Garrison Dam

0 5 10
MILES



Project Management Team

- The Project Management Team (PMT) is made up of Tribal Leadership and is responsible for contract compliance and financial performance
- The PMT is responsible for project decision making

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Technical Advisory Committee

- The Technical Advisory Council (TAC) is made up of Tribal and non-Tribal key stakeholders
- The TAC is responsible for assisting in the development of the technical analysis of the Feasibility Study

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Introduce FIGG/CH2M Alliance

- RUSS CALL, PE, SE: CO-PROJECT MANAGER (FIGG)
- KURT WALD: CO-PROJECT MANAGER (CH2M)
- DAN PITZLER: PRINCIPAL ECONOMIST, STRATEGIC DECISIONS AND RISK MANAGEMENT (CH2M)
- HERB FRICKE, PE ROADWAY AND CIVIL LEAD (AKANA)
- STUART FRICKE, SURVEYING AND MAPPING LEAD (WHITE SHIELD, INC)



Meeting Schedule

October – Kickoff Meeting

- Draft Technical Memorandum #1: draft PMP, PCP, PIP

November - TAC Meeting #1

- PMP, PCP, PIP, Goals and objectives
- Roadway design criteria
- Bridge Design criteria
- 8 alignments - mapping
- Infrastructure needs and impacts
- Traffic
- Social and economic considerations
- Environmental and land use
- Project costs

December

- Final PMP, PCP, PIP, goals, design criteria, 8 alignments
- Publish newsletter #1 and web site post
- Develop segment meeting announcements and post

May - TAC Meeting #2

- Final 2 alignments
- Draft Working Paper #1 – Road/Bridge Site Assessment
- Segment meetings preparation

May - Segment Meetings

- Presentation, boards, brochures, feedback

June

- Final Working Paper #1 – Road/Bridge Site Assessment
- Publish newsletter #2 and web site post

July - TAC Meeting #3

- Draft Summary Report#1 – Public Participation Process
- Draft Working Paper #2 - Draft Bridge Feasibility Report

August – Tribal Council Presentation

- Submit Draft Bridge Feasibility Report
- Present summary of report, conclusions and recommendations

September

- Submit final Bridge Feasibility Report
- Publish newsletter #3 and web site post

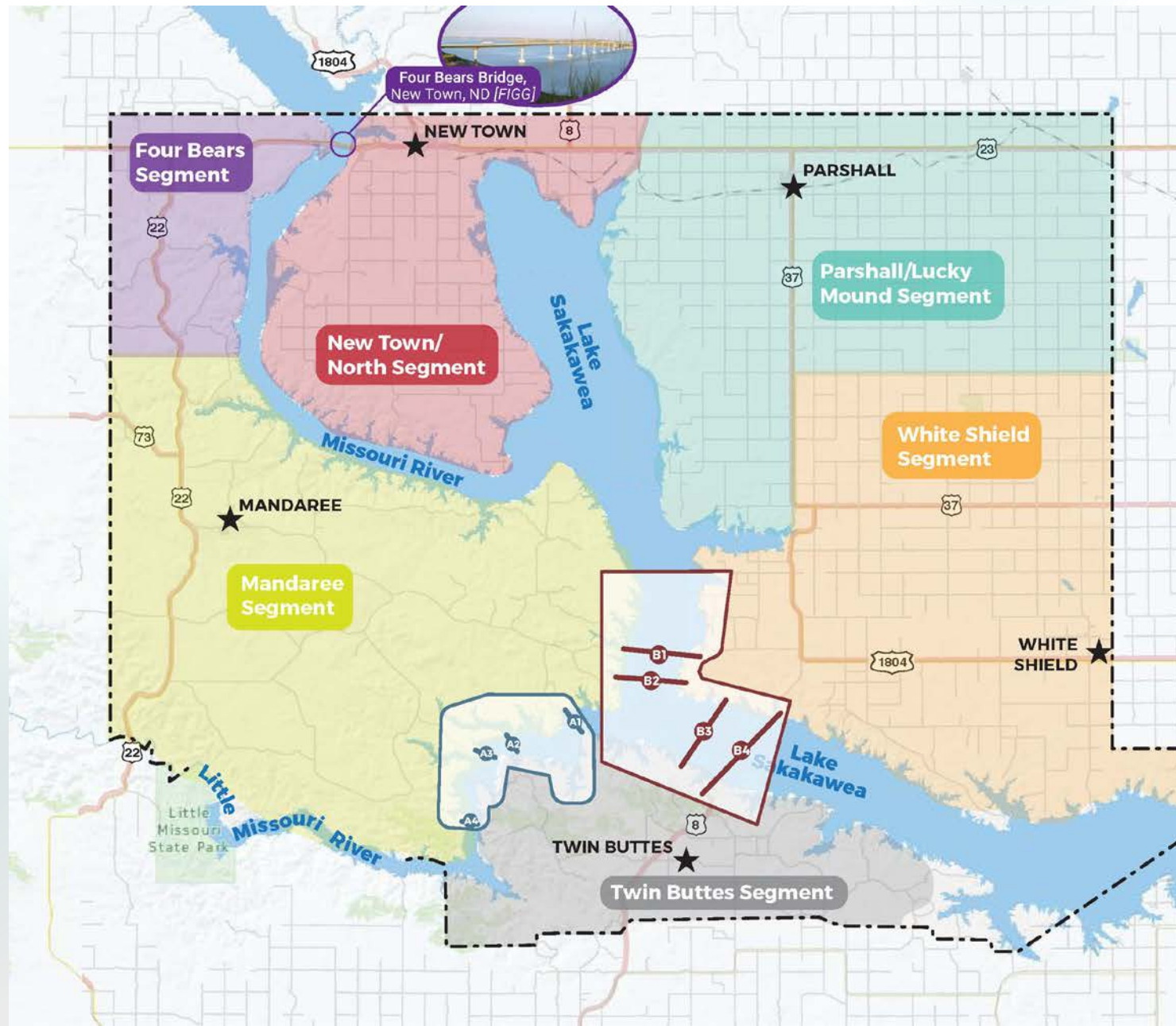


Fort Berthold Bridge Feasibility Study

Objective:

Execute a feasibility study process that informs the Tribal leadership and community members about the feasibility of constructing either or both of the proposed bridges crossings. Its critical to document the social, cultural, environmental, and economic trade-offs and impacts.

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Fort Berthold Bridge Feasibility Study

Crossings studied, in the Elbowoods and Charging Eagle Bay sites, will optimize use of existing roadway infrastructure while providing important regional and local connectivity

Charging Eagle Bay Bridge Site

Soil Conditions may effect bridge and connecting roadway geometry

Lake Depths here require deep structures that increase in depth from A4 to A1 heading northeast

Locations A1-A4 connect Twin Buttes and Mandaree Segments



Elbowoods Bridge Site

Soil Conditions may effect bridge and connecting roadway geometry.

Lake Sakakawea is anticipated to be the deepest at these locations

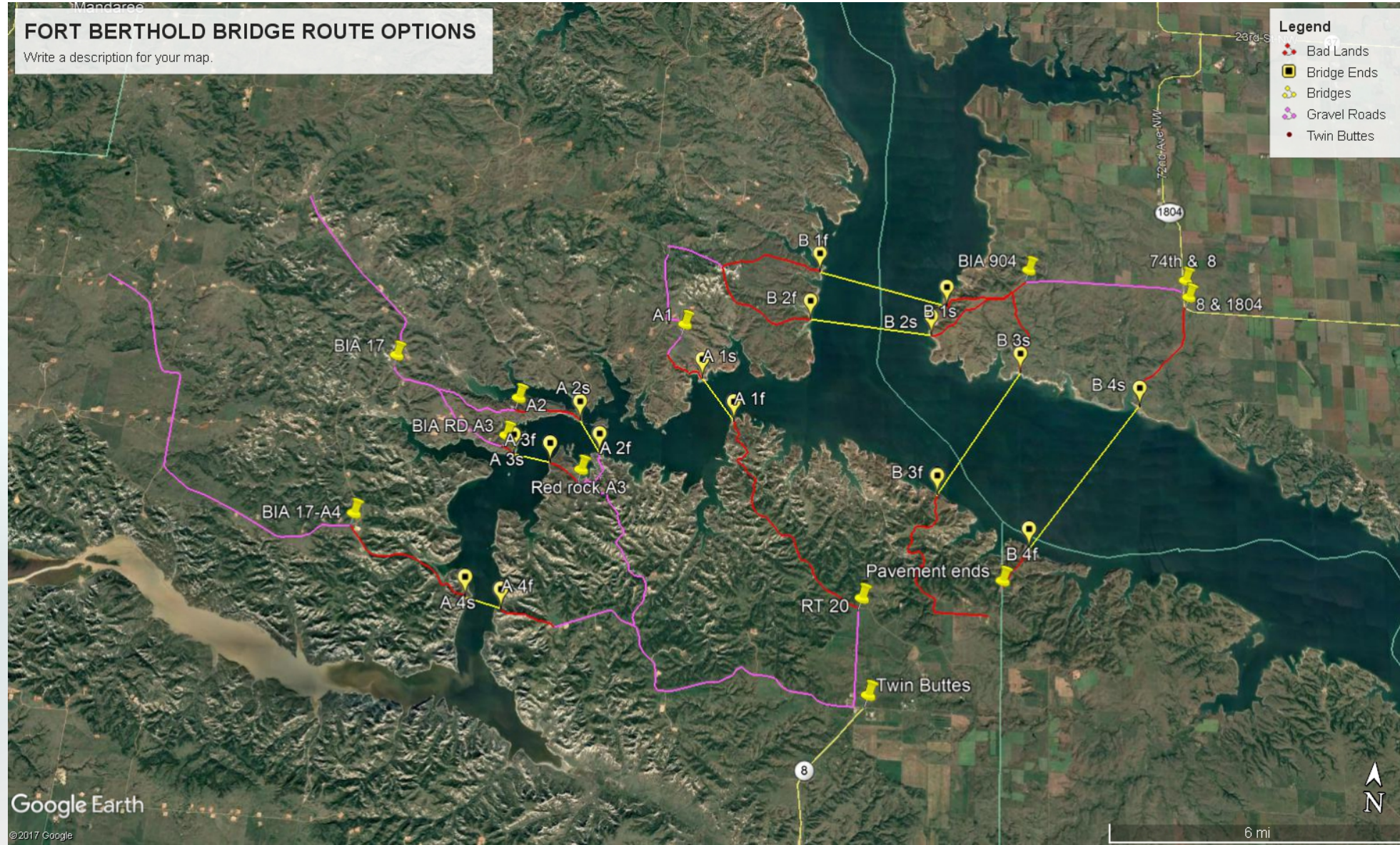
Locations B1 & B2 connect Mandaree and White Shield Segments

Locations B3 & B4 connect Twin Buttes and White Shield Segments





Conceptual Routes and Crossing Locations





Alternatives Development and Evaluation

Fort Berthold Bridge Feasibility Study

Connecting Roads and Bridges

Charging Eagle Bay Bridge – Site A1
Charging Eagle Bay Bridge – Site A2
Charging Eagle Bay Bridge – Site A3
Charging Eagle Bay Bridge – Site A4
Elbowoods Bridge Site – Site B1
Elbowoods Bridge Site – Site B2
Elbowoods Bridge Site – Site B3
Elbowoods Bridge Site – Site B4

Formulate alternative options

Screening
of Concepts

Screening
of Alternatives

Screening for
Action Plan

A

B

Feasibility Study
Recommendation

Screening Evaluation Criteria (Engineering, Constructability, Environmental)

SL0927171321B01

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Fort Berthold Bridge Feasibility Study Feasibility Elements

1. **Design Criteria**
 - Bridge Criteria
 - Roadway Criteria
 2. **Analyze Bridge Sites**
 - Geographic Location
 - Bridge/Road Length
 3. **Infrastructure Needs and Impacts**
 - Available Infrastructure
 - Impacts on Existing
 4. **Impacts of Bridges on Traffic Patterns**
 - Traffic Flow
 - Travel Time
 - Change in Patterns
 - Roadway Safety
 - Construction and Maintenance Costs
 5. **Social and Economic Analysis**
 - Regional Socioeconomic Conditions
 - Economics Impact of Bridge Construction
 - Benefit-Cost Analysis
 - Non-Monetary Impacts
 - Bridge Financing Analysis
 6. **Environmental and Land Use Evaluation**
 - Define Corridor Boundary
 - Identify Valued Ecosystem Components and Analysis Areas
 - Identify Land Use
 - Cultural Resources and Socio-Cultural Research
 - Environmental Impact Assessment Identification
 - Least Harm Path Analysis
 - Environmental, Land Use, and Socio-Cultural Comparative Matrix
 7. **Bridge Crossing and Roadway Corridor Evaluation**
 - Draft Fort Berthold Bridge Feasibility Study
 - Final Fort Berthold Bridge Feasibility Study
- *** **Ongoing Tribal, Stakeholder, and Public Involvement**

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Fort Berthold Bridge Feasibility Study Process

Step One: Project Initiation

Step Two: Study Area(s) Assessment

Step Three: Purpose and Need

Step Four: Develop and Evaluate Concepts

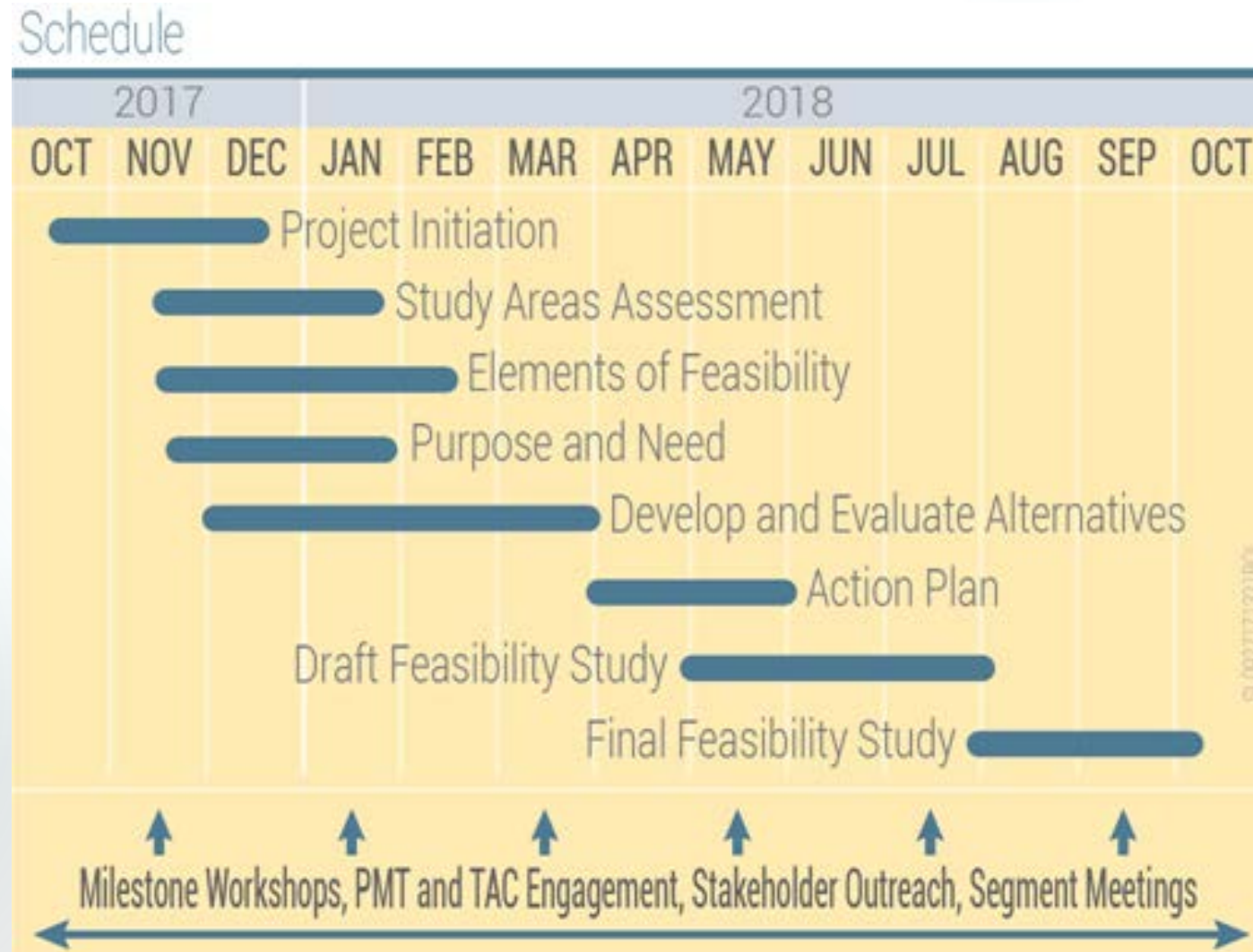
Step Five: Develop Draft Feasibility Study

Step Six: Prepare Final Feasibility Study

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



TAC Engagement Opportunities



Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Fort Berthold Bridge Feasibility Study Summary

MHA Nation
Input

Step One:
Project
Initiation

Step Two:
Study Area(s)
Assessment

Step Three:
Purpose and
Need

Step Four:
Develop and
Evaluate
Concepts

Step Five:
Develop Draft
Feasibility
Study Report

Step Five:
Prepare Final
Feasibility
Study Report

12 months

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



WORKING LUNCH BREAK

**20 Minute Break to get a lunch and
then we will continue the second
half of todays workshop.**

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



TAC Input – Project Framing

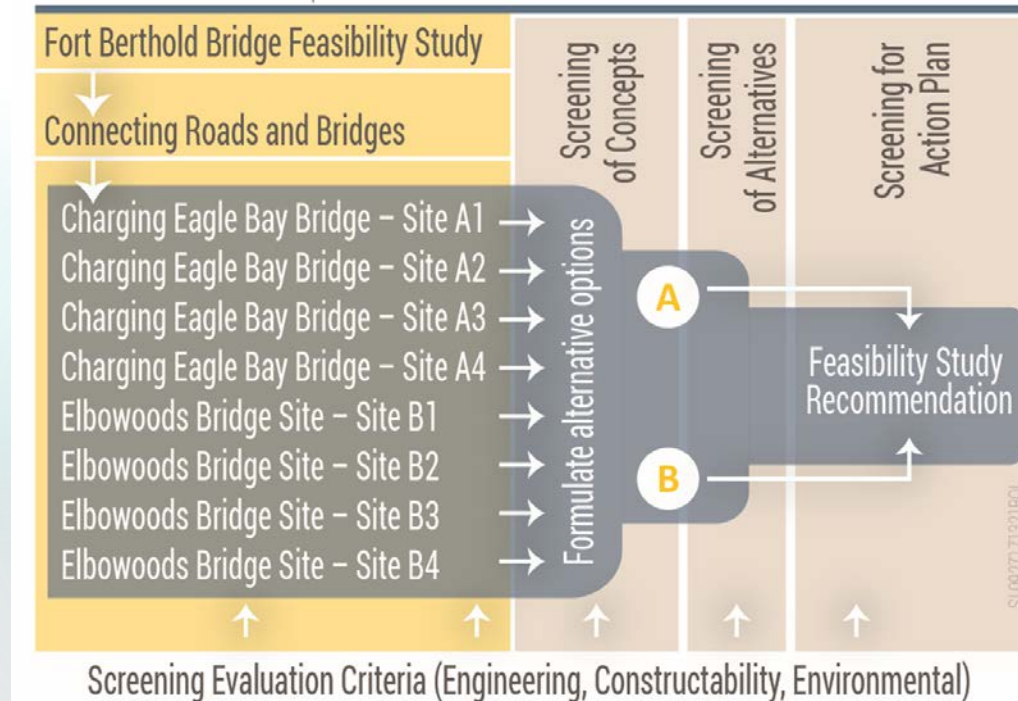
- **Critical success factors**
- **Project goals and screening criteria**
- **TAC member preferences**
- **Key assumptions and boundaries**
- **Project issues and challenges**

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation

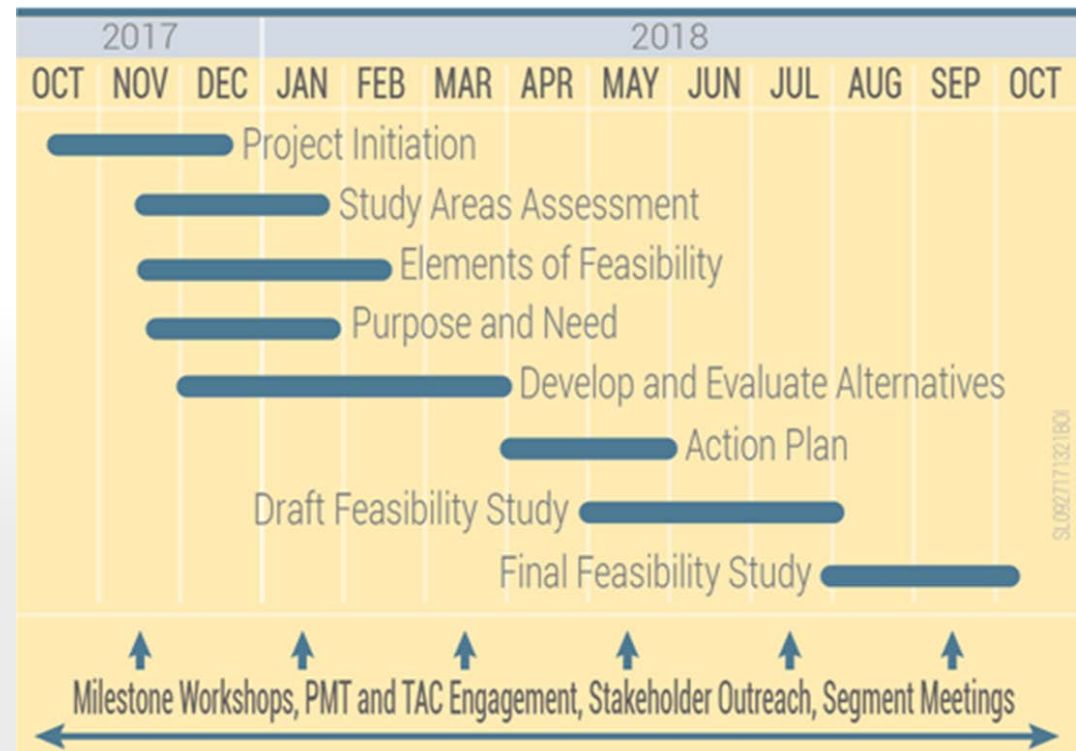


Project Schedule and Engagement

Alternatives Development and Evaluation



Schedule



Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation



Fort Berthold Bridge Feasibility Study Questions/Comments?

What do you want or need in terms of information, outreach, and coordination so that you can champion this effort?

We need to hear your concerns and suggestions to make this successful.

This is an exciting MHA Nation Project and we are here to facilitate successful delivery of this important project.

Fort Berthold Bridge Feasibility Study is an iterative and collaborative process with the MHA Nation